Transect Number: YK-92
43.365
43.36
43.355
43.35
43.345
43.34
43.335
43.33
Latitude
-70.5
-70.49
-70.48
-70.47
-70.46
-70.45
Longitude
ur Corners
ME 9
Casino Hill
16m
eat Hill

Elevation profile
30
20
10
0
-10
-20
-30
Elevation (ft)
-2000
-1500
-1000
-500
0
500
1000
1500
2000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-92

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -1875 ft
LON: -70.4796 deg E
LAT: 43.3423 deg N
Bottom ELEV: -28.5921 ft-NAVD88
TWL: 8.8306 ft-NAVD88
HS: 18.9295 ft
TP: 14.3487 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 83.5401 deg CCW from East

TAW/RUNUP input

toe sta: 62 ft
toe elev: 1.4764 ft-NAVD88
top sta: 245.5 ft
top elev: 13.1562 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-92: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-1500
-1000
-500
0
500
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-92zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-92.swn
swan output name:     2_swan/swanfiles/YK-92.dat

Boundary Conditions:
    TWL- 2.6916 meters
    HS-  5.7697 meters
    PER- 14.3487 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 1.4808 feet
SWAN output at toe:
    SETUP- 0.9778 feet
    HS-    5.1811 feet
    PER-   14.019 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 1.4808 feet
SWAN output at toe:
    SETUP- 0.9778 feet
    HS-    5.1811 feet
    PER-   14.019 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-92
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-2000
-1500
-1000
-500
0
500
1000
1500
2000

```
1
                    Execution started at 20200401.174306


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      639       0.   639     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      639   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-92zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   5.7697     14.3487     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      639  639    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-92.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             640 MYC              1
                     : MCGRD           641
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  11.25 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.16 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  14.85 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  71.57 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  98.29 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  99.22 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  99.22 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in  99.22 % of wet grid points ( 99.50 % required)

iteration   10; sweep 1
iteration   10; sweep 2
iteration   10; sweep 3
iteration   10; sweep 4
accuracy OK in  99.22 % of wet grid points ( 99.50 % required)

iteration   11; sweep 1
iteration   11; sweep 2
iteration   11; sweep 3
iteration   11; sweep 4
accuracy OK in  99.22 % of wet grid points ( 99.50 % required)

iteration   12; sweep 1
iteration   12; sweep 2
iteration   12; sweep 3
iteration   12; sweep 4
accuracy OK in  99.22 % of wet grid points ( 99.50 % required)

iteration   13; sweep 1
iteration   13; sweep 2
iteration   13; sweep 3
iteration   13; sweep 4
accuracy OK in  99.38 % of wet grid points ( 99.50 % required)

iteration   14; sweep 1
iteration   14; sweep 2
iteration   14; sweep 3
iteration   14; sweep 4
accuracy OK in  99.38 % of wet grid points ( 99.50 % required)

iteration   15; sweep 1
iteration   15; sweep 2
iteration   15; sweep 3
iteration   15; sweep 4
accuracy OK in  99.38 % of wet grid points ( 99.50 % required)

iteration   16; sweep 1
iteration   16; sweep 2
iteration   16; sweep 3
iteration   16; sweep 4
accuracy OK in  99.54 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	5.76558	13.9895	13.8874	12.9461	0.000	31.5067	11.4100	0.000000
1.	0.	5.77726	13.9915	13.8874	12.8249	0.000	31.5312	11.4103	0.000321
2.	0.	5.78820	13.9933	13.8874	12.7101	0.000	31.5518	11.4106	0.000647
3.	0.	5.79796	13.9951	13.8874	12.6038	0.000	31.5677	11.4110	0.000978
4.	0.	5.80651	13.9967	13.8874	12.5061	0.000	31.5791	11.4113	0.001315
5.	0.	5.81392	13.9982	13.8874	12.4161	0.000	31.5866	11.4117	0.001658
6.	0.	5.82031	13.9996	13.8874	12.3330	0.000	31.5910	11.4120	0.002006
7.	0.	5.82576	14.0009	13.8874	12.2561	0.000	31.5926	11.4124	0.002359
8.	0.	5.83038	14.0021	13.8874	12.1847	0.000	31.5921	11.4127	0.002717
9.	0.	5.83424	14.0032	13.8874	12.1183	0.000	31.5896	11.4131	0.003078
10.	0.	5.83684	14.0043	13.8874	12.0563	0.000	31.5682	11.4134	0.003447
11.	0.	5.83979	14.0053	13.8874	11.9990	0.000	31.5311	11.3937	0.003659
12.	0.	5.84156	14.0062	13.8874	11.9447	0.000	31.4969	11.3840	0.003960
13.	0.	5.84284	14.0071	13.8874	11.8935	0.000	31.4632	11.3743	0.004264
14.	0.	5.84364	14.0079	13.8874	11.8453	0.000	31.4293	11.3646	0.004574
15.	0.	5.84399	14.0086	13.8874	11.7997	0.000	31.3950	11.3549	0.004887
16.	0.	5.84383	14.0094	13.8874	11.7560	0.000	31.3529	11.3452	0.005207
17.	0.	5.84394	14.0100	13.8874	11.7147	0.000	31.3077	11.3254	0.005449
18.	0.	5.84323	14.0107	13.8874	11.6749	0.000	31.2698	11.3158	0.005778
19.	0.	5.84227	14.0113	13.8874	11.6370	0.000	31.2341	11.3061	0.006110
20.	0.	5.84102	14.0118	13.8874	11.6009	0.000	31.1991	11.2964	0.006445
21.	0.	5.83949	14.0124	13.8874	11.5665	0.000	31.1648	11.2868	0.006785
22.	0.	5.83768	14.0129	13.8874	11.5337	0.000	31.1318	11.2771	0.007129
23.	0.	5.83536	14.0133	13.8874	11.5024	0.000	31.0931	11.2675	0.007481
24.	0.	5.83336	14.0138	13.8874	11.4729	0.000	31.0521	11.2478	0.007755
25.	0.	5.83070	14.0142	13.8874	11.4441	0.000	31.0173	11.2381	0.008113
26.	0.	5.82764	14.0145	13.8874	11.4166	0.000	30.9778	11.2285	0.008475
27.	0.	5.82495	14.0149	13.8874	11.3906	0.000	30.9365	11.2088	0.008759
28.	0.	5.82163	14.0153	13.8874	11.3652	0.000	30.9015	11.1991	0.009126
29.	0.	5.81798	14.0156	13.8874	11.3407	0.000	30.8631	11.1895	0.009499
30.	0.	5.81472	14.0159	13.8874	11.3178	0.000	30.8235	11.1698	0.009793
31.	0.	5.81064	14.0161	13.8874	11.2951	0.000	30.7842	11.1602	0.010174
32.	0.	5.80702	14.0164	13.8874	11.2738	0.000	30.7445	11.1405	0.010474
33.	0.	5.80261	14.0167	13.8874	11.2527	0.000	30.7049	11.1309	0.010860
34.	0.	5.79868	14.0169	13.8874	11.2329	0.000	30.6651	11.1112	0.011166
35.	0.	5.79421	14.0171	13.8874	11.2132	0.000	30.6313	11.1016	0.011555
36.	0.	5.78946	14.0173	13.8874	11.1943	0.000	30.5936	11.0919	0.011947
37.	0.	5.78515	14.0175	13.8874	11.1765	0.000	30.5545	11.0723	0.012258
38.	0.	5.78009	14.0177	13.8874	11.1587	0.000	30.5153	11.0627	0.012655
39.	0.	5.77552	14.0179	13.8874	11.1421	0.000	30.4758	11.0430	0.012971
40.	0.	5.77044	14.0180	13.8874	11.1255	0.000	30.4422	11.0334	0.013370
41.	0.	5.76512	14.0181	13.8874	11.1094	0.000	30.4049	11.0238	0.013772
42.	0.	5.76026	14.0183	13.8874	11.0944	0.000	30.3660	11.0041	0.014092
43.	0.	5.75468	14.0184	13.8874	11.0793	0.000	30.3271	10.9945	0.014498
44.	0.	5.74962	14.0185	13.8874	11.0652	0.000	30.2877	10.9748	0.014822
45.	0.	5.74406	14.0186	13.8874	11.0510	0.000	30.2544	10.9652	0.015230
46.	0.	5.73829	14.0187	13.8874	11.0372	0.000	30.2173	10.9556	0.015639
47.	0.	5.73300	14.0188	13.8874	11.0244	0.000	30.1787	10.9360	0.015966
48.	0.	5.72702	14.0189	13.8874	11.0114	0.000	30.1400	10.9264	0.016378
49.	0.	5.72156	14.0190	13.8874	10.9993	0.000	30.1010	10.9067	0.016709
50.	0.	5.71543	14.0191	13.8874	10.9870	0.000	30.0623	10.8971	0.017124
51.	0.	5.70983	14.0191	13.8874	10.9756	0.000	30.0234	10.8775	0.017457
52.	0.	5.70376	14.0192	13.8874	10.9640	0.000	29.9904	10.8679	0.017874
53.	0.	5.69751	14.0192	13.8874	10.9526	0.000	29.9539	10.8583	0.018291
54.	0.	5.69176	14.0193	13.8874	10.9422	0.000	29.9158	10.8386	0.018626
55.	0.	5.68554	14.0193	13.8874	10.9315	0.000	29.8833	10.8290	0.019045
56.	0.	5.67933	14.0194	13.8874	10.9211	0.000	29.8526	10.8195	0.019463
57.	0.	5.67312	14.0194	13.8874	10.9109	0.000	29.8226	10.8099	0.019880
58.	0.	5.66687	14.0194	13.8874	10.9011	0.000	29.7929	10.8003	0.020297
59.	0.	5.66060	14.0194	13.8874	10.8915	0.000	29.7634	10.7907	0.020713

60.	0.	5.65430	14.0195	13.8874	10.8821	0.000	29.7339	10.7811	0.021129
61.	0.	5.64797	14.0195	13.8874	10.8730	0.000	29.7046	10.7715	0.021544
62.	0.	5.64162	14.0195	13.8874	10.8641	0.000	29.6754	10.7620	0.021958
63.	0.	5.63595	14.0195	13.8874	10.8529	0.000	29.6477	10.7524	0.022370
64.	0.	5.63048	14.0195	13.8874	10.8412	0.000	29.6206	10.7428	0.022782
65.	0.	5.62503	14.0195	13.8874	10.8294	0.000	29.5936	10.7332	0.023195
66.	0.	5.61956	14.0195	13.8874	10.8177	0.000	29.5667	10.7236	0.023607
67.	0.	5.61406	14.0194	13.8874	10.8063	0.000	29.5398	10.7140	0.024020
68.	0.	5.60851	14.0194	13.8874	10.7950	0.000	29.5131	10.7044	0.024433
69.	0.	5.60291	14.0194	13.8874	10.7840	0.000	29.4863	10.6948	0.024846
70.	0.	5.59728	14.0194	13.8874	10.7732	0.000	29.4596	10.6853	0.025260
71.	0.	5.59143	14.0193	13.8874	10.7626	0.000	29.4275	10.6757	0.025674
72.	0.	5.58605	14.0193	13.8874	10.7528	0.000	29.3934	10.6560	0.026008
73.	0.	5.58019	14.0193	13.8874	10.7425	0.000	29.3644	10.6464	0.026425
74.	0.	5.57434	14.0192	13.8874	10.7324	0.000	29.3371	10.6368	0.026842
75.	0.	5.56848	14.0192	13.8874	10.7225	0.000	29.3104	10.6273	0.027260
76.	0.	5.56260	14.0191	13.8874	10.7128	0.000	29.2839	10.6177	0.027677
77.	0.	5.55668	14.0191	13.8874	10.7032	0.000	29.2577	10.6081	0.028094
78.	0.	5.55074	14.0190	13.8874	10.6938	0.000	29.2315	10.5985	0.028511
79.	0.	5.54477	14.0189	13.8874	10.6846	0.000	29.2054	10.5889	0.028928
80.	0.	5.53877	14.0189	13.8874	10.6755	0.000	29.1795	10.5793	0.029345
81.	0.	5.53275	14.0188	13.8874	10.6666	0.000	29.1536	10.5698	0.029761
82.	0.	5.52671	14.0187	13.8874	10.6578	0.000	29.1278	10.5602	0.030177
83.	0.	5.52064	14.0187	13.8874	10.6492	0.000	29.1021	10.5506	0.030593
84.	0.	5.51456	14.0186	13.8874	10.6407	0.000	29.0765	10.5410	0.031009
85.	0.	5.50845	14.0185	13.8874	10.6323	0.000	29.0510	10.5314	0.031425
86.	0.	5.50233	14.0185	13.8874	10.6241	0.000	29.0257	10.5218	0.031839
87.	0.	5.49619	14.0184	13.8874	10.6160	0.000	29.0004	10.5123	0.032254
88.	0.	5.49003	14.0183	13.8874	10.6080	0.000	28.9753	10.5027	0.032668
89.	0.	5.48370	14.0182	13.8874	10.6001	0.000	28.9450	10.4931	0.033083
90.	0.	5.47785	14.0181	13.8874	10.5930	0.000	28.9128	10.4734	0.033416
91.	0.	5.47154	14.0181	13.8874	10.5853	0.000	28.8856	10.4638	0.033832
92.	0.	5.46526	14.0180	13.8874	10.5777	360.000	28.8602	10.4542	0.034249
93.	0.	5.45889	14.0179	13.8874	10.5705	360.000	28.8357	10.4447	0.034667
94.	0.	5.45248	14.0178	13.8874	10.5635	359.999	28.8117	10.4351	0.035086
95.	0.	5.44603	14.0177	13.8874	10.5567	359.998	28.7880	10.4255	0.035506
96.	0.	5.43957	14.0176	13.8874	10.5499	359.998	28.7644	10.4159	0.035925
97.	0.	5.43306	14.0175	13.8874	10.5434	359.996	28.7410	10.4063	0.036345
98.	0.	5.42653	14.0174	13.8874	10.5371	359.995	28.7176	10.3968	0.036764
99.	0.	5.41999	14.0173	13.8874	10.5308	359.993	28.6944	10.3872	0.037182
100.	0.	5.41345	14.0173	13.8874	10.5246	359.992	28.6713	10.3776	0.037600
101.	0.	5.40690	14.0172	13.8874	10.5185	359.990	28.6482	10.3680	0.038017
102.	0.	5.40049	14.0171	13.8874	10.5121	359.989	28.6247	10.3584	0.038428
103.	0.	5.39398	14.0170	13.8874	10.5057	359.989	28.5960	10.3488	0.038838
104.	0.	5.38812	14.0169	13.8874	10.5000	359.988	28.5705	10.3292	0.039165
105.	0.	5.38132	14.0168	13.8874	10.4930	359.988	28.5518	10.3297	0.039656
106.	0.	5.37501	14.0167	13.8874	10.4868	359.988	28.5299	10.3201	0.040063
107.	0.	5.36867	14.0166	13.8874	10.4807	359.987	28.5072	10.3105	0.040468
108.	0.	5.36232	14.0165	13.8874	10.4746	359.987	28.4842	10.3009	0.040873
109.	0.	5.35596	14.0164	13.8874	10.4686	359.986	28.4612	10.2913	0.041277
110.	0.	5.34960	14.0163	13.8874	10.4627	359.986	28.4382	10.2817	0.041681
111.	0.	5.34323	14.0162	13.8874	10.4569	359.986	28.4153	10.2721	0.042084
112.	0.	5.33687	14.0161	13.8874	10.4511	359.985	28.3926	10.2625	0.042486
113.	0.	5.33050	14.0160	13.8874	10.4454	359.985	28.3698	10.2529	0.042887
114.	0.	5.32413	14.0159	13.8874	10.4398	359.984	28.3472	10.2433	0.043288
115.	0.	5.31777	14.0157	13.8874	10.4342	359.984	28.3247	10.2337	0.043688
116.	0.	5.31140	14.0156	13.8874	10.4287	359.984	28.3022	10.2241	0.044087
117.	0.	5.30503	14.0155	13.8874	10.4232	359.983	28.2799	10.2145	0.044485
118.	0.	5.29867	14.0154	13.8874	10.4179	359.983	28.2576	10.2049	0.044883
119.	0.	5.29230	14.0153	13.8874	10.4126	359.983	28.2354	10.1953	0.045280
120.	0.	5.28594	14.0152	13.8874	10.4073	359.982	28.2133	10.1857	0.045676
121.	0.	5.27971	14.0151	13.8874	10.4021	359.982	28.1963	10.1761	0.046072
122.	0.	5.27299	14.0150	13.8874	10.3963	359.982	28.1814	10.1765	0.046546
123.	0.	5.26673	14.0149	13.8874	10.3913	359.981	28.1618	10.1669	0.046936
124.	0.	5.26043	14.0148	13.8874	10.3863	359.981	28.1408	10.1573	0.047326
125.	0.	5.25413	14.0147	13.8874	10.3813	359.981	28.1194	10.1477	0.047715
126.	0.	5.24782	14.0146	13.8874	10.3764	359.980	28.0979	10.1381	0.048103

127.	0.	5.24151	14.0145	13.8874	10.3716	359.980	28.0764	10.1285	0.048490
128.	0.	5.23521	14.0143	13.8874	10.3668	359.980	28.0550	10.1189	0.048877
129.	0.	5.22891	14.0142	13.8874	10.3621	359.979	28.0336	10.1093	0.049263
130.	0.	5.22261	14.0141	13.8874	10.3574	359.979	28.0123	10.0996	0.049647
131.	0.	5.21631	14.0140	13.8874	10.3528	359.979	27.9911	10.0900	0.050032
132.	0.	5.21002	14.0139	13.8874	10.3482	359.978	27.9699	10.0804	0.050415
133.	0.	5.20374	14.0138	13.8874	10.3437	359.978	27.9488	10.0708	0.050798
134.	0.	5.19745	14.0137	13.8874	10.3392	359.978	27.9280	10.0612	0.051180
135.	0.	5.19117	14.0136	13.8874	10.3347	359.978	27.9077	10.0516	0.051563
136.	0.	5.18490	14.0135	13.8874	10.3303	359.978	27.8878	10.0419	0.051945
137.	0.	5.17863	14.0134	13.8874	10.3260	359.977	27.8679	10.0323	0.052326
138.	0.	5.17236	14.0133	13.8874	10.3217	359.977	27.8481	10.0227	0.052706
139.	0.	5.16610	14.0131	13.8874	10.3174	359.977	27.8283	10.0131	0.053086
140.	0.	5.15996	14.0130	13.8874	10.3132	359.977	27.8131	10.0035	0.053465
141.	0.	5.15334	14.0129	13.8874	10.3083	359.977	27.7998	10.0039	0.053921
142.	0.	5.14719	14.0128	13.8874	10.3042	359.977	27.7823	9.9943	0.054296
143.	0.	5.14100	14.0127	13.8874	10.3001	359.977	27.7636	9.9847	0.054669
144.	0.	5.13481	14.0126	13.8874	10.2961	359.976	27.7444	9.9750	0.055042
145.	0.	5.12862	14.0125	13.8874	10.2921	359.976	27.7251	9.9654	0.055414
146.	0.	5.12243	14.0124	13.8874	10.2882	359.976	27.7058	9.9558	0.055785
147.	0.	5.11625	14.0122	13.8874	10.2843	359.976	27.6865	9.9462	0.056155
148.	0.	5.11007	14.0121	13.8874	10.2804	359.977	27.6672	9.9365	0.056525
149.	0.	5.10389	14.0120	13.8874	10.2766	359.977	27.6479	9.9269	0.056894
150.	0.	5.09772	14.0119	13.8874	10.2728	359.977	27.6286	9.9173	0.057262
151.	0.	5.09155	14.0118	13.8874	10.2690	359.977	27.6093	9.9076	0.057630
152.	0.	5.08537	14.0117	13.8874	10.2653	359.978	27.5900	9.8980	0.057997
153.	0.	5.07920	14.0116	13.8874	10.2617	359.978	27.5707	9.8884	0.058363
154.	0.	5.07304	14.0115	13.8874	10.2581	359.979	27.5515	9.8787	0.058729
155.	0.	5.06722	14.0114	13.8874	10.2533	359.979	27.5325	9.8691	0.059092
156.	0.	5.06151	14.0113	13.8874	10.2481	359.980	27.5138	9.8595	0.059455
157.	0.	5.05582	14.0111	13.8874	10.2428	359.981	27.4952	9.8498	0.059817
158.	0.	5.05013	14.0110	13.8874	10.2376	359.981	27.4766	9.8402	0.060179
159.	0.	5.04444	14.0109	13.8874	10.2324	359.982	27.4581	9.8305	0.060541
160.	0.	5.03874	14.0108	13.8874	10.2272	359.983	27.4396	9.8209	0.060902
161.	0.	5.03294	14.0107	13.8874	10.2223	359.983	27.4216	9.8113	0.061267
162.	0.	5.02730	14.0106	13.8874	10.2174	359.984	27.4078	9.8016	0.061629
163.	0.	5.02119	14.0105	13.8874	10.2117	359.985	27.3956	9.8021	0.062067
164.	0.	5.01547	14.0104	13.8874	10.2070	359.986	27.3796	9.7924	0.062427
165.	0.	5.00974	14.0103	13.8874	10.2023	359.987	27.3621	9.7828	0.062786
166.	0.	5.00391	14.0102	13.8874	10.1978	359.988	27.3446	9.7731	0.063147
167.	0.	4.99809	14.0101	13.8874	10.1934	359.989	27.3269	9.7635	0.063507
168.	0.	4.99232	14.0101	13.8874	10.1888	359.990	27.3088	9.7539	0.063864
169.	0.	4.98657	14.0100	13.8874	10.1842	359.991	27.2906	9.7442	0.064221
170.	0.	4.98083	14.0099	13.8874	10.1796	359.992	27.2724	9.7346	0.064577
171.	0.	4.97508	14.0098	13.8874	10.1751	359.992	27.2544	9.7249	0.064933
172.	0.	4.96933	14.0097	13.8874	10.1706	359.993	27.2365	9.7153	0.065288
173.	0.	4.96357	14.0096	13.8874	10.1662	359.994	27.2186	9.7056	0.065644
174.	0.	4.95782	14.0096	13.8874	10.1617	359.995	27.2008	9.6960	0.065999
175.	0.	4.95206	14.0095	13.8874	10.1574	359.996	27.1830	9.6864	0.066353
176.	0.	4.94629	14.0094	13.8874	10.1530	359.997	27.1653	9.6767	0.066708
177.	0.	4.94053	14.0093	13.8874	10.1487	359.997	27.1475	9.6671	0.067062
178.	0.	4.93477	14.0093	13.8874	10.1444	359.998	27.1299	9.6574	0.067415
179.	0.	4.92900	14.0092	13.8874	10.1402	359.999	27.1123	9.6478	0.067769
180.	0.	4.92323	14.0091	13.8874	10.1359	359.999	27.0946	9.6381	0.068121
181.	0.	4.91747	14.0091	13.8874	10.1317	360.000	27.0770	9.6285	0.068474
182.	0.	4.91180	14.0090	13.8874	10.1273	0.001	27.0589	9.6188	0.068823
183.	0.	4.90623	14.0089	13.8874	10.1227	0.003	27.0405	9.6092	0.069168
184.	0.	4.90071	14.0089	13.8874	10.1179	0.005	27.0219	9.5995	0.069511
185.	0.	4.89518	14.0088	13.8874	10.1133	0.007	27.0035	9.5899	0.069854
186.	0.	4.88967	14.0087	13.8874	10.1086	0.010	26.9850	9.5802	0.070197
187.	0.	4.88421	14.0087	13.8874	10.1037	0.014	26.9666	9.5705	0.070537
188.	0.	4.87880	14.0086	13.8874	10.0988	0.018	26.9482	9.5609	0.070876
189.	0.	4.87340	14.0085	13.8874	10.0939	0.023	26.9298	9.5512	0.071214
190.	0.	4.86802	14.0085	13.8874	10.0889	0.028	26.9115	9.5416	0.071551
191.	0.	4.86264	14.0084	13.8874	10.0840	0.033	26.8932	9.5319	0.071888
192.	0.	4.85733	14.0084	13.8874	10.0789	0.039	26.8752	9.5222	0.072223
193.	0.	4.85218	14.0083	13.8874	10.0737	0.046	26.8617	9.5126	0.072556

194.	0.	4.84644	14.0082	13.8874	10.0676	0.053	26.8459	9.5130	0.072965
195.	0.	4.84165	14.0082	13.8874	10.0633	0.061	26.8244	9.4932	0.073219
196.	0.	4.83635	14.0082	13.8874	10.0582	0.068	26.8058	9.4836	0.073552
197.	0.	4.83098	14.0081	13.8874	10.0530	0.075	26.7838	9.4739	0.073885
198.	0.	4.82610	14.0081	13.8874	10.0487	0.083	26.7604	9.4541	0.074141
199.	0.	4.82074	14.0080	13.8874	10.0436	0.091	26.7414	9.4445	0.074476
200.	0.	4.81538	14.0080	13.8874	10.0387	0.098	26.7236	9.4348	0.074812
201.	0.	4.80993	14.0079	13.8874	10.0337	0.106	26.7024	9.4251	0.075148
202.	0.	4.80500	14.0079	13.8874	10.0296	0.115	26.6799	9.4054	0.075407
203.	0.	4.79959	14.0078	13.8874	10.0246	0.124	26.6615	9.3957	0.075746
204.	0.	4.79418	14.0078	13.8874	10.0195	0.132	26.6400	9.3861	0.076082
205.	0.	4.78930	14.0078	13.8874	10.0151	0.139	26.6171	9.3663	0.076340
206.	0.	4.78397	14.0077	13.8874	10.0098	0.147	26.5984	9.3567	0.076677
207.	0.	4.77858	14.0077	13.8874	10.0045	0.155	26.5769	9.3470	0.077014
208.	0.	4.77369	14.0077	13.8874	10.0001	0.163	26.5541	9.3273	0.077274
209.	0.	4.76834	14.0076	13.8874	9.9948	0.171	26.5355	9.3176	0.077613
210.	0.	4.76303	14.0076	13.8874	9.9896	0.179	26.5182	9.3080	0.077953
211.	0.	4.75769	14.0075	13.8874	9.9841	0.187	26.4971	9.2983	0.078289
212.	0.	4.75285	14.0075	13.8874	9.9795	0.195	26.4741	9.2785	0.078549
213.	0.	4.74754	14.0075	13.8874	9.9741	0.203	26.4552	9.2689	0.078887
214.	0.	4.74226	14.0075	13.8874	9.9686	0.211	26.4376	9.2592	0.079226
215.	0.	4.73691	14.0074	13.8874	9.9632	0.220	26.4164	9.2496	0.079564
216.	0.	4.73205	14.0074	13.8874	9.9586	0.228	26.3936	9.2298	0.079825
217.	0.	4.72672	14.0074	13.8874	9.9531	0.236	26.3749	9.2202	0.080165
218.	0.	4.72143	14.0073	13.8874	9.9477	0.244	26.3576	9.2105	0.080506
219.	0.	4.71615	14.0073	13.8874	9.9422	0.253	26.3407	9.2008	0.080845
220.	0.	4.71087	14.0073	13.8874	9.9368	0.261	26.3242	9.1912	0.081185
221.	0.	4.70558	14.0072	13.8874	9.9315	0.270	26.3078	9.1815	0.081524
222.	0.	4.70021	14.0072	13.8874	9.9261	0.278	26.2875	9.1719	0.081863
223.	0.	4.69533	14.0072	13.8874	9.9216	0.287	26.2654	9.1521	0.082125
224.	0.	4.68998	14.0072	13.8874	9.9162	0.295	26.2475	9.1425	0.082466
225.	0.	4.68466	14.0072	13.8874	9.9109	0.304	26.2308	9.1328	0.082807
226.	0.	4.67936	14.0071	13.8874	9.9056	0.313	26.2147	9.1231	0.083148
227.	0.	4.67406	14.0071	13.8874	9.9003	0.322	26.1988	9.1135	0.083488
228.	0.	4.66877	14.0071	13.8874	9.8950	0.330	26.1831	9.1038	0.083828
229.	0.	4.66339	14.0071	13.8874	9.8896	0.339	26.1634	9.0942	0.084167
230.	0.	4.65850	14.0070	13.8874	9.8852	0.348	26.1418	9.0744	0.084429
231.	0.	4.65313	14.0070	13.8874	9.8800	0.357	26.1241	9.0648	0.084770
232.	0.	4.64779	14.0070	13.8874	9.8747	0.366	26.1078	9.0551	0.085112
233.	0.	4.64247	14.0070	13.8874	9.8695	0.374	26.0919	9.0455	0.085453
234.	0.	4.63714	14.0070	13.8874	9.8643	0.383	26.0762	9.0358	0.085793
235.	0.	4.63182	14.0069	13.8874	9.8591	0.392	26.0604	9.0261	0.086134
236.	0.	4.62652	14.0069	13.8874	9.8540	0.401	26.0447	9.0165	0.086472
237.	0.	4.62131	14.0069	13.8874	9.8487	0.410	26.0286	9.0068	0.086804
238.	0.	4.61612	14.0069	13.8874	9.8435	0.420	26.0125	8.9971	0.087135
239.	0.	4.61093	14.0069	13.8874	9.8383	0.429	25.9964	8.9875	0.087466
240.	0.	4.60573	14.0069	13.8874	9.8331	0.439	25.9804	8.9778	0.087796
241.	0.	4.60053	14.0068	13.8874	9.8279	0.448	25.9643	8.9681	0.088126
242.	0.	4.59534	14.0068	13.8874	9.8228	0.458	25.9482	8.9585	0.088455
243.	0.	4.59014	14.0068	13.8874	9.8178	0.468	25.9321	8.9488	0.088784
244.	0.	4.58494	14.0068	13.8874	9.8127	0.477	25.9160	8.9391	0.089112
245.	0.	4.57983	14.0068	13.8874	9.8077	0.487	25.9040	8.9294	0.089441
246.	0.	4.57418	14.0068	13.8874	9.8019	0.497	25.8942	8.9298	0.089850
247.	0.	4.56907	14.0067	13.8874	9.7970	0.507	25.8801	8.9202	0.090174
248.	0.	4.56395	14.0067	13.8874	9.7921	0.516	25.8649	8.9105	0.090497
249.	0.	4.55881	14.0067	13.8874	9.7872	0.526	25.8492	8.9008	0.090820
250.	0.	4.55368	14.0067	13.8874	9.7823	0.536	25.8335	8.8911	0.091142
251.	0.	4.54854	14.0067	13.8874	9.7775	0.546	25.8176	8.8815	0.091464
252.	0.	4.54341	14.0067	13.8874	9.7727	0.556	25.8019	8.8718	0.091786
253.	0.	4.53828	14.0067	13.8874	9.7679	0.566	25.7861	8.8621	0.092107
254.	0.	4.53315	14.0067	13.8874	9.7631	0.576	25.7703	8.8524	0.092427
255.	0.	4.52803	14.0066	13.8874	9.7584	0.586	25.7546	8.8427	0.092748
256.	0.	4.52290	14.0066	13.8874	9.7536	0.596	25.7388	8.8331	0.093067
257.	0.	4.51783	14.0066	13.8874	9.7485	0.606	25.7180	8.8234	0.093381
258.	0.	4.51341	14.0066	13.8874	9.7439	0.616	25.6948	8.8036	0.093612
259.	0.	4.50850	14.0066	13.8874	9.7384	0.627	25.6758	8.7939	0.093925
260.	0.	4.50362	14.0066	13.8874	9.7328	0.639	25.6581	8.7842	0.094239

261.	0.	4.49876	14.0066	13.8874	9.7271	0.650	25.6409	8.7746	0.094552
262.	0.	4.49397	14.0066	13.8874	9.7213	0.662	25.6239	8.7649	0.094864
263.	0.	4.48928	14.0066	13.8874	9.7153	0.675	25.6070	8.7552	0.095172
264.	0.	4.48460	14.0066	13.8874	9.7092	0.688	25.5902	8.7455	0.095480
265.	0.	4.47994	14.0065	13.8874	9.7031	0.701	25.5735	8.7358	0.095787
266.	0.	4.47530	14.0065	13.8874	9.6969	0.714	25.5568	8.7261	0.096094
267.	0.	4.47068	14.0065	13.8874	9.6907	0.728	25.5402	8.7164	0.096400
268.	0.	4.46607	14.0065	13.8874	9.6844	0.741	25.5237	8.7067	0.096705
269.	0.	4.46149	14.0065	13.8874	9.6782	0.755	25.5072	8.6970	0.097010
270.	0.	4.45692	14.0065	13.8874	9.6718	0.769	25.4908	8.6873	0.097314
271.	0.	4.45244	14.0065	13.8874	9.6653	0.784	25.4749	8.6776	0.097616
272.	0.	4.44794	14.0065	13.8874	9.6588	0.800	25.4591	8.6679	0.097918
273.	0.	4.44347	14.0065	13.8874	9.6522	0.815	25.4434	8.6582	0.098219
274.	0.	4.43899	14.0065	13.8874	9.6457	0.830	25.4279	8.6485	0.098521
275.	0.	4.43446	14.0065	13.8874	9.6391	0.846	25.4083	8.6388	0.098820
276.	0.	4.43047	14.0065	13.8874	9.6334	0.861	25.3865	8.6190	0.099039
277.	0.	4.42596	14.0065	13.8874	9.6267	0.877	25.3692	8.6093	0.099342
278.	0.	4.42136	14.0065	13.8874	9.6201	0.892	25.3493	8.5996	0.099645
279.	0.	4.41733	14.0065	13.8874	9.6144	0.908	25.3276	8.5799	0.099867
280.	0.	4.41270	14.0065	13.8874	9.6077	0.923	25.3066	8.5702	0.100172
281.	0.	4.40866	14.0065	13.8874	9.6019	0.939	25.2846	8.5504	0.100395
282.	0.	4.40408	14.0065	13.8874	9.5952	0.955	25.2678	8.5407	0.100703
283.	0.	4.39944	14.0065	13.8874	9.5885	0.971	25.2483	8.5310	0.101012
284.	0.	4.39536	14.0065	13.8874	9.5827	0.987	25.2271	8.5112	0.101237
285.	0.	4.39067	14.0065	13.8874	9.5759	1.003	25.2065	8.5015	0.101548
286.	0.	4.38658	14.0065	13.8874	9.5700	1.019	25.1852	8.4818	0.101776
287.	0.	4.38195	14.0065	13.8874	9.5631	1.036	25.1689	8.4721	0.102090
288.	0.	4.37728	14.0065	13.8874	9.5562	1.052	25.1503	8.4624	0.102404
289.	0.	4.37321	14.0065	13.8874	9.5501	1.069	25.1303	8.4426	0.102634
290.	0.	4.36855	14.0065	13.8874	9.5430	1.087	25.1112	8.4329	0.102949
291.	0.	4.36448	14.0065	13.8874	9.5368	1.105	25.0913	8.4132	0.103181
292.	0.	4.35988	14.0065	13.8874	9.5295	1.123	25.0765	8.4035	0.103501
293.	0.	4.35525	14.0065	13.8874	9.5222	1.141	25.0594	8.3938	0.103819
294.	0.	4.35119	14.0065	13.8874	9.5158	1.159	25.0405	8.3741	0.104053
295.	0.	4.34652	14.0065	13.8874	9.5084	1.178	25.0222	8.3644	0.104373
296.	0.	4.34244	14.0065	13.8874	9.5019	1.196	25.0030	8.3446	0.104609
297.	0.	4.33776	14.0065	13.8874	9.4944	1.215	24.9850	8.3349	0.104932
298.	0.	4.33369	14.0065	13.8874	9.4878	1.233	24.9659	8.3152	0.105169
299.	0.	4.32901	14.0065	13.8874	9.4801	1.252	24.9481	8.3055	0.105495
300.	0.	4.32493	14.0065	13.8874	9.4733	1.271	24.9294	8.2857	0.105735
301.	0.	4.32020	14.0065	13.8874	9.4656	1.290	24.9122	8.2761	0.106064
302.	0.	4.31609	14.0065	13.8874	9.4588	1.309	24.8942	8.2563	0.106307
303.	0.	4.31136	14.0065	13.8874	9.4510	1.329	24.8776	8.2466	0.106639
304.	0.	4.30724	14.0065	13.8874	9.4440	1.349	24.8601	8.2269	0.106884
305.	0.	4.30251	14.0065	13.8874	9.4360	1.369	24.8440	8.2172	0.107219
306.	0.	4.29839	14.0066	13.8874	9.4289	1.389	24.8272	8.1975	0.107467
307.	0.	4.29366	14.0066	13.8874	9.4207	1.410	24.8119	8.1878	0.107804
308.	0.	4.28954	14.0066	13.8874	9.4135	1.431	24.7957	8.1681	0.108055
309.	0.	4.28479	14.0066	13.8874	9.4052	1.452	24.7809	8.1584	0.108395
310.	0.	4.28062	14.0066	13.8874	9.3980	1.473	24.7652	8.1386	0.108649
311.	0.	4.27583	14.0066	13.8874	9.3897	1.495	24.7509	8.1290	0.108993
312.	0.	4.27158	14.0066	13.8874	9.3823	1.517	24.7319	8.1092	0.109249
313.	0.	4.26729	14.0066	13.8874	9.3750	1.540	24.7159	8.0895	0.109511
314.	0.	4.26232	14.0066	13.8874	9.3668	1.564	24.7023	8.0799	0.109868
315.	0.	4.25796	14.0066	13.8874	9.3596	1.589	24.6883	8.0601	0.110137
316.	0.	4.25296	14.0066	13.8874	9.3513	1.615	24.6763	8.0505	0.110498
317.	0.	4.24841	14.0066	13.8874	9.3442	1.642	24.6600	8.0308	0.110775
318.	0.	4.24388	14.0066	13.8874	9.3370	1.669	24.6467	8.0111	0.111056
319.	0.	4.23875	14.0066	13.8874	9.3287	1.697	24.6359	8.0014	0.111427
320.	0.	4.23415	14.0066	13.8874	9.3213	1.725	24.6208	7.9817	0.111711
321.	0.	4.22958	14.0067	13.8874	9.3140	1.753	24.6087	7.9620	0.111998
322.	0.	4.22441	14.0067	13.8874	9.3054	1.783	24.5993	7.9524	0.112377
323.	0.	4.21986	14.0067	13.8874	9.2979	1.813	24.5895	7.9327	0.112667
324.	0.	4.21470	14.0067	13.8874	9.2892	1.844	24.5815	7.9230	0.113049
325.	0.	4.21009	14.0067	13.8874	9.2815	1.875	24.5692	7.9033	0.113340
326.	0.	4.20550	14.0067	13.8874	9.2738	1.908	24.5597	7.8836	0.113635
327.	0.	4.20030	14.0067	13.8874	9.2649	1.940	24.5528	7.8740	0.114023

328.	0.	4.19568	14.0067	13.8874	9.2571	1.974	24.5455	7.8543	0.114323
329.	0.	4.19047	14.0067	13.8874	9.2480	2.008	24.5400	7.8447	0.114715
330.	0.	4.18580	14.0067	13.8874	9.2401	2.042	24.5297	7.8250	0.115016
331.	0.	4.18115	14.0067	13.8874	9.2320	2.077	24.5225	7.8053	0.115321
332.	0.	4.17583	14.0067	13.8874	9.2229	2.113	24.5184	7.7957	0.115723
333.	0.	4.17102	14.0067	13.8874	9.2150	2.149	24.5100	7.7760	0.116036
334.	0.	4.16624	14.0068	13.8874	9.2069	2.186	24.5046	7.7564	0.116352
335.	0.	4.16087	14.0067	13.8874	9.1976	2.224	24.5018	7.7468	0.116761
336.	0.	4.15605	14.0068	13.8874	9.1895	2.262	24.4985	7.7271	0.117082
337.	0.	4.15063	14.0068	13.8874	9.1803	2.300	24.4969	7.7175	0.117497
338.	0.	4.14579	14.0068	13.8874	9.1718	2.342	24.4901	7.6978	0.117820
339.	0.	4.14101	14.0068	13.8874	9.1631	2.385	24.4861	7.6781	0.118146
340.	0.	4.13568	14.0068	13.8874	9.1531	2.428	24.4845	7.6686	0.118565
341.	0.	4.13074	14.0068	13.8874	9.1445	2.469	24.4771	7.6489	0.118898
342.	0.	4.12573	14.0068	13.8874	9.1359	2.509	24.4715	7.6292	0.119236
343.	0.	4.12016	14.0068	13.8874	9.1261	2.550	24.4685	7.6197	0.119668
344.	0.	4.11511	14.0068	13.8874	9.1175	2.590	24.4647	7.6000	0.120013
345.	0.	4.10951	14.0068	13.8874	9.1075	2.632	24.4625	7.5904	0.120449
346.	0.	4.10435	14.0068	13.8874	9.0989	2.672	24.4550	7.5708	0.120796
347.	0.	4.09917	14.0068	13.8874	9.0901	2.712	24.4459	7.5511	0.121144
348.	0.	4.09395	14.0069	13.8874	9.0813	2.753	24.4362	7.5315	0.121495
349.	0.	4.08866	14.0069	13.8874	9.0724	2.792	24.4260	7.5119	0.121851
350.	0.	4.08330	14.0069	13.8874	9.0635	2.832	24.4156	7.4922	0.122212
351.	0.	4.07786	14.0069	13.8874	9.0545	2.871	24.4050	7.4726	0.122579
352.	0.	4.07221	14.0069	13.8874	9.0458	2.908	24.3898	7.4530	0.122953
353.	0.	4.06694	14.0069	13.8874	9.0385	2.943	24.3707	7.4232	0.123241
354.	0.	4.06099	14.0070	13.8874	9.0300	2.978	24.3569	7.4036	0.123636
355.	0.	4.05493	14.0070	13.8874	9.0217	3.014	24.3438	7.3840	0.124038
356.	0.	4.04866	14.0070	13.8874	9.0137	3.046	24.3292	7.3644	0.124450
357.	0.	4.04223	14.0070	13.8874	9.0057	3.077	24.3106	7.3449	0.124866
358.	0.	4.03631	14.0070	13.8874	8.9990	3.108	24.2883	7.3152	0.125191
359.	0.	4.02981	14.0070	13.8874	8.9908	3.140	24.2712	7.2956	0.125619
360.	0.	4.02325	14.0071	13.8874	8.9826	3.171	24.2553	7.2761	0.126053
361.	0.	4.01653	14.0071	13.8874	8.9745	3.201	24.2354	7.2565	0.126492
362.	0.	4.01031	14.0071	13.8874	8.9677	3.231	24.2120	7.2268	0.126839
363.	0.	4.00349	14.0071	13.8874	8.9595	3.262	24.1942	7.2073	0.127291
364.	0.	3.99656	14.0071	13.8874	8.9514	3.294	24.1775	7.1878	0.127751
365.	0.	3.98951	14.0071	13.8874	8.9433	3.325	24.1568	7.1682	0.128215
366.	0.	3.98293	14.0072	13.8874	8.9366	3.355	24.1325	7.1386	0.128587
367.	0.	3.97574	14.0072	13.8874	8.9285	3.386	24.1138	7.1191	0.129065
368.	0.	3.96847	14.0072	13.8874	8.9204	3.416	24.0962	7.0995	0.129550
369.	0.	3.96110	14.0072	13.8874	8.9125	3.446	24.0787	7.0800	0.130041
370.	0.	3.95358	14.0072	13.8874	8.9047	3.476	24.0571	7.0605	0.130536
371.	0.	3.94653	14.0073	13.8874	8.8983	3.505	24.0317	7.0309	0.130937
372.	0.	3.93890	14.0073	13.8874	8.8904	3.535	24.0119	7.0114	0.131445
373.	0.	3.93122	14.0073	13.8874	8.8825	3.564	23.9931	6.9920	0.131959
374.	0.	3.92341	14.0073	13.8874	8.8747	3.593	23.9702	6.9725	0.132476
375.	0.	3.91590	14.0073	13.8874	8.8686	3.618	23.9420	6.9429	0.132904
376.	0.	3.90783	14.0073	13.8874	8.8611	3.644	23.9195	6.9234	0.133439
377.	0.	3.89967	14.0074	13.8874	8.8537	3.669	23.8977	6.9040	0.133980
378.	0.	3.89138	14.0074	13.8874	8.8463	3.693	23.8715	6.8845	0.134524
379.	0.	3.88346	14.0074	13.8874	8.8406	3.716	23.8409	6.8550	0.134979
380.	0.	3.87503	14.0074	13.8874	8.8332	3.740	23.8167	6.8355	0.135538
381.	0.	3.86656	14.0074	13.8874	8.8259	3.765	23.7937	6.8161	0.136101
382.	0.	3.85806	14.0074	13.8874	8.8185	3.789	23.7710	6.7967	0.136668
383.	0.	3.84951	14.0075	13.8874	8.8112	3.813	23.7481	6.7772	0.137238
384.	0.	3.84085	14.0075	13.8874	8.8039	3.835	23.7207	6.7578	0.137809
385.	0.	3.83255	14.0075	13.8874	8.7984	3.856	23.6889	6.7283	0.138290
386.	0.	3.82372	14.0075	13.8874	8.7912	3.878	23.6636	6.7089	0.138877
387.	0.	3.81485	14.0075	13.8874	8.7841	3.900	23.6394	6.6895	0.139468
388.	0.	3.80592	14.0076	13.8874	8.7771	3.922	23.6157	6.6701	0.140063
389.	0.	3.79694	14.0076	13.8874	8.7702	3.943	23.5920	6.6507	0.140661
390.	0.	3.78793	14.0076	13.8874	8.7633	3.964	23.5682	6.6313	0.141261
391.	0.	3.77887	14.0076	13.8874	8.7564	3.985	23.5442	6.6119	0.141865
392.	0.	3.76977	14.0076	13.8874	8.7495	4.005	23.5201	6.5925	0.142470
393.	0.	3.76064	14.0076	13.8874	8.7427	4.025	23.4957	6.5731	0.143079
394.	0.	3.75146	14.0077	13.8874	8.7360	4.045	23.4712	6.5537	0.143689

395.	0.	3.74228	14.0077	13.8874	8.7293	4.064	23.4502	6.5343	0.144304
396.	0.	3.73269	14.0077	13.8874	8.7209	4.084	23.4334	6.5250	0.145015
397.	0.	3.72351	14.0077	13.8874	8.7143	4.102	23.4098	6.5056	0.145625
398.	0.	3.71429	14.0077	13.8874	8.7077	4.120	23.3848	6.4862	0.146236
399.	0.	3.70503	14.0077	13.8874	8.7012	4.137	23.3592	6.4668	0.146850
400.	0.	3.69574	14.0078	13.8874	8.6947	4.154	23.3333	6.4475	0.147466
401.	0.	3.68642	14.0078	13.8874	8.6882	4.170	23.3073	6.4281	0.148083
402.	0.	3.67706	14.0078	13.8874	8.6818	4.187	23.2812	6.4087	0.148704
403.	0.	3.66768	14.0078	13.8874	8.6754	4.203	23.2550	6.3893	0.149326
404.	0.	3.65827	14.0078	13.8874	8.6690	4.219	23.2287	6.3699	0.149950
405.	0.	3.64888	14.0078	13.8874	8.6626	4.235	23.2070	6.3506	0.150578
406.	0.	3.63907	14.0079	13.8874	8.6545	4.253	23.1899	6.3413	0.151302
407.	0.	3.62964	14.0079	13.8874	8.6484	4.269	23.1660	6.3219	0.151927
408.	0.	3.62016	14.0079	13.8874	8.6424	4.283	23.1406	6.3026	0.152553
409.	0.	3.61063	14.0079	13.8874	8.6364	4.298	23.1148	6.2832	0.153182
410.	0.	3.60104	14.0079	13.8874	8.6306	4.312	23.0888	6.2638	0.153814
411.	0.	3.59141	14.0079	13.8874	8.6248	4.325	23.0628	6.2444	0.154448
412.	0.	3.58177	14.0080	13.8874	8.6190	4.339	23.0369	6.2251	0.155084
413.	0.	3.57208	14.0080	13.8874	8.6134	4.352	23.0109	6.2057	0.155722
414.	0.	3.56236	14.0080	13.8874	8.6077	4.365	22.9848	6.1864	0.156363
415.	0.	3.55266	14.0080	13.8874	8.6022	4.378	22.9632	6.1670	0.157007
416.	0.	3.54253	14.0080	13.8874	8.5949	4.393	22.9462	6.1577	0.157748
417.	0.	3.53273	14.0080	13.8874	8.5897	4.403	22.9219	6.1384	0.158391
418.	0.	3.52292	14.0081	13.8874	8.5845	4.413	22.8960	6.1190	0.159034
419.	0.	3.51308	14.0081	13.8874	8.5794	4.423	22.8695	6.0997	0.159679
420.	0.	3.50321	14.0081	13.8874	8.5743	4.432	22.8428	6.0803	0.160325
421.	0.	3.49337	14.0081	13.8874	8.5692	4.442	22.8207	6.0610	0.160974
422.	0.	3.48319	14.0081	13.8874	8.5622	4.455	22.8034	6.0517	0.161716
423.	0.	3.47334	14.0081	13.8874	8.5573	4.464	22.7791	6.0324	0.162361
424.	0.	3.46353	14.0082	13.8874	8.5525	4.473	22.7577	6.0130	0.163007
425.	0.	3.45337	14.0082	13.8874	8.5457	4.485	22.7406	6.0037	0.163745
426.	0.	3.44360	14.0082	13.8874	8.5410	4.494	22.7210	5.9844	0.164387
427.	0.	3.43350	14.0082	13.8874	8.5343	4.506	22.7046	5.9751	0.165119
428.	0.	3.42374	14.0082	13.8874	8.5298	4.513	22.6806	5.9558	0.165755
429.	0.	3.41403	14.0082	13.8874	8.5252	4.521	22.6593	5.9364	0.166390
430.	0.	3.40400	14.0082	13.8874	8.5186	4.532	22.6424	5.9271	0.167115
431.	0.	3.39431	14.0082	13.8874	8.5141	4.539	22.6181	5.9077	0.167745
432.	0.	3.38465	14.0083	13.8874	8.5096	4.546	22.5968	5.8884	0.168376
433.	0.	3.37467	14.0083	13.8874	8.5031	4.556	22.5798	5.8791	0.169097
434.	0.	3.36510	14.0083	13.8874	8.4987	4.563	22.5600	5.8597	0.169723
435.	0.	3.35520	14.0083	13.8874	8.4922	4.573	22.5434	5.8504	0.170438
436.	0.	3.34562	14.0083	13.8874	8.4879	4.579	22.5193	5.8311	0.171058
437.	0.	3.33607	14.0083	13.8874	8.4837	4.585	22.4981	5.8117	0.171679
438.	0.	3.32620	14.0083	13.8874	8.4773	4.594	22.4812	5.8024	0.172390
439.	0.	3.31664	14.0083	13.8874	8.4732	4.600	22.4569	5.7830	0.173007
440.	0.	3.30713	14.0083	13.8874	8.4691	4.606	22.4356	5.7636	0.173624
441.	0.	3.29730	14.0083	13.8874	8.4629	4.614	22.4187	5.7543	0.174331
442.	0.	3.28784	14.0083	13.8874	8.4589	4.620	22.3991	5.7349	0.174945
443.	0.	3.27807	14.0083	13.8874	8.4527	4.628	22.3827	5.7256	0.175647
444.	0.	3.26861	14.0084	13.8874	8.4489	4.633	22.3585	5.7063	0.176255
445.	0.	3.25919	14.0084	13.8874	8.4450	4.638	22.3372	5.6869	0.176864
446.	0.	3.24946	14.0084	13.8874	8.4390	4.646	22.3203	5.6776	0.177561
447.	0.	3.24002	14.0084	13.8874	8.4352	4.650	22.2958	5.6582	0.178167
448.	0.	3.23062	14.0084	13.8874	8.4315	4.654	22.2746	5.6388	0.178773
449.	0.	3.22092	14.0084	13.8874	8.4256	4.662	22.2577	5.6295	0.179467
450.	0.	3.21151	14.0084	13.8874	8.4220	4.665	22.2332	5.6101	0.180070
451.	0.	3.20208	14.0084	13.8874	8.4184	4.668	22.2070	5.5907	0.180673
452.	0.	3.19256	14.0084	13.8874	8.4149	4.669	22.1754	5.5713	0.181276
453.	0.	3.18332	14.0084	13.8874	8.4137	4.666	22.1381	5.5418	0.181792
454.	0.	3.17368	14.0084	13.8874	8.4102	4.668	22.1084	5.5224	0.182410
455.	0.	3.16396	14.0084	13.8874	8.4068	4.668	22.0753	5.5030	0.183031
456.	0.	3.15453	14.0085	13.8874	8.4057	4.665	22.0373	5.4736	0.183563
457.	0.	3.14469	14.0085	13.8874	8.4024	4.666	22.0069	5.4542	0.184197
458.	0.	3.13477	14.0085	13.8874	8.3991	4.665	21.9731	5.4348	0.184834
459.	0.	3.12514	14.0085	13.8874	8.3982	4.661	21.9338	5.4054	0.185383
460.	0.	3.11513	14.0085	13.8874	8.3949	4.661	21.9018	5.3860	0.186032
461.	0.	3.10505	14.0085	13.8874	8.3916	4.659	21.8661	5.3667	0.186684

462.	0.	3.09528	14.0086	13.8874	8.3906	4.654	21.8250	5.3372	0.187245
463.	0.	3.08503	14.0086	13.8874	8.3874	4.651	21.7868	5.3179	0.187910
464.	0.	3.07509	14.0086	13.8874	8.3866	4.644	21.7443	5.2885	0.188485
465.	0.	3.06468	14.0086	13.8874	8.3835	4.640	21.7050	5.2692	0.189164
466.	0.	3.05458	14.0086	13.8874	8.3828	4.633	21.6615	5.2398	0.189753
467.	0.	3.04403	14.0086	13.8874	8.3797	4.629	21.6216	5.2204	0.190445
468.	0.	3.03386	14.0087	13.8874	8.3787	4.621	21.5782	5.1910	0.191045
469.	0.	3.02319	14.0087	13.8874	8.3755	4.616	21.5384	5.1718	0.191751
470.	0.	3.01280	14.0087	13.8874	8.3747	4.606	21.4898	5.1424	0.192364
471.	0.	3.00232	14.0087	13.8874	8.3740	4.598	21.4437	5.1130	0.192990
472.	0.	2.99132	14.0087	13.8874	8.3711	4.593	21.4021	5.0937	0.193723
473.	0.	2.98071	14.0088	13.8874	8.3704	4.586	21.3574	5.0644	0.194364
474.	0.	2.96958	14.0088	13.8874	8.3675	4.581	21.3157	5.0451	0.195111
475.	0.	2.95884	14.0088	13.8874	8.3669	4.574	21.2706	5.0158	0.195764
476.	0.	2.94759	14.0088	13.8874	8.3640	4.569	21.2282	4.9965	0.196524
477.	0.	2.93672	14.0089	13.8874	8.3635	4.561	21.1824	4.9672	0.197190
478.	0.	2.92532	14.0089	13.8874	8.3607	4.556	21.1393	4.9480	0.197964
479.	0.	2.91426	14.0089	13.8874	8.3603	4.546	21.0874	4.9186	0.198641
480.	0.	2.90312	14.0090	13.8874	8.3600	4.537	21.0380	4.8893	0.199329
481.	0.	2.89146	14.0090	13.8874	8.3573	4.530	20.9928	4.8701	0.200128
482.	0.	2.88020	14.0090	13.8874	8.3571	4.521	20.9446	4.8408	0.200831
483.	0.	2.86842	14.0090	13.8874	8.3545	4.514	20.8993	4.8216	0.201643
484.	0.	2.85705	14.0091	13.8874	8.3544	4.504	20.8506	4.7924	0.202357
485.	0.	2.84515	14.0091	13.8874	8.3519	4.497	20.8047	4.7732	0.203182
486.	0.	2.83361	14.0091	13.8874	8.3519	4.485	20.7498	4.7439	0.203906
487.	0.	2.82200	14.0092	13.8874	8.3519	4.474	20.6978	4.7146	0.204643
488.	0.	2.80989	14.0092	13.8874	8.3493	4.468	20.6519	4.6955	0.205494
489.	0.	2.79820	14.0092	13.8874	8.3492	4.458	20.6023	4.6662	0.206245
490.	0.	2.78591	14.0092	13.8874	8.3470	4.449	20.5544	4.6471	0.207110
491.	0.	2.77406	14.0093	13.8874	8.3474	4.436	20.5023	4.6179	0.207872
492.	0.	2.76166	14.0093	13.8874	8.3454	4.427	20.4534	4.5987	0.208747
493.	0.	2.74967	14.0094	13.8874	8.3459	4.412	20.3952	4.5695	0.209519
494.	0.	2.73761	14.0094	13.8874	8.3464	4.399	20.3402	4.5403	0.210302
495.	0.	2.72501	14.0094	13.8874	8.3445	4.389	20.2898	4.5212	0.211200
496.	0.	2.71290	14.0095	13.8874	8.3451	4.376	20.2361	4.4920	0.211993
497.	0.	2.70025	14.0095	13.8874	8.3432	4.365	20.1864	4.4729	0.212900
498.	0.	2.68810	14.0096	13.8874	8.3439	4.352	20.1331	4.4437	0.213700
499.	0.	2.67539	14.0096	13.8874	8.3420	4.342	20.0833	4.4246	0.214615
500.	0.	2.66314	14.0096	13.8874	8.3428	4.328	20.0243	4.3954	0.215423
501.	0.	2.65082	14.0097	13.8874	8.3435	4.314	19.9683	4.3662	0.216243
502.	0.	2.63791	14.0097	13.8874	8.3419	4.303	19.9173	4.3472	0.217181
503.	0.	2.62561	14.0098	13.8874	8.3424	4.289	19.8627	4.3180	0.218007
504.	0.	2.61274	14.0098	13.8874	8.3405	4.278	19.8118	4.2990	0.218951
505.	0.	2.60041	14.0099	13.8874	8.3410	4.263	19.7572	4.2698	0.219784
506.	0.	2.58760	14.0099	13.8874	8.3386	4.249	19.7073	4.2507	0.220734
507.	0.	2.57561	14.0100	13.8874	8.3374	4.235	19.6530	4.2216	0.221562
508.	0.	2.56308	14.0100	13.8874	8.3337	4.228	19.6070	4.2025	0.222510
509.	0.	2.55053	14.0101	13.8874	8.3296	4.224	19.5545	4.1835	0.223459
510.	0.	2.53864	14.0101	13.8874	8.3281	4.215	19.5002	4.1543	0.224289
511.	0.	2.52608	14.0102	13.8874	8.3242	4.208	19.4487	4.1352	0.225243
512.	0.	2.51411	14.0102	13.8874	8.3226	4.199	19.3941	4.1061	0.226084
513.	0.	2.50169	14.0103	13.8874	8.3177	4.200	19.3528	4.0870	0.227048
514.	0.	2.48919	14.0104	13.8874	8.3135	4.198	19.3115	4.0680	0.228014
515.	0.	2.47671	14.0104	13.8874	8.3094	4.195	19.2707	4.0490	0.228978
516.	0.	2.46434	14.0105	13.8874	8.3049	4.188	19.2300	4.0299	0.229936
517.	0.	2.45195	14.0105	13.8874	8.3009	4.181	19.1892	4.0109	0.230894
518.	0.	2.43952	14.0106	13.8874	8.2972	4.175	19.1478	3.9919	0.231853
519.	0.	2.42709	14.0106	13.8874	8.2938	4.169	19.1056	3.9728	0.232809
520.	0.	2.41469	14.0107	13.8874	8.2905	4.162	19.0633	3.9538	0.233763
521.	0.	2.40247	14.0107	13.8874	8.2866	4.161	19.0247	3.9347	0.234712
522.	0.	2.39012	14.0108	13.8874	8.2835	4.157	18.9844	3.9157	0.235663
523.	0.	2.37777	14.0109	13.8874	8.2807	4.151	18.9428	3.8966	0.236612
524.	0.	2.36554	14.0109	13.8874	8.2775	4.142	18.9017	3.8776	0.237556
525.	0.	2.35331	14.0110	13.8874	8.2746	4.133	18.8601	3.8585	0.238499
526.	0.	2.34103	14.0111	13.8874	8.2722	4.124	18.8175	3.8394	0.239442
527.	0.	2.32872	14.0111	13.8874	8.2702	4.115	18.7738	3.8204	0.240384
528.	0.	2.31639	14.0112	13.8874	8.2685	4.106	18.7293	3.8013	0.241326

529.	0.	2.30407	14.0113	13.8874	8.2672	4.096	18.6847	3.7823	0.242267
530.	0.	2.29174	14.0113	13.8874	8.2661	4.086	18.6397	3.7632	0.243207
531.	0.	2.27942	14.0114	13.8874	8.2652	4.076	18.5942	3.7441	0.244145
532.	0.	2.26711	14.0115	13.8874	8.2647	4.065	18.5487	3.7251	0.245082
533.	0.	2.25494	14.0115	13.8874	8.2636	4.058	18.5063	3.7060	0.246014
534.	0.	2.24270	14.0116	13.8874	8.2633	4.049	18.4620	3.6869	0.246947
535.	0.	2.23043	14.0117	13.8874	8.2634	4.039	18.4162	3.6679	0.247879
536.	0.	2.21818	14.0118	13.8874	8.2637	4.028	18.3701	3.6488	0.248810
537.	0.	2.20594	14.0118	13.8874	8.2642	4.018	18.3236	3.6297	0.249739
538.	0.	2.19372	14.0119	13.8874	8.2650	4.007	18.2765	3.6107	0.250666
539.	0.	2.18152	14.0120	13.8874	8.2660	3.995	18.2292	3.5916	0.251591
540.	0.	2.16945	14.0121	13.8874	8.2666	3.981	18.1828	3.5725	0.252511
541.	0.	2.15738	14.0122	13.8874	8.2675	3.967	18.1360	3.5534	0.253429
542.	0.	2.14524	14.0123	13.8874	8.2689	3.952	18.0825	3.5343	0.254348
543.	0.	2.13379	14.0124	13.8874	8.2729	3.935	18.0239	3.5051	0.255146
544.	0.	2.12151	14.0125	13.8874	8.2748	3.921	17.9718	3.4861	0.256081
545.	0.	2.10925	14.0126	13.8874	8.2769	3.908	17.9211	3.4670	0.257016
546.	0.	2.09701	14.0127	13.8874	8.2792	3.894	17.8702	3.4479	0.257949
547.	0.	2.08479	14.0128	13.8874	8.2818	3.881	17.8190	3.4289	0.258879
548.	0.	2.07261	14.0129	13.8874	8.2846	3.868	17.7672	3.4098	0.259808
549.	0.	2.06045	14.0130	13.8874	8.2876	3.854	17.7151	3.3907	0.260734
550.	0.	2.04831	14.0131	13.8874	8.2908	3.840	17.6626	3.3717	0.261659
551.	0.	2.03618	14.0132	13.8874	8.2944	3.827	17.6091	3.3526	0.262582
552.	0.	2.02406	14.0133	13.8874	8.2983	3.814	17.5551	3.3335	0.263503
553.	0.	2.01198	14.0134	13.8874	8.3024	3.801	17.5008	3.3144	0.264422
554.	0.	1.99994	14.0135	13.8874	8.3066	3.788	17.4460	3.2953	0.265338
555.	0.	1.98790	14.0136	13.8874	8.3111	3.775	17.3910	3.2763	0.266255
556.	0.	1.97588	14.0137	13.8874	8.3159	3.763	17.3358	3.2572	0.267170
557.	0.	1.96390	14.0139	13.8874	8.3208	3.750	17.2802	3.2381	0.268084
558.	0.	1.95195	14.0140	13.8874	8.3259	3.737	17.2242	3.2190	0.268995
559.	0.	1.93996	14.0141	13.8874	8.3314	3.721	17.1608	3.1999	0.269905
560.	0.	1.92870	14.0142	13.8874	8.3398	3.703	17.0920	3.1707	0.270694
561.	0.	1.91659	14.0144	13.8874	8.3457	3.687	17.0302	3.1516	0.271622
562.	0.	1.90452	14.0145	13.8874	8.3518	3.673	16.9701	3.1325	0.272549
563.	0.	1.89250	14.0146	13.8874	8.3579	3.658	16.9103	3.1135	0.273473
564.	0.	1.88053	14.0148	13.8874	8.3641	3.643	16.8505	3.0944	0.274395
565.	0.	1.86861	14.0149	13.8874	8.3705	3.629	16.7907	3.0753	0.275314
566.	0.	1.85675	14.0150	13.8874	8.3769	3.615	16.7308	3.0562	0.276230
567.	0.	1.84493	14.0152	13.8874	8.3834	3.601	16.6709	3.0371	0.277144
568.	0.	1.83315	14.0153	13.8874	8.3900	3.587	16.6112	3.0181	0.278056
569.	0.	1.82143	14.0154	13.8874	8.3967	3.573	16.5516	2.9990	0.278966
570.	0.	1.80968	14.0156	13.8874	8.4037	3.559	16.4850	2.9799	0.279875
571.	0.	1.79863	14.0157	13.8874	8.4139	3.541	16.4055	2.9507	0.280662
572.	0.	1.78741	14.0159	13.8874	8.4243	3.523	16.3283	2.9215	0.281470
573.	0.	1.77524	14.0160	13.8874	8.4325	3.508	16.2607	2.9024	0.282427
574.	0.	1.76313	14.0162	13.8874	8.4407	3.495	16.1959	2.8834	0.283382
575.	0.	1.75110	14.0163	13.8874	8.4489	3.482	16.1320	2.8643	0.284333
576.	0.	1.73914	14.0165	13.8874	8.4572	3.471	16.0747	2.8453	0.285283
577.	0.	1.72649	14.0167	13.8874	8.4628	3.463	16.0224	2.8364	0.286351
578.	0.	1.71487	14.0168	13.8874	8.4713	3.454	15.9685	2.8173	0.287270
579.	0.	1.70254	14.0170	13.8874	8.4771	3.443	15.9108	2.8083	0.288304
580.	0.	1.69201	14.0171	13.8874	8.4882	3.430	15.8401	2.7791	0.289069
581.	0.	1.68052	14.0173	13.8874	8.4967	3.417	15.7680	2.7600	0.289974
582.	0.	1.66984	14.0175	13.8874	8.5079	3.403	15.6855	2.7308	0.290756
583.	0.	1.65913	14.0177	13.8874	8.5185	3.392	15.6023	2.7015	0.291546
584.	0.	1.64832	14.0178	13.8874	8.5287	3.384	15.5254	2.6724	0.292356
585.	0.	1.63668	14.0180	13.8874	8.5354	3.374	15.4540	2.6533	0.293304
586.	0.	1.62591	14.0182	13.8874	8.5446	3.362	15.3743	2.6241	0.294121
587.	0.	1.61501	14.0184	13.8874	8.5535	3.351	15.2994	2.5950	0.294960
588.	0.	1.60318	14.0186	13.8874	8.5594	3.345	15.2423	2.5760	0.295953
589.	0.	1.59061	14.0188	13.8874	8.5622	3.340	15.1933	2.5671	0.297072
590.	0.	1.57919	14.0190	13.8874	8.5677	3.337	15.1446	2.5480	0.298033
591.	0.	1.56705	14.0192	13.8874	8.5701	3.335	15.1063	2.5391	0.299117
592.	0.	1.55521	14.0194	13.8874	8.5724	3.333	15.0638	2.5302	0.300169
593.	0.	1.54443	14.0196	13.8874	8.5775	3.325	15.0032	2.5111	0.301064
594.	0.	1.53447	14.0198	13.8874	8.5853	3.312	14.9201	2.4818	0.301829
595.	0.	1.52515	14.0200	13.8874	8.5958	3.298	14.8282	2.4425	0.302490

596.	0.	1.51455	14.0202	13.8874	8.6033	3.286	14.7417	2.4133	0.303335
597.	0.	1.50373	14.0205	13.8874	8.6107	3.274	14.6566	2.3842	0.304211
598.	0.	1.49275	14.0207	13.8874	8.6178	3.267	14.5864	2.3551	0.305118
599.	0.	1.47987	14.0209	13.8874	8.6191	3.264	14.5322	2.3463	0.306321
600.	0.	1.46816	14.0211	13.8874	8.6231	3.259	14.4731	2.3274	0.307357
601.	0.	1.45650	14.0214	13.8874	8.6270	3.256	14.4114	2.3084	0.308391
602.	0.	1.44491	14.0216	13.8874	8.6310	3.248	14.3431	2.2894	0.309418
603.	0.	1.43423	14.0218	13.8874	8.6378	3.238	14.2620	2.2603	0.310307
604.	0.	1.42333	14.0221	13.8874	8.6445	3.227	14.1759	2.2312	0.311225
605.	0.	1.41222	14.0223	13.8874	8.6512	3.216	14.0880	2.2022	0.312174
606.	0.	1.40088	14.0226	13.8874	8.6577	3.205	13.9985	2.1732	0.313153
607.	0.	1.38932	14.0229	13.8874	8.6641	3.195	13.9079	2.1442	0.314165
608.	0.	1.37754	14.0231	13.8874	8.6703	3.184	13.8162	2.1152	0.315209
609.	0.	1.36554	14.0234	13.8874	8.6765	3.173	13.7238	2.0863	0.316284
610.	0.	1.35333	14.0237	13.8874	8.6826	3.162	13.6308	2.0574	0.317392
611.	0.	1.34091	14.0240	13.8874	8.6885	3.151	13.5373	2.0285	0.318532
612.	0.	1.32828	14.0243	13.8874	8.6944	3.141	13.4429	1.9997	0.319705
613.	0.	1.31548	14.0247	13.8874	8.7000	3.133	13.3564	1.9709	0.320909
614.	0.	1.30149	14.0250	13.8874	8.7027	3.123	13.2655	1.9523	0.322293
615.	0.	1.28950	14.0255	13.8874	8.7110	3.108	13.1532	1.9134	0.323372
616.	0.	1.27696	14.0262	13.8874	8.7187	3.095	13.0421	1.8745	0.324530
617.	0.	1.26307	14.0263	13.8874	8.7245	3.079	12.9309	1.8459	0.325897
618.	0.	1.25003	14.0263	13.8874	8.7330	3.067	12.8265	1.8071	0.327143
619.	0.	1.23449	14.0262	13.8874	8.7356	3.060	12.7454	1.7888	0.328781
620.	0.	1.21916	14.0261	13.8874	8.7382	3.053	12.6625	1.7704	0.330396
621.	0.	1.20504	14.0261	13.8874	8.7438	3.041	12.5599	1.7418	0.331828
622.	0.	1.19169	14.0261	13.8874	8.7525	3.016	12.4060	1.7031	0.333128
623.	0.	1.18190	14.0261	13.8874	8.7725	2.982	12.2009	1.6239	0.333854
624.	0.	1.16885	14.0259	13.8874	8.7889	2.946	11.9762	1.5551	0.335060
625.	0.	1.15490	14.0258	13.8874	8.8070	2.922	11.7767	1.4764	0.336402
626.	0.	1.13267	14.0256	13.8874	8.8092	2.911	11.6372	1.4491	0.339135
627.	0.	1.11045	14.0255	13.8874	8.8115	2.903	11.5084	1.4219	0.341878
628.	0.	1.08925	14.0252	13.8874	8.8183	2.849	11.2248	1.3844	0.344403
629.	0.	1.08532	14.0252	13.8874	8.8664	2.789	10.8325	1.1939	0.343910
630.	0.	1.05629	14.0251	13.8874	8.8708	2.749	10.5442	1.1281	0.348053
631.	0.	1.02297	14.0250	13.8874	8.8701	2.725	10.3131	1.0731	0.353106
632.	0.	0.98682	14.0250	13.8874	8.8662	2.697	10.0757	1.0288	0.358770
633.	0.	0.95425	14.0249	13.8874	8.8704	2.657	9.7874	0.9538	0.363826
634.	0.	0.91668	14.0252	13.8874	8.9124	2.523	9.4026	0.8699	0.369948
635.	0.	0.85133	14.0240	13.8874	9.4007	1.890	9.1701	0.7015	0.381503
636.	0.	0.77611	14.0395	13.8874	9.8054	1.137	9.0257	0.5578	0.397763
637.	0.	0.70545	14.0588	13.8874	9.8716	0.582	8.9154	0.4952	0.415191
638.	0.	0.62271	14.2359	13.8874	9.6712	0.098	9.0662	0.4854	0.435364
639.	0.	0.55091	14.3597	13.8874	10.0574	0.514	9.4587	0.4514	0.451354

PART 3: WHAFIS

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WHAFIS input:  YK-92.dat
WHAFIS output: YK-92.out
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PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-92
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500
3000
3500
4000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-92.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-92.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-28.592	1.000	1.000	8.831	30.287	14.349	56.140	0.000	0.000
OF	2.000	-28.592	0.000	8.831	0.000	0.000	0.000	0.000	0.000	0.000
OF	3.300	-28.592	0.000	8.832	0.000	0.000	0.000	0.000	0.000	0.000
OF	6.600	-28.592	0.000	8.833	0.000	0.000	0.000	0.000	0.000	0.000
OF	9.800	-28.592	0.000	8.834	0.000	0.000	0.000	0.000	0.000	0.000
OF	13.100	-28.592	0.000	8.835	0.000	0.000	0.000	0.000	0.000	0.000
OF	16.400	-28.592	0.000	8.836	0.000	0.000	0.000	0.000	0.000	0.000
OF	19.700	-28.592	0.000	8.837	0.000	0.000	0.000	0.000	0.000	0.000
OF	23.000	-28.592	0.000	8.838	0.000	0.000	0.000	0.000	0.000	0.000
OF	26.200	-28.593	0.000	8.840	0.000	0.000	0.000	0.000	0.000	0.000
OF	29.500	-28.593	0.000	8.841	0.000	0.000	0.000	0.000	0.001	0.000
OF	32.800	-28.587	0.000	8.842	0.000	0.000	0.000	0.000	0.007	0.000
OF	36.100	-28.550	0.000	8.843	0.000	0.000	0.000	0.000	0.011	0.000
OF	39.400	-28.512	0.000	8.844	0.000	0.000	0.000	0.000	0.012	0.000
OF	42.700	-28.474	0.000	8.845	0.000	0.000	0.000	0.000	0.012	0.000
OF	45.900	-28.436	0.000	8.846	0.000	0.000	0.000	0.000	0.012	0.000
OF	49.200	-28.399	0.000	8.847	0.000	0.000	0.000	0.000	0.011	0.000
OF	52.500	-28.361	0.000	8.848	0.000	0.000	0.000	0.000	0.012	0.000
OF	55.800	-28.323	0.000	8.849	0.000	0.000	0.000	0.000	0.012	0.000
OF	59.100	-28.285	0.000	8.850	0.000	0.000	0.000	0.000	0.012	0.000
OF	62.300	-28.248	0.000	8.851	0.000	0.000	0.000	0.000	0.012	0.000
OF	65.600	-28.210	0.000	8.852	0.000	0.000	0.000	0.000	0.012	0.000
OF	68.900	-28.172	0.000	8.853	0.000	0.000	0.000	0.000	0.012	0.000
OF	72.200	-28.134	0.000	8.854	0.000	0.000	0.000	0.000	0.012	0.000
OF	75.500	-28.096	0.000	8.855	0.000	0.000	0.000	0.000	0.012	0.000
OF	78.700	-28.059	0.000	8.856	0.000	0.000	0.000	0.000	0.012	0.000
OF	82.000	-28.018	0.000	8.857	0.000	0.000	0.000	0.000	0.013	0.000
OF	85.300	-27.972	0.000	8.858	0.000	0.000	0.000	0.000	0.014	0.000
OF	88.600	-27.925	0.000	8.859	0.000	0.000	0.000	0.000	0.014	0.000
OF	91.900	-27.879	0.000	8.861	0.000	0.000	0.000	0.000	0.014	0.000
OF	95.100	-27.833	0.000	8.862	0.000	0.000	0.000	0.000	0.014	0.000
OF	98.400	-27.787	0.000	8.863	0.000	0.000	0.000	0.000	0.014	0.000
OF	101.700	-27.740	0.000	8.864	0.000	0.000	0.000	0.000	0.014	0.000
OF	105.000	-27.694	0.000	8.865	0.000	0.000	0.000	0.000	0.014	0.000
OF	108.300	-27.648	0.000	8.866	0.000	0.000	0.000	0.000	0.014	0.000
OF	111.500	-27.602	0.000	8.867	0.000	0.000	0.000	0.000	0.014	0.000
OF	114.800	-27.555	0.000	8.868	0.000	0.000	0.000	0.000	0.014	0.000
OF	118.100	-27.509	0.000	8.870	0.000	0.000	0.000	0.000	0.014	0.000
OF	121.400	-27.463	0.000	8.871	0.000	0.000	0.000	0.000	0.014	0.000
OF	124.700	-27.416	0.000	8.872	0.000	0.000	0.000	0.000	0.014	0.000
OF	128.000	-27.370	0.000	8.873	0.000	0.000	0.000	0.000	0.014	0.000
OF	131.200	-27.324	0.000	8.875	0.000	0.000	0.000	0.000	0.014	0.000
OF	134.500	-27.278	0.000	8.876	0.000	0.000	0.000	0.000	0.014	0.000
OF	137.800	-27.231	0.000	8.877	0.000	0.000	0.000	0.000	0.014	0.000
OF	141.100	-27.185	0.000	8.878	0.000	0.000	0.000	0.000	0.014	0.000
OF	144.400	-27.139	0.000	8.879	0.000	0.000	0.000	0.000	0.014	0.000
OF	147.600	-27.092	0.000	8.881	0.000	0.000	0.000	0.000	0.014	0.000
OF	150.900	-27.046	0.000	8.882	0.000	0.000	0.000	0.000	0.014	0.000
OF	154.200	-27.000	0.000	8.883	0.000	0.000	0.000	0.000	0.014	0.000
OF	157.500	-26.954	0.000	8.884	0.000	0.000	0.000	0.000	0.014	0.000
OF	160.800	-26.907	0.000	8.885	0.000	0.000	0.000	0.000	0.014	0.000
OF	164.000	-26.861	0.000	8.887	0.000	0.000	0.000	0.000	0.014	0.000
OF	167.300	-26.815	0.000	8.888	0.000	0.000	0.000	0.000	0.014	0.000
OF	170.600	-26.768	0.000	8.889	0.000	0.000	0.000	0.000	0.014	0.000
OF	173.900	-26.722	0.000	8.891	0.000	0.000	0.000	0.000	0.013	0.000
OF	177.200	-26.682	0.000	8.892	0.000	0.000	0.000	0.000	0.012	0.000
OF	180.400	-26.647	0.000	8.893	0.000	0.000	0.000	0.000	0.011	0.000
OF	183.700	-26.613	0.000	8.894	0.000	0.000	0.000	0.000	0.010	0.000
OF	187.000	-26.578	0.000	8.896	0.000	0.000	0.000	0.000	0.010	0.000
OF	190.300	-26.544	0.000	8.897	0.000	0.000	0.000	0.000	0.010	0.000
OF	193.600	-26.509	0.000	8.899	0.000	0.000	0.000	0.000	0.011	0.000
OF	196.800	-26.474	0.000	8.900	0.000	0.000	0.000	0.000	0.011	0.000
OF	200.100	-26.440	0.000	8.901	0.000	0.000	0.000	0.000	0.010	0.000
OF	203.400	-26.405	0.000	8.903	0.000	0.000	0.000	0.000	0.010	0.000
OF	206.700	-26.371	0.000	8.904	0.000	0.000	0.000	0.000	0.010	0.000
OF	210.000	-26.336	0.000	8.905	0.000	0.000	0.000	0.000	0.011	0.000
OF	213.300	-26.301	0.000	8.907	0.000	0.000	0.000	0.000	0.011	0.000
OF	216.500	-26.267	0.000	8.908	0.000	0.000	0.000	0.000	0.011	0.000
OF	219.800	-26.232	0.000	8.909	0.000	0.000	0.000	0.000	0.010	0.000
OF	223.100	-26.198	0.000	8.911	0.000	0.000	0.000	0.000	0.010	0.000
OF	226.400	-26.163	0.000	8.912	0.000	0.000	0.000	0.000	0.011	0.000
OF	229.700	-26.128	0.000	8.913	0.000	0.000	0.000	0.000	0.011	0.000
OF	232.900	-26.094	0.000	8.915	0.000	0.000	0.000	0.000	0.011	0.000
OF	236.200	-26.059	0.000	8.916	0.000	0.000	0.000	0.000	0.010	0.000
OF	239.500	-26.025	0.000	8.917	0.000	0.000	0.000	0.000	0.010	0.000
OF	242.800	-25.990	0.000	8.919	0.000	0.000	0.000	0.000	0.011	0.000
OF	246.100	-25.955	0.000	8.920	0.000	0.000	0.000	0.000	0.011	0.000
OF	249.300	-25.921	0.000	8.921	0.000	0.000	0.000	0.000	0.011	0.000
OF	252.600	-25.886	0.000	8.923	0.000	0.000	0.000	0.000	0.011	0.000
OF	255.900	-25.851	0.000	8.924	0.000	0.000	0.000	0.000	0.010	0.000
OF	259.200	-25.817	0.000	8.925	0.000	0.000	0.000	0.000	0.010	0.000
OF	262.500	-25.782	0.000	8.927	0.000	0.000	0.000	0.000	0.011	0.000
OF	265.700	-25.748	0.000	8.928	0.000	0.000	0.000	0.000	0.011	0.000
OF	269.000	-25.713	0.000	8.930	0.000	0.000	0.000	0.000	0.011	0.000
OF	272.300	-25.678	0.000	8.931	0.000	0.000	0.000	0.000	0.010	0.000
OF	275.600	-25.644	0.000	8.932	0.000	0.000	0.000	0.000	0.010	0.000
OF	278.900	-25.609	0.000	8.934	0.000	0.000	0.000	0.000	0.010	0.000
OF	282.200	-25.575	0.000	8.935	0.000	0.000	0.000	0.000	0.011	0.000
OF	285.400	-25.540	0.000	8.936	0.000	0.000	0.000	0.000	0.011	0.000
OF	288.700	-25.505	0.000	8.938	0.000	0.000	0.000	0.000	0.010	0.000
OF	292.000	-25.471	0.000	8.939	0.000	0.000	0.000	0.000	0.010	0.000
OF	295.300	-25.436	0.000	8.940	0.000	0.000	0.000	0.000	0.010	0.000
OF	298.600	-25.402	0.000	8.942	0.000	0.000	0.000	0.000	0.011	0.000

OF	301.800	-25.367	0.000	8.943	0.000	0.000	0.000	0.000	0.011	0.000
OF	305.100	-25.332	0.000	8.944	0.000	0.000	0.000	0.000	0.010	0.000
OF	308.400	-25.298	0.000	8.946	0.000	0.000	0.000	0.000	0.011	0.000
OF	311.700	-25.262	0.000	8.947	0.000	0.000	0.000	0.000	0.011	0.000
OF	315.000	-25.227	0.000	8.948	0.000	0.000	0.000	0.000	0.011	0.000
OF	318.200	-25.191	0.000	8.950	0.000	0.000	0.000	0.000	0.011	0.000
OF	321.500	-25.156	0.000	8.951	0.000	0.000	0.000	0.000	0.011	0.000
OF	324.800	-25.120	0.000	8.953	0.000	0.000	0.000	0.000	0.011	0.000
OF	328.100	-25.085	0.000	8.954	0.000	0.000	0.000	0.000	0.011	0.000
OF	331.400	-25.049	0.000	8.955	0.000	0.000	0.000	0.000	0.011	0.000
OF	334.600	-25.014	0.000	8.957	0.000	0.000	0.000	0.000	0.011	0.000
OF	337.900	-24.978	0.000	8.958	0.000	0.000	0.000	0.000	0.011	0.000
OF	341.200	-24.943	0.000	8.959	0.000	0.000	0.000	0.000	0.010	0.000
OF	344.500	-24.913	0.000	8.961	0.000	0.000	0.000	0.000	0.009	0.000
OF	347.800	-24.882	0.000	8.962	0.000	0.000	0.000	0.000	0.009	0.000
OF	351.000	-24.851	0.000	8.963	0.000	0.000	0.000	0.000	0.009	0.000
OF	354.300	-24.821	0.000	8.965	0.000	0.000	0.000	0.000	0.009	0.000
OF	357.600	-24.790	0.000	8.966	0.000	0.000	0.000	0.000	0.009	0.000
OF	360.900	-24.760	0.000	8.967	0.000	0.000	0.000	0.000	0.009	0.000
OF	364.200	-24.729	0.000	8.969	0.000	0.000	0.000	0.000	0.009	0.000
OF	367.500	-24.698	0.000	8.970	0.000	0.000	0.000	0.000	0.009	0.000
OF	370.700	-24.668	0.000	8.971	0.000	0.000	0.000	0.000	0.009	0.000
OF	374.000	-24.637	0.000	8.973	0.000	0.000	0.000	0.000	0.009	0.000
OF	377.300	-24.606	0.000	8.974	0.000	0.000	0.000	0.000	0.009	0.000
OF	380.600	-24.575	0.000	8.975	0.000	0.000	0.000	0.000	0.009	0.000
OF	383.900	-24.544	0.000	8.977	0.000	0.000	0.000	0.000	0.009	0.000
OF	387.100	-24.513	0.000	8.978	0.000	0.000	0.000	0.000	0.009	0.000
OF	390.400	-24.482	0.000	8.979	0.000	0.000	0.000	0.000	0.009	0.000
OF	393.700	-24.451	0.000	8.981	0.000	0.000	0.000	0.000	0.009	0.000
OF	397.000	-24.420	0.000	8.982	0.000	0.000	0.000	0.000	0.009	0.000
OF	400.300	-24.389	0.000	8.983	0.000	0.000	0.000	0.000	0.010	0.000
OF	403.500	-24.357	0.000	8.985	0.000	0.000	0.000	0.000	0.010	0.000
OF	406.800	-24.326	0.000	8.986	0.000	0.000	0.000	0.000	0.009	0.000
OF	410.100	-24.295	0.000	8.987	0.000	0.000	0.000	0.000	0.009	0.000
OF	413.400	-24.264	0.000	8.988	0.000	0.000	0.000	0.000	0.009	0.000
OF	416.700	-24.233	0.000	8.990	0.000	0.000	0.000	0.000	0.009	0.000
OF	419.900	-24.202	0.000	8.991	0.000	0.000	0.000	0.000	0.009	0.000
OF	423.200	-24.171	0.000	8.992	0.000	0.000	0.000	0.000	0.009	0.000
OF	426.500	-24.139	0.000	8.993	0.000	0.000	0.000	0.000	0.009	0.000
OF	429.800	-24.108	0.000	8.995	0.000	0.000	0.000	0.000	0.009	0.000
OF	433.100	-24.077	0.000	8.996	0.000	0.000	0.000	0.000	0.009	0.000
OF	436.400	-24.046	0.000	8.997	0.000	0.000	0.000	0.000	0.009	0.000
OF	439.600	-24.015	0.000	8.998	0.000	0.000	0.000	0.000	0.009	0.000
OF	442.900	-23.984	0.000	9.000	0.000	0.000	0.000	0.000	0.009	0.000
OF	446.200	-23.953	0.000	9.001	0.000	0.000	0.000	0.000	0.009	0.000
OF	449.500	-23.922	0.000	9.002	0.000	0.000	0.000	0.000	0.009	0.000
OF	452.800	-23.890	0.000	9.003	0.000	0.000	0.000	0.000	0.010	0.000
OF	456.000	-23.859	0.000	9.005	0.000	0.000	0.000	0.000	0.009	0.000
OF	459.300	-23.828	0.000	9.006	0.000	0.000	0.000	0.000	0.009	0.000
OF	462.600	-23.797	0.000	9.007	0.000	0.000	0.000	0.000	0.009	0.000
OF	465.900	-23.766	0.000	9.009	0.000	0.000	0.000	0.000	0.009	0.000
OF	469.200	-23.735	0.000	9.010	0.000	0.000	0.000	0.000	0.009	0.000
OF	472.400	-23.704	0.000	9.011	0.000	0.000	0.000	0.000	0.010	0.000
OF	475.700	-23.672	0.000	9.012	0.000	0.000	0.000	0.000	0.009	0.000
OF	479.000	-23.641	0.000	9.014	0.000	0.000	0.000	0.000	0.009	0.000
OF	482.300	-23.610	0.000	9.015	0.000	0.000	0.000	0.000	0.009	0.000
OF	485.600	-23.579	0.000	9.016	0.000	0.000	0.000	0.000	0.009	0.000
OF	488.800	-23.548	0.000	9.017	0.000	0.000	0.000	0.000	0.009	0.000
OF	492.100	-23.517	0.000	9.019	0.000	0.000	0.000	0.000	0.009	0.000
OF	495.400	-23.486	0.000	9.020	0.000	0.000	0.000	0.000	0.009	0.000
OF	498.700	-23.454	0.000	9.021	0.000	0.000	0.000	0.000	0.009	0.000
OF	502.000	-23.423	0.000	9.022	0.000	0.000	0.000	0.000	0.009	0.000
OF	505.200	-23.392	0.000	9.023	0.000	0.000	0.000	0.000	0.010	0.000
OF	508.500	-23.360	0.000	9.024	0.000	0.000	0.000	0.000	0.009	0.000
OF	511.800	-23.329	0.000	9.026	0.000	0.000	0.000	0.000	0.009	0.000
OF	515.100	-23.297	0.000	9.027	0.000	0.000	0.000	0.000	0.009	0.000
OF	518.400	-23.266	0.000	9.028	0.000	0.000	0.000	0.000	0.009	0.000
OF	521.700	-23.235	0.000	9.029	0.000	0.000	0.000	0.000	0.010	0.000
OF	524.900	-23.203	0.000	9.030	0.000	0.000	0.000	0.000	0.010	0.000
OF	528.200	-23.172	0.000	9.032	0.000	0.000	0.000	0.000	0.009	0.000
OF	531.500	-23.140	0.000	9.033	0.000	0.000	0.000	0.000	0.009	0.000
OF	534.800	-23.109	0.000	9.034	0.000	0.000	0.000	0.000	0.009	0.000
OF	538.100	-23.078	0.000	9.035	0.000	0.000	0.000	0.000	0.010	0.000
OF	541.300	-23.046	0.000	9.037	0.000	0.000	0.000	0.000	0.010	0.000
OF	544.600	-23.015	0.000	9.038	0.000	0.000	0.000	0.000	0.009	0.000
OF	547.900	-22.983	0.000	9.039	0.000	0.000	0.000	0.000	0.009	0.000
OF	551.200	-22.952	0.000	9.040	0.000	0.000	0.000	0.000	0.009	0.000
OF	554.500	-22.920	0.000	9.041	0.000	0.000	0.000	0.000	0.010	0.000
OF	557.700	-22.889	0.000	9.042	0.000	0.000	0.000	0.000	0.009	0.000
OF	561.000	-22.858	0.000	9.044	0.000	0.000	0.000	0.000	0.009	0.000
OF	564.300	-22.826	0.000	9.045	0.000	0.000	0.000	0.000	0.009	0.000
OF	567.600	-22.795	0.000	9.046	0.000	0.000	0.000	0.000	0.009	0.000
OF	570.900	-22.763	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
OF	574.100	-22.732	0.000	9.048	0.000	0.000	0.000	0.000	0.010	0.000
OF	577.400	-22.700	0.000	9.050	0.000	0.000	0.000	0.000	0.009	0.000
OF	580.700	-22.669	0.000	9.051	0.000	0.000	0.000	0.000	0.009	0.000
OF	584.000	-22.638	0.000	9.052	0.000	0.000	0.000	0.000	0.009	0.000
OF	587.300	-22.606	0.000	9.053	0.000	0.000	0.000	0.000	0.010	0.000
OF	590.500	-22.575	0.000	9.054	0.000	0.000	0.000	0.000	0.010	0.000
OF	593.800	-22.543	0.000	9.055	0.000	0.000	0.000	0.000	0.010	0.000
OF	597.100	-22.511	0.000	9.056	0.000	0.000	0.000	0.000	0.010	0.000
OF	600.400	-22.479	0.000	9.057	0.000	0.000	0.000	0.000	0.010	0.000
OF	603.700	-22.447	0.000	9.059	0.000	0.000	0.000	0.000	0.010	0.000
OF	607.000	-22.414	0.000	9.060	0.000	0.000	0.000	0.000	0.010	0.000
OF	610.200	-22.382	0.000	9.061	0.000	0.000	0.000	0.000	0.010	0.000
OF	613.500	-22.350	0.000	9.062	0.000	0.000	0.000	0.000	0.010	0.000
OF	616.800	-22.317	0.000	9.063	0.000	0.000	0.000	0.000	0.010	0.000
OF	620.100	-22.285	0.000	9.064	0.000	0.000	0.000	0.000	0.010	0.000
OF	623.400	-22.253	0.000	9.065	0.000	0.000	0.000	0.000	0.010	0.000
OF	626.600	-22.221	0.000	9.066	0.000	0.000	0.000	0.000	0.010	0.000
OF	629.900	-22.189	0.000	9.068	0.000	0.000	0.000	0.000	0.010	0.000
OF	633.200	-22.156	0.000	9.069	0.000	0.000	0.000	0.000	0.010	0.000

OF	636.500	-22.124	0.000	9.070	0.000	0.000	0.000	0.000	0.011	0.000
OF	639.800	-22.086	0.000	9.071	0.000	0.000	0.000	0.000	0.012	0.000
OF	643.000	-22.044	0.000	9.072	0.000	0.000	0.000	0.000	0.013	0.000
OF	646.300	-22.001	0.000	9.073	0.000	0.000	0.000	0.000	0.013	0.000
OF	649.600	-21.959	0.000	9.074	0.000	0.000	0.000	0.000	0.013	0.000
OF	652.900	-21.916	0.000	9.075	0.000	0.000	0.000	0.000	0.013	0.000
OF	656.200	-21.873	0.000	9.076	0.000	0.000	0.000	0.000	0.013	0.000
OF	659.400	-21.831	0.000	9.077	0.000	0.000	0.000	0.000	0.013	0.000
OF	662.700	-21.788	0.000	9.078	0.000	0.000	0.000	0.000	0.013	0.000
OF	666.000	-21.746	0.000	9.079	0.000	0.000	0.000	0.000	0.013	0.000
OF	669.300	-21.703	0.000	9.080	0.000	0.000	0.000	0.000	0.013	0.000
OF	672.600	-21.660	0.000	9.081	0.000	0.000	0.000	0.000	0.013	0.000
OF	675.900	-21.618	0.000	9.082	0.000	0.000	0.000	0.000	0.013	0.000
OF	679.100	-21.575	0.000	9.083	0.000	0.000	0.000	0.000	0.013	0.000
OF	682.400	-21.533	0.000	9.084	0.000	0.000	0.000	0.000	0.013	0.000
OF	685.700	-21.490	0.000	9.085	0.000	0.000	0.000	0.000	0.013	0.000
OF	689.000	-21.448	0.000	9.086	0.000	0.000	0.000	0.000	0.013	0.000
OF	692.300	-21.405	0.000	9.087	0.000	0.000	0.000	0.000	0.013	0.000
OF	695.500	-21.362	0.000	9.088	0.000	0.000	0.000	0.000	0.013	0.000
OF	698.800	-21.320	0.000	9.089	0.000	0.000	0.000	0.000	0.012	0.000
OF	702.100	-21.280	0.000	9.090	0.000	0.000	0.000	0.000	0.012	0.000
OF	705.400	-21.242	0.000	9.092	0.000	0.000	0.000	0.000	0.011	0.000
OF	708.700	-21.205	0.000	9.092	0.000	0.000	0.000	0.000	0.012	0.000
OF	711.900	-21.167	0.000	9.094	0.000	0.000	0.000	0.000	0.012	0.000
OF	715.200	-21.130	0.000	9.095	0.000	0.000	0.000	0.000	0.011	0.000
OF	718.500	-21.092	0.000	9.096	0.000	0.000	0.000	0.000	0.011	0.000
OF	721.800	-21.055	0.000	9.097	0.000	0.000	0.000	0.000	0.011	0.000
OF	725.100	-21.017	0.000	9.098	0.000	0.000	0.000	0.000	0.012	0.000
OF	728.300	-20.980	0.000	9.099	0.000	0.000	0.000	0.000	0.012	0.000
OF	731.600	-20.942	0.000	9.100	0.000	0.000	0.000	0.000	0.011	0.000
OF	734.900	-20.905	0.000	9.101	0.000	0.000	0.000	0.000	0.011	0.000
OF	738.200	-20.867	0.000	9.102	0.000	0.000	0.000	0.000	0.011	0.000
OF	741.500	-20.830	0.000	9.103	0.000	0.000	0.000	0.000	0.012	0.000
OF	744.700	-20.792	0.000	9.104	0.000	0.000	0.000	0.000	0.012	0.000
OF	748.000	-20.755	0.000	9.106	0.000	0.000	0.000	0.000	0.011	0.000
OF	751.300	-20.717	0.000	9.107	0.000	0.000	0.000	0.000	0.011	0.000
OF	754.600	-20.680	0.000	9.108	0.000	0.000	0.000	0.000	0.011	0.000
OF	757.900	-20.642	0.000	9.109	0.000	0.000	0.000	0.000	0.011	0.000
OF	761.200	-20.605	0.000	9.110	0.000	0.000	0.000	0.000	0.012	0.000
OF	764.400	-20.567	0.000	9.111	0.000	0.000	0.000	0.000	0.012	0.000
OF	767.700	-20.530	0.000	9.112	0.000	0.000	0.000	0.000	0.011	0.000
OF	771.000	-20.493	0.000	9.113	0.000	0.000	0.000	0.000	0.010	0.000
OF	774.300	-20.462	0.000	9.114	0.000	0.000	0.000	0.000	0.009	0.000
OF	777.600	-20.432	0.000	9.115	0.000	0.000	0.000	0.000	0.009	0.000
OF	780.800	-20.401	0.000	9.116	0.000	0.000	0.000	0.000	0.009	0.000
OF	784.100	-20.371	0.000	9.118	0.000	0.000	0.000	0.000	0.009	0.000
OF	787.400	-20.340	0.000	9.119	0.000	0.000	0.000	0.000	0.009	0.000
OF	790.700	-20.310	0.000	9.120	0.000	0.000	0.000	0.000	0.009	0.000
OF	794.000	-20.279	0.000	9.121	0.000	0.000	0.000	0.000	0.009	0.000
OF	797.200	-20.249	0.000	9.122	0.000	0.000	0.000	0.000	0.009	0.000
OF	800.500	-20.218	0.000	9.123	0.000	0.000	0.000	0.000	0.009	0.000
OF	803.800	-20.187	0.000	9.124	0.000	0.000	0.000	0.000	0.009	0.000
OF	807.100	-20.157	0.000	9.125	0.000	0.000	0.000	0.000	0.009	0.000
OF	810.400	-20.126	0.000	9.127	0.000	0.000	0.000	0.000	0.009	0.000
OF	813.600	-20.096	0.000	9.127	0.000	0.000	0.000	0.000	0.009	0.000
OF	816.900	-20.065	0.000	9.129	0.000	0.000	0.000	0.000	0.009	0.000
OF	820.200	-20.033	0.000	9.130	0.000	0.000	0.000	0.000	0.010	0.000
OF	823.500	-19.999	0.000	9.131	0.000	0.000	0.000	0.000	0.010	0.000
OF	826.800	-19.965	0.000	9.132	0.000	0.000	0.000	0.000	0.010	0.000
OF	830.100	-19.931	0.000	9.133	0.000	0.000	0.000	0.000	0.010	0.000
OF	833.300	-19.897	0.000	9.134	0.000	0.000	0.000	0.000	0.010	0.000
OF	836.600	-19.863	0.000	9.135	0.000	0.000	0.000	0.000	0.010	0.000
OF	839.900	-19.829	0.000	9.136	0.000	0.000	0.000	0.000	0.010	0.000
OF	843.200	-19.795	0.000	9.137	0.000	0.000	0.000	0.000	0.010	0.000
OF	846.500	-19.761	0.000	9.138	0.000	0.000	0.000	0.000	0.010	0.000
OF	849.700	-19.727	0.000	9.139	0.000	0.000	0.000	0.000	0.010	0.000
OF	853.000	-19.693	0.000	9.140	0.000	0.000	0.000	0.000	0.010	0.000
OF	856.300	-19.659	0.000	9.141	0.000	0.000	0.000	0.000	0.010	0.000
OF	859.600	-19.625	0.000	9.142	0.000	0.000	0.000	0.000	0.010	0.000
OF	862.900	-19.591	0.000	9.143	0.000	0.000	0.000	0.000	0.010	0.000
OF	866.100	-19.557	0.000	9.144	0.000	0.000	0.000	0.000	0.010	0.000
OF	869.400	-19.523	0.000	9.145	0.000	0.000	0.000	0.000	0.010	0.000
OF	872.700	-19.489	0.000	9.146	0.000	0.000	0.000	0.000	0.010	0.000
OF	876.000	-19.455	0.000	9.147	0.000	0.000	0.000	0.000	0.010	0.000
OF	879.300	-19.421	0.000	9.148	0.000	0.000	0.000	0.000	0.010	0.000
OF	882.500	-19.387	0.000	9.149	0.000	0.000	0.000	0.000	0.010	0.000
OF	885.800	-19.353	0.000	9.150	0.000	0.000	0.000	0.000	0.010	0.000
OF	889.100	-19.318	0.000	9.151	0.000	0.000	0.000	0.000	0.010	0.000
OF	892.400	-19.284	0.000	9.152	0.000	0.000	0.000	0.000	0.010	0.000
OF	895.700	-19.250	0.000	9.153	0.000	0.000	0.000	0.000	0.010	0.000
OF	898.900	-19.216	0.000	9.154	0.000	0.000	0.000	0.000	0.011	0.000
OF	902.200	-19.180	0.000	9.155	0.000	0.000	0.000	0.000	0.012	0.000
OF	905.500	-19.134	0.000	9.156	0.000	0.000	0.000	0.000	0.014	0.000
OF	908.800	-19.088	0.000	9.156	0.000	0.000	0.000	0.000	0.014	0.000
OF	912.100	-19.042	0.000	9.158	0.000	0.000	0.000	0.000	0.014	0.000
OF	915.400	-18.996	0.000	9.158	0.000	0.000	0.000	0.000	0.014	0.000
OF	918.600	-18.951	0.000	9.159	0.000	0.000	0.000	0.000	0.014	0.000
OF	921.900	-18.905	0.000	9.160	0.000	0.000	0.000	0.000	0.014	0.000
OF	925.200	-18.859	0.000	9.161	0.000	0.000	0.000	0.000	0.014	0.000
OF	928.500	-18.813	0.000	9.162	0.000	0.000	0.000	0.000	0.014	0.000
OF	931.800	-18.767	0.000	9.163	0.000	0.000	0.000	0.000	0.014	0.000
OF	935.000	-18.721	0.000	9.164	0.000	0.000	0.000	0.000	0.014	0.000
OF	938.300	-18.675	0.000	9.165	0.000	0.000	0.000	0.000	0.014	0.000
OF	941.600	-18.629	0.000	9.166	0.000	0.000	0.000	0.000	0.014	0.000
OF	944.900	-18.583	0.000	9.167	0.000	0.000	0.000	0.000	0.014	0.000
OF	948.200	-18.537	0.000	9.167	0.000	0.000	0.000	0.000	0.014	0.000
OF	951.400	-18.491	0.000	9.168	0.000	0.000	0.000	0.000	0.014	0.000
OF	954.700	-18.445	0.000	9.169	0.000	0.000	0.000	0.000	0.014	0.000
OF	958.000	-18.399	0.000	9.170	0.000	0.000	0.000	0.000	0.014	0.000
OF	961.300	-18.353	0.000	9.171	0.000	0.000	0.000	0.000	0.014	0.000
OF	964.600	-18.308	0.000	9.172	0.000	0.000	0.000	0.000	0.014	0.000
OF	967.800	-18.262	0.000	9.173	0.000	0.000	0.000	0.000	0.014	0.000

OF	971.100	-18.216	0.000	9.174	0.000	0.000	0.000	0.000	0.014	0.000
OF	974.400	-18.169	0.000	9.175	0.000	0.000	0.000	0.000	0.015	0.000
OF	977.700	-18.119	0.000	9.176	0.000	0.000	0.000	0.000	0.015	0.000
OF	981.000	-18.069	0.000	9.177	0.000	0.000	0.000	0.000	0.015	0.000
OF	984.200	-18.019	0.000	9.177	0.000	0.000	0.000	0.000	0.015	0.000
OF	987.500	-17.969	0.000	9.179	0.000	0.000	0.000	0.000	0.015	0.000
OF	990.800	-17.920	0.000	9.179	0.000	0.000	0.000	0.000	0.015	0.000
OF	994.100	-17.870	0.000	9.181	0.000	0.000	0.000	0.000	0.015	0.000
OF	997.400	-17.820	0.000	9.181	0.000	0.000	0.000	0.000	0.015	0.000
OF	1000.700	-17.770	0.000	9.182	0.000	0.000	0.000	0.000	0.015	0.000
OF	1003.900	-17.720	0.000	9.183	0.000	0.000	0.000	0.000	0.015	0.000
OF	1007.200	-17.671	0.000	9.184	0.000	0.000	0.000	0.000	0.015	0.000
OF	1010.500	-17.621	0.000	9.185	0.000	0.000	0.000	0.000	0.015	0.000
OF	1013.800	-17.571	0.000	9.186	0.000	0.000	0.000	0.000	0.015	0.000
OF	1017.100	-17.521	0.000	9.187	0.000	0.000	0.000	0.000	0.015	0.000
OF	1020.300	-17.471	0.000	9.188	0.000	0.000	0.000	0.000	0.016	0.000
OF	1023.600	-17.419	0.000	9.189	0.000	0.000	0.000	0.000	0.016	0.000
OF	1026.900	-17.366	0.000	9.190	0.000	0.000	0.000	0.000	0.016	0.000
OF	1030.200	-17.313	0.000	9.191	0.000	0.000	0.000	0.000	0.016	0.000
OF	1033.500	-17.259	0.000	9.192	0.000	0.000	0.000	0.000	0.016	0.000
OF	1036.700	-17.206	0.000	9.193	0.000	0.000	0.000	0.000	0.016	0.000
OF	1040.000	-17.153	0.000	9.194	0.000	0.000	0.000	0.000	0.016	0.000
OF	1043.300	-17.100	0.000	9.195	0.000	0.000	0.000	0.000	0.016	0.000
OF	1046.600	-17.046	0.000	9.196	0.000	0.000	0.000	0.000	0.016	0.000
OF	1049.900	-16.993	0.000	9.197	0.000	0.000	0.000	0.000	0.016	0.000
OF	1053.100	-16.940	0.000	9.198	0.000	0.000	0.000	0.000	0.016	0.000
OF	1056.400	-16.887	0.000	9.199	0.000	0.000	0.000	0.000	0.016	0.000
OF	1059.700	-16.833	0.000	9.200	0.000	0.000	0.000	0.000	0.016	0.000
OF	1063.000	-16.780	0.000	9.201	0.000	0.000	0.000	0.000	0.016	0.000
OF	1066.300	-16.727	0.000	9.203	0.000	0.000	0.000	0.000	0.016	0.000
OF	1069.600	-16.673	0.000	9.203	0.000	0.000	0.000	0.000	0.016	0.000
OF	1072.800	-16.620	0.000	9.205	0.000	0.000	0.000	0.000	0.016	0.000
OF	1076.100	-16.567	0.000	9.206	0.000	0.000	0.000	0.000	0.016	0.000
OF	1079.400	-16.514	0.000	9.207	0.000	0.000	0.000	0.000	0.016	0.000
OF	1082.700	-16.460	0.000	9.208	0.000	0.000	0.000	0.000	0.016	0.000
OF	1086.000	-16.407	0.000	9.209	0.000	0.000	0.000	0.000	0.016	0.000
OF	1089.200	-16.354	0.000	9.210	0.000	0.000	0.000	0.000	0.016	0.000
OF	1092.500	-16.301	0.000	9.211	0.000	0.000	0.000	0.000	0.016	0.000
OF	1095.800	-16.247	0.000	9.212	0.000	0.000	0.000	0.000	0.016	0.000
OF	1099.100	-16.194	0.000	9.214	0.000	0.000	0.000	0.000	0.016	0.000
OF	1102.400	-16.141	0.000	9.215	0.000	0.000	0.000	0.000	0.016	0.000
OF	1105.600	-16.088	0.000	9.216	0.000	0.000	0.000	0.000	0.016	0.000
OF	1108.900	-16.034	0.000	9.217	0.000	0.000	0.000	0.000	0.016	0.000
OF	1112.200	-15.981	0.000	9.218	0.000	0.000	0.000	0.000	0.016	0.000
OF	1115.500	-15.928	0.000	9.220	0.000	0.000	0.000	0.000	0.016	0.000
OF	1118.800	-15.875	0.000	9.221	0.000	0.000	0.000	0.000	0.016	0.000
OF	1122.000	-15.821	0.000	9.222	0.000	0.000	0.000	0.000	0.016	0.000
OF	1125.300	-15.768	0.000	9.223	0.000	0.000	0.000	0.000	0.016	0.000
OF	1128.600	-15.715	0.000	9.224	0.000	0.000	0.000	0.000	0.016	0.000
OF	1131.900	-15.662	0.000	9.226	0.000	0.000	0.000	0.000	0.016	0.000
OF	1135.200	-15.608	0.000	9.227	0.000	0.000	0.000	0.000	0.016	0.000
OF	1138.400	-15.555	0.000	9.228	0.000	0.000	0.000	0.000	0.017	0.000
OF	1141.700	-15.496	0.000	9.229	0.000	0.000	0.000	0.000	0.019	0.000
OF	1145.000	-15.428	0.000	9.230	0.000	0.000	0.000	0.000	0.021	0.000
OF	1148.300	-15.355	0.000	9.232	0.000	0.000	0.000	0.000	0.022	0.000
OF	1151.600	-15.281	0.000	9.233	0.000	0.000	0.000	0.000	0.022	0.000
OF	1154.900	-15.208	0.000	9.234	0.000	0.000	0.000	0.000	0.023	0.000
OF	1158.100	-15.135	0.000	9.235	0.000	0.000	0.000	0.000	0.023	0.000
OF	1161.400	-15.062	0.000	9.236	0.000	0.000	0.000	0.000	0.022	0.000
OF	1164.700	-14.989	0.000	9.238	0.000	0.000	0.000	0.000	0.022	0.000
OF	1168.000	-14.915	0.000	9.239	0.000	0.000	0.000	0.000	0.022	0.000
OF	1171.300	-14.842	0.000	9.240	0.000	0.000	0.000	0.000	0.023	0.000
OF	1174.500	-14.769	0.000	9.241	0.000	0.000	0.000	0.000	0.023	0.000
OF	1177.800	-14.696	0.000	9.243	0.000	0.000	0.000	0.000	0.022	0.000
OF	1181.100	-14.623	0.000	9.244	0.000	0.000	0.000	0.000	0.022	0.000
OF	1184.400	-14.549	0.000	9.246	0.000	0.000	0.000	0.000	0.022	0.000
OF	1187.700	-14.476	0.000	9.247	0.000	0.000	0.000	0.000	0.023	0.000
OF	1190.900	-14.403	0.000	9.248	0.000	0.000	0.000	0.000	0.023	0.000
OF	1194.200	-14.330	0.000	9.250	0.000	0.000	0.000	0.000	0.022	0.000
OF	1197.500	-14.257	0.000	9.251	0.000	0.000	0.000	0.000	0.022	0.000
OF	1200.800	-14.183	0.000	9.252	0.000	0.000	0.000	0.000	0.022	0.000
OF	1204.100	-14.110	0.000	9.254	0.000	0.000	0.000	0.000	0.023	0.000
OF	1207.300	-14.037	0.000	9.256	0.000	0.000	0.000	0.000	0.023	0.000
OF	1210.600	-13.964	0.000	9.257	0.000	0.000	0.000	0.000	0.022	0.000
OF	1213.900	-13.891	0.000	9.259	0.000	0.000	0.000	0.000	0.022	0.000
OF	1217.200	-13.817	0.000	9.260	0.000	0.000	0.000	0.000	0.022	0.000
OF	1220.500	-13.744	0.000	9.262	0.000	0.000	0.000	0.000	0.022	0.000
OF	1223.800	-13.671	0.000	9.264	0.000	0.000	0.000	0.000	0.023	0.000
OF	1227.000	-13.598	0.000	9.265	0.000	0.000	0.000	0.000	0.023	0.000
OF	1230.300	-13.525	0.000	9.267	0.000	0.000	0.000	0.000	0.022	0.000
OF	1233.600	-13.451	0.000	9.268	0.000	0.000	0.000	0.000	0.022	0.000
OF	1236.900	-13.378	0.000	9.270	0.000	0.000	0.000	0.000	0.022	0.000
OF	1240.200	-13.305	0.000	9.272	0.000	0.000	0.000	0.000	0.023	0.000
OF	1243.400	-13.232	0.000	9.274	0.000	0.000	0.000	0.000	0.023	0.000
OF	1246.700	-13.159	0.000	9.275	0.000	0.000	0.000	0.000	0.022	0.000
OF	1250.000	-13.085	0.000	9.277	0.000	0.000	0.000	0.000	0.022	0.000
OF	1253.300	-13.012	0.000	9.279	0.000	0.000	0.000	0.000	0.022	0.000
OF	1256.600	-12.939	0.000	9.281	0.000	0.000	0.000	0.000	0.022	0.000
OF	1259.800	-12.872	0.000	9.283	0.000	0.000	0.000	0.000	0.021	0.000
OF	1263.100	-12.805	0.000	9.284	0.000	0.000	0.000	0.000	0.020	0.000
OF	1266.400	-12.739	0.000	9.286	0.000	0.000	0.000	0.000	0.020	0.000
OF	1269.700	-12.672	0.000	9.288	0.000	0.000	0.000	0.000	0.020	0.000
OF	1273.000	-12.605	0.000	9.290	0.000	0.000	0.000	0.000	0.021	0.000
OF	1276.200	-12.539	0.000	9.292	0.000	0.000	0.000	0.000	0.021	0.000
OF	1279.500	-12.472	0.000	9.294	0.000	0.000	0.000	0.000	0.020	0.000
OF	1282.800	-12.405	0.000	9.296	0.000	0.000	0.000	0.000	0.020	0.000
OF	1286.100	-12.339	0.000	9.298	0.000	0.000	0.000	0.000	0.020	0.000
OF	1289.400	-12.274	0.000	9.300	0.000	0.000	0.000	0.000	0.020	0.000
OF	1292.600	-12.212	0.000	9.302	0.000	0.000	0.000	0.000	0.019	0.000
OF	1295.900	-12.149	0.000	9.304	0.000	0.000	0.000	0.000	0.019	0.000
OF	1299.200	-12.087	0.000	9.306	0.000	0.000	0.000	0.000	0.019	0.000
OF	1302.500	-12.024	0.000	9.308	0.000	0.000	0.000	0.000	0.019	0.000

OF	1305.800	-11.962	0.000	9.310	0.000	0.000	0.000	0.000	0.019	0.000
OF	1309.100	-11.900	0.000	9.312	0.000	0.000	0.000	0.000	0.019	0.000
OF	1312.300	-11.837	0.000	9.314	0.000	0.000	0.000	0.000	0.019	0.000
OF	1315.600	-11.775	0.000	9.316	0.000	0.000	0.000	0.000	0.019	0.000
OF	1318.900	-11.712	0.000	9.318	0.000	0.000	0.000	0.000	0.019	0.000
OF	1322.200	-11.650	0.000	9.321	0.000	0.000	0.000	0.000	0.019	0.000
OF	1325.500	-11.587	0.000	9.323	0.000	0.000	0.000	0.000	0.019	0.000
OF	1328.700	-11.525	0.000	9.325	0.000	0.000	0.000	0.000	0.019	0.000
OF	1332.000	-11.463	0.000	9.327	0.000	0.000	0.000	0.000	0.019	0.000
OF	1335.300	-11.400	0.000	9.329	0.000	0.000	0.000	0.000	0.019	0.000
OF	1338.600	-11.338	0.000	9.331	0.000	0.000	0.000	0.000	0.019	0.000
OF	1341.900	-11.275	0.000	9.333	0.000	0.000	0.000	0.000	0.019	0.000
OF	1345.100	-11.213	0.000	9.335	0.000	0.000	0.000	0.000	0.019	0.000
OF	1348.400	-11.150	0.000	9.337	0.000	0.000	0.000	0.000	0.019	0.000
OF	1351.700	-11.088	0.000	9.339	0.000	0.000	0.000	0.000	0.019	0.000
OF	1355.000	-11.025	0.000	9.342	0.000	0.000	0.000	0.000	0.019	0.000
OF	1358.300	-10.963	0.000	9.344	0.000	0.000	0.000	0.000	0.019	0.000
OF	1361.500	-10.901	0.000	9.346	0.000	0.000	0.000	0.000	0.019	0.000
OF	1364.800	-10.838	0.000	9.348	0.000	0.000	0.000	0.000	0.019	0.000
OF	1368.100	-10.776	0.000	9.350	0.000	0.000	0.000	0.000	0.019	0.000
OF	1371.400	-10.713	0.000	9.352	0.000	0.000	0.000	0.000	0.019	0.000
OF	1374.700	-10.651	0.000	9.354	0.000	0.000	0.000	0.000	0.019	0.000
OF	1377.900	-10.591	0.000	9.357	0.000	0.000	0.000	0.000	0.018	0.000
OF	1381.200	-10.537	0.000	9.359	0.000	0.000	0.000	0.000	0.016	0.000
OF	1384.500	-10.484	0.000	9.361	0.000	0.000	0.000	0.000	0.016	0.000
OF	1387.800	-10.430	0.000	9.363	0.000	0.000	0.000	0.000	0.016	0.000
OF	1391.100	-10.377	0.000	9.365	0.000	0.000	0.000	0.000	0.016	0.000
OF	1394.400	-10.324	0.000	9.368	0.000	0.000	0.000	0.000	0.016	0.000
OF	1397.600	-10.270	0.000	9.370	0.000	0.000	0.000	0.000	0.016	0.000
OF	1400.900	-10.217	0.000	9.372	0.000	0.000	0.000	0.000	0.016	0.000
OF	1404.200	-10.164	0.000	9.374	0.000	0.000	0.000	0.000	0.016	0.000
OF	1407.500	-10.111	0.000	9.377	0.000	0.000	0.000	0.000	0.016	0.000
OF	1410.800	-10.057	0.000	9.379	0.000	0.000	0.000	0.000	0.016	0.000
OF	1414.000	-10.004	0.000	9.381	0.000	0.000	0.000	0.000	0.016	0.000
OF	1417.300	-9.951	0.000	9.383	0.000	0.000	0.000	0.000	0.016	0.000
OF	1420.600	-9.898	0.000	9.385	0.000	0.000	0.000	0.000	0.016	0.000
OF	1423.900	-9.845	0.000	9.387	0.000	0.000	0.000	0.000	0.016	0.000
OF	1427.200	-9.792	0.000	9.390	0.000	0.000	0.000	0.000	0.016	0.000
OF	1430.400	-9.738	0.000	9.392	0.000	0.000	0.000	0.000	0.016	0.000
OF	1433.700	-9.685	0.000	9.394	0.000	0.000	0.000	0.000	0.016	0.000
OF	1437.000	-9.632	0.000	9.396	0.000	0.000	0.000	0.000	0.016	0.000
OF	1440.300	-9.578	0.000	9.398	0.000	0.000	0.000	0.000	0.016	0.000
OF	1443.600	-9.525	0.000	9.400	0.000	0.000	0.000	0.000	0.016	0.000
OF	1446.800	-9.472	0.000	9.403	0.000	0.000	0.000	0.000	0.016	0.000
OF	1450.100	-9.419	0.000	9.405	0.000	0.000	0.000	0.000	0.016	0.000
OF	1453.400	-9.365	0.000	9.407	0.000	0.000	0.000	0.000	0.016	0.000
OF	1456.700	-9.312	0.000	9.409	0.000	0.000	0.000	0.000	0.016	0.000
OF	1460.000	-9.259	0.000	9.411	0.000	0.000	0.000	0.000	0.016	0.000
OF	1463.300	-9.206	0.000	9.413	0.000	0.000	0.000	0.000	0.016	0.000
OF	1466.500	-9.152	0.000	9.415	0.000	0.000	0.000	0.000	0.016	0.000
OF	1469.800	-9.099	0.000	9.417	0.000	0.000	0.000	0.000	0.016	0.000
OF	1473.100	-9.046	0.000	9.419	0.000	0.000	0.000	0.000	0.017	0.000
OF	1476.400	-8.989	0.000	9.421	0.000	0.000	0.000	0.000	0.020	0.000
OF	1479.700	-8.913	0.000	9.423	0.000	0.000	0.000	0.000	0.023	0.000
OF	1482.900	-8.838	0.000	9.425	0.000	0.000	0.000	0.000	0.023	0.000
OF	1486.200	-8.762	0.000	9.427	0.000	0.000	0.000	0.000	0.023	0.000
OF	1489.500	-8.687	0.000	9.429	0.000	0.000	0.000	0.000	0.023	0.000
OF	1492.800	-8.612	0.000	9.431	0.000	0.000	0.000	0.000	0.023	0.000
OF	1496.100	-8.536	0.000	9.433	0.000	0.000	0.000	0.000	0.023	0.000
OF	1499.300	-8.461	0.000	9.435	0.000	0.000	0.000	0.000	0.023	0.000
OF	1502.600	-8.385	0.000	9.437	0.000	0.000	0.000	0.000	0.023	0.000
OF	1505.900	-8.310	0.000	9.439	0.000	0.000	0.000	0.000	0.023	0.000
OF	1509.200	-8.235	0.000	9.441	0.000	0.000	0.000	0.000	0.023	0.000
OF	1512.500	-8.159	0.000	9.443	0.000	0.000	0.000	0.000	0.024	0.000
OF	1515.700	-8.078	0.000	9.445	0.000	0.000	0.000	0.000	0.025	0.000
OF	1519.000	-7.995	0.000	9.447	0.000	0.000	0.000	0.000	0.025	0.000
OF	1522.300	-7.911	0.000	9.449	0.000	0.000	0.000	0.000	0.025	0.000
OF	1525.600	-7.827	0.000	9.451	0.000	0.000	0.000	0.000	0.025	0.000
OF	1528.900	-7.743	0.000	9.453	0.000	0.000	0.000	0.000	0.026	0.000
OF	1532.100	-7.659	0.000	9.455	0.000	0.000	0.000	0.000	0.026	0.000
OF	1535.400	-7.576	0.000	9.457	0.000	0.000	0.000	0.000	0.025	0.000
OF	1538.700	-7.492	0.000	9.460	0.000	0.000	0.000	0.000	0.025	0.000
OF	1542.000	-7.408	0.000	9.462	0.000	0.000	0.000	0.000	0.025	0.000
OF	1545.300	-7.324	0.000	9.464	0.000	0.000	0.000	0.000	0.025	0.000
OF	1548.600	-7.240	0.000	9.466	0.000	0.000	0.000	0.000	0.026	0.000
OF	1551.800	-7.156	0.000	9.468	0.000	0.000	0.000	0.000	0.026	0.000
OF	1555.100	-7.073	0.000	9.471	0.000	0.000	0.000	0.000	0.025	0.000
OF	1558.400	-6.989	0.000	9.473	0.000	0.000	0.000	0.000	0.025	0.000
OF	1561.700	-6.905	0.000	9.475	0.000	0.000	0.000	0.000	0.025	0.000
OF	1565.000	-6.821	0.000	9.478	0.000	0.000	0.000	0.000	0.026	0.000
OF	1568.200	-6.737	0.000	9.480	0.000	0.000	0.000	0.000	0.026	0.000
OF	1571.500	-6.654	0.000	9.482	0.000	0.000	0.000	0.000	0.025	0.000
OF	1574.800	-6.570	0.000	9.485	0.000	0.000	0.000	0.000	0.025	0.000
OF	1578.100	-6.486	0.000	9.487	0.000	0.000	0.000	0.000	0.025	0.000
OF	1581.400	-6.402	0.000	9.490	0.000	0.000	0.000	0.000	0.026	0.000
OF	1584.600	-6.318	0.000	9.492	0.000	0.000	0.000	0.000	0.026	0.000
OF	1587.900	-6.234	0.000	9.495	0.000	0.000	0.000	0.000	0.026	0.000
OF	1591.200	-6.149	0.000	9.497	0.000	0.000	0.000	0.000	0.026	0.000
OF	1594.500	-6.065	0.000	9.500	0.000	0.000	0.000	0.000	0.026	0.000
OF	1597.800	-5.980	0.000	9.502	0.000	0.000	0.000	0.000	0.026	0.000
OF	1601.000	-5.896	0.000	9.505	0.000	0.000	0.000	0.000	0.026	0.000
OF	1604.300	-5.812	0.000	9.507	0.000	0.000	0.000	0.000	0.026	0.000
OF	1607.600	-5.727	0.000	9.510	0.000	0.000	0.000	0.000	0.026	0.000
OF	1610.900	-5.643	0.000	9.513	0.000	0.000	0.000	0.000	0.026	0.000
OF	1614.200	-5.558	0.000	9.516	0.000	0.000	0.000	0.000	0.026	0.000
OF	1617.500	-5.474	0.000	9.518	0.000	0.000	0.000	0.000	0.026	0.000
OF	1620.700	-5.390	0.000	9.521	0.000	0.000	0.000	0.000	0.026	0.000
OF	1624.000	-5.305	0.000	9.524	0.000	0.000	0.000	0.000	0.026	0.000
OF	1627.300	-5.221	0.000	9.526	0.000	0.000	0.000	0.000	0.026	0.000
OF	1630.600	-5.136	0.000	9.529	0.000	0.000	0.000	0.000	0.026	0.000
OF	1633.900	-5.052	0.000	9.532	0.000	0.000	0.000	0.000	0.026	0.000
OF	1637.100	-4.968	0.000	9.535	0.000	0.000	0.000	0.000	0.026	0.000

OF	1640.400	-4.883	0.000	9.537	0.000	0.000	0.000	0.000	0.026	0.000
OF	1643.700	-4.799	0.000	9.540	0.000	0.000	0.000	0.000	0.026	0.000
OF	1647.000	-4.714	0.000	9.543	0.000	0.000	0.000	0.000	0.026	0.000
OF	1650.300	-4.630	0.000	9.546	0.000	0.000	0.000	0.000	0.026	0.000
OF	1653.500	-4.546	0.000	9.549	0.000	0.000	0.000	0.000	0.025	0.000
OF	1656.800	-4.467	0.000	9.552	0.000	0.000	0.000	0.000	0.024	0.000
OF	1660.100	-4.388	0.000	9.555	0.000	0.000	0.000	0.000	0.024	0.000
OF	1663.400	-4.309	0.000	9.557	0.000	0.000	0.000	0.000	0.024	0.000
OF	1666.700	-4.230	0.000	9.561	0.000	0.000	0.000	0.000	0.024	0.000
OF	1669.900	-4.151	0.000	9.564	0.000	0.000	0.000	0.000	0.024	0.000
OF	1673.200	-4.072	0.000	9.566	0.000	0.000	0.000	0.000	0.024	0.000
OF	1676.500	-3.993	0.000	9.570	0.000	0.000	0.000	0.000	0.024	0.000
OF	1679.800	-3.914	0.000	9.572	0.000	0.000	0.000	0.000	0.024	0.000
OF	1683.100	-3.835	0.000	9.575	0.000	0.000	0.000	0.000	0.024	0.000
OF	1686.300	-3.756	0.000	9.579	0.000	0.000	0.000	0.000	0.023	0.000
OF	1689.600	-3.688	0.000	9.582	0.000	0.000	0.000	0.000	0.020	0.000
OF	1692.900	-3.623	0.000	9.585	0.000	0.000	0.000	0.000	0.020	0.000
OF	1696.200	-3.558	0.000	9.588	0.000	0.000	0.000	0.000	0.020	0.000
OF	1699.500	-3.493	0.000	9.591	0.000	0.000	0.000	0.000	0.020	0.000
OF	1702.800	-3.428	0.000	9.594	0.000	0.000	0.000	0.000	0.020	0.000
OF	1706.000	-3.363	0.000	9.598	0.000	0.000	0.000	0.000	0.020	0.000
OF	1709.300	-3.298	0.000	9.601	0.000	0.000	0.000	0.000	0.020	0.000
OF	1712.600	-3.234	0.000	9.604	0.000	0.000	0.000	0.000	0.020	0.000
OF	1715.900	-3.168	0.000	9.607	0.000	0.000	0.000	0.000	0.020	0.000
OF	1719.200	-3.104	0.000	9.610	0.000	0.000	0.000	0.000	0.020	0.000
OF	1722.400	-3.039	0.000	9.613	0.000	0.000	0.000	0.000	0.020	0.000
OF	1725.700	-2.974	0.000	9.616	0.000	0.000	0.000	0.000	0.020	0.000
OF	1729.000	-2.909	0.000	9.619	0.000	0.000	0.000	0.000	0.020	0.000
OF	1732.300	-2.844	0.000	9.622	0.000	0.000	0.000	0.000	0.020	0.000
OF	1735.600	-2.779	0.000	9.625	0.000	0.000	0.000	0.000	0.020	0.000
OF	1738.800	-2.714	0.000	9.628	0.000	0.000	0.000	0.000	0.020	0.000
OF	1742.100	-2.649	0.000	9.632	0.000	0.000	0.000	0.000	0.020	0.000
OF	1745.400	-2.584	0.000	9.635	0.000	0.000	0.000	0.000	0.020	0.000
OF	1748.700	-2.519	0.000	9.638	0.000	0.000	0.000	0.000	0.020	0.000
OF	1752.000	-2.454	0.000	9.641	0.000	0.000	0.000	0.000	0.020	0.000
OF	1755.200	-2.389	0.000	9.644	0.000	0.000	0.000	0.000	0.020	0.000
OF	1758.500	-2.324	0.000	9.647	0.000	0.000	0.000	0.000	0.020	0.000
OF	1761.800	-2.259	0.000	9.650	0.000	0.000	0.000	0.000	0.020	0.000
OF	1765.100	-2.194	0.000	9.653	0.000	0.000	0.000	0.000	0.020	0.000
OF	1768.400	-2.129	0.000	9.656	0.000	0.000	0.000	0.000	0.020	0.000
OF	1771.600	-2.065	0.000	9.659	0.000	0.000	0.000	0.000	0.021	0.000
OF	1774.900	-1.991	0.000	9.662	0.000	0.000	0.000	0.000	0.023	0.000
OF	1778.200	-1.915	0.000	9.665	0.000	0.000	0.000	0.000	0.023	0.000
OF	1781.500	-1.839	0.000	9.668	0.000	0.000	0.000	0.000	0.023	0.000
OF	1784.800	-1.763	0.000	9.671	0.000	0.000	0.000	0.000	0.022	0.000
OF	1788.100	-1.695	0.000	9.674	0.000	0.000	0.000	0.000	0.020	0.000
OF	1791.300	-1.631	0.000	9.677	0.000	0.000	0.000	0.000	0.020	0.000
OF	1794.600	-1.566	0.000	9.680	0.000	0.000	0.000	0.000	0.020	0.000
OF	1797.900	-1.502	0.000	9.683	0.000	0.000	0.000	0.000	0.020	0.000
OF	1801.200	-1.437	0.000	9.686	0.000	0.000	0.000	0.000	0.020	0.000
OF	1804.500	-1.373	0.000	9.689	0.000	0.000	0.000	0.000	0.020	0.000
OF	1807.700	-1.308	0.000	9.692	0.000	0.000	0.000	0.000	0.021	0.000
OF	1811.000	-1.240	0.000	9.695	0.000	0.000	0.000	0.000	0.021	0.000
OF	1814.300	-1.172	0.000	9.698	0.000	0.000	0.000	0.000	0.021	0.000
OF	1817.600	-1.105	0.000	9.701	0.000	0.000	0.000	0.000	0.021	0.000
OF	1820.900	-1.037	0.000	9.704	0.000	0.000	0.000	0.000	0.021	0.000
OF	1824.100	-0.969	0.000	9.707	0.000	0.000	0.000	0.000	0.021	0.000
OF	1827.400	-0.901	0.000	9.710	0.000	0.000	0.000	0.000	0.021	0.000
OF	1830.700	-0.834	0.000	9.713	0.000	0.000	0.000	0.000	0.021	0.000
OF	1834.000	-0.766	0.000	9.716	0.000	0.000	0.000	0.000	0.021	0.000
OF	1837.300	-0.698	0.000	9.719	0.000	0.000	0.000	0.000	0.021	0.000
OF	1840.500	-0.631	0.000	9.722	0.000	0.000	0.000	0.000	0.021	0.000
OF	1843.800	-0.563	0.000	9.725	0.000	0.000	0.000	0.000	0.021	0.000
OF	1847.100	-0.495	0.000	9.728	0.000	0.000	0.000	0.000	0.021	0.000
OF	1850.400	-0.428	0.000	9.731	0.000	0.000	0.000	0.000	0.021	0.000
OF	1853.700	-0.360	0.000	9.734	0.000	0.000	0.000	0.000	0.021	0.000
OF	1857.000	-0.292	0.000	9.737	0.000	0.000	0.000	0.000	0.021	0.000
OF	1860.200	-0.225	0.000	9.740	0.000	0.000	0.000	0.000	0.021	0.000
OF	1863.500	-0.157	0.000	9.743	0.000	0.000	0.000	0.000	0.021	0.000
OF	1866.800	-0.089	0.000	9.746	0.000	0.000	0.000	0.000	0.021	0.000
OF	1870.100	-0.022	0.000	9.749	0.000	0.000	0.000	0.000	0.025	0.000
IF	1873.400	0.076	0.000	9.751	0.000	0.000	0.000	0.000	0.028	0.000
IF	1876.600	0.162	0.000	9.754	0.000	0.000	0.000	0.000	0.023	0.000
IF	1879.900	0.223	0.000	9.757	0.000	0.000	0.000	0.000	0.020	0.000
IF	1883.200	0.293	0.000	9.760	0.000	0.000	0.000	0.000	0.023	0.000
IF	1886.500	0.376	0.000	9.764	0.000	0.000	0.000	0.000	0.022	0.000
IF	1889.800	0.439	0.000	9.767	0.000	0.000	0.000	0.000	0.015	0.000
IF	1893.000	0.472	0.000	9.770	0.000	0.000	0.000	0.000	0.012	0.000
IF	1896.300	0.517	0.000	9.773	0.000	0.000	0.000	0.000	0.016	0.000
IF	1899.600	0.578	0.000	9.776	0.000	0.000	0.000	0.000	0.020	0.000
IF	1902.900	0.646	0.000	9.779	0.000	0.000	0.000	0.000	0.023	0.000
IF	1906.200	0.728	0.000	9.782	0.000	0.000	0.000	0.000	0.026	0.000
IF	1909.400	0.816	0.000	9.785	0.000	0.000	0.000	0.000	0.029	0.000
IF	1912.700	0.917	0.000	9.787	0.000	0.000	0.000	0.000	0.030	0.000
IF	1916.000	1.017	0.000	9.790	0.000	0.000	0.000	0.000	0.028	0.000
IF	1919.300	1.102	0.000	9.793	0.000	0.000	0.000	0.000	0.025	0.000
IF	1922.600	1.186	0.000	9.796	0.000	0.000	0.000	0.000	0.026	0.000
IF	1925.800	1.270	0.000	9.798	0.000	0.000	0.000	0.000	0.024	0.000
IF	1929.100	1.340	0.000	9.802	0.000	0.000	0.000	0.000	0.019	0.000
IF	1932.400	1.397	0.000	9.805	0.000	0.000	0.000	0.000	0.017	0.000
IF	1935.700	1.454	0.000	9.808	0.000	0.000	0.000	0.000	0.015	0.000
IF	1939.000	1.494	0.000	9.812	0.000	0.000	0.000	0.000	0.010	0.000
IF	1942.300	1.522	0.000	9.815	0.000	0.000	0.000	0.000	0.013	0.000
IF	1945.500	1.579	0.000	9.818	0.000	0.000	0.000	0.000	0.026	0.000
IF	1948.800	1.694	0.000	9.821	0.000	0.000	0.000	0.000	0.035	0.000
IF	1952.100	1.808	0.000	9.823	0.000	0.000	0.000	0.000	0.033	0.000
IF	1955.400	1.915	0.000	9.826	0.000	0.000	0.000	0.000	0.033	0.000
IF	1958.700	2.023	0.000	9.829	0.000	0.000	0.000	0.000	0.028	0.000
IF	1961.900	2.099	0.000	9.832	0.000	0.000	0.000	0.000	0.020	0.000
IF	1965.200	2.152	0.000	9.836	0.000	0.000	0.000	0.000	0.016	0.000
IF	1968.500	2.206	0.000	9.839	0.000	0.000	0.000	0.000	0.016	0.000
IF	1971.800	2.260	0.000	9.842	0.000	0.000	0.000	0.000	0.018	0.000

IF	1975.100	2.328	0.000	9.846	0.000	0.000	0.000	0.000	0.025	0.000
IF	1978.300	2.424	0.000	9.849	0.000	0.000	0.000	0.000	0.030	0.000
IF	1981.600	2.521	0.000	9.852	0.000	0.000	0.000	0.000	0.029	0.000
IF	1984.900	2.617	0.000	9.855	0.000	0.000	0.000	0.000	0.029	0.000
IF	1988.200	2.714	0.000	9.858	0.000	0.000	0.000	0.000	0.030	0.000
IF	1991.500	2.817	0.000	9.861	0.000	0.000	0.000	0.000	0.032	0.000
IF	1994.700	2.921	0.000	9.865	0.000	0.000	0.000	0.000	0.032	0.000
IF	1998.000	3.025	0.000	9.868	0.000	0.000	0.000	0.000	0.032	0.000
IF	2001.300	3.129	0.000	9.872	0.000	0.000	0.000	0.000	0.030	0.000
IF	2004.600	3.225	0.000	9.876	0.000	0.000	0.000	0.000	0.028	0.000
IF	2007.900	3.313	0.000	9.880	0.000	0.000	0.000	0.000	0.027	0.000
IF	2011.200	3.401	0.000	9.884	0.000	0.000	0.000	0.000	0.028	0.000
IF	2014.400	3.494	0.000	9.888	0.000	0.000	0.000	0.000	0.033	0.000
IF	2017.700	3.615	0.000	9.892	0.000	0.000	0.000	0.000	0.037	0.000
IF	2021.000	3.736	0.000	9.895	0.000	0.000	0.000	0.000	0.037	0.000
IF	2024.300	3.860	0.000	9.900	0.000	0.000	0.000	0.000	0.038	0.000
IF	2027.600	3.986	0.000	9.904	0.000	0.000	0.000	0.000	0.028	0.000
IF	2030.800	4.040	0.000	9.909	0.000	0.000	0.000	0.000	0.018	0.000
IF	2034.100	4.105	0.000	9.915	0.000	0.000	0.000	0.000	0.026	0.000
IF	2037.400	4.213	0.000	9.919	0.000	0.000	0.000	0.000	0.037	0.000
IF	2040.700	4.348	0.000	9.924	0.000	0.000	0.000	0.000	0.058	0.000
IF	2044.000	4.593	0.000	9.926	0.000	0.000	0.000	0.000	0.075	0.000
IF	2047.200	4.838	0.000	9.930	0.000	0.000	0.000	0.000	0.075	0.000
IF	2050.500	5.082	0.000	9.934	0.000	0.000	0.000	0.000	0.053	0.000
IF	2053.800	5.190	0.000	9.943	0.000	0.000	0.000	0.000	0.029	0.000
IF	2057.100	5.273	0.000	9.952	0.000	0.000	0.000	0.000	0.036	0.000
IF	2060.400	5.427	0.000	9.960	0.000	0.000	0.000	0.000	0.119	0.000
IF	2063.600	6.046	0.000	9.959	0.000	0.000	0.000	0.000	0.128	0.000
IF	2066.900	6.261	0.000	9.972	0.000	0.000	0.000	0.000	0.062	0.000
IF	2070.200	6.455	0.000	9.989	0.000	0.000	0.000	0.000	0.058	0.000
IF	2073.500	6.643	0.000	10.008	0.000	0.000	0.000	0.000	0.065	0.000
IF	2076.800	6.883	0.000	10.024	0.000	0.000	0.000	0.000	0.087	0.000
IF	2080.000	7.206	0.000	10.044	0.000	0.000	0.000	0.000	0.138	0.000
IF	2083.300	7.778	0.000	10.082	0.000	0.000	0.000	0.000	0.168	0.000
IF	2086.600	8.315	0.000	10.136	0.000	0.000	0.000	0.000	0.119	0.000
IF	2089.900	8.562	0.000	10.193	0.000	0.000	0.000	0.000	0.055	0.000
IF	2093.200	8.678	0.000	10.259	0.000	0.000	0.000	0.000	0.041	0.000
IF	2096.500	8.830	0.000	10.311	0.000	0.000	0.000	0.000	0.095	0.000
IF	2110.300	10.311	0.000	10.311	0.000	0.000	0.000	0.000	0.107	0.000
AS	2286.300	9.123	0.000	9.123	0.000	0.000	0.000	0.000	-0.042	0.000
IF	2291.000	8.924	0.000	9.123	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2313.500	8.760	0.000	9.123	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2321.500	8.858	0.000	9.123	0.000	0.000	0.000	0.000	0.009	0.000
IF	2332.000	8.924	0.000	9.123	0.000	0.000	0.000	0.000	0.015	0.000
IF	2339.400	9.123	0.000	9.123	0.000	0.000	0.000	0.000	0.027	0.000
AS	2754.000	8.948	0.000	8.948	0.000	0.000	0.000	0.000	-0.115	0.000
OF	2901.000	-7.929	0.000	8.948	0.000	0.000	0.000	0.000	-0.115	0.000
OF	2902.000	-8.114	0.000	8.948	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2937.000	-8.202	0.000	8.948	0.000	0.000	0.000	0.000	0.000	0.000
OF	2973.000	-8.126	0.000	8.948	0.000	0.000	0.000	0.000	0.020	0.000
OF	2979.000	-7.363	0.000	8.948	0.000	0.000	0.000	0.000	0.117	0.000
IF	3060.500	2.087	0.000	8.950	0.000	0.000	0.000	0.000	0.115	0.000
IF	3077.500	3.957	0.000	8.950	0.000	0.000	0.000	0.000	0.070	0.000
IF	3093.500	4.383	0.000	8.949	0.000	0.000	0.000	0.000	0.018	0.000
IF	3109.000	4.514	0.000	8.949	0.000	0.000	0.000	0.000	0.024	0.000
IF	3123.000	5.105	0.000	8.948	0.000	0.000	0.000	0.000	0.076	0.000
IF	3144.500	7.215	0.000	8.948	0.000	0.000	0.000	0.000	0.091	0.000
IF	3160.500	8.530	0.000	8.948	0.000	0.000	0.000	0.000	0.047	0.000
IF	3174.000	8.596	0.000	8.948	0.000	0.000	0.000	0.000	-0.003	0.000
IF	3226.000	8.333	0.000	8.948	0.000	0.000	0.000	0.000	0.006	0.000
IF	3235.100	8.948	0.000	8.948	0.000	0.000	0.000	0.000	0.068	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-28.592	1.000	1.000	8.831	30.287	14.349	56.140	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2.000	-28.592	0.000	8.831	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.300	-28.592	0.000	8.832	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	6.600	-28.592	0.000	8.833	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.800	-28.592	0.000	8.834	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.100	-28.592	0.000	8.835	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.400	-28.592	0.000	8.836	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.700	-28.592	0.000	8.837	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-28.592	0.000	8.838	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.200	-28.593	0.000	8.840	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	29.500	-28.593	0.000	8.841	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	32.800	-28.587	0.000	8.842	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	36.100	-28.550	0.000	8.843	0.000	0.000	0.000	0.000	0.011	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.400	-28.512	0.000	8.844	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	42.700	-28.474	0.000	8.845	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.900	-28.436	0.000	8.846	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.200	-28.399	0.000	8.847	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.500	-28.361	0.000	8.848	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	55.800	-28.323	0.000	8.849	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	59.100	-28.285	0.000	8.850	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.300	-28.248	0.000	8.851	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	65.600	-28.210	0.000	8.852	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	68.900	-28.172	0.000	8.853	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	72.200	-28.134	0.000	8.854	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.500	-28.096	0.000	8.855	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	78.700	-28.059	0.000	8.856	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-28.018	0.000	8.857	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.300	-27.972	0.000	8.858	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.600	-27.925	0.000	8.859	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.900	-27.879	0.000	8.861	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.100	-27.833	0.000	8.862	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.400	-27.787	0.000	8.863	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.700	-27.740	0.000	8.864	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-27.694	0.000	8.865	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.300	-27.648	0.000	8.866	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-27.602	0.000	8.867	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-27.555	0.000	8.868	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-27.509	0.000	8.870	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-27.463	0.000	8.871	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-27.416	0.000	8.872	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-27.370	0.000	8.873	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-27.324	0.000	8.875	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-27.278	0.000	8.876	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-27.231	0.000	8.877	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-27.185	0.000	8.878	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.400	-27.139	0.000	8.879	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.600	-27.092	0.000	8.881	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.900	-27.046	0.000	8.882	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.200	-27.000	0.000	8.883	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.500	-26.954	0.000	8.884	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.800	-26.907	0.000	8.885	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-26.861	0.000	8.887	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.300	-26.815	0.000	8.888	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.600	-26.768	0.000	8.889	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.900	-26.722	0.000	8.891	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.200	-26.682	0.000	8.892	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.400	-26.647	0.000	8.893	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.700	-26.613	0.000	8.894	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	187.000	-26.578	0.000	8.896	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	190.300	-26.544	0.000	8.897	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.600	-26.509	0.000	8.899	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.800	-26.474	0.000	8.900	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.100	-26.440	0.000	8.901	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	203.400	-26.405	0.000	8.903	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.700	-26.371	0.000	8.904	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	210.000	-26.336	0.000	8.905	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	213.300	-26.301	0.000	8.907	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.500	-26.267	0.000	8.908	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	219.800	-26.232	0.000	8.909	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	223.100	-26.198	0.000	8.911	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	226.400	-26.163	0.000	8.912	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.700	-26.128	0.000	8.913	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	232.900	-26.094	0.000	8.915	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	236.200	-26.059	0.000	8.916	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	239.500	-26.025	0.000	8.917	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	242.800	-25.990	0.000	8.919	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	246.100	-25.955	0.000	8.920	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.300	-25.921	0.000	8.921	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	252.600	-25.886	0.000	8.923	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.900	-25.851	0.000	8.924	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-25.817	0.000	8.925	0.000	0.000	0.000	0.000	0.010	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-25.782	0.000	8.927	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-25.748	0.000	8.928	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-25.713	0.000	8.930	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-25.678	0.000	8.931	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-25.644	0.000	8.932	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-25.609	0.000	8.934	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-25.575	0.000	8.935	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-25.540	0.000	8.936	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-25.505	0.000	8.938	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-25.471	0.000	8.939	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-25.436	0.000	8.940	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-25.402	0.000	8.942	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-25.367	0.000	8.943	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-25.332	0.000	8.944	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-25.298	0.000	8.946	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-25.262	0.000	8.947	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-25.227	0.000	8.948	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-25.191	0.000	8.950	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-25.156	0.000	8.951	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-25.120	0.000	8.953	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-25.085	0.000	8.954	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-25.049	0.000	8.955	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-25.014	0.000	8.957	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-24.978	0.000	8.958	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-24.943	0.000	8.959	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-24.913	0.000	8.961	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.800	-24.882	0.000	8.962	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-24.851	0.000	8.963	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-24.821	0.000	8.965	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	357.600	-24.790	0.000	8.966	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-24.760	0.000	8.967	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-24.729	0.000	8.969	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	367.500	-24.698	0.000	8.970	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.700	-24.668	0.000	8.971	0.000	0.000	0.000	0.000	0.009	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	374.000	-24.637	0.000	8.973	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.300	-24.606	0.000	8.974	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	380.600	-24.575	0.000	8.975	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.900	-24.544	0.000	8.977	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	387.100	-24.513	0.000	8.978	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	390.400	-24.482	0.000	8.979	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	393.700	-24.451	0.000	8.981	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	397.000	-24.420	0.000	8.982	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	400.300	-24.389	0.000	8.983	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	403.500	-24.357	0.000	8.985	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	406.800	-24.326	0.000	8.986	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	410.100	-24.295	0.000	8.987	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	413.400	-24.264	0.000	8.988	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	416.700	-24.233	0.000	8.990	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	419.900	-24.202	0.000	8.991	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	423.200	-24.171	0.000	8.992	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	426.500	-24.139	0.000	8.993	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	429.800	-24.108	0.000	8.995	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	433.100	-24.077	0.000	8.996	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	436.400	-24.046	0.000	8.997	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	439.600	-24.015	0.000	8.998	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	442.900	-23.984	0.000	9.000	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	446.200	-23.953	0.000	9.001	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	449.500	-23.922	0.000	9.002	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	452.800	-23.890	0.000	9.003	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	456.000	-23.859	0.000	9.005	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	459.300	-23.828	0.000	9.006	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	462.600	-23.797	0.000	9.007	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	465.900	-23.766	0.000	9.009	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	469.200	-23.735	0.000	9.010	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	472.400	-23.704	0.000	9.011	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	475.700	-23.672	0.000	9.012	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	479.000	-23.641	0.000	9.014	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	482.300	-23.610	0.000	9.015	0.000	0.000	0.000	0.000	0.009	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	485.600	-23.579	0.000	9.016	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	488.800	-23.548	0.000	9.017	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	492.100	-23.517	0.000	9.019	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	495.400	-23.486	0.000	9.020	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	498.700	-23.454	0.000	9.021	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	502.000	-23.423	0.000	9.022	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	505.200	-23.392	0.000	9.023	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	508.500	-23.360	0.000	9.024	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	511.800	-23.329	0.000	9.026	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	515.100	-23.297	0.000	9.027	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	518.400	-23.266	0.000	9.028	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	521.700	-23.235	0.000	9.029	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	524.900	-23.203	0.000	9.030	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	528.200	-23.172	0.000	9.032	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	531.500	-23.140	0.000	9.033	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	534.800	-23.109	0.000	9.034	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	538.100	-23.078	0.000	9.035	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	541.300	-23.046	0.000	9.037	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	544.600	-23.015	0.000	9.038	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	547.900	-22.983	0.000	9.039	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	551.200	-22.952	0.000	9.040	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	554.500	-22.920	0.000	9.041	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	557.700	-22.889	0.000	9.042	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	561.000	-22.858	0.000	9.044	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	564.300	-22.826	0.000	9.045	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	567.600	-22.795	0.000	9.046	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	570.900	-22.763	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	574.100	-22.732	0.000	9.048	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	577.400	-22.700	0.000	9.050	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	580.700	-22.669	0.000	9.051	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	584.000	-22.638	0.000	9.052	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	587.300	-22.606	0.000	9.053	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	590.500	-22.575	0.000	9.054	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	593.800	-22.543	0.000	9.055	0.000	0.000	0.000	0.000	0.010	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	597.100	-22.511	0.000	9.056	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	600.400	-22.479	0.000	9.057	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	603.700	-22.447	0.000	9.059	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	607.000	-22.414	0.000	9.060	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	610.200	-22.382	0.000	9.061	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	613.500	-22.350	0.000	9.062	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	616.800	-22.317	0.000	9.063	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	620.100	-22.285	0.000	9.064	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	623.400	-22.253	0.000	9.065	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	626.600	-22.221	0.000	9.066	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	629.900	-22.189	0.000	9.068	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	633.200	-22.156	0.000	9.069	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	636.500	-22.124	0.000	9.070	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	639.800	-22.086	0.000	9.071	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	643.000	-22.044	0.000	9.072	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	646.300	-22.001	0.000	9.073	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	649.600	-21.959	0.000	9.074	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	652.900	-21.916	0.000	9.075	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	656.200	-21.873	0.000	9.076	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	659.400	-21.831	0.000	9.077	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	662.700	-21.788	0.000	9.078	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	666.000	-21.746	0.000	9.079	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	669.300	-21.703	0.000	9.080	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	672.600	-21.660	0.000	9.081	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	675.900	-21.618	0.000	9.082	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	679.100	-21.575	0.000	9.083	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	682.400	-21.533	0.000	9.084	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	685.700	-21.490	0.000	9.085	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	689.000	-21.448	0.000	9.086	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	692.300	-21.405	0.000	9.087	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	695.500	-21.362	0.000	9.088	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	698.800	-21.320	0.000	9.089	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	702.100	-21.280	0.000	9.090	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	705.400	-21.242	0.000	9.092	0.000	0.000	0.000	0.000	0.011	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	708.700	-21.205	0.000	9.092	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	711.900	-21.167	0.000	9.094	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	715.200	-21.130	0.000	9.095	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	718.500	-21.092	0.000	9.096	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	721.800	-21.055	0.000	9.097	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	725.100	-21.017	0.000	9.098	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	728.300	-20.980	0.000	9.099	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	731.600	-20.942	0.000	9.100	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	734.900	-20.905	0.000	9.101	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	738.200	-20.867	0.000	9.102	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	741.500	-20.830	0.000	9.103	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	744.700	-20.792	0.000	9.104	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	748.000	-20.755	0.000	9.106	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	751.300	-20.717	0.000	9.107	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	754.600	-20.680	0.000	9.108	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	757.900	-20.642	0.000	9.109	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	761.200	-20.605	0.000	9.110	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	764.400	-20.567	0.000	9.111	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	767.700	-20.530	0.000	9.112	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	771.000	-20.493	0.000	9.113	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	774.300	-20.462	0.000	9.114	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	777.600	-20.432	0.000	9.115	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	780.800	-20.401	0.000	9.116	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	784.100	-20.371	0.000	9.118	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	787.400	-20.340	0.000	9.119	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	790.700	-20.310	0.000	9.120	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	794.000	-20.279	0.000	9.121	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	797.200	-20.249	0.000	9.122	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	800.500	-20.218	0.000	9.123	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	803.800	-20.187	0.000	9.124	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	807.100	-20.157	0.000	9.125	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	810.400	-20.126	0.000	9.127	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	813.600	-20.096	0.000	9.127	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	816.900	-20.065	0.000	9.129	0.000	0.000	0.000	0.000	0.009	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	820.200	-20.033	0.000	9.130	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	823.500	-19.999	0.000	9.131	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	826.800	-19.965	0.000	9.132	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	830.100	-19.931	0.000	9.133	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	833.300	-19.897	0.000	9.134	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	836.600	-19.863	0.000	9.135	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	839.900	-19.829	0.000	9.136	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	843.200	-19.795	0.000	9.137	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	846.500	-19.761	0.000	9.138	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	849.700	-19.727	0.000	9.139	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	853.000	-19.693	0.000	9.140	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	856.300	-19.659	0.000	9.141	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	859.600	-19.625	0.000	9.142	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	862.900	-19.591	0.000	9.143	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	866.100	-19.557	0.000	9.144	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	869.400	-19.523	0.000	9.145	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	872.700	-19.489	0.000	9.146	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	876.000	-19.455	0.000	9.147	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	879.300	-19.421	0.000	9.148	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	882.500	-19.387	0.000	9.149	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	885.800	-19.353	0.000	9.150	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	889.100	-19.318	0.000	9.151	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	892.400	-19.284	0.000	9.152	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	895.700	-19.250	0.000	9.153	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	898.900	-19.216	0.000	9.154	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	902.200	-19.180	0.000	9.155	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	905.500	-19.134	0.000	9.156	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	908.800	-19.088	0.000	9.156	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	912.100	-19.042	0.000	9.158	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	915.400	-18.996	0.000	9.158	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	918.600	-18.951	0.000	9.159	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	921.900	-18.905	0.000	9.160	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	925.200	-18.859	0.000	9.161	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	928.500	-18.813	0.000	9.162	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	931.800	-18.767	0.000	9.163	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	935.000	-18.721	0.000	9.164	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	938.300	-18.675	0.000	9.165	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	941.600	-18.629	0.000	9.166	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	944.900	-18.583	0.000	9.167	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	948.200	-18.537	0.000	9.167	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	951.400	-18.491	0.000	9.168	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	954.700	-18.445	0.000	9.169	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	958.000	-18.399	0.000	9.170	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	961.300	-18.353	0.000	9.171	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	964.600	-18.308	0.000	9.172	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	967.800	-18.262	0.000	9.173	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	971.100	-18.216	0.000	9.174	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	974.400	-18.169	0.000	9.175	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	977.700	-18.119	0.000	9.176	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	981.000	-18.069	0.000	9.177	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	984.200	-18.019	0.000	9.177	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	987.500	-17.969	0.000	9.179	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	990.800	-17.920	0.000	9.179	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	994.100	-17.870	0.000	9.181	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	997.400	-17.820	0.000	9.181	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1000.700	-17.770	0.000	9.182	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1003.900	-17.720	0.000	9.183	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1007.200	-17.671	0.000	9.184	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1010.500	-17.621	0.000	9.185	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1013.800	-17.571	0.000	9.186	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1017.100	-17.521	0.000	9.187	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1020.300	-17.471	0.000	9.188	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1023.600	-17.419	0.000	9.189	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1026.900	-17.366	0.000	9.190	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1030.200	-17.313	0.000	9.191	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1033.500	-17.259	0.000	9.192	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1036.700	-17.206	0.000	9.193	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1040.000	-17.153	0.000	9.194	0.000	0.000	0.000	0.000	0.016	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1043.300	-17.100	0.000	9.195	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1046.600	-17.046	0.000	9.196	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1049.900	-16.993	0.000	9.197	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1053.100	-16.940	0.000	9.198	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1056.400	-16.887	0.000	9.199	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1059.700	-16.833	0.000	9.200	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1063.000	-16.780	0.000	9.201	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1066.300	-16.727	0.000	9.203	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1069.600	-16.673	0.000	9.203	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1072.800	-16.620	0.000	9.205	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1076.100	-16.567	0.000	9.206	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1079.400	-16.514	0.000	9.207	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1082.700	-16.460	0.000	9.208	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1086.000	-16.407	0.000	9.209	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1089.200	-16.354	0.000	9.210	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1092.500	-16.301	0.000	9.211	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1095.800	-16.247	0.000	9.212	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1099.100	-16.194	0.000	9.214	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1102.400	-16.141	0.000	9.215	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1105.600	-16.088	0.000	9.216	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1108.900	-16.034	0.000	9.217	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1112.200	-15.981	0.000	9.218	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1115.500	-15.928	0.000	9.220	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1118.800	-15.875	0.000	9.221	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1122.000	-15.821	0.000	9.222	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1125.300	-15.768	0.000	9.223	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1128.600	-15.715	0.000	9.224	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1131.900	-15.662	0.000	9.226	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1135.200	-15.608	0.000	9.227	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1138.400	-15.555	0.000	9.228	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1141.700	-15.496	0.000	9.229	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1145.000	-15.428	0.000	9.230	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1148.300	-15.355	0.000	9.232	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1151.600	-15.281	0.000	9.233	0.000	0.000	0.000	0.000	0.022	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1154.900	-15.208	0.000	9.234	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1158.100	-15.135	0.000	9.235	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1161.400	-15.062	0.000	9.236	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1164.700	-14.989	0.000	9.238	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1168.000	-14.915	0.000	9.239	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1171.300	-14.842	0.000	9.240	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1174.500	-14.769	0.000	9.241	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1177.800	-14.696	0.000	9.243	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1181.100	-14.623	0.000	9.244	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1184.400	-14.549	0.000	9.246	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1187.700	-14.476	0.000	9.247	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1190.900	-14.403	0.000	9.248	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1194.200	-14.330	0.000	9.250	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1197.500	-14.257	0.000	9.251	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1200.800	-14.183	0.000	9.252	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1204.100	-14.110	0.000	9.254	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1207.300	-14.037	0.000	9.256	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1210.600	-13.964	0.000	9.257	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1213.900	-13.891	0.000	9.259	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1217.200	-13.817	0.000	9.260	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1220.500	-13.744	0.000	9.262	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1223.800	-13.671	0.000	9.264	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1227.000	-13.598	0.000	9.265	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1230.300	-13.525	0.000	9.267	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1233.600	-13.451	0.000	9.268	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1236.900	-13.378	0.000	9.270	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1240.200	-13.305	0.000	9.272	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1243.400	-13.232	0.000	9.274	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1246.700	-13.159	0.000	9.275	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1250.000	-13.085	0.000	9.277	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1253.300	-13.012	0.000	9.279	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1256.600	-12.939	0.000	9.281	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1259.800	-12.872	0.000	9.283	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1263.100	-12.805	0.000	9.284	0.000	0.000	0.000	0.000	0.020	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1266.400	-12.739	0.000	9.286	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1269.700	-12.672	0.000	9.288	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1273.000	-12.605	0.000	9.290	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1276.200	-12.539	0.000	9.292	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1279.500	-12.472	0.000	9.294	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1282.800	-12.405	0.000	9.296	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1286.100	-12.339	0.000	9.298	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1289.400	-12.274	0.000	9.300	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1292.600	-12.212	0.000	9.302	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1295.900	-12.149	0.000	9.304	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1299.200	-12.087	0.000	9.306	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1302.500	-12.024	0.000	9.308	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1305.800	-11.962	0.000	9.310	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1309.100	-11.900	0.000	9.312	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1312.300	-11.837	0.000	9.314	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1315.600	-11.775	0.000	9.316	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1318.900	-11.712	0.000	9.318	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1322.200	-11.650	0.000	9.321	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1325.500	-11.587	0.000	9.323	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1328.700	-11.525	0.000	9.325	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1332.000	-11.463	0.000	9.327	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1335.300	-11.400	0.000	9.329	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1338.600	-11.338	0.000	9.331	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1341.900	-11.275	0.000	9.333	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1345.100	-11.213	0.000	9.335	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1348.400	-11.150	0.000	9.337	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1351.700	-11.088	0.000	9.339	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1355.000	-11.025	0.000	9.342	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1358.300	-10.963	0.000	9.344	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1361.500	-10.901	0.000	9.346	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1364.800	-10.838	0.000	9.348	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1368.100	-10.776	0.000	9.350	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1371.400	-10.713	0.000	9.352	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1374.700	-10.651	0.000	9.354	0.000	0.000	0.000	0.000	0.019	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1377.900	-10.591	0.000	9.357	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1381.200	-10.537	0.000	9.359	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1384.500	-10.484	0.000	9.361	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1387.800	-10.430	0.000	9.363	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1391.100	-10.377	0.000	9.365	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1394.400	-10.324	0.000	9.368	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1397.600	-10.270	0.000	9.370	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1400.900	-10.217	0.000	9.372	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1404.200	-10.164	0.000	9.374	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1407.500	-10.111	0.000	9.377	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1410.800	-10.057	0.000	9.379	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1414.000	-10.004	0.000	9.381	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1417.300	-9.951	0.000	9.383	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1420.600	-9.898	0.000	9.385	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1423.900	-9.845	0.000	9.387	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1427.200	-9.792	0.000	9.390	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1430.400	-9.738	0.000	9.392	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1433.700	-9.685	0.000	9.394	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1437.000	-9.632	0.000	9.396	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1440.300	-9.578	0.000	9.398	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1443.600	-9.525	0.000	9.400	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1446.800	-9.472	0.000	9.403	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1450.100	-9.419	0.000	9.405	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1453.400	-9.365	0.000	9.407	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1456.700	-9.312	0.000	9.409	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1460.000	-9.259	0.000	9.411	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1463.300	-9.206	0.000	9.413	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1466.500	-9.152	0.000	9.415	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1469.800	-9.099	0.000	9.417	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1473.100	-9.046	0.000	9.419	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1476.400	-8.989	0.000	9.421	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1479.700	-8.913	0.000	9.423	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1482.900	-8.838	0.000	9.425	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1486.200	-8.762	0.000	9.427	0.000	0.000	0.000	0.000	0.023	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1489.500	-8.687	0.000	9.429	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1492.800	-8.612	0.000	9.431	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1496.100	-8.536	0.000	9.433	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1499.300	-8.461	0.000	9.435	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1502.600	-8.385	0.000	9.437	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1505.900	-8.310	0.000	9.439	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1509.200	-8.235	0.000	9.441	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1512.500	-8.159	0.000	9.443	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1515.700	-8.078	0.000	9.445	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1519.000	-7.995	0.000	9.447	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1522.300	-7.911	0.000	9.449	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1525.600	-7.827	0.000	9.451	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1528.900	-7.743	0.000	9.453	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1532.100	-7.659	0.000	9.455	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1535.400	-7.576	0.000	9.457	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1538.700	-7.492	0.000	9.460	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1542.000	-7.408	0.000	9.462	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1545.300	-7.324	0.000	9.464	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1548.600	-7.240	0.000	9.466	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1551.800	-7.156	0.000	9.468	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1555.100	-7.073	0.000	9.471	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1558.400	-6.989	0.000	9.473	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1561.700	-6.905	0.000	9.475	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1565.000	-6.821	0.000	9.478	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1568.200	-6.737	0.000	9.480	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1571.500	-6.654	0.000	9.482	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1574.800	-6.570	0.000	9.485	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1578.100	-6.486	0.000	9.487	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1581.400	-6.402	0.000	9.490	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1584.600	-6.318	0.000	9.492	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1587.900	-6.234	0.000	9.495	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1591.200	-6.149	0.000	9.497	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1594.500	-6.065	0.000	9.500	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1597.800	-5.980	0.000	9.502	0.000	0.000	0.000	0.000	0.026	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1601.000	-5.896	0.000	9.505	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1604.300	-5.812	0.000	9.507	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1607.600	-5.727	0.000	9.510	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1610.900	-5.643	0.000	9.513	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1614.200	-5.558	0.000	9.516	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1617.500	-5.474	0.000	9.518	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1620.700	-5.390	0.000	9.521	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1624.000	-5.305	0.000	9.524	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1627.300	-5.221	0.000	9.526	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1630.600	-5.136	0.000	9.529	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1633.900	-5.052	0.000	9.532	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1637.100	-4.968	0.000	9.535	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1640.400	-4.883	0.000	9.537	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1643.700	-4.799	0.000	9.540	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1647.000	-4.714	0.000	9.543	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1650.300	-4.630	0.000	9.546	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1653.500	-4.546	0.000	9.549	0.000	0.000	0.000	0.000	0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1656.800	-4.467	0.000	9.552	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1660.100	-4.388	0.000	9.555	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1663.400	-4.309	0.000	9.557	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1666.700	-4.230	0.000	9.561	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1669.900	-4.151	0.000	9.564	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1673.200	-4.072	0.000	9.566	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1676.500	-3.993	0.000	9.570	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1679.800	-3.914	0.000	9.572	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1683.100	-3.835	0.000	9.575	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1686.300	-3.756	0.000	9.579	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1689.600	-3.688	0.000	9.582	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1692.900	-3.623	0.000	9.585	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1696.200	-3.558	0.000	9.588	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1699.500	-3.493	0.000	9.591	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1702.800	-3.428	0.000	9.594	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1706.000	-3.363	0.000	9.598	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1709.300	-3.298	0.000	9.601	0.000	0.000	0.000	0.000	0.020	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1712.600	-3.234	0.000	9.604	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1715.900	-3.168	0.000	9.607	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1719.200	-3.104	0.000	9.610	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1722.400	-3.039	0.000	9.613	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1725.700	-2.974	0.000	9.616	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1729.000	-2.909	0.000	9.619	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1732.300	-2.844	0.000	9.622	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1735.600	-2.779	0.000	9.625	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1738.800	-2.714	0.000	9.628	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1742.100	-2.649	0.000	9.632	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1745.400	-2.584	0.000	9.635	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1748.700	-2.519	0.000	9.638	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1752.000	-2.454	0.000	9.641	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1755.200	-2.389	0.000	9.644	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1758.500	-2.324	0.000	9.647	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1761.800	-2.259	0.000	9.650	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1765.100	-2.194	0.000	9.653	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1768.400	-2.129	0.000	9.656	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1771.600	-2.065	0.000	9.659	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1774.900	-1.991	0.000	9.662	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1778.200	-1.915	0.000	9.665	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1781.500	-1.839	0.000	9.668	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1784.800	-1.763	0.000	9.671	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1788.100	-1.695	0.000	9.674	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1791.300	-1.631	0.000	9.677	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1794.600	-1.566	0.000	9.680	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1797.900	-1.502	0.000	9.683	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1801.200	-1.437	0.000	9.686	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1804.500	-1.373	0.000	9.689	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1807.700	-1.308	0.000	9.692	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1811.000	-1.240	0.000	9.695	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1814.300	-1.172	0.000	9.698	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1817.600	-1.105	0.000	9.701	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1820.900	-1.037	0.000	9.704	0.000	0.000	0.000	0.000	0.021	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1824.100	-0.969	0.000	9.707	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1827.400	-0.901	0.000	9.710	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1830.700	-0.834	0.000	9.713	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1834.000	-0.766	0.000	9.716	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1837.300	-0.698	0.000	9.719	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1840.500	-0.631	0.000	9.722	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1843.800	-0.563	0.000	9.725	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1847.100	-0.495	0.000	9.728	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1850.400	-0.428	0.000	9.731	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1853.700	-0.360	0.000	9.734	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1857.000	-0.292	0.000	9.737	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1860.200	-0.225	0.000	9.740	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1863.500	-0.157	0.000	9.743	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1866.800	-0.089	0.000	9.746	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1870.100	-0.022	0.000	9.749	0.000	0.000	0.000	0.000	0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1873.400	0.076	0.000	9.751	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1876.600	0.162	0.000	9.754	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1879.900	0.223	0.000	9.757	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1883.200	0.293	0.000	9.760	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1886.500	0.376	0.000	9.764	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1889.800	0.439	0.000	9.767	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1893.000	0.472	0.000	9.770	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1896.300	0.517	0.000	9.773	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1899.600	0.578	0.000	9.776	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1902.900	0.646	0.000	9.779	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1906.200	0.728	0.000	9.782	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1909.400	0.816	0.000	9.785	0.000	0.000	0.000	0.000	0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1912.700	0.917	0.000	9.787	0.000	0.000	0.000	0.000	0.030	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1916.000	1.017	0.000	9.790	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1919.300	1.102	0.000	9.793	0.000	0.000	0.000	0.000	0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1922.600	1.186	0.000	9.796	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1925.800	1.270	0.000	9.798	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1929.100	1.340	0.000	9.802	0.000	0.000	0.000	0.000	0.019	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1932.400	1.397	0.000	9.805	0.000	0.000	0.000	0.000	0.017	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1935.700	1.454	0.000	9.808	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1939.000	1.494	0.000	9.812	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1942.300	1.522	0.000	9.815	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1945.500	1.579	0.000	9.818	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1948.800	1.694	0.000	9.821	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1952.100	1.808	0.000	9.823	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1955.400	1.915	0.000	9.826	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1958.700	2.023	0.000	9.829	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1961.900	2.099	0.000	9.832	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1965.200	2.152	0.000	9.836	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1968.500	2.206	0.000	9.839	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1971.800	2.260	0.000	9.842	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1975.100	2.328	0.000	9.846	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1978.300	2.424	0.000	9.849	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1981.600	2.521	0.000	9.852	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1984.900	2.617	0.000	9.855	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1988.200	2.714	0.000	9.858	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1991.500	2.817	0.000	9.861	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1994.700	2.921	0.000	9.865	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1998.000	3.025	0.000	9.868	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2001.300	3.129	0.000	9.872	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2004.600	3.225	0.000	9.876	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2007.900	3.313	0.000	9.880	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2011.200	3.401	0.000	9.884	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2014.400	3.494	0.000	9.888	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2017.700	3.615	0.000	9.892	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2021.000	3.736	0.000	9.895	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2024.300	3.860	0.000	9.900	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2027.600	3.986	0.000	9.904	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2030.800	4.040	0.000	9.909	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2034.100	4.105	0.000	9.915	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2037.400	4.213	0.000	9.919	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2040.700	4.348	0.000	9.924	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2044.000	4.593	0.000	9.926	0.000	0.000	0.000	0.000	0.075	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2047.200	4.838	0.000	9.930	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2050.500	5.082	0.000	9.934	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2053.800	5.190	0.000	9.943	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2057.100	5.273	0.000	9.952	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2060.400	5.427	0.000	9.960	0.000	0.000	0.000	0.000	0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2063.600	6.046	0.000	9.959	0.000	0.000	0.000	0.000	0.128	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2066.900	6.261	0.000	9.972	0.000	0.000	0.000	0.000	0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2070.200	6.455	0.000	9.989	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2073.500	6.643	0.000	10.008	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2076.800	6.883	0.000	10.024	0.000	0.000	0.000	0.000	0.087	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2080.000	7.206	0.000	10.044	0.000	0.000	0.000	0.000	0.138	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2083.300	7.778	0.000	10.082	0.000	0.000	0.000	0.000	0.168	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2086.600	8.315	0.000	10.136	0.000	0.000	0.000	0.000	0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2089.900	8.562	0.000	10.193	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2093.200	8.678	0.000	10.259	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2096.500	8.830	0.000	10.311	0.000	0.000	0.000	0.000	0.095	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2110.300	10.311	0.000	10.311	0.000	0.000	0.000	0.000	0.107	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2286.300	9.123	0.000	9.123	0.000	0.000	0.000	0.000	-0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2291.000	8.924	0.000	9.123	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2313.500	8.760	0.000	9.123	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2321.500	8.858	0.000	9.123	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2332.000	8.924	0.000	9.123	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2339.400	9.123	0.000	9.123	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2754.000	8.948	0.000	8.948	0.000	0.000	0.000	0.000	-0.115	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2901.000	-7.929	0.000	8.948	0.000	0.000	0.000	0.000	-0.115	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2902.000	-8.114	0.000	8.948	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2937.000	-8.202	0.000	8.948	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2973.000	-8.126	0.000	8.948	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2979.000	-7.363	0.000	8.948	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3060.500	2.087	0.000	8.950	0.000	0.000	0.000	0.000	0.115	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3077.500	3.957	0.000	8.950	0.000	0.000	0.000	0.000	0.070	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3093.500	4.383	0.000	8.949	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3109.000	4.514	0.000	8.949	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3123.000	5.105	0.000	8.948	0.000	0.000	0.000	0.000	0.076	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3144.500	7.215	0.000	8.948	0.000	0.000	0.000	0.000	0.091	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3160.500	8.530	0.000	8.948	0.000	0.000	0.000	0.000	0.047	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3174.000	8.596	0.000	8.948	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3226.000	8.333	0.000	8.948	0.000	0.000	0.000	0.000	0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3235.100	8.948	0.000	8.948	0.000	0.000	0.000	0.000	0.068	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

1

PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	27.63	14.35	28.17
OF	2.00	27.63	14.35	28.17
OF	3.30	27.63	14.35	28.17
OF	6.60	27.63	14.35	28.17
OF	9.80	27.63	14.35	28.18
OF	13.10	27.63	14.35	28.18
OF	16.40	27.63	14.35	28.18
OF	19.70	27.63	14.35	28.18
OF	23.00	27.63	14.35	28.18
OF	26.20	27.63	14.35	28.18
OF	29.50	27.63	14.35	28.18
OF	32.80	27.63	14.35	28.18
OF	36.10	27.61	14.35	28.17
OF	39.40	27.59	14.35	28.15
OF	42.70	27.56	14.35	28.14
OF	45.90	27.53	14.35	28.12
OF	49.20	27.51	14.35	28.10
OF	52.50	27.48	14.35	28.09
OF	55.80	27.46	14.35	28.07
OF	59.10	27.43	14.35	28.05
OF	62.30	27.41	14.35	28.04
OF	65.60	27.38	14.35	28.02
OF	68.90	27.35	14.35	28.00
OF	72.20	27.33	14.35	27.98
OF	75.50	27.30	14.35	27.97
OF	78.70	27.28	14.35	27.95
OF	82.00	27.25	14.35	27.93
OF	85.30	27.22	14.35	27.91
OF	88.60	27.19	14.35	27.89
OF	91.90	27.15	14.35	27.87
OF	95.10	27.12	14.35	27.85
OF	98.40	27.09	14.35	27.83
OF	101.70	27.06	14.35	27.81
OF	105.00	27.03	14.35	27.78
OF	108.30	27.00	14.35	27.76
OF	111.50	26.97	14.35	27.74
OF	114.80	26.93	14.35	27.72
OF	118.10	26.90	14.35	27.70
OF	121.40	26.87	14.35	27.68
OF	124.70	26.84	14.35	27.66
OF	128.00	26.81	14.35	27.64
OF	131.20	26.78	14.35	27.62
OF	134.50	26.74	14.35	27.60
OF	137.80	26.71	14.35	27.58
OF	141.10	26.68	14.35	27.55
OF	144.40	26.65	14.35	27.53
OF	147.60	26.62	14.35	27.51
OF	150.90	26.59	14.35	27.49
OF	154.20	26.55	14.35	27.47
OF	157.50	26.52	14.35	27.45
OF	160.80	26.49	14.35	27.43
OF	164.00	26.46	14.35	27.41
OF	167.30	26.43	14.35	27.39
OF	170.60	26.40	14.35	27.37
OF	173.90	26.37	14.35	27.35
OF	177.20	26.34	14.35	27.33
OF	180.40	26.31	14.35	27.31
OF	183.70	26.29	14.35	27.30
OF	187.00	26.27	14.35	27.28
OF	190.30	26.24	14.35	27.27
OF	193.60	26.22	14.35	27.25
OF	196.80	26.20	14.35	27.24
OF	200.10	26.17	14.35	27.22
OF	203.40	26.15	14.35	27.21
OF	206.70	26.13	14.35	27.19
OF	210.00	26.10	14.35	27.18
OF	213.30	26.08	14.35	27.16
OF	216.50	26.06	14.35	27.15
OF	219.80	26.03	14.35	27.13
OF	223.10	26.01	14.35	27.12
OF	226.40	25.99	14.35	27.10
OF	229.70	25.96	14.35	27.09
OF	232.90	25.94	14.35	27.07
OF	236.20	25.92	14.35	27.06
OF	239.50	25.89	14.35	27.04
OF	242.80	25.87	14.35	27.03
OF	246.10	25.85	14.35	27.01
OF	249.30	25.82	14.35	27.00
OF	252.60	25.80	14.35	26.98

OF	255.90	25.78	14.35	26.97
OF	259.20	25.75	14.35	26.95
OF	262.50	25.73	14.35	26.94
OF	265.70	25.71	14.35	26.92
OF	269.00	25.68	14.35	26.91
OF	272.30	25.66	14.35	26.89
OF	275.60	25.64	14.35	26.88
OF	278.90	25.61	14.35	26.86
OF	282.20	25.59	14.35	26.85
OF	285.40	25.57	14.35	26.83
OF	288.70	25.54	14.35	26.82
OF	292.00	25.52	14.35	26.80
OF	295.30	25.50	14.35	26.79
OF	298.60	25.47	14.35	26.77
OF	301.80	25.45	14.35	26.76
OF	305.10	25.42	14.35	26.74
OF	308.40	25.40	14.35	26.73
OF	311.70	25.38	14.35	26.71
OF	315.00	25.35	14.35	26.70
OF	318.20	25.33	14.35	26.68
OF	321.50	25.31	14.35	26.66
OF	324.80	25.28	14.35	26.65
OF	328.10	25.26	14.35	26.63
OF	331.40	25.23	14.35	26.62
OF	334.60	25.21	14.35	26.60
OF	337.90	25.18	14.35	26.59
OF	341.20	25.16	14.35	26.57
OF	344.50	25.14	14.35	26.56
OF	347.80	25.12	14.35	26.55
OF	351.00	25.10	14.35	26.53
OF	354.30	25.08	14.35	26.52
OF	357.60	25.06	14.35	26.51
OF	360.90	25.04	14.35	26.49
OF	364.20	25.02	14.35	26.48
OF	367.50	25.00	14.35	26.47
OF	370.70	24.98	14.35	26.45
OF	374.00	24.95	14.35	26.44
OF	377.30	24.93	14.35	26.43
OF	380.60	24.91	14.35	26.41
OF	383.90	24.89	14.35	26.40
OF	387.10	24.87	14.35	26.39
OF	390.40	24.85	14.35	26.37
OF	393.70	24.83	14.35	26.36
OF	397.00	24.81	14.35	26.35
OF	400.30	24.79	14.35	26.33
OF	403.50	24.77	14.35	26.32
OF	406.80	24.74	14.35	26.31
OF	410.10	24.72	14.35	26.29
OF	413.40	24.70	14.35	26.28
OF	416.70	24.68	14.35	26.27
OF	419.90	24.66	14.35	26.25
OF	423.20	24.64	14.35	26.24
OF	426.50	24.62	14.35	26.22
OF	429.80	24.60	14.35	26.21
OF	433.10	24.58	14.35	26.20
OF	436.40	24.55	14.35	26.18
OF	439.60	24.53	14.35	26.17
OF	442.90	24.51	14.35	26.16
OF	446.20	24.49	14.35	26.14
OF	449.50	24.47	14.35	26.13
OF	452.80	24.45	14.35	26.12
OF	456.00	24.43	14.35	26.10
OF	459.30	24.41	14.35	26.09
OF	462.60	24.38	14.35	26.08
OF	465.90	24.36	14.35	26.06
OF	469.20	24.34	14.35	26.05
OF	472.40	24.32	14.35	26.04
OF	475.70	24.30	14.35	26.02
OF	479.00	24.28	14.35	26.01
OF	482.30	24.26	14.35	26.00
OF	485.60	24.24	14.35	25.98
OF	488.80	24.22	14.35	25.97
OF	492.10	24.20	14.35	25.96
OF	495.40	24.17	14.35	25.94
OF	498.70	24.15	14.35	25.93
OF	502.00	24.13	14.35	25.91
OF	505.20	24.11	14.35	25.90
OF	508.50	24.09	14.35	25.89
OF	511.80	24.07	14.35	25.87
OF	515.10	24.04	14.35	25.86
OF	518.40	24.02	14.35	25.84
OF	521.70	24.00	14.35	25.83
OF	524.90	23.98	14.35	25.82
OF	528.20	23.96	14.35	25.80
OF	531.50	23.94	14.35	25.79
OF	534.80	23.92	14.35	25.78
OF	538.10	23.90	14.35	25.76
OF	541.30	23.87	14.35	25.75
OF	544.60	23.85	14.35	25.73
OF	547.90	23.83	14.35	25.72
OF	551.20	23.81	14.35	25.71
OF	554.50	23.79	14.35	25.69
OF	557.70	23.77	14.35	25.68
OF	561.00	23.75	14.35	25.67
OF	564.30	23.72	14.35	25.65
OF	567.60	23.70	14.35	25.64
OF	570.90	23.68	14.35	25.62
OF	574.10	23.66	14.35	25.61
OF	577.40	23.64	14.35	25.60
OF	580.70	23.62	14.35	25.58
OF	584.00	23.60	14.35	25.57
OF	587.30	23.57	14.35	25.55

OF	590.50	23.55	14.35	25.54
OF	593.80	23.53	14.35	25.53
OF	597.10	23.51	14.35	25.51
OF	600.40	23.49	14.35	25.50
OF	603.70	23.46	14.35	25.48
OF	607.00	23.44	14.35	25.47
OF	610.20	23.42	14.35	25.45
OF	613.50	23.40	14.35	25.44
OF	616.80	23.37	14.35	25.43
OF	620.10	23.35	14.35	25.41
OF	623.40	23.33	14.35	25.40
OF	626.60	23.31	14.35	25.38
OF	629.90	23.29	14.35	25.37
OF	633.20	23.26	14.35	25.35
OF	636.50	23.24	14.35	25.34
OF	639.80	23.22	14.35	25.32
OF	643.00	23.19	14.35	25.30
OF	646.30	23.16	14.35	25.28
OF	649.60	23.13	14.35	25.26
OF	652.90	23.10	14.35	25.24
OF	656.20	23.07	14.35	25.22
OF	659.40	23.04	14.35	25.20
OF	662.70	23.01	14.35	25.18
OF	666.00	22.98	14.35	25.16
OF	669.30	22.95	14.35	25.14
OF	672.60	22.92	14.35	25.13
OF	675.90	22.89	14.35	25.11
OF	679.10	22.86	14.35	25.09
OF	682.40	22.83	14.35	25.07
OF	685.70	22.80	14.35	25.05
OF	689.00	22.77	14.35	25.03
OF	692.30	22.74	14.35	25.01
OF	695.50	22.71	14.35	24.99
OF	698.80	22.68	14.35	24.97
OF	702.10	22.66	14.35	24.95
OF	705.40	22.63	14.35	24.93
OF	708.70	22.60	14.35	24.91
OF	711.90	22.58	14.35	24.90
OF	715.20	22.55	14.35	24.88
OF	718.50	22.53	14.35	24.86
OF	721.80	22.50	14.35	24.85
OF	725.10	22.47	14.35	24.83
OF	728.30	22.45	14.35	24.81
OF	731.60	22.42	14.35	24.80
OF	734.90	22.40	14.35	24.78
OF	738.20	22.37	14.35	24.76
OF	741.50	22.34	14.35	24.74
OF	744.70	22.32	14.35	24.73
OF	748.00	22.29	14.35	24.71
OF	751.30	22.27	14.35	24.69
OF	754.60	22.24	14.35	24.68
OF	757.90	22.21	14.35	24.66
OF	761.20	22.19	14.35	24.64
OF	764.40	22.16	14.35	24.62
OF	767.70	22.14	14.35	24.61
OF	771.00	22.11	14.35	24.59
OF	774.30	22.09	14.35	24.58
OF	777.60	22.07	14.35	24.56
OF	780.80	22.05	14.35	24.55
OF	784.10	22.03	14.35	24.54
OF	787.40	22.01	14.35	24.52
OF	790.70	21.98	14.35	24.51
OF	794.00	21.96	14.35	24.50
OF	797.20	21.94	14.35	24.48
OF	800.50	21.92	14.35	24.47
OF	803.80	21.90	14.35	24.45
OF	807.10	21.88	14.35	24.44
OF	810.40	21.86	14.35	24.43
OF	813.60	21.84	14.35	24.41
OF	816.90	21.82	14.35	24.40
OF	820.20	21.79	14.35	24.39
OF	823.50	21.77	14.35	24.37
OF	826.80	21.75	14.35	24.35
OF	830.10	21.72	14.35	24.34
OF	833.30	21.70	14.35	24.32
OF	836.60	21.68	14.35	24.31
OF	839.90	21.65	14.35	24.29
OF	843.20	21.63	14.35	24.28
OF	846.50	21.60	14.35	24.26
OF	849.70	21.58	14.35	24.25
OF	853.00	21.56	14.35	24.23
OF	856.30	21.53	14.35	24.21
OF	859.60	21.51	14.35	24.20
OF	862.90	21.49	14.35	24.18
OF	866.10	21.46	14.35	24.17
OF	869.40	21.44	14.35	24.15
OF	872.70	21.42	14.35	24.14
OF	876.00	21.39	14.35	24.12
OF	879.30	21.37	14.35	24.11
OF	882.50	21.34	14.35	24.09
OF	885.80	21.32	14.35	24.07
OF	889.10	21.30	14.35	24.06
OF	892.40	21.27	14.35	24.04
OF	895.70	21.25	14.35	24.03
OF	898.90	21.23	14.35	24.01
OF	902.20	21.20	14.35	24.00
OF	905.50	21.17	14.35	23.97
OF	908.80	21.13	14.35	23.95
OF	912.10	21.10	14.35	23.93
OF	915.40	21.07	14.35	23.91
OF	918.60	21.04	14.35	23.89
OF	921.90	21.01	14.35	23.86

OF	925.20	20.97	14.35	23.84
OF	928.50	20.94	14.35	23.82
OF	931.80	20.91	14.35	23.80
OF	935.00	20.88	14.35	23.78
OF	938.30	20.84	14.35	23.76
OF	941.60	20.81	14.35	23.73
OF	944.90	20.78	14.35	23.71
OF	948.20	20.75	14.35	23.69
OF	951.40	20.71	14.35	23.67
OF	954.70	20.68	14.35	23.65
OF	958.00	20.65	14.35	23.63
OF	961.30	20.62	14.35	23.60
OF	964.60	20.59	14.35	23.58
OF	967.80	20.55	14.35	23.56
OF	971.10	20.52	14.35	23.54
OF	974.40	20.49	14.35	23.52
OF	977.70	20.45	14.35	23.49
OF	981.00	20.42	14.35	23.47
OF	984.20	20.38	14.35	23.44
OF	987.50	20.35	14.35	23.42
OF	990.80	20.31	14.35	23.40
OF	994.10	20.28	14.35	23.38
OF	997.40	20.24	14.35	23.35
OF	1000.70	20.21	14.35	23.33
OF	1003.90	20.17	14.35	23.30
OF	1007.20	20.14	14.35	23.28
OF	1010.50	20.10	14.35	23.26
OF	1013.80	20.07	14.35	23.23
OF	1017.10	20.03	14.35	23.21
OF	1020.30	19.99	14.35	23.18
OF	1023.60	19.96	14.35	23.16
OF	1026.90	19.92	14.35	23.13
OF	1030.20	19.88	14.35	23.11
OF	1033.50	19.84	14.35	23.08
OF	1036.70	19.81	14.35	23.06
OF	1040.00	19.77	14.35	23.03
OF	1043.30	19.73	14.35	23.01
OF	1046.60	19.69	14.35	22.98
OF	1049.90	19.66	14.35	22.96
OF	1053.10	19.62	14.35	22.93
OF	1056.40	19.58	14.35	22.91
OF	1059.70	19.54	14.35	22.88
OF	1063.00	19.51	14.35	22.85
OF	1066.30	19.47	14.35	22.83
OF	1069.60	19.43	14.35	22.80
OF	1072.80	19.39	14.35	22.78
OF	1076.10	19.36	14.35	22.75
OF	1079.40	19.32	14.35	22.73
OF	1082.70	19.28	14.35	22.70
OF	1086.00	19.24	14.35	22.68
OF	1089.20	19.20	14.35	22.65
OF	1092.50	19.17	14.35	22.63
OF	1095.80	19.13	14.35	22.60
OF	1099.10	19.09	14.35	22.58
OF	1102.40	19.05	14.35	22.55
OF	1105.60	19.02	14.35	22.53
OF	1108.90	18.98	14.35	22.50
OF	1112.20	18.94	14.35	22.48
OF	1115.50	18.90	14.35	22.45
OF	1118.80	18.87	14.35	22.43
OF	1122.00	18.83	14.35	22.40
OF	1125.30	18.79	14.35	22.38
OF	1128.60	18.75	14.35	22.35
OF	1131.90	18.71	14.35	22.33
OF	1135.20	18.68	14.35	22.30
OF	1138.40	18.64	14.35	22.28
OF	1141.70	18.60	14.35	22.25
OF	1145.00	18.55	14.35	22.21
OF	1148.30	18.50	14.35	22.18
OF	1151.60	18.44	14.35	22.14
OF	1154.90	18.39	14.35	22.11
OF	1158.10	18.34	14.35	22.07
OF	1161.40	18.29	14.35	22.04
OF	1164.70	18.24	14.35	22.00
OF	1168.00	18.18	14.35	21.97
OF	1171.30	18.13	14.35	21.93
OF	1174.50	18.08	14.35	21.90
OF	1177.80	18.03	14.35	21.86
OF	1181.10	17.97	14.35	21.83
OF	1184.40	17.92	14.35	21.79
OF	1187.70	17.87	14.35	21.76
OF	1190.90	17.82	14.35	21.72
OF	1194.20	17.76	14.35	21.69
OF	1197.50	17.71	14.35	21.65
OF	1200.80	17.66	14.35	21.61
OF	1204.10	17.61	14.35	21.58
OF	1207.30	17.56	14.35	21.55
OF	1210.60	17.50	14.35	21.51
OF	1213.90	17.45	14.35	21.48
OF	1217.20	17.40	14.35	21.44
OF	1220.50	17.35	14.35	21.40
OF	1223.80	17.30	14.35	21.37
OF	1227.00	17.24	14.35	21.33
OF	1230.30	17.19	14.35	21.30
OF	1233.60	17.14	14.35	21.26
OF	1236.90	17.09	14.35	21.23
OF	1240.20	17.03	14.35	21.20
OF	1243.40	16.98	14.35	21.16
OF	1246.70	16.93	14.35	21.13
OF	1250.00	16.88	14.35	21.09
OF	1253.30	16.83	14.35	21.06
OF	1256.60	16.77	14.35	21.02

OF	1259.80	16.73	14.35	20.99
OF	1263.10	16.68	14.35	20.96
OF	1266.40	16.63	14.35	20.93
OF	1269.70	16.58	14.35	20.90
OF	1273.00	16.54	14.35	20.87
OF	1276.20	16.49	14.35	20.83
OF	1279.50	16.44	14.35	20.80
OF	1282.80	16.39	14.35	20.77
OF	1286.10	16.35	14.35	20.74
OF	1289.40	16.30	14.35	20.71
OF	1292.60	16.26	14.35	20.68
OF	1295.90	16.21	14.35	20.65
OF	1299.20	16.17	14.35	20.62
OF	1302.50	16.12	14.35	20.59
OF	1305.80	16.08	14.35	20.57
OF	1309.10	16.04	14.35	20.54
OF	1312.30	15.99	14.35	20.51
OF	1315.60	15.95	14.35	20.48
OF	1318.90	15.90	14.35	20.45
OF	1322.20	15.86	14.35	20.42
OF	1325.50	15.81	14.35	20.39
OF	1328.70	15.77	14.35	20.36
OF	1332.00	15.73	14.35	20.34
OF	1335.30	15.68	14.35	20.31
OF	1338.60	15.64	14.35	20.28
OF	1341.90	15.59	14.35	20.25
OF	1345.10	15.55	14.35	20.22
OF	1348.40	15.50	14.35	20.19
OF	1351.70	15.46	14.35	20.16
OF	1355.00	15.42	14.35	20.13
OF	1358.30	15.37	14.35	20.10
OF	1361.50	15.33	14.35	20.08
OF	1364.80	15.28	14.35	20.05
OF	1368.10	15.24	14.35	20.02
OF	1371.40	15.19	14.35	19.99
OF	1374.70	15.15	14.35	19.96
OF	1377.90	15.11	14.35	19.93
OF	1381.20	15.07	14.35	19.91
OF	1384.50	15.03	14.35	19.88
OF	1387.80	14.99	14.35	19.86
OF	1391.10	14.96	14.35	19.83
OF	1394.40	14.92	14.35	19.81
OF	1397.60	14.88	14.35	19.79
OF	1400.90	14.84	14.35	19.76
OF	1404.20	14.81	14.35	19.74
OF	1407.50	14.77	14.35	19.72
OF	1410.80	14.73	14.35	19.69
OF	1414.00	14.69	14.35	19.67
OF	1417.30	14.66	14.35	19.64
OF	1420.60	14.62	14.35	19.62
OF	1423.90	14.58	14.35	19.59
OF	1427.20	14.54	14.35	19.57
OF	1430.40	14.51	14.35	19.55
OF	1433.70	14.47	14.35	19.52
OF	1437.00	14.43	14.35	19.50
OF	1440.30	14.39	14.35	19.47
OF	1443.60	14.35	14.35	19.45
OF	1446.80	14.32	14.35	19.43
OF	1450.10	14.28	14.35	19.40
OF	1453.40	14.24	14.35	19.38
OF	1456.70	14.20	14.35	19.35
OF	1460.00	14.17	14.35	19.33
OF	1463.30	14.13	14.35	19.30
OF	1466.50	14.09	14.35	19.28
OF	1469.80	14.05	14.35	19.25
OF	1473.10	14.02	14.35	19.23
OF	1476.40	13.97	14.35	19.20
OF	1479.70	13.92	14.35	19.17
OF	1482.90	13.87	14.35	19.13
OF	1486.20	13.81	14.35	19.10
OF	1489.50	13.76	14.35	19.06
OF	1492.80	13.70	14.35	19.02
OF	1496.10	13.65	14.35	18.99
OF	1499.30	13.59	14.35	18.95
OF	1502.60	13.54	14.35	18.92
OF	1505.90	13.49	14.35	18.88
OF	1509.20	13.43	14.35	18.84
OF	1512.50	13.38	14.35	18.81
OF	1515.70	13.32	14.35	18.77
OF	1519.00	13.26	14.35	18.73
OF	1522.30	13.20	14.35	18.69
OF	1525.60	13.14	14.35	18.65
OF	1528.90	13.08	14.35	18.61
OF	1532.10	13.02	14.35	18.57
OF	1535.40	12.96	14.35	18.53
OF	1538.70	12.90	14.35	18.49
OF	1542.00	12.83	14.35	18.45
OF	1545.30	12.77	14.35	18.41
OF	1548.60	12.71	14.35	18.37
OF	1551.80	12.65	14.35	18.32
OF	1555.10	12.59	14.35	18.29
OF	1558.40	12.53	14.35	18.25
OF	1561.70	12.47	14.35	18.20
OF	1565.00	12.41	14.35	18.17
OF	1568.20	12.35	14.35	18.12
OF	1571.50	12.29	14.35	18.08
OF	1574.80	12.23	14.35	18.05
OF	1578.10	12.17	14.35	18.00
OF	1581.40	12.11	14.35	17.97
OF	1584.60	12.05	14.35	17.92
OF	1587.90	11.99	14.35	17.89
OF	1591.20	11.92	14.35	17.84

OF	1594.50	11.86	14.35	17.81
OF	1597.80	11.80	14.35	17.76
OF	1601.00	11.74	14.35	17.72
OF	1604.30	11.68	14.35	17.68
OF	1607.60	11.62	14.35	17.64
OF	1610.90	11.56	14.35	17.60
OF	1614.20	11.50	14.35	17.56
OF	1617.50	11.44	14.35	17.52
OF	1620.70	11.38	14.35	17.48
OF	1624.00	11.32	14.35	17.44
OF	1627.30	11.25	14.35	17.40
OF	1630.60	11.19	14.35	17.36
OF	1633.90	11.13	14.35	17.32
OF	1637.10	11.07	14.35	17.29
OF	1640.40	11.01	14.35	17.24
OF	1643.70	10.95	14.35	17.20
OF	1647.00	10.89	14.35	17.16
OF	1650.30	10.83	14.35	17.13
OF	1653.50	10.77	14.35	17.09
OF	1656.80	10.71	14.35	17.05
OF	1660.10	10.65	14.35	17.01
OF	1663.40	10.60	14.35	16.97
OF	1666.70	10.54	14.35	16.94
OF	1669.90	10.48	14.35	16.90
OF	1673.20	10.42	14.35	16.86
OF	1676.50	10.37	14.35	16.83
OF	1679.80	10.31	14.35	16.79
OF	1683.10	10.25	14.35	16.75
OF	1686.30	10.20	14.35	16.72
OF	1689.60	10.15	14.35	16.69
OF	1692.90	10.10	14.35	16.66
OF	1696.20	10.06	14.35	16.63
OF	1699.50	10.01	14.35	16.60
OF	1702.80	9.96	14.35	16.57
OF	1706.00	9.92	14.35	16.54
OF	1709.30	9.87	14.35	16.51
OF	1712.60	9.82	14.35	16.48
OF	1715.90	9.78	14.35	16.45
OF	1719.20	9.73	14.35	16.42
OF	1722.40	9.69	14.35	16.39
OF	1725.70	9.64	14.35	16.36
OF	1729.00	9.59	14.35	16.33
OF	1732.30	9.55	14.35	16.30
OF	1735.60	9.50	14.35	16.27
OF	1738.80	9.45	14.35	16.24
OF	1742.10	9.41	14.35	16.22
OF	1745.40	9.36	14.35	16.19
OF	1748.70	9.31	14.35	16.16
OF	1752.00	9.27	14.35	16.13
OF	1755.20	9.22	14.35	16.10
OF	1758.50	9.17	14.35	16.07
OF	1761.80	9.13	14.35	16.04
OF	1765.10	9.08	14.35	16.01
OF	1768.40	9.03	14.35	15.98
OF	1771.60	8.99	14.35	15.95
OF	1774.90	8.93	14.35	15.92
OF	1778.20	8.88	14.35	15.88
OF	1781.50	8.82	14.35	15.84
OF	1784.80	8.77	14.35	15.81
OF	1788.10	8.72	14.35	15.78
OF	1791.30	8.67	14.35	15.75
OF	1794.60	8.63	14.35	15.72
OF	1797.90	8.58	14.35	15.69
OF	1801.20	8.53	14.35	15.66
OF	1804.50	8.49	14.35	15.63
OF	1807.70	8.44	14.35	15.60
OF	1811.00	8.39	14.35	15.57
OF	1814.30	8.34	14.35	15.54
OF	1817.60	8.29	14.35	15.51
OF	1820.90	8.25	14.35	15.48
OF	1824.10	8.20	14.35	15.44
OF	1827.40	8.15	14.35	15.41
OF	1830.70	8.10	14.35	15.38
OF	1834.00	8.05	14.35	15.35
OF	1837.30	8.00	14.35	15.32
OF	1840.50	7.95	14.35	15.29
OF	1843.80	7.90	14.35	15.26
OF	1847.10	7.85	14.35	15.23
OF	1850.40	7.81	14.35	15.19
OF	1853.70	7.76	14.35	15.16
OF	1857.00	7.71	14.35	15.13
OF	1860.20	7.66	14.35	15.10
OF	1863.50	7.61	14.35	15.07
OF	1866.80	7.56	14.35	15.04
OF	1870.10	7.51	14.35	15.01
IF	1873.40	7.44	14.35	14.96
IF	1876.60	7.38	14.35	14.92
IF	1879.90	7.33	14.35	14.89
IF	1883.20	7.28	14.35	14.86
IF	1886.50	7.22	14.35	14.82
IF	1889.80	7.18	14.35	14.79
IF	1893.00	7.15	14.35	14.78
IF	1896.30	7.12	14.35	14.76
IF	1899.60	7.08	14.35	14.73
IF	1902.90	7.03	14.35	14.70
IF	1906.20	6.97	14.35	14.66
IF	1909.40	6.90	14.35	14.62
IF	1912.70	6.83	14.35	14.57
IF	1916.00	6.75	14.35	14.52
IF	1919.30	6.69	14.35	14.48
IF	1922.60	6.63	14.35	14.44
IF	1925.80	6.57	14.35	14.40

IF	1929.10	6.52	14.35	14.36
IF	1932.40	6.48	14.35	14.34
IF	1935.70	6.44	14.35	14.31
IF	1939.00	6.41	14.35	14.30
IF	1942.30	6.39	14.35	14.29
IF	1945.50	6.35	14.35	14.26
IF	1948.80	6.26	14.35	14.21
IF	1952.10	6.18	14.35	14.15
IF	1955.40	6.10	14.35	14.09
IF	1958.70	6.02	14.35	14.04
IF	1961.90	5.96	14.35	14.01
IF	1965.20	5.93	14.35	13.98
IF	1968.50	5.89	14.35	13.96
IF	1971.80	5.85	14.35	13.94
IF	1975.10	5.80	14.35	13.91
IF	1978.30	5.73	14.35	13.86
IF	1981.60	5.66	14.35	13.81
IF	1984.90	5.59	14.35	13.76
IF	1988.20	5.51	14.35	13.72
IF	1991.50	5.44	14.35	13.67
IF	1994.70	5.36	14.35	13.62
IF	1998.00	5.28	14.35	13.57
IF	2001.30	5.21	14.35	13.52
IF	2004.60	5.14	14.35	13.47
IF	2007.90	5.07	14.35	13.43
IF	2011.20	5.01	14.35	13.39
IF	2014.40	4.94	14.35	13.35
IF	2017.70	4.85	14.35	13.29
IF	2021.00	4.76	14.35	13.23
IF	2024.30	4.67	14.35	13.17
IF	2027.60	4.58	14.35	13.11
IF	2030.80	4.54	14.35	13.09
IF	2034.10	4.49	14.35	13.06
IF	2037.40	4.41	14.35	13.01
IF	2040.70	4.31	14.35	12.94
IF	2044.00	4.13	14.35	12.81
IF	2047.20	3.94	14.35	12.69
IF	2050.50	3.76	14.35	12.56
IF	2053.80	3.68	14.35	12.52
IF	2057.10	3.62	14.35	12.49
IF	2060.40	3.51	14.35	12.42
IF	2063.60	3.03	14.35	12.08
IF	2066.90	2.88	14.35	11.99
IF	2070.20	2.74	14.35	11.91
IF	2073.50	2.61	14.35	11.84
IF	2076.80	2.44	14.35	11.73
IF	2080.00	2.20	14.35	11.59
IF	2083.30	1.79	14.35	11.34
IF	2086.60	1.42	14.35	11.13
IF	2089.90	1.27	14.35	11.08
IF	2093.20	1.23	14.35	11.12
IF	2096.50	1.15	14.35	11.12
IF	2110.30	0.01	14.35	10.32
AS	2286.30	0.00	0.00	9.12
IF	2291.00	0.04	0.24	9.15
IF	2313.50	0.13	0.42	9.21
IF	2321.50	0.13	0.46	9.21
IF	2332.00	0.12	0.50	9.21
IF	2339.40	0.01	0.53	9.13
AS	2754.00	0.00	0.00	8.95
OF	2901.00	0.40	0.74	9.23
OF	2902.00	0.40	0.74	9.23
OF	2937.00	0.46	0.80	9.27
OF	2973.00	0.52	0.85	9.31
OF	2979.00	0.53	0.85	9.32
IF	3060.50	0.65	0.95	9.41
IF	3077.50	0.68	0.96	9.42
IF	3093.50	0.70	0.98	9.44
IF	3109.00	0.72	0.99	9.45
IF	3123.00	0.74	1.01	9.47
IF	3144.50	0.71	1.02	9.45
IF	3160.50	0.29	1.04	9.15
IF	3174.00	0.25	1.05	9.12
IF	3226.00	0.40	1.09	9.23
IF	3235.10	0.01	1.10	8.95

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN 2110.30 AND 2286.30

BETWEEN 2339.40 AND 2754.00

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
3.30	1.00	8.83
6.60	1.00	8.83
9.80	1.00	8.83
13.10	1.00	8.84
16.40	1.00	8.84
19.70	1.00	8.84
23.00	1.00	8.84
26.20	1.00	8.84
29.50	1.00	8.84
32.80	1.00	8.84
36.10	1.00	8.84
39.40	1.00	8.84
42.70	1.00	8.85
45.90	1.00	8.85
49.20	1.00	8.85
52.50	1.00	8.85
55.80	1.00	8.85
59.10	1.00	8.85
62.30	1.00	8.85
65.60	1.00	8.85
68.90	1.00	8.85
72.20	1.00	8.85

75.50	1.00	8.85
78.70	1.00	8.86
82.00	1.00	8.86
85.30	1.00	8.86
88.60	1.00	8.86
91.90	1.00	8.86
95.10	1.00	8.86
98.40	1.00	8.86
101.70	1.00	8.86
105.00	1.00	8.86
108.30	1.00	8.87
111.50	1.00	8.87
114.80	1.00	8.87
118.10	1.00	8.87
121.40	1.00	8.87
124.70	1.00	8.87
128.00	1.00	8.87
131.20	1.00	8.88
134.50	1.00	8.88
137.80	1.00	8.88
141.10	1.00	8.88
144.40	1.00	8.88
147.60	1.00	8.88
150.90	1.00	8.88
154.20	1.00	8.88
157.50	1.00	8.88
160.80	1.00	8.89
164.00	1.00	8.89
167.30	1.00	8.89
170.60	1.00	8.89
173.90	1.00	8.89
177.20	1.00	8.89
180.40	1.00	8.89
183.70	1.00	8.89
187.00	1.00	8.90
190.30	1.00	8.90
193.60	1.00	8.90
196.80	1.00	8.90
200.10	1.00	8.90
203.40	1.00	8.90
206.70	1.00	8.90
210.00	1.00	8.90
213.30	1.00	8.91
216.50	1.00	8.91
219.80	1.00	8.91
223.10	1.00	8.91
226.40	1.00	8.91
229.70	1.00	8.91
232.90	1.00	8.91
236.20	1.00	8.92
239.50	1.00	8.92
242.80	1.00	8.92
246.10	1.00	8.92
249.30	1.00	8.92
252.60	1.00	8.92
255.90	1.00	8.92
259.20	1.00	8.93
262.50	1.00	8.93
265.70	1.00	8.93
269.00	1.00	8.93
272.30	1.00	8.93
275.60	1.00	8.93
278.90	1.00	8.93
282.20	1.00	8.94
285.40	1.00	8.94
288.70	1.00	8.94
292.00	1.00	8.94
295.30	1.00	8.94
298.60	1.00	8.94
301.80	1.00	8.94
305.10	1.00	8.94
308.40	1.00	8.95
311.70	1.00	8.95
315.00	1.00	8.95
318.20	1.00	8.95
321.50	1.00	8.95
324.80	1.00	8.95
328.10	1.00	8.95
331.40	1.00	8.95
334.60	1.00	8.96
337.90	1.00	8.96
341.20	1.00	8.96
344.50	1.00	8.96
347.80	1.00	8.96
351.00	1.00	8.96
354.30	1.00	8.97
357.60	1.00	8.97
360.90	1.00	8.97
364.20	1.00	8.97
367.50	1.00	8.97
370.70	1.00	8.97
374.00	1.00	8.97
377.30	1.00	8.97
380.60	1.00	8.98
383.90	1.00	8.98
387.10	1.00	8.98
390.40	1.00	8.98
393.70	1.00	8.98
397.00	1.00	8.98
400.30	1.00	8.98
403.50	1.00	8.98
406.80	1.00	8.99

410.10	1.00	8.99
413.40	1.00	8.99
416.70	1.00	8.99
419.90	1.00	8.99
423.20	1.00	8.99
426.50	1.00	8.99
429.80	1.00	8.99
433.10	1.00	9.00
436.40	1.00	9.00
439.60	1.00	9.00
442.90	1.00	9.00
446.20	1.00	9.00
449.50	1.00	9.00
452.80	1.00	9.00
456.00	1.00	9.01
459.30	1.00	9.01
462.60	1.00	9.01
465.90	1.00	9.01
469.20	1.00	9.01
472.40	1.00	9.01
475.70	1.00	9.01
479.00	1.00	9.01
482.30	1.00	9.02
485.60	1.00	9.02
488.80	1.00	9.02
492.10	1.00	9.02
495.40	1.00	9.02
498.70	1.00	9.02
502.00	1.00	9.02
505.20	1.00	9.02
508.50	1.00	9.02
511.80	1.00	9.03
515.10	1.00	9.03
518.40	1.00	9.03
521.70	1.00	9.03
524.90	1.00	9.03
528.20	1.00	9.03
531.50	1.00	9.03
534.80	1.00	9.03
538.10	1.00	9.03
541.30	1.00	9.04
544.60	1.00	9.04
547.90	1.00	9.04
551.20	1.00	9.04
554.50	1.00	9.04
557.70	1.00	9.04
561.00	1.00	9.04
564.30	1.00	9.05
567.60	1.00	9.05
570.90	1.00	9.05
574.10	1.00	9.05
577.40	1.00	9.05
580.70	1.00	9.05
584.00	1.00	9.05
587.30	1.00	9.05
590.50	1.00	9.05
593.80	1.00	9.06
597.10	1.00	9.06
600.40	1.00	9.06
603.70	1.00	9.06
607.00	1.00	9.06
610.20	1.00	9.06
613.50	1.00	9.06
616.80	1.00	9.06
620.10	1.00	9.06
623.40	1.00	9.06
626.60	1.00	9.07
629.90	1.00	9.07
633.20	1.00	9.07
636.50	1.00	9.07
639.80	1.00	9.07
643.00	1.00	9.07
646.30	1.00	9.07
649.60	1.00	9.07
652.90	1.00	9.07
656.20	1.00	9.08
659.40	1.00	9.08
662.70	1.00	9.08
666.00	1.00	9.08
669.30	1.00	9.08
672.60	1.00	9.08
675.90	1.00	9.08
679.10	1.00	9.08
682.40	1.00	9.08
685.70	1.00	9.09
689.00	1.00	9.09
692.30	1.00	9.09
695.50	1.00	9.09
698.80	1.00	9.09
702.10	1.00	9.09
705.40	1.00	9.09
711.90	1.00	9.09
715.20	1.00	9.10
718.50	1.00	9.10
721.80	1.00	9.10
725.10	1.00	9.10
728.30	1.00	9.10
731.60	1.00	9.10
734.90	1.00	9.10
738.20	1.00	9.10
741.50	1.00	9.10
744.70	1.00	9.10

748.00	1.00	9.11
751.30	1.00	9.11
754.60	1.00	9.11
757.90	1.00	9.11
761.20	1.00	9.11
764.40	1.00	9.11
767.70	1.00	9.11
771.00	1.00	9.11
774.30	1.00	9.11
777.60	1.00	9.11
780.80	1.00	9.12
784.10	1.00	9.12
787.40	1.00	9.12
790.70	1.00	9.12
794.00	1.00	9.12
797.20	1.00	9.12
800.50	1.00	9.12
803.80	1.00	9.12
807.10	1.00	9.12
810.40	1.00	9.13
816.90	1.00	9.13
820.20	1.00	9.13
823.50	1.00	9.13
826.80	1.00	9.13
830.10	1.00	9.13
833.30	1.00	9.13
836.60	1.00	9.14
839.90	1.00	9.14
843.20	1.00	9.14
846.50	1.00	9.14
849.70	1.00	9.14
853.00	1.00	9.14
856.30	1.00	9.14
859.60	1.00	9.14
862.90	1.00	9.14
866.10	1.00	9.14
869.40	1.00	9.15
872.70	1.00	9.15
876.00	1.00	9.15
879.30	1.00	9.15
882.50	1.00	9.15
885.80	1.00	9.15
889.10	1.00	9.15
892.40	1.00	9.15
895.70	1.00	9.15
898.90	1.00	9.15
902.20	1.00	9.15
905.50	1.00	9.16
912.10	1.00	9.16
918.60	1.00	9.16
921.90	1.00	9.16
925.20	1.00	9.16
928.50	1.00	9.16
931.80	1.00	9.16
935.00	1.00	9.16
938.30	1.00	9.16
941.60	1.00	9.17
944.90	1.00	9.17
951.40	1.00	9.17
954.70	1.00	9.17
958.00	1.00	9.17
961.30	1.00	9.17
964.60	1.00	9.17
967.80	1.00	9.17
971.10	1.00	9.17
974.40	1.00	9.18
977.70	1.00	9.18
981.00	1.00	9.18
987.50	1.00	9.18
994.10	1.00	9.18
1000.70	1.00	9.18
1003.90	1.00	9.18
1007.20	1.00	9.18
1010.50	1.00	9.19
1013.80	1.00	9.19
1017.10	1.00	9.19
1020.30	1.00	9.19
1023.60	1.00	9.19
1026.90	1.00	9.19
1030.20	1.00	9.19
1033.50	1.00	9.19
1036.70	1.00	9.19
1040.00	1.00	9.19
1043.30	1.00	9.19
1046.60	1.00	9.20
1049.90	1.00	9.20
1053.10	1.00	9.20
1056.40	1.00	9.20
1059.70	1.00	9.20
1063.00	1.00	9.20
1066.30	1.00	9.20
1072.80	1.00	9.20
1076.10	1.00	9.21
1079.40	1.00	9.21
1082.70	1.00	9.21
1086.00	1.00	9.21
1089.20	1.00	9.21
1092.50	1.00	9.21
1095.80	1.00	9.21
1099.10	1.00	9.21
1102.40	1.00	9.22
1105.60	1.00	9.22

1108.90	1.00	9.22
1112.20	1.00	9.22
1115.50	1.00	9.22
1118.80	1.00	9.22
1122.00	1.00	9.22
1125.30	1.00	9.22
1128.60	1.00	9.22
1131.90	1.00	9.23
1135.20	1.00	9.23
1138.40	1.00	9.23
1141.70	1.00	9.23
1145.00	1.00	9.23
1148.30	1.00	9.23
1151.60	1.00	9.23
1154.90	1.00	9.23
1158.10	1.00	9.23
1161.40	1.00	9.24
1164.70	1.00	9.24
1168.00	1.00	9.24
1171.30	1.00	9.24
1174.50	1.00	9.24
1177.80	1.00	9.24
1181.10	1.00	9.24
1184.40	1.00	9.25
1187.70	1.00	9.25
1190.90	1.00	9.25
1194.20	1.00	9.25
1197.50	1.00	9.25
1200.80	1.00	9.25
1204.10	1.00	9.25
1207.30	1.00	9.26
1210.60	1.00	9.26
1213.90	1.00	9.26
1217.20	1.00	9.26
1220.50	1.00	9.26
1223.80	1.00	9.26
1227.00	1.00	9.27
1230.30	1.00	9.27
1233.60	1.00	9.27
1236.90	1.00	9.27
1240.20	1.00	9.27
1243.40	1.00	9.27
1246.70	1.00	9.27
1250.00	1.00	9.28
1253.30	1.00	9.28
1256.60	1.00	9.28
1259.80	1.00	9.28
1263.10	1.00	9.28
1266.40	1.00	9.29
1269.70	1.00	9.29
1273.00	1.00	9.29
1276.20	1.00	9.29
1279.50	1.00	9.29
1282.80	1.00	9.30
1286.10	1.00	9.30
1289.40	1.00	9.30
1292.60	1.00	9.30
1295.90	1.00	9.30
1299.20	1.00	9.31
1302.50	1.00	9.31
1305.80	1.00	9.31
1309.10	1.00	9.31
1312.30	1.00	9.31
1315.60	1.00	9.32
1318.90	1.00	9.32
1322.20	1.00	9.32
1325.50	1.00	9.32
1328.70	1.00	9.32
1332.00	1.00	9.33
1335.30	1.00	9.33
1338.60	1.00	9.33
1341.90	1.00	9.33
1345.10	1.00	9.34
1348.40	1.00	9.34
1351.70	1.00	9.34
1355.00	1.00	9.34
1358.30	1.00	9.34
1361.50	1.00	9.35
1364.80	1.00	9.35
1368.10	1.00	9.35
1371.40	1.00	9.35
1374.70	1.00	9.35
1377.90	1.00	9.36
1381.20	1.00	9.36
1384.50	1.00	9.36
1387.80	1.00	9.36
1391.10	1.00	9.36
1394.40	1.00	9.37
1397.60	1.00	9.37
1400.90	1.00	9.37
1404.20	1.00	9.37
1407.50	1.00	9.38
1410.80	1.00	9.38
1414.00	1.00	9.38
1417.30	1.00	9.38
1420.60	1.00	9.39
1423.90	1.00	9.39
1427.20	1.00	9.39
1430.40	1.00	9.39
1433.70	1.00	9.39
1437.00	1.00	9.40
1440.30	1.00	9.40

1443.60	1.00	9.40
1446.80	1.00	9.40
1450.10	1.00	9.40
1453.40	1.00	9.41
1456.70	1.00	9.41
1460.00	1.00	9.41
1463.30	1.00	9.41
1466.50	1.00	9.41
1469.80	1.00	9.42
1473.10	1.00	9.42
1476.40	1.00	9.42
1479.70	1.00	9.42
1482.90	1.00	9.43
1486.20	1.00	9.43
1489.50	1.00	9.43
1492.80	1.00	9.43
1496.10	1.00	9.43
1499.30	1.00	9.44
1502.60	1.00	9.44
1505.90	1.00	9.44
1509.20	1.00	9.44
1512.50	1.00	9.44
1515.70	1.00	9.44
1519.00	1.00	9.45
1522.30	1.00	9.45
1525.60	1.00	9.45
1528.90	1.00	9.45
1532.10	1.00	9.45
1535.40	1.00	9.46
1538.70	1.00	9.46
1542.00	1.00	9.46
1545.30	1.00	9.46
1548.60	1.00	9.47
1551.80	1.00	9.47
1555.10	1.00	9.47
1558.40	1.00	9.47
1561.70	1.00	9.48
1565.00	1.00	9.48
1568.20	1.00	9.48
1571.50	1.00	9.48
1574.80	1.00	9.48
1578.10	1.00	9.49
1581.40	1.00	9.49
1584.60	1.00	9.49
1587.90	1.00	9.49
1591.20	1.00	9.50
1594.50	1.00	9.50
1597.80	1.00	9.50
1601.00	1.00	9.51
1604.30	1.00	9.51
1607.60	1.00	9.51
1610.90	1.00	9.51
1614.20	1.00	9.52
1617.50	1.00	9.52
1620.70	1.00	9.52
1624.00	1.00	9.52
1627.30	1.00	9.53
1630.60	1.00	9.53
1633.90	1.00	9.53
1637.10	1.00	9.53
1640.40	1.00	9.54
1643.70	1.00	9.54
1647.00	1.00	9.54
1650.30	1.00	9.55
1653.50	1.00	9.55
1656.80	1.00	9.55
1660.10	1.00	9.56
1663.40	1.00	9.56
1666.70	1.00	9.56
1669.90	1.00	9.56
1673.20	1.00	9.57
1676.50	1.00	9.57
1679.80	1.00	9.57
1683.10	1.00	9.57
1686.30	1.00	9.58
1689.60	1.00	9.58
1692.90	1.00	9.59
1696.20	1.00	9.59
1699.50	1.00	9.59
1702.80	1.00	9.59
1706.00	1.00	9.60
1709.30	1.00	9.60
1712.60	1.00	9.60
1715.90	1.00	9.61
1719.20	1.00	9.61
1722.40	1.00	9.61
1725.70	1.00	9.62
1729.00	1.00	9.62
1732.30	1.00	9.62
1735.60	1.00	9.62
1738.80	1.00	9.63
1742.10	1.00	9.63
1745.40	1.00	9.64
1748.70	1.00	9.64
1752.00	1.00	9.64
1755.20	1.00	9.64
1758.50	1.00	9.65
1761.80	1.00	9.65
1765.10	1.00	9.65
1768.40	1.00	9.66
1771.60	1.00	9.66
1774.90	1.00	9.66

1778.20	1.00	9.66
1781.50	1.00	9.67
1784.80	1.00	9.67
1788.10	1.00	9.67
1791.30	1.00	9.68
1794.60	1.00	9.68
1797.90	1.00	9.68
1801.20	1.00	9.69
1804.50	1.00	9.69
1807.70	1.00	9.69
1811.00	1.00	9.69
1814.30	1.00	9.70
1817.60	1.00	9.70
1820.90	1.00	9.70
1824.10	1.00	9.71
1827.40	1.00	9.71
1830.70	1.00	9.71
1834.00	1.00	9.72
1837.30	1.00	9.72
1840.50	1.00	9.72
1843.80	1.00	9.73
1847.10	1.00	9.73
1850.40	1.00	9.73
1853.70	1.00	9.73
1857.00	1.00	9.74
1860.20	1.00	9.74
1863.50	1.00	9.74
1866.80	1.00	9.75
1870.10	1.00	9.75
1873.40	1.00	9.75
1876.60	1.00	9.75
1879.90	1.00	9.76
1883.20	1.00	9.76
1886.50	1.00	9.76
1889.80	1.00	9.77
1893.00	1.00	9.77
1896.30	1.00	9.77
1899.60	1.00	9.78
1902.90	1.00	9.78
1906.20	1.00	9.78
1909.40	1.00	9.78
1912.70	1.00	9.79
1916.00	1.00	9.79
1919.30	1.00	9.79
1922.60	1.00	9.80
1925.80	1.00	9.80
1929.10	1.00	9.80
1932.40	1.00	9.81
1935.70	1.00	9.81
1939.00	1.00	9.81
1942.30	1.00	9.81
1945.50	1.00	9.82
1948.80	1.00	9.82
1952.10	1.00	9.82
1955.40	1.00	9.83
1958.70	1.00	9.83
1961.90	1.00	9.83
1965.20	1.00	9.84
1968.50	1.00	9.84
1971.80	1.00	9.84
1975.10	1.00	9.85
1978.30	1.00	9.85
1981.60	1.00	9.85
1984.90	1.00	9.85
1988.20	1.00	9.86
1991.50	1.00	9.86
1994.70	1.00	9.86
1998.00	1.00	9.87
2001.30	1.00	9.87
2004.60	1.00	9.88
2007.90	1.00	9.88
2011.20	1.00	9.88
2014.40	1.00	9.89
2017.70	1.00	9.89
2021.00	1.00	9.90
2024.30	1.00	9.90
2027.60	1.00	9.90
2030.80	1.00	9.91
2034.10	1.00	9.91
2037.40	1.00	9.92
2040.70	1.00	9.92
2044.00	1.00	9.93
2047.20	1.00	9.93
2050.50	1.00	9.93
2053.80	1.00	9.94
2057.10	1.00	9.95
2060.40	1.00	9.96
2063.60	1.00	9.96
2066.90	1.00	9.97
2070.20	1.00	9.99
2073.50	1.00	10.01
2076.80	1.00	10.02
2080.00	1.00	10.04
2083.30	1.00	10.08
2086.60	1.00	10.14
2089.90	1.00	10.19
2093.20	1.00	10.26
2096.50	1.00	10.31
2286.30	1.00	9.12
2754.00	1.00	8.95
3060.50	1.00	8.95
3093.50	1.00	8.95

3123.00 1.00 8.95

PART5 LOCATION OF V ZONES

STATION OF GUTTER LOCATION OF ZONE

2064.33 WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
16.97	28.17			
		V12	EL=**	60
3.30	1660.10			
		V12	EL=**	60
6.60	1663.40			
		V19	EL=**	95
9.80	1666.70			
		V23	EL=24	130
12.20	24.50			
		V23	EL=24	130
13.10	1669.90			
		V23	EL=24	130
13.98	25.50			
		V23	EL=24	130
15.24	26.50			
		V23	EL=24	130
16.23	27.50			
		V23	EL=24	130
16.40	1673.20			
		V23	EL=24	130
16.97	28.17			
		V23	EL=24	130
19.70	1676.50			
		V23	EL=24	130
23.00	1679.80			
		V23	EL=24	130
26.20	1683.10			
		V23	EL=24	130
29.50	1686.30			
		V23	EL=24	130
32.80	1689.60			
		V23	EL=24	130
36.10	1692.90			
		V23	EL=24	130
39.40	1696.20			
		V23	EL=24	130
42.70	1699.50			
		V23	EL=24	130
45.90	1702.80			
		V23	EL=24	130
49.20	1706.00			
		V23	EL=24	130
52.50	1709.30			
		V23	EL=24	130
55.80	1712.60			
		V23	EL=24	130
59.10	1715.90			
		V23	EL=24	130
62.30	1719.20			
		V23	EL=24	130
65.60	1722.40			
		V23	EL=24	130
68.90	1725.70			
		V23	EL=24	130
72.20	1729.00			
		V23	EL=24	130
75.50	1732.30			
		V23	EL=24	130
78.70	1735.60			
		V23	EL=24	130
82.00	1738.80			
		V23	EL=24	130
85.30	1742.10			
		V23	EL=24	130
88.60	1745.40			
		V23	EL=24	130
91.90	1748.70			
		V23	EL=24	130
95.10	1752.00			
		V23	EL=24	130
98.40	1755.20			
		V23	EL=24	130
101.70	1758.50			
		V23	EL=24	130
105.00	1761.80			
		V23	EL=24	130
108.30	1765.10			
		V23	EL=24	130
111.50	1768.40			
		V23	EL=24	130
114.80	1771.60			
		V23	EL=24	130
118.10	1774.90			
		V23	EL=24	130
121.40	1778.20			
		V23	EL=24	130
124.70	1781.50			
		V23	EL=24	130
128.00	1784.80			
		V23	EL=24	130
131.20	1788.10			
		V23	EL=24	130
134.50	1791.30			
		V23	EL=24	130
137.80	1794.60			
		V23	EL=24	130

141.10	1797.90	V23	EL=24	130
144.40	1801.20	V23	EL=24	130
147.60	1804.50	V23	EL=24	130
150.90	1807.70	V23	EL=24	130
154.20	1811.00	V23	EL=24	130
157.50	1814.30	V23	EL=24	130
160.80	1817.60	V23	EL=24	130
164.00	1818.36	V23	EL=24	130
167.30	1820.90	V23	EL=24	130
170.60	1824.10	V23	EL=24	130
173.90	1827.40	V23	EL=24	130
177.20	1830.70	V23	EL=24	130
180.40	1834.00	V23	EL=24	130
183.70	1837.30	V23	EL=24	130
187.00	1840.50	V23	EL=24	130
190.30	1843.80	V23	EL=24	130
193.60	1847.10	V23	EL=24	130
196.80	1850.40	V23	EL=24	130
200.10	1853.70	V23	EL=24	130
203.40	1857.00	V23	EL=24	130
206.70	1860.20	V23	EL=24	130
210.00	1863.50	V23	EL=24	130
213.30	1866.80	V23	EL=24	130
216.50	1870.10	V23	EL=24	130
219.80	1873.40	V23	EL=24	130
223.10	1876.60	V23	EL=24	130
226.40	1879.90	V23	EL=24	130
229.70	1883.20	V23	EL=24	130
232.90	1886.50	V23	EL=24	130
236.20	1889.80	V23	EL=24	130
239.50	1893.00	V23	EL=24	130
242.80	1896.30	V23	EL=24	130
246.10	1899.60	V23	EL=24	130
249.30	1902.90	V23	EL=24	130
252.60	1906.20	V23	EL=24	130
255.90	1909.40	V23	EL=24	130
259.20	1912.70	V23	EL=24	130
262.50	1916.00	V23	EL=24	130
265.70	1919.30	V23	EL=24	130
269.00	1922.60	V23	EL=24	130
272.30	1925.80	V23	EL=24	130
275.60	1929.10	V23	EL=24	130
278.90	1932.40	V23	EL=24	130
282.20	1935.70	V23	EL=24	130
285.40	1939.00	V23	EL=24	130
288.70	1942.30	V23	EL=24	130
292.00	1945.50	V23	EL=24	130
295.30	1948.80	V23	EL=24	130
298.60	1952.10	V23	EL=24	130
301.80	1955.40	V23	EL=24	130
305.10	1958.70	V23	EL=24	130

308.40	1961.90	V23	EL=24	130
311.70	1965.20	V23	EL=24	130
315.00	1968.50	V23	EL=24	130
318.20	1971.80	V23	EL=24	130
321.50	1975.10	V23	EL=24	130
324.80	1978.30	V23	EL=24	130
328.10	1981.60	V23	EL=24	130
331.40	1984.90	V23	EL=24	130
334.60	1988.20	V23	EL=24	130
337.90	1991.50	V23	EL=24	130
341.20	1994.70	V23	EL=24	130
344.50	1998.00	V23	EL=24	130
347.80	2001.30	V23	EL=24	130
351.00	2002.53	V23	EL=24	130
354.30	2004.60	V23	EL=24	130
357.60	2007.90	V23	EL=24	130
360.90	2011.20	V23	EL=24	130
364.20	2014.40	V23	EL=24	130
367.50	2017.70	V23	EL=24	130
370.70	2021.00	V23	EL=24	130
374.00	2024.30	V23	EL=24	130
377.30	2027.60	V23	EL=24	130
380.60	2030.80	V23	EL=24	130
383.90	2034.10	V23	EL=24	130
387.10	2037.40	V23	EL=24	130
390.40	2040.70	V23	EL=24	130
393.70	2044.00	V23	EL=24	130
397.00	2047.20	V23	EL=24	130
400.30	2050.50	V23	EL=24	130
403.50	2053.80	V23	EL=24	130
406.80	2057.10	V23	EL=24	130
410.10	2060.40	V23	EL=24	130
413.40	2063.60	V23	EL=24	130
416.70	2064.33	V23	EL=24	130
419.90	2066.90	V23	EL=24	130
423.20	2070.20	V23	EL=24	130
426.50	2073.50	V23	EL=24	130
429.80	2076.80	V23	EL=24	130
433.10	2080.00	V23	EL=24	130
436.40	2083.30	V23	EL=24	130
439.60	2086.60	V23	EL=24	130
442.90	2089.90	V23	EL=24	130
446.20	2093.20	V23	EL=24	130
449.50	2096.50	V23	EL=24	130
452.80	2110.30	V23	EL=24	130
456.00	2230.70	V23	EL=24	130
459.30	2286.30	V23	EL=24	130
462.60	2339.40	V23	EL=24	130
465.90	2754.00	V23	EL=24	130
469.20	3060.50	V23	EL=24	130
472.40	3093.50	V23	EL=24	130

475.70	3123.00	V23	EL=24	130
479.00	26.01	V23	EL=24	130
482.30	26.00	V23	EL=24	130
485.60	25.98	V23	EL=24	130
488.80	25.97	V23	EL=24	130
492.10	25.96	V23	EL=24	130
495.40	25.94	V23	EL=24	130
498.70	25.93	V23	EL=24	130
502.00	25.91	V23	EL=24	130
505.20	25.90	V23	EL=24	130
508.50	25.89	V23	EL=24	130
511.80	25.87	V23	EL=24	130
515.10	25.86	V23	EL=24	130
518.40	25.84	V23	EL=24	130
521.70	25.83	V23	EL=24	130
524.90	25.82	V23	EL=24	130
528.20	25.80	V23	EL=24	130
531.50	25.79	V23	EL=24	130
534.80	25.78	V23	EL=24	130
538.10	25.76	V23	EL=24	130
541.30	25.75	V23	EL=24	130
544.60	25.73	V23	EL=24	130
547.90	25.72	V23	EL=24	130
551.20	25.71	V23	EL=24	130
554.50	25.69	V23	EL=24	130
557.70	25.68	V23	EL=24	130
561.00	25.67	V23	EL=24	130
564.30	25.65	V23	EL=24	130
567.60	25.64	V23	EL=24	130
570.90	25.62	V23	EL=24	130
574.10	25.61	V23	EL=24	130
577.40	25.60	V23	EL=24	130
580.70	25.58	V23	EL=24	130
584.00	25.57	V23	EL=24	130
587.30	25.55	V23	EL=24	130
590.50	25.54	V23	EL=24	130
593.80	25.53	V23	EL=24	130
597.10	25.51	V23	EL=24	130
600.40	25.50	V23	EL=24	130
603.70	25.48	V23	EL=24	130
607.00	25.47	V23	EL=24	130
610.20	25.45	V23	EL=24	130
613.50	25.44	V23	EL=24	130
616.80	25.43	V23	EL=24	130
620.10	25.41	V23	EL=24	130
623.40	25.40	V23	EL=24	130
626.60	25.38	V23	EL=24	130
629.90	25.37	V23	EL=24	130
633.20	25.35	V23	EL=24	130
636.50	25.34	V23	EL=24	130
639.80	25.32	V23	EL=24	130

643.00	25.30	V23	EL=24	130
646.30	25.28	V23	EL=24	130
649.60	25.26	V23	EL=24	130
652.90	25.24	V23	EL=24	130
656.20	25.22	V23	EL=24	130
659.40	25.20	V23	EL=24	130
662.70	25.18	V23	EL=24	130
666.00	25.16	V23	EL=24	130
669.30	25.14	V23	EL=24	130
672.60	25.13	V23	EL=24	130
675.90	25.11	V23	EL=24	130
679.10	25.09	V23	EL=24	130
682.40	25.07	V23	EL=24	130
685.70	25.05	V23	EL=24	130
689.00	25.03	V23	EL=24	130
692.30	25.01	V23	EL=24	130
695.50	24.99	V23	EL=24	130
698.80	24.97	V23	EL=24	130
702.10	24.95	V23	EL=24	130
705.40	24.93	V23	EL=24	130
708.70	24.91	V23	EL=24	130
711.90	24.90	V23	EL=24	130
715.20	24.88	V23	EL=24	130
718.50	24.86	V23	EL=24	130
721.80	24.85	V23	EL=24	130
725.10	24.83	V23	EL=24	130
728.30	24.81	V23	EL=24	130
731.60	24.80	V23	EL=24	130
734.90	24.78	V23	EL=24	130
738.20	24.76	V23	EL=24	130
741.50	24.74	V23	EL=24	130
744.70	24.73	V23	EL=24	130
748.00	24.71	V23	EL=24	130
751.30	24.69	V23	EL=24	130
754.60	24.68	V23	EL=24	130
757.90	24.66	V23	EL=24	130
761.20	24.64	V23	EL=24	130
764.40	24.62	V23	EL=24	130
767.70	24.61	V23	EL=24	130
771.00	24.59	V23	EL=24	130
774.30	24.58	V23	EL=24	130
777.60	24.56	V23	EL=24	130
780.80	24.55	V23	EL=24	130
784.10	24.54	V23	EL=24	130
787.40	24.52	V23	EL=24	130
790.70	24.51	V23	EL=24	130
794.00	24.50	V23	EL=24	130
797.20	24.48	V23	EL=24	130
800.50	24.47	V23	EL=24	130
803.80	24.45	V23	EL=24	130
807.10	24.44	V23	EL=24	130

810.40	24.43	V23	EL=24	130
813.60	24.41	V23	EL=24	130
816.90	24.40	V23	EL=24	130
820.20	24.39	V23	EL=24	130
823.50	24.37	V23	EL=24	130
826.80	24.35	V23	EL=24	130
830.10	24.34	V23	EL=24	130
833.30	24.32	V23	EL=24	130
836.60	24.31	V23	EL=24	130
839.90	24.29	V23	EL=24	130
843.20	24.28	V23	EL=24	130
846.50	24.26	V23	EL=24	130
849.70	24.25	V23	EL=24	130
853.00	24.23	V23	EL=24	130
856.30	24.21	V23	EL=24	130
859.60	24.20	V23	EL=24	130
862.90	24.18	V23	EL=24	130
866.10	24.17	V23	EL=24	130
869.40	24.15	V23	EL=24	130
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885.80	24.07	V23	EL=24	130
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892.40	24.04	V23	EL=24	130
895.70	24.03	V23	EL=24	130
898.90	24.01	V23	EL=24	130
902.20	24.00	V23	EL=24	130
905.50	23.97	V23	EL=24	130
908.80	23.95	V23	EL=24	130
912.10	23.93	V23	EL=24	130
915.40	23.91	V23	EL=24	130
918.60	23.89	V23	EL=24	130
921.90	23.86	V23	EL=24	130
925.20	23.84	V23	EL=24	130
928.50	23.82	V23	EL=24	130
931.80	23.80	V23	EL=24	130
935.00	23.78	V23	EL=24	130
938.30	23.76	V23	EL=24	130
941.60	23.73	V23	EL=24	130
944.90	23.71	V23	EL=24	130
948.20	23.69	V23	EL=24	130
951.40	23.67	V23	EL=24	130
954.70	23.65	V23	EL=24	130
958.00	23.63	V23	EL=24	130
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967.80	23.56	V23	EL=24	130
971.10	23.54	V23	EL=24	130
974.40	23.52	V23	EL=24	130

976.74	23.50	V23	EL=23	130
977.70	23.49	V23	EL=23	130
981.00	23.47	V23	EL=23	130
984.20	23.44	V23	EL=23	130
987.50	23.42	V23	EL=23	130
990.80	23.40	V23	EL=23	130
994.10	23.38	V23	EL=23	130
997.40	23.35	V23	EL=23	130
1000.70	23.33	V23	EL=23	130
1003.90	23.30	V23	EL=23	130
1007.20	23.28	V23	EL=23	130
1010.50	23.26	V23	EL=23	130
1013.80	23.23	V23	EL=23	130
1017.10	23.21	V23	EL=23	130
1020.30	23.18	V23	EL=23	130
1023.60	23.16	V23	EL=23	130
1026.90	23.13	V23	EL=23	130
1030.20	23.11	V23	EL=23	130
1033.50	23.08	V23	EL=23	130
1036.70	23.06	V23	EL=23	130
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1079.40	22.73	V23	EL=23	130
1082.70	22.70	V23	EL=23	130
1086.00	22.68	V23	EL=23	130
1089.20	22.65	V23	EL=23	130
1092.50	22.63	V23	EL=23	130
1095.80	22.60	V23	EL=23	130
1099.10	22.58	V23	EL=23	130
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1105.60	22.53	V23	EL=23	130
1108.90	22.50	V23	EL=23	130
1109.08	22.50	V23	EL=22	130
1112.20	22.48	V23	EL=22	130
1115.50	22.45	V23	EL=22	130
1118.80	22.43	V23	EL=22	130
1122.00	22.40	V23	EL=22	130
1125.30	22.38	V23	EL=22	130
1128.60	22.35	V23	EL=22	130
1131.90	22.33	V23	EL=22	130
1135.20	22.30	V23	EL=22	130

1138.40	22.28	V23	EL=22	130
1141.70	22.25	V23	EL=22	130
1145.00	22.21	V23	EL=22	130
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1181.10	21.83	V23	EL=22	130
1184.40	21.79	V23	EL=22	130
1187.70	21.76	V23	EL=22	130
1190.90	21.72	V23	EL=22	130
1194.20	21.69	V23	EL=22	130
1197.50	21.65	V23	EL=22	130
1200.80	21.61	V23	EL=22	130
1204.10	21.58	V23	EL=22	130
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1210.60	21.51	V23	EL=22	130
1211.52	21.50	V23	EL=21	130
1213.90	21.48	V23	EL=21	130
1217.20	21.44	V23	EL=21	130
1220.50	21.40	V23	EL=21	130
1223.80	21.37	V23	EL=21	130
1227.00	21.33	V23	EL=21	130
1230.30	21.30	V23	EL=21	130
1233.60	21.26	V23	EL=21	130
1236.90	21.23	V23	EL=21	130
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1243.40	21.16	V23	EL=21	130
1246.70	21.13	V23	EL=21	130
1250.00	21.09	V23	EL=21	130
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1266.40	20.93	V23	EL=21	130
1269.70	20.90	V23	EL=21	130
1273.00	20.87	V23	EL=21	130
1276.20	20.83	V23	EL=21	130
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1282.80	20.77	V23	EL=21	130
1286.10	20.74	V23	EL=21	130
1289.40	20.71	V23	EL=21	130
1292.60	20.68	V23	EL=21	130
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1313.22	20.50	V23	EL=20	130
1315.60	20.48	V23	EL=20	130
1318.90	20.45	V23	EL=20	130
1322.20	20.42	V23	EL=20	130
1325.50	20.39	V23	EL=20	130
1328.70	20.36	V23	EL=20	130
1332.00	20.34	V23	EL=20	130
1335.30	20.31	V23	EL=20	130
1338.60	20.28	V23	EL=20	130
1341.90	20.25	V23	EL=20	130
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1348.40	20.19	V23	EL=20	130
1351.70	20.16	V23	EL=20	130
1355.00	20.13	V23	EL=20	130
1358.30	20.10	V23	EL=20	130
1361.50	20.08	V23	EL=20	130
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1377.90	19.93	V23	EL=20	130
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1384.50	19.88	V23	EL=20	130
1387.80	19.86	V23	EL=20	130
1391.10	19.83	V23	EL=20	130
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1558.40	18.25	V23	EL=18	130
1561.70	18.20	V23	EL=18	130
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1571.50	18.08	V23	EL=18	130
1574.80	18.05	V23	EL=18	130
1578.10	18.00	V23	EL=18	130
1581.40	17.97	V23	EL=18	130
1584.60	17.92	V23	EL=18	130
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1620.70	17.48	V23	EL=17	130

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1633.90	17.32	V23	EL=17	130
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2081.14	0.00	A17	EL=11	85
2083.30	0.00	A17	EL=11	85
2086.60	0.00	A17	EL=11	85
2089.90	0.00	A17	EL=11	85
2093.20	0.00	A17	EL=11	85
2096.50	0.00	A17	EL=11	85
2107.14	0.00	A17	EL=10	85

```
2110.30          0.00
2286.30          0.00
                                 A17  EL= 9      85
2339.40          0.00
2754.00          0.00
                                 A17  EL= 9      85
2979.00          0.00
                                 A17  EL= 9      85
3060.50          0.00
                                 A17  EL= 9      85
3077.50          0.00
                                 A17  EL= 9      85
3093.50          0.00
                                 A17  EL= 9      85
3109.00          0.00
                                 A17  EL= 9      85
3123.00          0.00
                                 A17  EL= 9      85
3235.10          0.00
      ZONE TERMINATED AT END OF TRANSECT
      PART 7   POSTSCRIPT NOTES
PS START(380068.8812,4799887.1881)
PS END(380176.5982,4800958.9554)
-1.000000e+00
```

YK-92
100-year WHAFIS Output
Zero Station: -70.47904691, 43.34738429
Onshore Dir: 84.3 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-1500
-1000
-500
0
500
1000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-92
Two Percent Run-up Elevation is 26.3 Feet-NAVD88
Run-up Height is 16.4 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
0
5
10
15
20
25
30
50
100
150
200
250
300
350
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-92
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-92sta_ele_include.csv';   % file with station, elevation, include
                                             % third colunm is 0 for excluded points
imgname='logfiles/YK-92-runup';
SWEL=8.8306;  % 100-yr still water level including wave setup.
H0=5.1811;    % significant wave height at toe of structure
Tp=14.019;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.80989;   % this may get changed automatically below
gamma_rough=1;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.9778;
maxSetup=1.4808;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-92'

plotTitle =

Iterative TAW for YK-92



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                    9.8084

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                   11.2892



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          831.093355281874


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                   2.03675


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                  17.58005


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

           84.080132894416

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

           275.53999772455


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

           275.53999772455

toe_sta

toe_sta =

           84.080132894416




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 176.8 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 1.04 feet


ans =

-!!-       SWEL is adjusted to 9.87 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
    21
    22
    23
    24
    25




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
```

```
T0

R2=R2_new
Z2=R2+SWEL
% determine slope for this iteration
top_sta=-999;
for kk=1:length(sta)-1
   if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
      top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
      break;
   end
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% get the length of the slope (not accounting for berm)
Lslope=top_sta-toe_sta

% loop over profile segments to determine berm factor
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
```

```
        TAW_VALID=0;
    else
        sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
    end
    if TAW_VALID == 0
        TAW_ALWAYS_VALID=0;
    end

    if (Irb*gamma_berm < 1.8)
        R2_new=gamma*H0*1.77*Irb
    else
        R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
    end


    % check to see if we need to evaluate a shallow foreshore
    if berm_width > 0.25 * L0;
        disp ('!   Berm_width is greater than 1/4 wave length')
        disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
        % do the foreshore calculation
        fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
        % get upper slope
        fore_toe_sta=-999;
        fore_toe_dep=-999;
        for kk=length(dep)-1:-1:1
            ddep=dep(kk+1)-dep(kk);
            dsta=sta(kk+1)-sta(kk);
            s=ddep/dsta;
            if s < 1/15
                break
            end
            fore_toe_sta=sta(kk);
            fore_toe_dep=dep(kk);
            upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
        end
        fore_Irb=upper_slope/(sqrt(fore_H0/L0));
        fore_gamma=gamma_perm*gamma_beta*gamma_rough;
        if (fore_Irb < 1.8)
            fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
        else
            fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
        end
        if berm_width >= L0
            R2_new=fore_R2
            disp ('berm is wider than one wavelength, use full shallow foreshore solution');
        else
            w2=(berm_width-0.25*L0)/(0.75*L0)
            w1=1-w2
            R2_new=w2*fore_R2 + w1*R2_new
        end
    end % end berm width check
    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;
    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
        if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
            top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
            break;
        end
    end
    if top_sta==-999
        dy=Z2-dep(end);
        top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                    2.03675
toe_sta =
            84.080132894416
top_sta =
            275.53999772455
Z2 =
                   17.58005
H0 =
                     5.1811
Tp =
                     14.019
T0 =
           12.7445454545455
R2 =
                    15.5433
Z2 =
           25.4145166045166
top_sta =
```

```
           327.97216324691
Lslope =
          243.892030352494
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 1
dh =
           7.7632766045166
rdh_sum =
         0.852654006183964
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 2
dh =
           7.7468726045166
rdh_sum =
          1.70354085902299
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 3
dh =
           7.7304686045166
rdh_sum =
          2.55265187969483
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 4
dh =
           7.7140646045166
rdh_sum =
           3.3999784333006
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 5
dh =
           7.6976601045166
rdh_sum =
          4.24551187429484
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 6
dh =
           7.6812556045166
rdh_sum =
          5.08924365574538
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 7
dh =
           7.6648516045166
rdh_sum =
          5.93116533058679
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 8
dh =
           7.6484476045166
rdh_sum =
          6.77126844174121
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 9
dh =
           7.6320436045166
rdh_sum =
          7.60954457711106
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 10
dh =
           7.6156391045166
rdh_sum =
          8.44598531371813
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 11
dh =
           7.5992346045166
rdh_sum =
          9.28058232954258
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 12
dh =
           7.5828306045166
rdh_sum =
          10.1133274047434
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 13
dh =
           7.5599216045166
rdh_sum =
          10.9434723904669
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 14
dh =
           7.5305071045166
rdh_sum =
          11.7702556011328
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 15
dh =
```

```
           7.5010926045166
rdh_sum =
          12.5936510486205
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 16
dh =
           7.4716781045166
rdh_sum =
          13.4136330142289
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 17
dh =
           7.4422636045166
rdh_sum =
          14.2301760507206
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 18
dh =
           7.4128491045166
rdh_sum =
          15.0432549843469
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 19
dh =
           7.3834346045166
rdh_sum =
          15.8528449168487
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 20
dh =
           7.3540206045166
rdh_sum =
          16.6589212873708
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 21
dh =
           7.3246061045166
rdh_sum =
          17.4614596950303
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 22
dh =
           7.2951916045166
rdh_sum =
          18.2604360798256
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 23
dh =
           7.2657771045166
rdh_sum =
          19.0558266650325
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 24
dh =
           7.2363626045166
rdh_sum =
          19.8476079590952
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 25
dh =
           7.2069481045166
rdh_sum =
          20.6357567574941
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 26
dh =
           7.1775336045166
rdh_sum =
          21.4202501445914
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 27
dh =
           7.1475536045166
rdh_sum =
          22.2009945646876
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 28
dh =
           7.1164421045166
rdh_sum =
          22.9778240059777
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 29
dh =
           7.0847651045166
rdh_sum =
          23.7506420052684
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 30
dh =
```

```
           7.0530881045166
rdh_sum =
          24.5194234001146
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 31
dh =
           7.0214111045166
rdh_sum =
          25.2841434003735
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 32
dh =
           6.9897341045166
rdh_sum =
          26.0447775904915
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 33
dh =
           6.9580571045166
rdh_sum =
          26.8013019317559
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 34
dh =
           6.9263801045166
rdh_sum =
          27.5536927645119
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 35
dh =
           6.8947031045166
rdh_sum =
          28.3019268103448
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 36
dh =
           6.8630261045166
rdh_sum =
          29.0459811742274
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
           6.8313491045166
rdh_sum =
          29.7858333466309
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
           6.7996716045166
rdh_sum =
          30.5214611387512
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
           6.7679941045166
rdh_sum =
           31.25284281757
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
           6.7363171045166
rdh_sum =
          31.9799571092315
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
           6.7046401045166
rdh_sum =
          32.7027830666172
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
           6.6753801045166
rdh_sum =
           33.421629627493
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
           6.6485371045166
rdh_sum =
          34.1368103525298
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
           6.6216936045166
rdh_sum =
           34.848310921628
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
```

```
           6.5948501045166
rdh_sum =
          35.5561173265822
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
           6.5680071045166
rdh_sum =
          36.2602158730533
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
           6.5411641045166
rdh_sum =
          36.9605930435937
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
           6.5143211045166
rdh_sum =
          37.6572355672229
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 49
dh =
           6.4874776045166
rdh_sum =
          38.3501303503788
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 50
dh =
           6.4606341045166
rdh_sum =
          39.0392646171633
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 51
dh =
           6.4337911045166
rdh_sum =
          39.7246259111404
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 52
dh =
           6.4069481045166
rdh_sum =
          40.4062019558309
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 53
dh =
           6.3750716045166
rdh_sum =
          41.0832673559498
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 54
dh =
           6.3381621045166
rdh_sum =
          41.7550892907014
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 55
dh =
           6.3012526045166
rdh_sum =
          42.4216462448818
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 56
dh =
           6.2643431045166
rdh_sum =
          43.0829173625575
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 57
dh =
           6.2274336045166
rdh_sum =
          43.7388824496769
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
           6.1905241045166
rdh_sum =
          44.3895219765993
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 59
dh =
           6.1536146045166
rdh_sum =
          45.0348170805401
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 60
dh =
```

```
           6.1167051045166
rdh_sum =
          45.6747495679326
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 61
dh =
           6.0791126045166
rdh_sum =
          46.3092021978903
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 62
dh =
           6.0408361045166
rdh_sum =
          46.9380573239141
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 63
dh =
           6.0025596045166
rdh_sum =
          47.5612975937324
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 64
dh =
           5.9642831045166
rdh_sum =
          48.1789064111981
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 65
dh =
           5.9260066045166
rdh_sum =
          48.7908679385234
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 66
dh =
           5.8877301045166
rdh_sum =
          49.3971670984127
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 67
dh =
           5.8620301045166
rdh_sum =
           49.999656294203
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 68
dh =
           5.8489066045166
rdh_sum =
          50.6001975477926
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 69
dh =
           5.8357831045166
rdh_sum =
          51.1987892675661
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 70
dh =
           5.8226601045166
rdh_sum =
          51.7954299671353
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 71
dh =
           5.8095366045166
rdh_sum =
          52.3901180423261
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 72
dh =
           5.7865706045166
rdh_sum =
          52.9813854552281
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 73
dh =
           5.7537626045166
rdh_sum =
           53.567758658751
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 74
dh =
           5.7209541045166
rdh_sum =
          54.1492290327597
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 75
dh =
```

```
           5.6881456045166
rdh_sum =
          54.7257885167177
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 76
dh =
           5.6553371045166
rdh_sum =
          55.2974295359634
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 77
dh =
           5.6225286045166
rdh_sum =
          55.8641450024594
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 78
dh =
           5.5897206045166
rdh_sum =
          56.4259283907077
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
           4.7403476045166
rdh_sum =
          56.8593131998669
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
           4.7148296045166
rdh_sum =
           57.288866279101
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
           4.6893121045166
rdh_sum =
          57.7145919198252
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
dh =
           4.6637946045166
rdh_sum =
          58.1364945674112
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
           4.6382766045166
rdh_sum =
           58.554578821269
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 95
dh =
           4.6127591045166
rdh_sum =
          58.9688496589766
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 96
dh =
           4.5872416045166
rdh_sum =
          59.3793122114833
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 97
dh =
           4.5617236045166
rdh_sum =
           59.785971763205
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 98
dh =
           4.5362061045166
rdh_sum =
          60.1888339752011
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
           3.8344711045166
rdh_sum =
          60.4903231742718
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
           3.7688541045166
rdh_sum =
           60.782722978911
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 104
dh =
```

```
           3.7032371045166
rdh_sum =
          61.0661155454898
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 105
dh =
           3.6376206045166
rdh_sum =
          61.3405866625786
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 106
dh =
           3.5740546045166
rdh_sum =
          61.6065001987138
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 107
dh =
           3.5145891045166
rdh_sum =
          61.8644868290953
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 108
dh =
           3.4571741045166
rdh_sum =
          62.1148945008283
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 109
dh =
           3.3997596045166
rdh_sum =
          62.3577989040397
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 110
dh =
           3.3423451045166
rdh_sum =
          62.5932779359422
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
           3.2849301045166
rdh_sum =
          62.8214116799453
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 112
dh =
           3.2275156045166
rdh_sum =
          63.0422825729321
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 113
dh =
           3.1701011045166
rdh_sum =
           63.255975188033
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 128
dh =
           1.3233666045166
rdh_sum =
          63.2956817008709
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 129
dh =
           1.2880346045166
rdh_sum =
          63.3333229652347
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 130
dh =
           1.2527026045166
rdh_sum =
          63.3689520336947
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 131
dh =
           1.2173706045166
rdh_sum =
          63.4026221897072
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 132
dh =
           1.1820381045166
rdh_sum =
           63.434386914916
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 133
dh =
```

```
           1.1467056045166
rdh_sum =
          63.4642999377056
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 134
dh =
           1.1017521045166
rdh_sum =
          63.4919350414865
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 142
dh =
         0.121156604516598
rdh_sum =
          63.4922723136011
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 143
dh =
         0.109226604516596
rdh_sum =
          63.4925464408818
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 144
dh =
        0.0972961045165981
rdh_sum =
          63.4927639585273
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 145
dh =
        0.0853656045165963
rdh_sum =
          63.4929314052601
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 146
dh =
        0.0734356045165967
rdh_sum =
          63.4930553221454
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
   111
rB =
         0.455119422473842
rdh_mean =
         0.572009507406715
gamma_berm =
         0.805213214186649
slope =
         0.175915489758922
Irb =
          2.22801443101817
gamma_berm =
         0.805213214186649
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.805213214186649
ans =
!!! - - Iribaren number:   1.79 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          16.4522058162864
R2del =
         0.908905816286378
Z2 =
           26.323422420803
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                   2.03675
toe_sta =
           84.080132894416
top_sta =
          334.055015163886
Z2 =
           26.323422420803
H0 =
                    5.1811
Tp =
                    14.019
T0 =
          12.7445454545455
R2 =
```

```
          16.4522058162864
Z2 =
           26.323422420803
top_sta =
          334.055015163886
Lslope =
           249.97488226947
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 1
dh =
           7.7632766045166
rdh_sum =
         0.852654006183964
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 2
dh =
           7.7468726045166
rdh_sum =
          1.70354085902299
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 3
dh =
           7.7304686045166
rdh_sum =
          2.55265187969483
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 4
dh =
           7.7140646045166
rdh_sum =
           3.3999784333006
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 5
dh =
           7.6976601045166
rdh_sum =
          4.24551187429484
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 6
dh =
           7.6812556045166
rdh_sum =
          5.08924365574538
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 7
dh =
           7.6648516045166
rdh_sum =
          5.93116533058679
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 8
dh =
           7.6484476045166
rdh_sum =
          6.77126844174121
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 9
dh =
           7.6320436045166
rdh_sum =
          7.60954457711106
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 10
dh =
           7.6156391045166
rdh_sum =
          8.44598531371813
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 11
dh =
           7.5992346045166
rdh_sum =
          9.28058232954258
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 12
dh =
           7.5828306045166
rdh_sum =
          10.1133274047434
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 13
dh =
           7.5599216045166
rdh_sum =
          10.9434723904669
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 14
dh =
           7.5305071045166
rdh_sum =
```

```
          11.7702556011328
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 15
dh =
           7.5010926045166
rdh_sum =
          12.5936510486205
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 16
dh =
           7.4716781045166
rdh_sum =
          13.4136330142289
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 17
dh =
           7.4422636045166
rdh_sum =
          14.2301760507206
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 18
dh =
           7.4128491045166
rdh_sum =
          15.0432549843469
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 19
dh =
           7.3834346045166
rdh_sum =
          15.8528449168487
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 20
dh =
           7.3540206045166
rdh_sum =
          16.6589212873708
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 21
dh =
           7.3246061045166
rdh_sum =
          17.4614596950303
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 22
dh =
           7.2951916045166
rdh_sum =
          18.2604360798256
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 23
dh =
           7.2657771045166
rdh_sum =
          19.0558266650325
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 24
dh =
           7.2363626045166
rdh_sum =
          19.8476079590952
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 25
dh =
           7.2069481045166
rdh_sum =
          20.6357567574941
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 26
dh =
           7.1775336045166
rdh_sum =
          21.4202501445914
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 27
dh =
           7.1475536045166
rdh_sum =
          22.2009945646876
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 28
dh =
           7.1164421045166
rdh_sum =
          22.9778240059777
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 29
dh =
           7.0847651045166
rdh_sum =
```

```
          23.7506420052684
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 30
dh =
           7.0530881045166
rdh_sum =
          24.5194234001146
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 31
dh =
           7.0214111045166
rdh_sum =
          25.2841434003735
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 32
dh =
           6.9897341045166
rdh_sum =
          26.0447775904915
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 33
dh =
           6.9580571045166
rdh_sum =
          26.8013019317559
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 34
dh =
           6.9263801045166
rdh_sum =
          27.5536927645119
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 35
dh =
           6.8947031045166
rdh_sum =
          28.3019268103448
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 36
dh =
           6.8630261045166
rdh_sum =
          29.0459811742274
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
           6.8313491045166
rdh_sum =
          29.7858333466309
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
           6.7996716045166
rdh_sum =
          30.5214611387512
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
           6.7679941045166
rdh_sum =
           31.25284281757
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
           6.7363171045166
rdh_sum =
          31.9799571092315
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
           6.7046401045166
rdh_sum =
          32.7027830666172
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
           6.6753801045166
rdh_sum =
           33.421629627493
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
           6.6485371045166
rdh_sum =
          34.1368103525298
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
           6.6216936045166
rdh_sum =
```

```
           34.848310921628
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
dh =
            6.5948501045166
rdh_sum =
           35.5561173265822
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
            6.5680071045166
rdh_sum =
           36.2602158730533
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
            6.5411641045166
rdh_sum =
           36.9605930435937
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 48
dh =
            6.5143211045166
rdh_sum =
           37.6572355672229
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 49
dh =
            6.4874776045166
rdh_sum =
           38.3501303503788
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 50
dh =
            6.4606341045166
rdh_sum =
           39.0392646171633
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 51
dh =
            6.4337911045166
rdh_sum =
           39.7246259111404
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 52
dh =
            6.4069481045166
rdh_sum =
           40.4062019558309
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 53
dh =
            6.3750716045166
rdh_sum =
           41.0832673559498
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 54
dh =
            6.3381621045166
rdh_sum =
           41.7550892907014
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 55
dh =
            6.3012526045166
rdh_sum =
           42.4216462448818
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 56
dh =
            6.2643431045166
rdh_sum =
           43.0829173625575
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 57
dh =
            6.2274336045166
rdh_sum =
           43.7388824496769
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
            6.1905241045166
rdh_sum =
           44.3895219765993
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 59
dh =
            6.1536146045166
rdh_sum =
```

```
          45.0348170805401
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 60
dh =
           6.1167051045166
rdh_sum =
          45.6747495679326
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 61
dh =
           6.0791126045166
rdh_sum =
          46.3092021978903
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 62
dh =
           6.0408361045166
rdh_sum =
          46.9380573239141
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 63
dh =
           6.0025596045166
rdh_sum =
          47.5612975937324
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 64
dh =
           5.9642831045166
rdh_sum =
          48.1789064111981
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 65
dh =
           5.9260066045166
rdh_sum =
          48.7908679385234
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 66
dh =
           5.8877301045166
rdh_sum =
          49.3971670984127
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 67
dh =
           5.8620301045166
rdh_sum =
           49.999656294203
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 68
dh =
           5.8489066045166
rdh_sum =
          50.6001975477926
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 69
dh =
           5.8357831045166
rdh_sum =
          51.1987892675661
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 70
dh =
           5.8226601045166
rdh_sum =
          51.7954299671353
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 71
dh =
           5.8095366045166
rdh_sum =
          52.3901180423261
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 72
dh =
           5.7865706045166
rdh_sum =
          52.9813854552281
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 73
dh =
           5.7537626045166
rdh_sum =
           53.567758658751
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 74
dh =
           5.7209541045166
rdh_sum =
```

```
          54.1492290327597
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 75
dh =
           5.6881456045166
rdh_sum =
          54.7257885167177
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 76
dh =
           5.6553371045166
rdh_sum =
          55.2974295359634
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 77
dh =
           5.6225286045166
rdh_sum =
          55.8641450024594
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 78
dh =
           5.5897206045166
rdh_sum =
          56.4259283907077
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 90
dh =
           4.7403476045166
rdh_sum =
          56.8593131998669
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 91
dh =
           4.7148296045166
rdh_sum =
           57.288866279101
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 92
dh =
           4.6893121045166
rdh_sum =
          57.7145919198252
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 93
dh =
           4.6637946045166
rdh_sum =
          58.1364945674112
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 94
dh =
           4.6382766045166
rdh_sum =
           58.554578821269
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 95
dh =
           4.6127591045166
rdh_sum =
          58.9688496589766
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 96
dh =
           4.5872416045166
rdh_sum =
          59.3793122114833
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 97
dh =
           4.5617236045166
rdh_sum =
           59.785971763205
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 98
dh =
           4.5362061045166
rdh_sum =
          60.1888339752011
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 102
dh =
           3.8344711045166
rdh_sum =
          60.4903231742718
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 103
dh =
           3.7688541045166
rdh_sum =
```

```
           60.782722978911
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 104
dh =
           3.7032371045166
rdh_sum =
          61.0661155454898
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 105
dh =
           3.6376206045166
rdh_sum =
          61.3405866625786
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 106
dh =
           3.5740546045166
rdh_sum =
          61.6065001987138
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 107
dh =
           3.5145891045166
rdh_sum =
          61.8644868290953
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 108
dh =
           3.4571741045166
rdh_sum =
          62.1148945008283
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 109
dh =
           3.3997596045166
rdh_sum =
          62.3577989040397
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 110
dh =
           3.3423451045166
rdh_sum =
          62.5932779359422
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 111
dh =
           3.2849301045166
rdh_sum =
          62.8214116799453
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 112
dh =
           3.2275156045166
rdh_sum =
          63.0422825729321
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 113
dh =
           3.1701011045166
rdh_sum =
           63.255975188033
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 128
dh =
           1.3233666045166
rdh_sum =
          63.2956817008709
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 129
dh =
           1.2880346045166
rdh_sum =
          63.3333229652347
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 130
dh =
           1.2527026045166
rdh_sum =
          63.3689520336947
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 131
dh =
           1.2173706045166
rdh_sum =
          63.4026221897072
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 132
dh =
           1.1820381045166
rdh_sum =
```

```
           63.434386914916
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 133
dh =
           1.1467056045166
rdh_sum =
          63.4642999377056
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 134
dh =
           1.1017521045166
rdh_sum =
          63.4919350414865
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 142
dh =
         0.121156604516598
rdh_sum =
          63.4922723136011
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 143
dh =
         0.109226604516596
rdh_sum =
          63.4925464408818
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 144
dh =
        0.0972961045165981
rdh_sum =
          63.4927639585273
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 145
dh =
        0.0853656045165963
rdh_sum =
          63.4929314052601
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 146
dh =
        0.0734356045165967
rdh_sum =
          63.4930553221454
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
   111
rB =
         0.444044613571789
rdh_mean =
         0.572009507406715
gamma_berm =
         0.809953127104015
slope =
         0.174755840941902
Irb =
          2.21332718373383
gamma_berm =
         0.809953127104015
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.809953127104015
ans =
!!! - - Iribaren number:   1.79 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          16.4399595825935
R2del =
        0.0122462336929132
Z2 =
          26.3111761871101
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                   2.03675
toe_sta =
           84.080132894416
top_sta =
          333.973057248379
Z2 =
          26.3111761871101
H0 =
                    5.1811
Tp =
```

```
                    14.019
T0 =
          12.7445454545455
R2 =
          16.4399595825935
Z2 =
          26.3111761871101
top_sta =
          333.973057248379
Lslope =
          249.892924353963
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 1
dh =
           7.7632766045166
rdh_sum =
         0.852654006183964
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 2
dh =
           7.7468726045166
rdh_sum =
          1.70354085902299
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 3
dh =
           7.7304686045166
rdh_sum =
          2.55265187969483
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 4
dh =
           7.7140646045166
rdh_sum =
           3.3999784333006
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 5
dh =
           7.6976601045166
rdh_sum =
          4.24551187429484
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 6
dh =
           7.6812556045166
rdh_sum =
          5.08924365574538
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 7
dh =
           7.6648516045166
rdh_sum =
          5.93116533058679
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 8
dh =
           7.6484476045166
rdh_sum =
          6.77126844174121
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 9
dh =
           7.6320436045166
rdh_sum =
          7.60954457711106
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 10
dh =
           7.6156391045166
rdh_sum =
          8.44598531371813
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 11
dh =
           7.5992346045166
rdh_sum =
          9.28058232954258
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 12
dh =
           7.5828306045166
rdh_sum =
          10.1133274047434
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 13
dh =
           7.5599216045166
rdh_sum =
          10.9434723904669
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 14
dh =
            7.5305071045166
rdh_sum =
           11.7702556011328
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 15
dh =
            7.5010926045166
rdh_sum =
           12.5936510486205
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 16
dh =
            7.4716781045166
rdh_sum =
           13.4136330142289
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 17
dh =
            7.4422636045166
rdh_sum =
           14.2301760507206
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 18
dh =
            7.4128491045166
rdh_sum =
           15.0432549843469
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 19
dh =
            7.3834346045166
rdh_sum =
           15.8528449168487
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 20
dh =
            7.3540206045166
rdh_sum =
           16.6589212873708
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 21
dh =
            7.3246061045166
rdh_sum =
           17.4614596950303
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 22
dh =
            7.2951916045166
rdh_sum =
           18.2604360798256
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 23
dh =
            7.2657771045166
rdh_sum =
           19.0558266650325
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 24
dh =
            7.2363626045166
rdh_sum =
           19.8476079590952
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 25
dh =
            7.2069481045166
rdh_sum =
           20.6357567574941
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 26
dh =
            7.1775336045166
rdh_sum =
           21.4202501445914
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 27
dh =
            7.1475536045166
rdh_sum =
           22.2009945646876
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 28
dh =
            7.1164421045166
rdh_sum =
           22.9778240059777
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 29
dh =
           7.0847651045166
rdh_sum =
          23.7506420052684
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 30
dh =
           7.0530881045166
rdh_sum =
          24.5194234001146
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 31
dh =
           7.0214111045166
rdh_sum =
          25.2841434003735
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 32
dh =
           6.9897341045166
rdh_sum =
          26.0447775904915
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 33
dh =
           6.9580571045166
rdh_sum =
          26.8013019317559
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 34
dh =
           6.9263801045166
rdh_sum =
          27.5536927645119
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 35
dh =
           6.8947031045166
rdh_sum =
          28.3019268103448
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 36
dh =
           6.8630261045166
rdh_sum =
          29.0459811742274
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
           6.8313491045166
rdh_sum =
          29.7858333466309
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
           6.7996716045166
rdh_sum =
          30.5214611387512
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
           6.7679941045166
rdh_sum =
            31.25284281757
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
           6.7363171045166
rdh_sum =
          31.9799571092315
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
           6.7046401045166
rdh_sum =
          32.7027830666172
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
           6.6753801045166
rdh_sum =
           33.421629627493
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
           6.6485371045166
rdh_sum =
          34.1368103525298
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
           6.6216936045166
rdh_sum =
           34.848310921628
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
           6.5948501045166
rdh_sum =
          35.5561173265822
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
           6.5680071045166
rdh_sum =
          36.2602158730533
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
dh =
           6.5411641045166
rdh_sum =
          36.9605930435937
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
           6.5143211045166
rdh_sum =
          37.6572355672229
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 49
dh =
           6.4874776045166
rdh_sum =
          38.3501303503788
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 50
dh =
           6.4606341045166
rdh_sum =
          39.0392646171633
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 51
dh =
           6.4337911045166
rdh_sum =
          39.7246259111404
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 52
dh =
           6.4069481045166
rdh_sum =
          40.4062019558309
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 53
dh =
           6.3750716045166
rdh_sum =
          41.0832673559498
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 54
dh =
           6.3381621045166
rdh_sum =
          41.7550892907014
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 55
dh =
           6.3012526045166
rdh_sum =
          42.4216462448818
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 56
dh =
           6.2643431045166
rdh_sum =
          43.0829173625575
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 57
dh =
           6.2274336045166
rdh_sum =
          43.7388824496769
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
           6.1905241045166
rdh_sum =
          44.3895219765993
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 59
dh =
           6.1536146045166
rdh_sum =
          45.0348170805401
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 60
dh =
           6.1167051045166
rdh_sum =
          45.6747495679326
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 61
dh =
           6.0791126045166
rdh_sum =
          46.3092021978903
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 62
dh =
           6.0408361045166
rdh_sum =
          46.9380573239141
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 63
dh =
           6.0025596045166
rdh_sum =
          47.5612975937324
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 64
dh =
           5.9642831045166
rdh_sum =
          48.1789064111981
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 65
dh =
           5.9260066045166
rdh_sum =
          48.7908679385234
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 66
dh =
           5.8877301045166
rdh_sum =
          49.3971670984127
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 67
dh =
           5.8620301045166
rdh_sum =
           49.999656294203
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 68
dh =
           5.8489066045166
rdh_sum =
          50.6001975477926
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 69
dh =
           5.8357831045166
rdh_sum =
          51.1987892675661
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 70
dh =
           5.8226601045166
rdh_sum =
          51.7954299671353
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 71
dh =
           5.8095366045166
rdh_sum =
          52.3901180423261
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 72
dh =
           5.7865706045166
rdh_sum =
          52.9813854552281
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 73
dh =
           5.7537626045166
rdh_sum =
           53.567758658751
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 74
dh =
           5.7209541045166
rdh_sum =
          54.1492290327597
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 75
dh =
           5.6881456045166
rdh_sum =
          54.7257885167177
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 76
dh =
           5.6553371045166
rdh_sum =
          55.2974295359634
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 77
dh =
           5.6225286045166
rdh_sum =
          55.8641450024594
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 78
dh =
           5.5897206045166
rdh_sum =
          56.4259283907077
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
           4.7403476045166
rdh_sum =
          56.8593131998669
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
           4.7148296045166
rdh_sum =
           57.288866279101
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
           4.6893121045166
rdh_sum =
          57.7145919198252
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
           4.6637946045166
rdh_sum =
          58.1364945674112
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
           4.6382766045166
rdh_sum =
           58.554578821269
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 95
dh =
           4.6127591045166
rdh_sum =
          58.9688496589766
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 96
dh =
           4.5872416045166
rdh_sum =
          59.3793122114833
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 97
dh =
           4.5617236045166
rdh_sum =
           59.785971763205
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 98
dh =
           4.5362061045166
rdh_sum =
          60.1888339752011
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
           3.8344711045166
rdh_sum =
          60.4903231742718
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
            3.7688541045166
rdh_sum =
            60.782722978911
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 104
dh =
            3.7032371045166
rdh_sum =
           61.0661155454898
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 105
dh =
            3.6376206045166
rdh_sum =
           61.3405866625786
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 106
dh =
            3.5740546045166
rdh_sum =
           61.6065001987138
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 107
dh =
            3.5145891045166
rdh_sum =
           61.8644868290953
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 108
dh =
            3.4571741045166
rdh_sum =
           62.1148945008283
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 109
dh =
            3.3997596045166
rdh_sum =
           62.3577989040397
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 110
dh =
            3.3423451045166
rdh_sum =
           62.5932779359422
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
            3.2849301045166
rdh_sum =
           62.8214116799453
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 112
dh =
            3.2275156045166
rdh_sum =
           63.0422825729321
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 113
dh =
            3.1701011045166
rdh_sum =
            63.255975188033
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 128
dh =
            1.3233666045166
rdh_sum =
           63.2956817008709
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 129
dh =
            1.2880346045166
rdh_sum =
           63.3333229652347
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 130
dh =
            1.2527026045166
rdh_sum =
           63.3689520336947
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 131
dh =
            1.2173706045166
rdh_sum =
           63.4026221897072
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 132
dh =
           1.1820381045166
rdh_sum =
           63.434386914916
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 133
dh =
           1.1467056045166
rdh_sum =
          63.4642999377056
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 134
dh =
           1.1017521045166
rdh_sum =
          63.4919350414865
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 142
dh =
         0.121156604516598
rdh_sum =
          63.4922723136011
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 143
dh =
         0.109226604516596
rdh_sum =
          63.4925464408818
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 144
dh =
        0.0972961045165981
rdh_sum =
          63.4927639585273
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 145
dh =
        0.0853656045165963
rdh_sum =
          63.4929314052601
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 146
dh =
        0.0734356045165967
rdh_sum =
          63.4930553221454
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
   111
rB =
         0.444190247830999
rdh_mean =
         0.572009507406715
gamma_berm =
         0.809890797025677
slope =
          0.17477079052096
Irb =
          2.21351652395581
gamma_berm =
         0.809890797025677
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.809890797025677
ans =
!!! - - Iribaren number:   1.79 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          16.4401006993975
R2del =
      0.000141116803987984
Z2 =
           26.311317303914
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
           26.311317303914
diary off
-1.000000e+00
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-92

Station locations shifted by: -3.93 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-92

Incident significant wave height: 18.93 feet

Peak wave period: 14.35 seconds

Mean wave height: 11.85 feet

Local Depth below SWEL: 37.42 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 37.42
    Period, T = 12.20
    Waveheight, H = 11.85
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*12.20*12.20/6.28 = 761.71
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 761.71/12.20 = 62.45
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/12.20 = 0.52
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.52*0.52*37.42/32.17 = 0.31
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 32.92
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(62.45/32.92) = 1.38
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 11.85/1.38 = 8.60
```

Deepwater mean wave height: 8.60 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-92

RUNUP2 SWEL:
8.80
8.80
8.80
8.80

8.80
8.80
8.80
8.80
8.80

RUNUP2 deepwater mean wave heights:
8.17
8.17
8.17
8.60
8.60
8.60
9.03
9.03
9.03

RUNUP2 mean wave periods:
11.59
12.20
12.81
11.59
12.20
12.81
11.59
12.20
12.81

RUNUP2 runup above SWEL:
2.29
2.25
2.29
2.19
2.24
2.19
2.12
2.26
2.21

RUNUP2 Mean runup height above SWEL: 2.23 feet

RUNUP2 2-percent runup height above SWEL: 4.90 feet

RUNUP2 2-percent runup elevation: 13.70 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 18.93 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 13.74 feet

Peak wave period: 14.35 seconds

Average beach Slope: 1:50.79 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =    13.74
Wave Period,                        T  =    14.35
Beach Slope,                        S  =    0.020

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 8.2,  7.3,   6.7,    5.5,    3.6]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 7.34 feet

ACES Beach 2-percent runup elevation: 16.14 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-92                                                     1
4.00
  -28.59 -1871.1 1.0
  -28.59 -1838.1 1.0
  -26.69 -1695.1 1.0
  -24.95 -1530.1 1.0
  -22.11 -1233.1 1.0
  -20.49 -1100.1 1.0
  -19.18 -969.1 1.0
  -17.46 -850.1 1.0
  -15.56 -733.1 1.0
  -12.95 -615.1 1.0
  -10.61 -494.1 1.0
  -9.00 -395.1 1.0
  -3.74 -184.1 1.0
  0.62  30.9   1.0
  2.30  102.9  1.0
  4.30  168.9  1.0
  5.35  188.9  1.0
  8.17  213.9  1.0
  9.81  237.4  1.0
1 13.16 249.4  1.0
 8.8   8.17  11.59
 8.8   8.17  12.20
 8.8   8.17  12.81
 8.8   8.60  11.59
 8.8   8.60  12.20
 8.8   8.60  12.81
 8.8   9.03  11.59
 8.8   9.03  12.20
 8.8   9.03  12.81
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-187.1	-28.5		
			.00	11.00
2	-183.8	-28.5		
			7.53	11.00
3	-169.5	-26.6		
			9.71	11.00
4	-153.0	-24.9		
			10.61	11.00
5	-123.3	-22.1		
			7.82	11.00
6	-110.0	-20.4		
			-660.77	11.00
7	-969.0	-19.1		
			70.00	1.00
8	-850.0	-17.4		
			61.58	1.00
9	-733.0	-15.5		
			45.38	1.00
10	-615.0	-12.9		
			52.61	1.00
11	-494.0	-10.6		
			61.81	1.00
12	-395.1	-9.0		
			40.11	1.00
13	-184.1	-3.7		
			49.31	1.00
14	30.9	.6		
			42.86	1.00
15	102.9	2.3		
			33.00	1.00
16	168.9	4.3		
			19.05	1.00
17	188.9	5.4		
			8.87	1.00
18	213.9	8.2		
			14.33	1.00
19	237.4	9.8		
			3.58	1.00
20	249.4	13.2		

LAST SLOPE 4.00 LAST ROUGHNESS 1.00

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
8.80	8.17	11.59	11	19	2.29	15.26
8.80	8.17	12.20	11	19	2.25	15.57
8.80	8.17	12.81	11	19	2.29	15.88
8.80	8.60	11.59	11	19	2.19	15.90
8.80	8.60	12.20	11	19	2.24	16.22
8.80	8.60	12.81	11	19	2.19	16.54
8.80	9.03	11.59	11	19	2.12	16.55
8.80	9.03	12.20	11	19	2.26	16.87
8.80	9.03	12.81	11	19	2.21	17.20

Runup2 2% runup elevation for Transect: YK-92
Two Percent Run-up Elevation is 13.7 Feet-NAVD88
Run-up Height is 4.9 Feet
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-2000
-1500
-1000
-500
0
500
Ground
Swel
2% Runup

Transect Number: YK-99
Latitude
Longitude
43.38
43.375
43.37
43.365
43.36
43.355
43.35
43.345
-70.46
-70.45
-70.44
-70.43
-70.42
-70.41
Crow Hill
19m
Trott Island
Casino Hill

Elevation profile
Elevation (ft)
Station (ft)
40
30
20
10
0
-10
-20
-30
-4000
-3000
-2000
-1000
0
1000
2000
3000

DATA LOG FOR TRANSECT ID: YK-99

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -3447 ft
LON: -70.4279 deg E
LAT: 43.3576 deg N
Bottom ELEV: -27.4598 ft-NAVD88
TWL: 9.0928 ft-NAVD88
HS: 14.3525 ft
TP: 13.1891 sec
Wave Direction bin: 135 deg CCW from East (90 deg sector)
Transect Direction: 140.1761 deg CCW from East

TAW/RUNUP input

toe sta: -63 ft
toe elev: -1.6713 ft-NAVD88
top sta: 177 ft
top elev: 10.1148 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-99: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-3500
-3000
-2500
-2000
-1500
-1000
-500
0
500

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-99zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-99.swn
swan output name:     2_swan/swanfiles/YK-99.dat

Boundary Conditions:
    TWL- 2.7715 meters
    HS-  4.3747 meters
    PER- 13.1891 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 1.14 feet
SWAN output at toe:
    SETUP- 0.56921 feet
    HS-    5.7995 feet
    PER-   13.1729 seconds

PART 2 COMPLETE_____________________________________________


SWAN maximum additional wave setup: 1.14 feet
SWAN output at toe:
    SETUP- 0.56921 feet
    HS-    5.7995 feet
    PER-   13.1729 seconds

PART 2 COMPLETE_____________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-99
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-4000
-3000
-2000
-1000
0
1000
2000
3000

```
1
                    Execution started at 20200401.174312


                    ----------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ----------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      1096       0.   1096     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      1096   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-99zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   4.3747     13.1891     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      1096  1096    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-99.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC            1097 MYC              1
                     : MCGRD          1098
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  41.03 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.10 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  42.85 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  81.50 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  98.36 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  99.46 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  99.46 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in  99.64 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	4.36840	13.0437	12.4477	11.9073	0.000	31.5091	11.1400	0.000000
1.	0.	4.37549	13.0481	12.4477	11.8459	0.000	31.4214	11.0998	-0.000155
2.	0.	4.38238	13.0525	12.4477	11.7864	0.000	31.3335	11.0597	-0.000313
3.	0.	4.38925	13.0568	12.4477	11.7294	0.000	31.2548	11.0195	-0.000474
4.	0.	4.39531	13.0609	12.4477	11.6744	0.000	31.1782	10.9894	-0.000586
5.	0.	4.40152	13.0649	12.4477	11.6220	0.000	31.1078	10.9493	-0.000737
6.	0.	4.40744	13.0688	12.4477	11.5716	0.000	31.0400	10.9091	-0.000883
7.	0.	4.41291	13.0726	12.4477	11.5229	0.000	30.9641	10.8690	-0.001029
8.	0.	4.41840	13.0764	12.4477	11.4759	0.000	30.8734	10.8188	-0.001224
9.	0.	4.42417	13.0802	12.4477	11.4304	0.000	30.7787	10.7585	-0.001472
10.	0.	4.42916	13.0838	12.4477	11.3859	0.000	30.6823	10.7083	-0.001668
11.	0.	4.43438	13.0875	12.4477	11.3431	0.000	30.5783	10.6481	-0.001920
12.	0.	4.43958	13.0911	12.4477	11.3013	0.000	30.4779	10.5878	-0.002176
13.	0.	4.44408	13.0945	12.4477	11.2603	0.000	30.3784	10.5376	-0.002380
14.	0.	4.44887	13.0980	12.4477	11.2208	0.000	30.2725	10.4774	-0.002642
15.	0.	4.45363	13.1013	12.4477	11.1822	0.000	30.1703	10.4171	-0.002907
16.	0.	4.45771	13.1046	12.4477	11.1442	0.000	30.0694	10.3669	-0.003116
17.	0.	4.46208	13.1079	12.4477	11.1076	0.000	29.9623	10.3066	-0.003385
18.	0.	4.46642	13.1111	12.4477	11.0719	0.000	29.8591	10.2463	-0.003656
19.	0.	4.47007	13.1142	12.4477	11.0366	0.000	29.7571	10.1961	-0.003869
20.	0.	4.47402	13.1173	12.4477	11.0025	0.000	29.6490	10.1359	-0.004142
21.	0.	4.47793	13.1203	12.4477	10.9692	0.000	29.5450	10.0756	-0.004417
22.	0.	4.48114	13.1232	12.4477	10.9362	0.000	29.4424	10.0254	-0.004629
23.	0.	4.48480	13.1261	12.4477	10.9045	0.000	29.3399	9.9651	-0.004904
24.	0.	4.48771	13.1287	13.8874	10.8729	0.000	29.2377	9.9149	-0.005114
25.	0.	4.49093	13.1306	13.8874	10.8426	360.000	29.1292	9.8546	-0.005388
26.	0.	4.49408	13.1326	13.8874	10.8128	360.000	29.0248	9.7943	-0.005661
27.	0.	4.49649	13.1344	13.8874	10.7832	360.000	28.9219	9.7441	-0.005865
28.	0.	4.49922	13.1362	13.8874	10.7548	0.000	28.8132	9.6839	-0.006135
29.	0.	4.50214	13.1379	13.8874	10.7269	0.000	28.7207	9.6236	-0.006400
30.	0.	4.50411	13.1395	13.8874	10.6980	0.000	28.6760	9.5936	-0.006450
31.	0.	4.50468	13.1408	13.8874	10.6681	0.000	28.6852	9.6038	-0.006217
32.	0.	4.50507	13.1419	13.8874	10.6382	0.000	28.7127	9.6241	-0.005916
33.	0.	4.50593	13.1430	13.8874	10.6100	0.000	28.7372	9.6343	-0.005686
34.	0.	4.50664	13.1440	13.8874	10.5830	0.001	28.7608	9.6445	-0.005457
35.	0.	4.50723	13.1449	13.8874	10.5570	0.001	28.7841	9.6548	-0.005229
36.	0.	4.50770	13.1458	13.8874	10.5322	0.001	28.8072	9.6650	-0.005002
37.	0.	4.50807	13.1465	13.8874	10.5083	0.001	28.8303	9.6752	-0.004776
38.	0.	4.50854	13.1472	13.8874	10.4854	0.001	28.8620	9.6854	-0.004552
39.	0.	4.50841	13.1478	13.8874	10.4629	0.001	28.8969	9.7057	-0.004263
40.	0.	4.50860	13.1484	13.8874	10.4418	0.001	28.9236	9.7160	-0.004043
41.	0.	4.50865	13.1489	13.8874	10.4214	0.002	28.9476	9.7262	-0.003824
42.	0.	4.50861	13.1494	13.8874	10.4019	0.002	28.9707	9.7364	-0.003607
43.	0.	4.50849	13.1498	13.8874	10.3830	0.002	28.9933	9.7466	-0.003391
44.	0.	4.50851	13.1501	13.8874	10.3648	0.002	29.0246	9.7568	-0.003177
45.	0.	4.50800	13.1504	13.8874	10.3466	0.002	29.0588	9.7771	-0.002899
46.	0.	4.50781	13.1507	13.8874	10.3296	0.002	29.0847	9.7873	-0.002689
47.	0.	4.50750	13.1509	13.8874	10.3133	0.002	29.1081	9.7975	-0.002481
48.	0.	4.50713	13.1512	13.8874	10.2974	0.002	29.1305	9.8077	-0.002274
49.	0.	4.50671	13.1513	13.8874	10.2821	0.002	29.1524	9.8179	-0.002068
50.	0.	4.50624	13.1515	13.8874	10.2672	0.002	29.1741	9.8281	-0.001864
51.	0.	4.50593	13.1516	13.8874	10.2528	0.002	29.2045	9.8383	-0.001662
52.	0.	4.50514	13.1516	13.8874	10.2383	0.002	29.2376	9.8586	-0.001398
53.	0.	4.50465	13.1517	13.8874	10.2248	0.002	29.2623	9.8688	-0.001200
54.	0.	4.50409	13.1517	13.8874	10.2117	0.002	29.2849	9.8790	-0.001004
55.	0.	4.50347	13.1517	13.8874	10.1989	0.003	29.3065	9.8892	-0.000809
56.	0.	4.50282	13.1517	13.8874	10.1865	0.003	29.3275	9.8994	-0.000615
57.	0.	4.50234	13.1517	13.8874	10.1745	0.003	29.3572	9.9096	-0.000424
58.	0.	4.50140	13.1516	13.8874	10.1622	0.003	29.3893	9.9298	-0.000172
59.	0.	4.50077	13.1515	13.8874	10.1509	0.003	29.4131	9.9400	0.000016

60.	0.	4.49987	13.1514	13.8874	10.1398	0.003	29.4264	9.9502	0.000202
61.	0.	4.49901	13.1513	13.8874	10.1296	0.003	29.4207	9.9503	0.000327
62.	0.	4.49847	13.1513	13.8874	10.1201	0.003	29.4090	9.9404	0.000390
63.	0.	4.49736	13.1512	13.8874	10.1102	0.003	29.3953	9.9405	0.000516
64.	0.	4.49653	13.1512	13.8874	10.1012	0.003	29.3738	9.9306	0.000580
65.	0.	4.49560	13.1511	13.8874	10.0922	0.003	29.3498	9.9206	0.000646
66.	0.	4.49462	13.1511	13.8874	10.0834	0.003	29.3250	9.9107	0.000713
67.	0.	4.49359	13.1510	13.8874	10.0748	0.003	29.2999	9.9008	0.000780
68.	0.	4.49252	13.1510	13.8874	10.0663	0.003	29.2749	9.8908	0.000849
69.	0.	4.49143	13.1509	13.8874	10.0580	0.003	29.2503	9.8809	0.000918
70.	0.	4.49015	13.1508	13.8874	10.0497	0.003	29.2193	9.8710	0.000989
71.	0.	4.48913	13.1507	13.8874	10.0422	0.003	29.1797	9.8510	0.000998
72.	0.	4.48799	13.1507	13.8874	10.0348	0.003	29.1374	9.8310	0.001010
73.	0.	4.48679	13.1506	13.8874	10.0275	0.003	29.0943	9.8110	0.001023
74.	0.	4.48553	13.1506	13.8874	10.0203	0.003	29.0509	9.7910	0.001038
75.	0.	4.48423	13.1505	13.8874	10.0132	0.003	29.0075	9.7711	0.001056
76.	0.	4.48289	13.1504	13.8874	10.0061	0.003	28.9645	9.7511	0.001075
77.	0.	4.48149	13.1504	13.8874	9.9991	0.003	28.9215	9.7311	0.001097
78.	0.	4.48007	13.1503	13.8874	9.9922	0.003	28.8790	9.7111	0.001120
79.	0.	4.47859	13.1502	13.8874	9.9854	0.003	28.8364	9.6911	0.001146
80.	0.	4.47706	13.1501	13.8874	9.9786	0.003	28.7941	9.6712	0.001174
81.	0.	4.47549	13.1500	13.8874	9.9720	0.003	28.7520	9.6512	0.001205
82.	0.	4.47388	13.1500	13.8874	9.9654	0.003	28.7100	9.6312	0.001237
83.	0.	4.47221	13.1499	13.8874	9.9588	0.003	28.6682	9.6113	0.001272
84.	0.	4.47051	13.1498	13.8874	9.9524	0.003	28.6268	9.5913	0.001310
85.	0.	4.46862	13.1497	13.8874	9.9460	0.003	28.5798	9.5713	0.001349
86.	0.	4.46674	13.1496	13.8874	9.9402	0.003	28.5138	9.5413	0.001326
87.	0.	4.46551	13.1496	13.8874	9.9358	0.003	28.4360	9.4912	0.001174
88.	0.	4.46361	13.1496	13.8874	9.9307	0.003	28.3548	9.4511	0.001093
89.	0.	4.46212	13.1497	13.8874	9.9262	0.003	28.2731	9.4009	0.000949
90.	0.	4.46001	13.1497	13.8874	9.9210	0.003	28.1916	9.3609	0.000879
91.	0.	4.45834	13.1497	13.8874	9.9165	0.003	28.1097	9.3107	0.000744
92.	0.	4.45606	13.1497	13.8874	9.9112	0.003	28.0280	9.2707	0.000684
93.	0.	4.45420	13.1497	13.8874	9.9067	0.003	27.9462	9.2206	0.000559
94.	0.	4.45173	13.1497	13.8874	9.9014	0.003	27.8647	9.1805	0.000511
95.	0.	4.44967	13.1498	13.8874	9.8968	0.003	27.7830	9.1304	0.000396
96.	0.	4.44698	13.1497	13.8874	9.8914	0.003	27.7021	9.0904	0.000362
97.	0.	4.44472	13.1498	13.8874	9.8868	0.003	27.6244	9.0403	0.000265
98.	0.	4.44180	13.1498	13.8874	9.8814	0.003	27.5482	9.0002	0.000250
99.	0.	4.43931	13.1498	13.8874	9.8768	0.002	27.4723	8.9502	0.000169
100.	0.	4.43614	13.1498	13.8874	9.8713	0.002	27.3968	8.9102	0.000171
101.	0.	4.43340	13.1498	13.8874	9.8666	0.002	27.3214	8.8601	0.000105
102.	0.	4.42997	13.1498	13.8874	9.8612	0.002	27.2470	8.8201	0.000125
103.	0.	4.42696	13.1498	13.8874	9.8564	0.002	27.1728	8.7701	0.000077
104.	0.	4.42338	13.1498	13.8874	9.8509	0.002	27.1041	8.7301	0.000117
105.	0.	4.42026	13.1498	13.8874	9.8426	0.002	27.0332	8.6902	0.000163
106.	0.	4.41777	13.1498	13.8874	9.8340	0.002	26.9625	8.6401	0.000140
107.	0.	4.41462	13.1498	13.8874	9.8243	0.002	26.8922	8.6002	0.000209
108.	0.	4.41201	13.1498	13.8874	9.8152	0.001	26.8262	8.5502	0.000207
109.	0.	4.40911	13.1498	13.8874	9.8047	0.001	26.8089	8.5204	0.000387
110.	0.	4.40343	13.1494	13.8874	9.7894	0.001	26.8610	8.5611	0.001148
111.	0.	4.39821	13.1489	13.8874	9.7748	0.001	26.9293	8.6019	0.001888
112.	0.	4.39376	13.1486	13.8874	9.7618	0.001	27.0037	8.6325	0.002529
113.	0.	4.38845	13.1481	13.8874	9.7500	360.000	27.0833	8.6732	0.003246
114.	0.	4.38361	13.1477	13.8874	9.7402	359.999	27.1641	8.7039	0.003871
115.	0.	4.37847	13.1473	13.8874	9.7303	359.998	27.2533	8.7446	0.004556
116.	0.	4.37333	13.1468	13.8874	9.7210	359.998	27.3367	8.7852	0.005221
117.	0.	4.36885	13.1464	13.8874	9.7128	359.998	27.4178	8.8158	0.005792
118.	0.	4.36416	13.1459	13.8874	9.7042	359.998	27.5063	8.8564	0.006419
119.	0.	4.35955	13.1454	13.8874	9.6957	359.998	27.5881	8.8970	0.007027
120.	0.	4.35555	13.1450	13.8874	9.6884	359.997	27.6670	8.9275	0.007547
121.	0.	4.35133	13.1445	13.8874	9.6805	359.996	27.7527	8.9681	0.008123
122.	0.	4.34711	13.1441	13.8874	9.6729	359.996	27.8308	9.0087	0.008682
123.	0.	4.34350	13.1437	13.8874	9.6663	359.996	27.9066	9.0392	0.009157
124.	0.	4.33954	13.1432	13.8874	9.6590	359.996	27.9819	9.0797	0.009687
125.	0.	4.33520	13.1428	13.8874	9.6524	359.996	28.0077	9.1101	0.010137
126.	0.	4.33243	13.1426	13.8874	9.6493	359.996	27.9876	9.0902	0.010240

127.	0.	4.32952	13.1425	13.8874	9.6456	359.999	27.9512	9.0703	0.010339
128.	0.	4.32692	13.1423	13.8874	9.6409	360.000	27.9151	9.0504	0.010432
129.	0.	4.32381	13.1421	13.8874	9.6355	359.999	27.8802	9.0406	0.010595
130.	0.	4.32087	13.1420	13.8874	9.6313	359.997	27.8390	9.0207	0.010696
131.	0.	4.31783	13.1418	13.8874	9.6271	359.994	27.7957	9.0008	0.010799
132.	0.	4.31472	13.1417	13.8874	9.6231	359.990	27.7517	8.9809	0.010906
133.	0.	4.31168	13.1416	13.8874	9.6191	359.986	27.7140	8.9610	0.011016
134.	0.	4.30815	13.1414	13.8874	9.6144	359.982	27.6789	8.9512	0.011197
135.	0.	4.30498	13.1413	13.8874	9.6105	359.978	27.6380	8.9313	0.011311
136.	0.	4.30172	13.1411	13.8874	9.6065	359.974	27.5954	8.9114	0.011427
137.	0.	4.29854	13.1410	13.8874	9.6027	359.970	27.5587	8.8915	0.011546
138.	0.	4.29486	13.1409	13.8874	9.5981	359.966	27.5243	8.8817	0.011738
139.	0.	4.29155	13.1408	13.8874	9.5942	359.962	27.4844	8.8619	0.011861
140.	0.	4.28816	13.1407	13.8874	9.5904	359.958	27.4433	8.8420	0.011987
141.	0.	4.28472	13.1406	13.8874	9.5866	359.953	27.4019	8.8221	0.012115
142.	0.	4.28135	13.1405	13.8874	9.5828	359.949	27.3665	8.8022	0.012248
143.	0.	4.27748	13.1403	13.8874	9.5783	359.945	27.3334	8.7925	0.012453
144.	0.	4.27397	13.1403	13.8874	9.5746	359.940	27.2948	8.7726	0.012589
145.	0.	4.27039	13.1402	13.8874	9.5709	359.936	27.2547	8.7527	0.012728
146.	0.	4.26699	13.1401	13.8874	9.5672	359.931	27.2260	8.7329	0.012871
147.	0.	4.26285	13.1399	13.8874	9.5621	359.927	27.2136	8.7332	0.013159
148.	0.	4.25900	13.1398	13.8874	9.5571	359.922	27.2147	8.7334	0.013445
149.	0.	4.25476	13.1395	13.8874	9.5515	359.917	27.2208	8.7438	0.013800
150.	0.	4.25093	13.1394	13.8874	9.5467	359.913	27.2198	8.7441	0.014080
151.	0.	4.24708	13.1392	13.8874	9.5419	359.908	27.2168	8.7444	0.014357
152.	0.	4.24363	13.1390	13.8874	9.5366	359.906	27.2212	8.7446	0.014627
153.	0.	4.23982	13.1388	13.8874	9.5303	359.905	27.2282	8.7550	0.014961
154.	0.	4.23644	13.1386	13.8874	9.5248	359.905	27.2276	8.7552	0.015221
155.	0.	4.23320	13.1385	13.8874	9.5194	359.904	27.2329	8.7555	0.015479
156.	0.	4.22953	13.1383	13.8874	9.5132	359.903	27.2404	8.7658	0.015803
157.	0.	4.22625	13.1381	13.8874	9.5078	359.903	27.2401	8.7661	0.016054
158.	0.	4.22294	13.1379	13.8874	9.5025	359.903	27.2375	8.7663	0.016303
159.	0.	4.21980	13.1378	13.8874	9.4973	359.902	27.2423	8.7666	0.016550
160.	0.	4.21624	13.1376	13.8874	9.4913	359.902	27.2497	8.7769	0.016864
161.	0.	4.21305	13.1374	13.8874	9.4862	359.902	27.2496	8.7771	0.017105
162.	0.	4.20999	13.1373	13.8874	9.4812	359.901	27.2554	8.7773	0.017345
163.	0.	4.20650	13.1371	13.8874	9.4755	359.901	27.2634	8.7877	0.017650
164.	0.	4.20338	13.1369	13.8874	9.4706	359.901	27.2636	8.7879	0.017884
165.	0.	4.20038	13.1368	13.8874	9.4658	359.900	27.2697	8.7881	0.018117
166.	0.	4.19695	13.1366	13.8874	9.4603	359.900	27.2779	8.7984	0.018415
167.	0.	4.19387	13.1365	13.8874	9.4556	359.900	27.2783	8.7986	0.018642
168.	0.	4.19074	13.1363	13.8874	9.4511	359.901	27.2765	8.7989	0.018869
169.	0.	4.18775	13.1362	13.8874	9.4468	359.902	27.2819	8.7991	0.019094
170.	0.	4.18434	13.1360	13.8874	9.4417	359.903	27.2898	8.8094	0.019384
171.	0.	4.18128	13.1359	13.8874	9.4375	359.904	27.2904	8.8096	0.019605
172.	0.	4.17762	13.1357	13.8874	9.4331	359.905	27.2595	8.8098	0.019822
173.	0.	4.17566	13.1359	13.8874	9.4326	359.907	27.1938	8.7597	0.019706
174.	0.	4.17303	13.1360	13.8874	9.4312	359.908	27.1234	8.7197	0.019663
175.	0.	4.17027	13.1361	13.8874	9.4298	359.910	27.0511	8.6796	0.019625
176.	0.	4.16742	13.1362	13.8874	9.4283	359.912	26.9785	8.6396	0.019594
177.	0.	4.16447	13.1363	13.8874	9.4267	359.913	26.9067	8.5996	0.019569
178.	0.	4.16131	13.1364	13.8874	9.4251	359.915	26.8312	8.5596	0.019551
179.	0.	4.15883	13.1366	13.8874	9.4244	359.917	26.7701	8.5095	0.019472
180.	0.	4.15525	13.1365	13.8874	9.4207	359.920	26.7626	8.4997	0.019685
181.	0.	4.15063	13.1363	13.8874	9.4139	359.922	26.8053	8.5302	0.020181
182.	0.	4.14643	13.1360	13.8874	9.4074	359.924	26.8640	8.5607	0.020665
183.	0.	4.14246	13.1357	13.8874	9.4012	359.926	26.9280	8.5911	0.021136
184.	0.	4.13819	13.1355	13.8874	9.3949	359.929	26.9702	8.6216	0.021595
185.	0.	4.13478	13.1354	13.8874	9.3910	359.931	26.9755	8.6218	0.021842
186.	0.	4.13154	13.1353	13.8874	9.3880	359.934	26.9632	8.6120	0.022018
187.	0.	4.12816	13.1353	13.8874	9.3849	359.937	26.9449	8.6022	0.022195
188.	0.	4.12485	13.1353	13.8874	9.3818	359.940	26.9303	8.5924	0.022372
189.	0.	4.12108	13.1352	13.8874	9.3780	359.942	26.9175	8.5926	0.022618
190.	0.	4.11769	13.1351	13.8874	9.3750	359.945	26.8990	8.5828	0.022794
191.	0.	4.11433	13.1351	13.8874	9.3718	359.948	26.8783	8.5730	0.022968
192.	0.	4.11104	13.1351	13.8874	9.3687	359.951	26.8629	8.5631	0.023144
193.	0.	4.10731	13.1350	13.8874	9.3648	359.954	26.8496	8.5634	0.023388

194.	0.	4.10397	13.1349	13.8874	9.3617	359.958	26.8309	8.5536	0.023562
195.	0.	4.10059	13.1349	13.8874	9.3586	359.961	26.8105	8.5437	0.023737
196.	0.	4.09718	13.1348	13.8874	9.3556	359.964	26.7896	8.5339	0.023913
197.	0.	4.09387	13.1348	13.8874	9.3526	359.967	26.7742	8.5241	0.024089
198.	0.	4.09013	13.1347	13.8874	9.3488	359.970	26.7608	8.5243	0.024333
199.	0.	4.08681	13.1346	13.8874	9.3457	359.973	26.7421	8.5145	0.024507
200.	0.	4.08344	13.1346	13.8874	9.3427	359.975	26.7217	8.5047	0.024681
201.	0.	4.08014	13.1345	13.8874	9.3398	359.978	26.7064	8.4949	0.024856
202.	0.	4.07636	13.1344	13.8874	9.3361	359.980	26.6931	8.4951	0.025100
203.	0.	4.07298	13.1343	13.8874	9.3333	359.982	26.6744	8.4853	0.025275
204.	0.	4.06956	13.1343	13.8874	9.3305	359.984	26.6541	8.4754	0.025450
205.	0.	4.06622	13.1342	13.8874	9.3278	359.987	26.6387	8.4656	0.025626
206.	0.	4.06243	13.1340	13.8874	9.3243	359.989	26.6254	8.4659	0.025870
207.	0.	4.05903	13.1340	13.8874	9.3216	359.991	26.6069	8.4560	0.026044
208.	0.	4.05568	13.1339	13.8874	9.3189	359.993	26.5864	8.4462	0.026214
209.	0.	4.05230	13.1338	13.8874	9.3161	359.996	26.5652	8.4364	0.026385
210.	0.	4.04907	13.1337	13.8874	9.3134	359.998	26.5488	8.4266	0.026552
211.	0.	4.04539	13.1335	13.8874	9.3098	0.001	26.5346	8.4268	0.026787
212.	0.	4.04214	13.1334	13.8874	9.3071	0.003	26.5151	8.4170	0.026951
213.	0.	4.03884	13.1333	13.8874	9.3044	0.006	26.4941	8.4071	0.027116
214.	0.	4.03564	13.1332	13.8874	9.3018	0.008	26.4781	8.3973	0.027281
215.	0.	4.03207	13.1330	13.8874	9.2983	0.010	26.4695	8.3975	0.027516
216.	0.	4.02860	13.1328	13.8874	9.2947	0.013	26.4635	8.3977	0.027749
217.	0.	4.02514	13.1326	13.8874	9.2913	0.016	26.4586	8.3980	0.027981
218.	0.	4.02176	13.1324	13.8874	9.2877	0.020	26.4539	8.3982	0.028211
219.	0.	4.01843	13.1322	13.8874	9.2840	0.024	26.4493	8.3984	0.028439
220.	0.	4.01513	13.1320	13.8874	9.2803	0.029	26.4448	8.3987	0.028665
221.	0.	4.01177	13.1318	13.8874	9.2769	0.033	26.4407	8.3989	0.028891
222.	0.	4.00847	13.1316	13.8874	9.2735	0.037	26.4365	8.3991	0.029114
223.	0.	4.00511	13.1314	13.8874	9.2700	0.042	26.4266	8.3993	0.029334
224.	0.	4.00223	13.1312	13.8874	9.2673	0.046	26.4146	8.3895	0.029485
225.	0.	3.99889	13.1310	13.8874	9.2640	0.049	26.4079	8.3897	0.029705
226.	0.	3.99568	13.1307	13.8874	9.2605	0.053	26.4023	8.3899	0.029922
227.	0.	3.99244	13.1305	13.8874	9.2572	0.056	26.3977	8.3901	0.030138
228.	0.	3.98922	13.1303	13.8874	9.2540	0.060	26.3933	8.3904	0.030353
229.	0.	3.98609	13.1300	13.8874	9.2505	0.064	26.3888	8.3906	0.030564
230.	0.	3.98298	13.1298	13.8874	9.2472	0.067	26.3842	8.3908	0.030773
231.	0.	3.97989	13.1296	13.8874	9.2438	0.071	26.3796	8.3910	0.030981
232.	0.	3.97680	13.1293	13.8874	9.2403	0.076	26.3697	8.3912	0.031185
233.	0.	3.97411	13.1291	13.8874	9.2375	0.081	26.3524	8.3813	0.031318
234.	0.	3.97137	13.1289	13.8874	9.2347	0.086	26.3329	8.3715	0.031452
235.	0.	3.96861	13.1287	13.8874	9.2319	0.091	26.3126	8.3616	0.031587
236.	0.	3.96583	13.1285	13.8874	9.2291	0.096	26.2921	8.3517	0.031722
237.	0.	3.96305	13.1283	13.8874	9.2263	0.101	26.2714	8.3419	0.031858
238.	0.	3.96025	13.1281	12.4477	9.2235	0.106	26.2507	8.3320	0.031994
239.	0.	3.95736	13.1278	12.4477	9.2207	0.111	26.2250	8.3221	0.032131
240.	0.	3.95493	13.1276	12.4477	9.2187	0.117	26.1970	8.3022	0.032199
241.	0.	3.95204	13.1273	12.4477	9.2158	0.122	26.1740	8.2923	0.032340
242.	0.	3.94920	13.1270	12.4477	9.2129	0.128	26.1526	8.2825	0.032480
243.	0.	3.94639	13.1267	12.4477	9.2098	0.135	26.1318	8.2726	0.032620
244.	0.	3.94358	13.1264	12.4477	9.2068	0.141	26.1113	8.2628	0.032761
245.	0.	3.94076	13.1261	12.4477	9.2038	0.148	26.0908	8.2529	0.032903
246.	0.	3.93794	13.1258	12.4477	9.2007	0.155	26.0703	8.2430	0.033045
247.	0.	3.93510	13.1254	12.4477	9.1977	0.162	26.0498	8.2332	0.033188
248.	0.	3.93230	13.1251	12.4477	9.1945	0.170	26.0296	8.2233	0.033330
249.	0.	3.92954	13.1248	12.4477	9.1913	0.178	26.0098	8.2135	0.033472
250.	0.	3.92686	13.1244	12.4477	9.1881	0.187	25.9950	8.2036	0.033614
251.	0.	3.92377	13.1240	12.4477	9.1841	0.196	25.9876	8.2038	0.033828
252.	0.	3.92074	13.1236	12.4477	9.1801	0.204	25.9825	8.2040	0.034040
253.	0.	3.91775	13.1231	12.4477	9.1761	0.212	25.9782	8.2043	0.034251
254.	0.	3.91493	13.1227	12.4477	9.1722	0.221	25.9812	8.2045	0.034459
255.	0.	3.91168	13.1222	12.4477	9.1674	0.229	25.9871	8.2147	0.034733
256.	0.	3.90894	13.1217	12.4477	9.1634	0.238	25.9863	8.2149	0.034931
257.	0.	3.90621	13.1213	12.4477	9.1593	0.247	25.9834	8.2151	0.035127
258.	0.	3.90361	13.1209	12.4477	9.1553	0.256	25.9869	8.2153	0.035321
259.	0.	3.90054	13.1203	12.4477	9.1506	0.264	25.9932	8.2256	0.035584
260.	0.	3.89794	13.1199	12.4477	9.1466	0.273	25.9928	8.2258	0.035772

261.	0.	3.89534	13.1194	12.4477	9.1426	0.282	25.9904	8.2260	0.035959
262.	0.	3.89286	13.1190	12.4477	9.1387	0.291	25.9943	8.2261	0.036145
263.	0.	3.89003	13.1185	12.4477	9.1336	0.299	26.0010	8.2364	0.036395
264.	0.	3.88771	13.1180	12.4477	9.1292	0.306	26.0009	8.2366	0.036571
265.	0.	3.88539	13.1176	12.4477	9.1247	0.313	25.9988	8.2367	0.036746
266.	0.	3.88321	13.1171	12.4477	9.1203	0.320	26.0031	8.2369	0.036919
267.	0.	3.88055	13.1166	12.4477	9.1150	0.327	26.0102	8.2472	0.037159
268.	0.	3.87836	13.1162	12.4477	9.1106	0.334	26.0106	8.2473	0.037328
269.	0.	3.87616	13.1157	12.4477	9.1061	0.341	26.0091	8.2475	0.037495
270.	0.	3.87408	13.1153	12.4477	9.1018	0.348	26.0139	8.2477	0.037661
271.	0.	3.87153	13.1148	12.4477	9.0966	0.355	26.0216	8.2579	0.037894
272.	0.	3.86944	13.1143	12.4477	9.0922	0.362	26.0225	8.2581	0.038055
273.	0.	3.86746	13.1139	12.4477	9.0879	0.369	26.0285	8.2582	0.038216
274.	0.	3.86506	13.1134	12.4477	9.0825	0.377	26.0369	8.2684	0.038442
275.	0.	3.86313	13.1130	12.4477	9.0778	0.385	26.0382	8.2686	0.038597
276.	0.	3.86134	13.1125	12.4477	9.0731	0.394	26.0445	8.2688	0.038750
277.	0.	3.85907	13.1120	12.4477	9.0676	0.402	26.0530	8.2790	0.038970
278.	0.	3.85736	13.1116	12.4477	9.0629	0.411	26.0615	8.2791	0.039120
279.	0.	3.85516	13.1111	12.4477	9.0574	0.419	26.0710	8.2893	0.039335
280.	0.	3.85340	13.1107	12.4477	9.0527	0.428	26.0734	8.2895	0.039480
281.	0.	3.85174	13.1103	12.4477	9.0481	0.438	26.0806	8.2896	0.039625
282.	0.	3.84961	13.1098	12.4477	9.0426	0.446	26.0901	8.2998	0.039835
283.	0.	3.84803	13.1094	12.4477	9.0380	0.456	26.0996	8.3000	0.039976
284.	0.	3.84595	13.1089	12.4477	9.0326	0.465	26.1100	8.3102	0.040182
285.	0.	3.84430	13.1085	12.4477	9.0280	0.474	26.1130	8.3103	0.040320
286.	0.	3.84276	13.1081	12.4477	9.0235	0.484	26.1208	8.3105	0.040456
287.	0.	3.84076	13.1077	12.4477	9.0180	0.494	26.1307	8.3207	0.040657
288.	0.	3.83930	13.1073	12.4477	9.0135	0.504	26.1406	8.3208	0.040790
289.	0.	3.83736	13.1068	12.4477	9.0082	0.514	26.1514	8.3310	0.040987
290.	0.	3.83575	13.1064	12.4477	9.0036	0.524	26.1498	8.3311	0.041116
291.	0.	3.83451	13.1061	12.4477	8.9997	0.535	26.1386	8.3212	0.041178
292.	0.	3.83321	13.1058	12.4477	8.9958	0.546	26.1245	8.3112	0.041241
293.	0.	3.83195	13.1055	12.4477	8.9920	0.557	26.1145	8.3013	0.041305
294.	0.	3.83020	13.1051	12.4477	8.9873	0.568	26.1064	8.3014	0.041436
295.	0.	3.82888	13.1047	12.4477	8.9835	0.579	26.0932	8.2915	0.041501
296.	0.	3.82751	13.1044	12.4477	8.9796	0.591	26.0785	8.2816	0.041566
297.	0.	3.82612	13.1041	12.4477	8.9758	0.603	26.0634	8.2716	0.041632
298.	0.	3.82480	13.1038	12.4477	8.9719	0.615	26.0531	8.2617	0.041700
299.	0.	3.82300	13.1034	12.4477	8.9673	0.626	26.0452	8.2618	0.041834
300.	0.	3.82164	13.1030	12.4477	8.9634	0.639	26.0322	8.2519	0.041901
301.	0.	3.82024	13.1027	12.4477	8.9595	0.651	26.0179	8.2420	0.041969
302.	0.	3.81882	13.1024	12.4477	8.9556	0.664	26.0030	8.2320	0.042038
303.	0.	3.81738	13.1020	12.4477	8.9517	0.676	25.9880	8.2221	0.042108
304.	0.	3.81600	13.1017	12.4477	8.9478	0.689	25.9780	8.2122	0.042179
305.	0.	3.81413	13.1013	12.4477	8.9431	0.701	25.9704	8.2123	0.042318
306.	0.	3.81269	13.1009	12.4477	8.9393	0.714	25.9576	8.2024	0.042390
307.	0.	3.81124	13.1006	12.4477	8.9353	0.728	25.9434	8.1925	0.042462
308.	0.	3.80977	13.1003	12.4477	8.9314	0.741	25.9287	8.1825	0.042535
309.	0.	3.80835	13.0999	12.4477	8.9275	0.755	25.9188	8.1726	0.042609
310.	0.	3.80642	13.0995	12.4477	8.9228	0.768	25.9111	8.1728	0.042752
311.	0.	3.80495	13.0992	12.4477	8.9189	0.781	25.8984	8.1628	0.042826
312.	0.	3.80344	13.0988	12.4477	8.9150	0.795	25.8843	8.1529	0.042901
313.	0.	3.80192	13.0985	12.4477	8.9111	0.809	25.8697	8.1430	0.042977
314.	0.	3.80044	13.0981	12.4477	8.9072	0.823	25.8599	8.1331	0.043055
315.	0.	3.79847	13.0977	12.4477	8.9024	0.836	25.8525	8.1332	0.043201
316.	0.	3.79695	13.0973	12.4477	8.8985	0.850	25.8400	8.1233	0.043279
317.	0.	3.79540	13.0970	12.4477	8.8946	0.864	25.8262	8.1134	0.043358
318.	0.	3.79382	13.0966	12.4477	8.8906	0.878	25.8119	8.1034	0.043437
319.	0.	3.79230	13.0963	12.4477	8.8867	0.893	25.8023	8.0935	0.043518
320.	0.	3.79028	13.0959	12.4477	8.8820	0.907	25.7951	8.0937	0.043668
321.	0.	3.78871	13.0955	12.4477	8.8780	0.921	25.7830	8.0837	0.043749
322.	0.	3.78711	13.0951	12.4477	8.8741	0.936	25.7695	8.0738	0.043830
323.	0.	3.78549	13.0948	12.4477	8.8701	0.950	25.7556	8.0639	0.043913
324.	0.	3.78385	13.0944	12.4477	8.8661	0.965	25.7415	8.0540	0.043996
325.	0.	3.78227	13.0941	12.4477	8.8622	0.980	25.7323	8.0441	0.044082
326.	0.	3.78019	13.0936	12.4477	8.8574	0.995	25.7254	8.0442	0.044236
327.	0.	3.77857	13.0933	12.4477	8.8534	1.010	25.7137	8.0343	0.044321

328.	0.	3.77692	13.0929	12.4477	8.8494	1.025	25.7005	8.0244	0.044407
329.	0.	3.77524	13.0925	12.4477	8.8454	1.041	25.6869	8.0145	0.044493
330.	0.	3.77362	13.0922	12.4477	8.8414	1.056	25.6779	8.0046	0.044582
331.	0.	3.77150	13.0917	12.4477	8.8365	1.072	25.6714	8.0047	0.044739
332.	0.	3.76984	13.0913	12.4477	8.8325	1.087	25.6600	7.9948	0.044827
333.	0.	3.76816	13.0910	12.4477	8.8285	1.103	25.6472	7.9849	0.044916
334.	0.	3.76652	13.0906	12.4477	8.8245	1.120	25.6388	7.9750	0.045006
335.	0.	3.76444	13.0902	12.4477	8.8196	1.136	25.6375	7.9752	0.045167
336.	0.	3.76237	13.0897	12.4477	8.8150	1.152	25.6386	7.9753	0.045328
337.	0.	3.76032	13.0893	12.4477	8.8103	1.169	25.6405	7.9755	0.045489
338.	0.	3.75829	13.0889	12.4477	8.8057	1.187	25.6429	7.9756	0.045649
339.	0.	3.75628	13.0884	12.4477	8.8010	1.204	25.6455	7.9758	0.045808
340.	0.	3.75428	13.0880	12.4477	8.7964	1.221	25.6483	7.9760	0.045966
341.	0.	3.75230	13.0876	12.4477	8.7918	1.239	25.6514	7.9761	0.046122
342.	0.	3.75034	13.0872	12.4477	8.7872	1.257	25.6546	7.9763	0.046278
343.	0.	3.74838	13.0867	12.4477	8.7827	1.275	25.6581	7.9764	0.046433
344.	0.	3.74643	13.0863	12.4477	8.7781	1.293	25.6618	7.9766	0.046587
345.	0.	3.74450	13.0859	12.4477	8.7736	1.311	25.6656	7.9767	0.046740
346.	0.	3.74259	13.0855	12.4477	8.7691	1.330	25.6695	7.9769	0.046892
347.	0.	3.74067	13.0851	12.4477	8.7646	1.349	25.6737	7.9770	0.047044
348.	0.	3.73875	13.0847	12.4477	8.7602	1.368	25.6779	7.9772	0.047196
349.	0.	3.73688	13.0843	12.4477	8.7557	1.388	25.6822	7.9773	0.047345
350.	0.	3.73504	13.0838	12.4477	8.7512	1.408	25.6865	7.9775	0.047493
351.	0.	3.73321	13.0834	12.4477	8.7466	1.429	25.6910	7.9776	0.047640
352.	0.	3.73141	13.0830	12.4477	8.7420	1.449	25.6956	7.9778	0.047786
353.	0.	3.72964	13.0826	12.4477	8.7374	1.470	25.7005	7.9779	0.047931
354.	0.	3.72788	13.0822	12.4477	8.7328	1.491	25.7055	7.9781	0.048075
355.	0.	3.72614	13.0819	12.4477	8.7283	1.513	25.7106	7.9782	0.048218
356.	0.	3.72439	13.0815	12.4477	8.7237	1.534	25.7160	7.9784	0.048361
357.	0.	3.72263	13.0811	12.4477	8.7193	1.557	25.7216	7.9785	0.048504
358.	0.	3.72089	13.0807	12.4477	8.7148	1.579	25.7274	7.9786	0.048646
359.	0.	3.71927	13.0803	12.4477	8.7104	1.602	25.7397	7.9788	0.048788
360.	0.	3.71724	13.0799	12.4477	8.7050	1.624	25.7551	7.9890	0.048993
361.	0.	3.71562	13.0795	12.4477	8.7006	1.647	25.7642	7.9891	0.049132
362.	0.	3.71403	13.0791	12.4477	8.6960	1.671	25.7714	7.9893	0.049267
363.	0.	3.71245	13.0787	12.4477	8.6914	1.694	25.7781	7.9894	0.049402
364.	0.	3.71088	13.0784	12.4477	8.6868	1.718	25.7848	7.9895	0.049535
365.	0.	3.70934	13.0780	12.4477	8.6822	1.743	25.7916	7.9897	0.049668
366.	0.	3.70780	13.0776	12.4477	8.6775	1.767	25.7984	7.9898	0.049799
367.	0.	3.70629	13.0773	12.4477	8.6729	1.791	25.8055	7.9899	0.049930
368.	0.	3.70479	13.0769	12.4477	8.6683	1.816	25.8126	7.9901	0.050060
369.	0.	3.70330	13.0765	12.4477	8.6637	1.841	25.8198	7.9902	0.050189
370.	0.	3.70183	13.0762	12.4477	8.6591	1.866	25.8273	7.9903	0.050318
371.	0.	3.70037	13.0758	12.4477	8.6545	1.892	25.8348	7.9904	0.050445
372.	0.	3.69892	13.0755	12.4477	8.6499	1.918	25.8423	7.9906	0.050573
373.	0.	3.69748	13.0751	12.4477	8.6453	1.944	25.8500	7.9907	0.050699
374.	0.	3.69615	13.0748	12.4477	8.6408	1.971	25.8641	7.9908	0.050825
375.	0.	3.69445	13.0744	12.4477	8.6353	1.998	25.8814	8.0010	0.051013
376.	0.	3.69324	13.0740	12.4477	8.6307	2.025	25.8986	8.0011	0.051135
377.	0.	3.69163	13.0736	12.4477	8.6251	2.052	25.9171	8.0113	0.051319
378.	0.	3.69047	13.0733	12.4477	8.6206	2.080	25.9349	8.0114	0.051439
379.	0.	3.68889	13.0729	12.4477	8.6151	2.108	25.9539	8.0216	0.051621
380.	0.	3.68766	13.0726	12.4477	8.6106	2.136	25.9657	8.0217	0.051738
381.	0.	3.68652	13.0722	12.4477	8.6061	2.164	25.9818	8.0219	0.051855
382.	0.	3.68498	13.0719	12.4477	8.6006	2.192	26.0002	8.0320	0.052032
383.	0.	3.68389	13.0715	12.4477	8.5962	2.221	26.0180	8.0321	0.052147
384.	0.	3.68239	13.0712	12.4477	8.5908	2.250	26.0370	8.0423	0.052322
385.	0.	3.68131	13.0708	12.4477	8.5865	2.278	26.0547	8.0424	0.052434
386.	0.	3.67980	13.0705	12.4477	8.5813	2.305	26.0731	8.0526	0.052607
387.	0.	3.67872	13.0702	12.4477	8.5772	2.332	26.0905	8.0527	0.052717
388.	0.	3.67725	13.0698	12.4477	8.5720	2.359	26.1089	8.0629	0.052887
389.	0.	3.67603	13.0695	12.4477	8.5678	2.385	26.1153	8.0630	0.052994
390.	0.	3.67480	13.0693	12.4477	8.5647	2.409	26.0979	8.0530	0.053038
391.	0.	3.67431	13.0692	12.4477	8.5645	2.428	26.0501	8.0129	0.052900
392.	0.	3.67411	13.0692	12.4477	8.5653	2.448	25.9924	7.9627	0.052696
393.	0.	3.67333	13.0691	12.4477	8.5650	2.468	25.9324	7.9226	0.052560
394.	0.	3.67287	13.0691	12.4477	8.5657	2.489	25.8698	7.8724	0.052363

395.	0.	3.67190	13.0690	12.4477	8.5654	2.509	25.8121	7.8322	0.052237
396.	0.	3.67079	13.0688	12.4477	8.5651	2.529	25.7506	7.7921	0.052114
397.	0.	3.67001	13.0688	12.4477	8.5658	2.549	25.6866	7.7419	0.051930
398.	0.	3.66863	13.0686	12.4477	8.5654	2.569	25.6233	7.7018	0.051819
399.	0.	3.66760	13.0685	12.4477	8.5661	2.589	25.5584	7.6516	0.051646
400.	0.	3.66595	13.0684	12.4477	8.5656	2.608	25.4943	7.6115	0.051549
401.	0.	3.66460	13.0683	12.4477	8.5664	2.627	25.4282	7.5614	0.051390
402.	0.	3.66265	13.0681	12.4477	8.5661	2.646	25.3674	7.5213	0.051312
403.	0.	3.66053	13.0679	12.4477	8.5659	2.664	25.3035	7.4812	0.051240
404.	0.	3.65874	13.0678	12.4477	8.5666	2.683	25.2369	7.4311	0.051103
405.	0.	3.65629	13.0676	12.4477	8.5662	2.701	25.1707	7.3910	0.051049
406.	0.	3.65417	13.0674	12.4477	8.5669	2.720	25.1023	7.3409	0.050929
407.	0.	3.65178	13.0672	12.4477	8.5666	2.740	25.0609	7.3009	0.050898
408.	0.	3.64752	13.0667	12.4477	8.5607	2.766	25.0671	7.3113	0.051255
409.	0.	3.64324	13.0662	12.4477	8.5539	2.793	25.1012	7.3317	0.051685
410.	0.	3.63882	13.0656	12.4477	8.5459	2.822	25.1465	7.3622	0.052175
411.	0.	3.63503	13.0651	12.4477	8.5393	2.850	25.1941	7.3826	0.052582
412.	0.	3.63100	13.0645	12.4477	8.5315	2.879	25.2447	7.4130	0.053046
413.	0.	3.62756	13.0640	12.4477	8.5250	2.907	25.2950	7.4334	0.053428
414.	0.	3.62386	13.0634	12.4477	8.5174	2.936	25.3471	7.4639	0.053866
415.	0.	3.62071	13.0630	12.4477	8.5111	2.964	25.3985	7.4842	0.054225
416.	0.	3.61731	13.0624	12.4477	8.5036	2.992	25.4515	7.5146	0.054640
417.	0.	3.61442	13.0620	12.4477	8.4974	3.020	25.5035	7.5350	0.054978
418.	0.	3.61128	13.0615	12.4477	8.4902	3.048	25.5570	7.5654	0.055371
419.	0.	3.60864	13.0611	12.4477	8.4842	3.075	25.6094	7.5857	0.055690
420.	0.	3.60574	13.0606	12.4477	8.4771	3.103	25.6631	7.6161	0.056063
421.	0.	3.60333	13.0602	12.4477	8.4712	3.129	25.7156	7.6364	0.056364
422.	0.	3.60067	13.0597	12.4477	8.4642	3.156	25.7693	7.6667	0.056718
423.	0.	3.59847	13.0593	12.4477	8.4586	3.182	25.8216	7.6870	0.057002
424.	0.	3.59603	13.0589	12.4477	8.4517	3.209	25.8750	7.7173	0.057339
425.	0.	3.59403	13.0585	12.4477	8.4462	3.235	25.9271	7.7376	0.057607
426.	0.	3.59178	13.0581	12.4477	8.4395	3.261	25.9801	7.7679	0.057928
427.	0.	3.58997	13.0577	12.4477	8.4340	3.286	26.0317	7.7882	0.058182
428.	0.	3.58791	13.0573	12.4477	8.4274	3.312	26.0842	7.8185	0.058487
429.	0.	3.58626	13.0570	12.4477	8.4221	3.337	26.1353	7.8387	0.058728
430.	0.	3.58436	13.0566	12.4477	8.4157	3.362	26.1872	7.8690	0.059020
431.	0.	3.58287	13.0562	12.4477	8.4105	3.387	26.2379	7.8892	0.059249
432.	0.	3.58114	13.0559	12.4477	8.4041	3.412	26.2897	7.9195	0.059528
433.	0.	3.57949	13.0556	12.4477	8.3988	3.434	26.3208	7.9397	0.059745
434.	0.	3.57824	13.0554	12.4477	8.3958	3.453	26.3327	7.9398	0.059847
435.	0.	3.57683	13.0552	12.4477	8.3927	3.470	26.3341	7.9399	0.059948
436.	0.	3.57567	13.0550	12.4477	8.3908	3.485	26.3306	7.9300	0.059994
437.	0.	3.57424	13.0548	12.4477	8.3878	3.502	26.3320	7.9301	0.060095
438.	0.	3.57275	13.0546	12.4477	8.3847	3.518	26.3289	7.9302	0.060196
439.	0.	3.57164	13.0545	12.4477	8.3829	3.534	26.3289	7.9202	0.060242
440.	0.	3.57001	13.0543	12.4477	8.3789	3.553	26.3387	7.9304	0.060398
441.	0.	3.56864	13.0541	12.4477	8.3759	3.569	26.3426	7.9305	0.060497
442.	0.	3.56728	13.0539	12.4477	8.3730	3.586	26.3459	7.9306	0.060596
443.	0.	3.56548	13.0537	12.4477	8.3700	3.599	26.3215	7.9307	0.060693
444.	0.	3.56483	13.0538	12.4477	8.3723	3.602	26.2545	7.8805	0.060505
445.	0.	3.56390	13.0539	12.4477	8.3746	3.603	26.1754	7.8303	0.060319
446.	0.	3.56281	13.0540	12.4477	8.3769	3.603	26.0920	7.7801	0.060135
447.	0.	3.56160	13.0541	12.4477	8.3792	3.604	26.0069	7.7300	0.059955
448.	0.	3.56040	13.0542	12.4477	8.3815	3.605	25.9209	7.6798	0.059772
449.	0.	3.55915	13.0542	12.4477	8.3836	3.607	25.8342	7.6296	0.059590
450.	0.	3.55777	13.0543	12.4477	8.3859	3.610	25.7472	7.5794	0.059412
451.	0.	3.55619	13.0544	12.4477	8.3881	3.611	25.6556	7.5292	0.059240
452.	0.	3.55489	13.0545	12.4477	8.3914	3.611	25.5613	7.4690	0.059006
453.	0.	3.55320	13.0545	12.4477	8.3935	3.614	25.4722	7.4188	0.058839
454.	0.	3.55144	13.0545	12.4477	8.3956	3.617	25.3842	7.3687	0.058675
455.	0.	3.54955	13.0546	12.4477	8.3976	3.622	25.2970	7.3185	0.058519
456.	0.	3.54751	13.0546	12.4477	8.3996	3.626	25.2089	7.2684	0.058370
457.	0.	3.54531	13.0546	12.4477	8.4016	3.631	25.1202	7.2182	0.058229
458.	0.	3.54298	13.0546	12.4477	8.4034	3.636	25.0310	7.1681	0.058094
459.	0.	3.54058	13.0546	12.4477	8.4052	3.643	24.9406	7.1180	0.057963
460.	0.	3.53807	13.0547	12.4477	8.4069	3.650	24.8489	7.0678	0.057836
461.	0.	3.53537	13.0547	12.4477	8.4085	3.657	24.7562	7.0177	0.057720

462.	0.	3.53248	13.0547	12.4477	8.4100	3.664	24.6626	6.9676	0.057614
463.	0.	3.52939	13.0547	12.4477	8.4115	3.671	24.5680	6.9175	0.057520
464.	0.	3.52611	13.0548	12.4477	8.4129	3.678	24.4728	6.8674	0.057439
465.	0.	3.52266	13.0548	12.4477	8.4141	3.685	24.3765	6.8174	0.057368
466.	0.	3.51900	13.0548	12.4477	8.4153	3.692	24.2796	6.7673	0.057310
467.	0.	3.51512	13.0549	12.4477	8.4163	3.699	24.1819	6.7173	0.057267
468.	0.	3.51100	13.0549	12.4477	8.4173	3.707	24.0836	6.6672	0.057240
469.	0.	3.50664	13.0550	12.4477	8.4182	3.714	23.9844	6.6172	0.057229
470.	0.	3.50204	13.0551	12.4477	8.4189	3.721	23.8844	6.5672	0.057235
471.	0.	3.49714	13.0552	12.4477	8.4195	3.728	23.7785	6.5173	0.057256
472.	0.	3.49260	13.0553	12.4477	8.4213	3.736	23.6728	6.4572	0.057205
473.	0.	3.48674	13.0554	12.4477	8.4203	3.746	23.5816	6.4174	0.057366
474.	0.	3.48078	13.0554	12.4477	8.4193	3.757	23.4986	6.3775	0.057545
475.	0.	3.47408	13.0555	12.4477	8.4169	3.770	23.4206	6.3478	0.057837
476.	0.	3.46779	13.0555	12.4477	8.4156	3.782	23.3360	6.3080	0.058043
477.	0.	3.46128	13.0556	12.4477	8.4143	3.793	23.2498	6.2683	0.058264
478.	0.	3.45464	13.0558	12.4477	8.4128	3.806	23.1679	6.2285	0.058503
479.	0.	3.44724	13.0558	12.4477	8.4099	3.819	23.0899	6.1989	0.058857
480.	0.	3.44027	13.0560	12.4477	8.4081	3.831	23.0055	6.1591	0.059123
481.	0.	3.43313	13.0561	12.4477	8.4062	3.843	22.9194	6.1194	0.059402
482.	0.	3.42583	13.0563	12.4477	8.4042	3.857	22.8376	6.0797	0.059701
483.	0.	3.41768	13.0564	12.4477	8.4007	3.871	22.7597	6.0501	0.060124
484.	0.	3.41000	13.0566	12.4477	8.3985	3.884	22.6750	6.0105	0.060453
485.	0.	3.40208	13.0569	12.4477	8.3962	3.897	22.5889	5.9708	0.060801
486.	0.	3.39399	13.0571	12.4477	8.3937	3.912	22.5073	5.9312	0.061171
487.	0.	3.38503	13.0573	12.4477	8.3898	3.926	22.4296	5.9017	0.061670
488.	0.	3.37655	13.0576	12.4477	8.3872	3.941	22.3452	5.8621	0.062071
489.	0.	3.36783	13.0578	12.4477	8.3844	3.954	22.2590	5.8225	0.062493
490.	0.	3.35892	13.0582	12.4477	8.3816	3.969	22.1771	5.7829	0.062937
491.	0.	3.34914	13.0584	12.4477	8.3772	3.985	22.0993	5.7535	0.063515
492.	0.	3.33983	13.0588	12.4477	8.3742	3.999	22.0145	5.7140	0.063992
493.	0.	3.33028	13.0591	12.4477	8.3711	4.014	21.9282	5.6745	0.064492
494.	0.	3.32052	13.0595	12.4477	8.3679	4.029	21.8462	5.6350	0.065015
495.	0.	3.31008	13.0598	12.4477	8.3632	4.048	21.7882	5.6057	0.065683
496.	0.	3.29800	13.0600	12.4477	8.3534	4.075	21.7561	5.6067	0.066697
497.	0.	3.28683	13.0602	12.4477	8.3450	4.103	21.7294	5.5976	0.067585
498.	0.	3.27526	13.0604	12.4477	8.3350	4.133	21.7084	5.5986	0.068567
499.	0.	3.26463	13.0606	12.4477	8.3263	4.161	21.6872	5.5894	0.069416
500.	0.	3.25358	13.0607	12.4477	8.3159	4.191	21.6698	5.5904	0.070358
501.	0.	3.24334	13.0609	12.4477	8.3072	4.220	21.6513	5.5812	0.071172
502.	0.	3.23266	13.0611	12.4477	8.2972	4.250	21.6419	5.5821	0.072083
503.	0.	3.22214	13.0612	12.4477	8.2873	4.280	21.6300	5.5830	0.072973
504.	0.	3.21225	13.0615	12.4477	8.2794	4.308	21.6105	5.5737	0.073740
505.	0.	3.20243	13.0617	12.4477	8.2716	4.336	21.5895	5.5645	0.074498
506.	0.	3.19277	13.0619	12.4477	8.2638	4.364	21.5732	5.5552	0.075246
507.	0.	3.18264	13.0620	12.4477	8.2546	4.392	21.5611	5.5561	0.076088
508.	0.	3.17315	13.0622	12.4477	8.2473	4.418	21.5425	5.5468	0.076812
509.	0.	3.16370	13.0624	12.4477	8.2402	4.443	21.5226	5.5375	0.077527
510.	0.	3.15432	13.0626	12.4477	8.2332	4.467	21.5024	5.5282	0.078234
511.	0.	3.14500	13.0628	12.4477	8.2263	4.492	21.4824	5.5189	0.078935
512.	0.	3.13576	13.0630	12.4477	8.2195	4.516	21.4624	5.5096	0.079627
513.	0.	3.12657	13.0632	12.4477	8.2128	4.540	21.4427	5.5003	0.080313
514.	0.	3.11745	13.0634	12.4477	8.2063	4.563	21.4232	5.4910	0.080992
515.	0.	3.10837	13.0636	12.4477	8.1999	4.587	21.4039	5.4817	0.081665
516.	0.	3.09940	13.0638	12.4477	8.1937	4.612	21.3895	5.4723	0.082333
517.	0.	3.08997	13.0639	12.4477	8.1860	4.638	21.3794	5.4731	0.083093
518.	0.	3.08118	13.0641	12.4477	8.1800	4.661	21.3627	5.4637	0.083739
519.	0.	3.07244	13.0643	12.4477	8.1742	4.685	21.3445	5.4544	0.084377
520.	0.	3.06376	13.0645	12.4477	8.1685	4.708	21.3261	5.4450	0.085009
521.	0.	3.05514	13.0647	12.4477	8.1628	4.731	21.3076	5.4356	0.085635
522.	0.	3.04656	13.0649	12.4477	8.1573	4.754	21.2891	5.4263	0.086255
523.	0.	3.03803	13.0651	12.4477	8.1519	4.776	21.2706	5.4169	0.086870
524.	0.	3.02957	13.0653	12.4477	8.1465	4.798	21.2522	5.4075	0.087479
525.	0.	3.02115	13.0654	12.4477	8.1413	4.819	21.2340	5.3981	0.088083
526.	0.	3.01285	13.0656	12.4477	8.1361	4.842	21.2207	5.3887	0.088683
527.	0.	3.00400	13.0657	12.4477	8.1292	4.864	21.2020	5.3894	0.089370
528.	0.	2.99679	13.0660	12.4477	8.1274	4.879	21.1614	5.3598	0.089752

529.	0.	2.98890	13.0663	12.4477	8.1237	4.893	21.1181	5.3402	0.090239
530.	0.	2.98148	13.0666	12.4477	8.1218	4.905	21.0701	5.3106	0.090633
531.	0.	2.97339	13.0668	12.4477	8.1180	4.919	21.0241	5.2911	0.091137
532.	0.	2.96580	13.0672	12.4477	8.1160	4.931	20.9747	5.2615	0.091545
533.	0.	2.95751	13.0674	12.4477	8.1122	4.944	20.9280	5.2421	0.092067
534.	0.	2.94967	13.0678	12.4477	8.1102	4.955	20.8728	5.2125	0.092492
535.	0.	2.94171	13.0681	12.4477	8.1081	4.966	20.8203	5.1829	0.092930
536.	0.	2.93303	13.0684	12.4477	8.1043	4.978	20.7716	5.1635	0.093485
537.	0.	2.92485	13.0687	12.4477	8.1023	4.989	20.7197	5.1339	0.093943
538.	0.	2.91597	13.0690	12.4477	8.0985	5.001	20.6708	5.1145	0.094517
539.	0.	2.90760	13.0694	12.4477	8.0965	5.012	20.6186	5.0850	0.094993
540.	0.	2.89853	13.0697	12.4477	8.0926	5.024	20.5693	5.0656	0.095585
541.	0.	2.88994	13.0701	12.4477	8.0905	5.033	20.5116	5.0361	0.096075
542.	0.	2.88126	13.0704	12.4477	8.0883	5.043	20.4570	5.0066	0.096579
543.	0.	2.87188	13.0708	12.4477	8.0841	5.055	20.4070	4.9872	0.097202
544.	0.	2.86303	13.0711	12.4477	8.0819	5.066	20.3543	4.9577	0.097725
545.	0.	2.85347	13.0715	12.4477	8.0777	5.078	20.3047	4.9384	0.098367
546.	0.	2.84444	13.0719	12.4477	8.0754	5.088	20.2521	4.9089	0.098906
547.	0.	2.83468	13.0722	12.4477	8.0713	5.100	20.2027	4.8896	0.099567
548.	0.	2.82542	13.0726	12.4477	8.0690	5.109	20.1450	4.8601	0.100122
549.	0.	2.81604	13.0730	12.4477	8.0667	5.119	20.0907	4.8307	0.100693
550.	0.	2.80592	13.0734	12.4477	8.0626	5.130	20.0408	4.8114	0.101387
551.	0.	2.79629	13.0738	12.4477	8.0605	5.138	19.9831	4.7820	0.101977
552.	0.	2.78654	13.0742	12.4477	8.0583	5.147	19.9287	4.7526	0.102580
553.	0.	2.77605	13.0745	12.4477	8.0543	5.157	19.8785	4.7333	0.103309
554.	0.	2.76607	13.0750	12.4477	8.0522	5.164	19.8203	4.7039	0.103930
555.	0.	2.75595	13.0754	12.4477	8.0501	5.171	19.7599	4.6746	0.104563
556.	0.	2.74573	13.0758	12.4477	8.0480	5.179	19.7041	4.6452	0.105212
557.	0.	2.73477	13.0762	12.4477	8.0439	5.189	19.6530	4.6260	0.105986
558.	0.	2.72440	13.0766	12.4477	8.0420	5.199	19.6043	4.5967	0.106655
559.	0.	2.71290	13.0769	12.4477	8.0358	5.215	19.5690	4.5876	0.107553
560.	0.	2.70204	13.0773	12.4477	8.0318	5.229	19.5337	4.5683	0.108336
561.	0.	2.69072	13.0776	12.4477	8.0258	5.247	19.5081	4.5592	0.109224
562.	0.	2.67956	13.0779	12.4477	8.0199	5.266	19.4852	4.5501	0.110099
563.	0.	2.66850	13.0782	12.4477	8.0141	5.284	19.4585	4.5410	0.110959
564.	0.	2.65810	13.0786	12.4477	8.0105	5.298	19.4275	4.5217	0.111701
565.	0.	2.64727	13.0789	12.4477	8.0048	5.316	19.4046	4.5125	0.112544
566.	0.	2.63658	13.0792	12.4477	7.9991	5.335	19.3839	4.5034	0.113375
567.	0.	2.62597	13.0795	12.4477	7.9936	5.351	19.3589	4.4942	0.114193
568.	0.	2.61597	13.0798	12.4477	7.9903	5.366	19.3294	4.4749	0.114897
569.	0.	2.60552	13.0801	12.4477	7.9850	5.383	19.3078	4.4657	0.115703
570.	0.	2.59521	13.0804	12.4477	7.9797	5.401	19.2882	4.4565	0.116497
571.	0.	2.58497	13.0807	12.4477	7.9746	5.417	19.2641	4.4473	0.117278
572.	0.	2.57530	13.0811	12.4477	7.9718	5.431	19.2355	4.4279	0.117949
573.	0.	2.56517	13.0814	12.4477	7.9669	5.447	19.2146	4.4187	0.118722
574.	0.	2.55518	13.0817	12.4477	7.9621	5.464	19.1956	4.4095	0.119483
575.	0.	2.54525	13.0819	12.4477	7.9575	5.479	19.1721	4.4002	0.120234
576.	0.	2.53590	13.0823	12.4477	7.9551	5.491	19.1439	4.3809	0.120874
577.	0.	2.52608	13.0826	12.4477	7.9506	5.507	19.1235	4.3716	0.121616
578.	0.	2.51638	13.0829	12.4477	7.9462	5.523	19.1048	4.3623	0.122348
579.	0.	2.50671	13.0832	12.4477	7.9421	5.536	19.0811	4.3531	0.123071
580.	0.	2.49761	13.0836	12.4477	7.9403	5.546	19.0527	4.3337	0.123686
581.	0.	2.48799	13.0839	12.4477	7.9362	5.558	19.0268	4.3244	0.124402
582.	0.	2.47899	13.0842	12.4477	7.9345	5.568	18.9973	4.3050	0.125009
583.	0.	2.46946	13.0845	12.4477	7.9305	5.580	18.9708	4.2957	0.125718
584.	0.	2.46051	13.0849	12.4477	7.9289	5.590	18.9411	4.2763	0.126319
585.	0.	2.45108	13.0852	12.4477	7.9251	5.603	18.9199	4.2670	0.127023
586.	0.	2.44170	13.0855	12.4477	7.9213	5.615	18.8954	4.2577	0.127719
587.	0.	2.43296	13.0859	12.4477	7.9198	5.624	18.8658	4.2383	0.128304
588.	0.	2.42369	13.0862	12.4477	7.9159	5.635	18.8389	4.2290	0.128992
589.	0.	2.41500	13.0866	12.4477	7.9145	5.644	18.8086	4.2096	0.129572
590.	0.	2.40582	13.0870	12.4477	7.9108	5.656	18.7868	4.2003	0.130255
591.	0.	2.39670	13.0873	12.4477	7.9071	5.667	18.7616	4.1909	0.130930
592.	0.	2.38815	13.0877	12.4477	7.9060	5.675	18.7317	4.1715	0.131499
593.	0.	2.37916	13.0881	12.4477	7.9024	5.689	18.7156	4.1622	0.132170
594.	0.	2.36993	13.0884	12.4477	7.8965	5.710	18.7206	4.1629	0.132931
595.	0.	2.36050	13.0887	12.4477	7.8883	5.735	18.7353	4.1738	0.133765

596.	0.	2.35190	13.0890	12.4477	7.8826	5.759	18.7495	4.1745	0.134473
597.	0.	2.34301	13.0893	12.4477	7.8748	5.783	18.7670	4.1853	0.135254
598.	0.	2.33482	13.0896	12.4477	7.8696	5.802	18.7738	4.1859	0.135913
599.	0.	2.32690	13.0899	12.4477	7.8645	5.823	18.7864	4.1866	0.136552
600.	0.	2.31875	13.0902	12.4477	7.8570	5.846	18.8044	4.1973	0.137262
601.	0.	2.31136	13.0906	12.4477	7.8519	5.868	18.8201	4.1979	0.137856
602.	0.	2.30374	13.0909	12.4477	7.8444	5.891	18.8395	4.2085	0.138520
603.	0.	2.29674	13.0912	12.4477	7.8395	5.909	18.8480	4.2091	0.139072
604.	0.	2.28997	13.0916	12.4477	7.8346	5.929	18.8621	4.2096	0.139609
605.	0.	2.28294	13.0919	12.4477	7.8274	5.951	18.8815	4.2202	0.140217
606.	0.	2.27659	13.0923	12.4477	7.8226	5.972	18.8986	4.2207	0.140718
607.	0.	2.26998	13.0926	12.4477	7.8155	5.994	18.9194	4.2313	0.141290
608.	0.	2.26394	13.0930	12.4477	7.8109	6.011	18.9290	4.2318	0.141758
609.	0.	2.25808	13.0934	12.4477	7.8063	6.030	18.9443	4.2322	0.142214
610.	0.	2.25196	13.0937	12.4477	7.7993	6.051	18.9648	4.2427	0.142742
611.	0.	2.24646	13.0941	12.4477	7.7948	6.071	18.9829	4.2432	0.143170
612.	0.	2.24069	13.0944	12.4477	7.7879	6.092	19.0047	4.2537	0.143668
613.	0.	2.23551	13.0947	12.4477	7.7835	6.111	19.0235	4.2541	0.144069
614.	0.	2.23004	13.0951	12.4477	7.7767	6.132	19.0457	4.2645	0.144540
615.	0.	2.22508	13.0954	12.4477	7.7725	6.148	19.0567	4.2649	0.144916
616.	0.	2.22028	13.0958	12.4477	7.7682	6.166	19.0732	4.2653	0.145284
617.	0.	2.21519	13.0961	12.4477	7.7615	6.186	19.0948	4.2757	0.145722
618.	0.	2.21066	13.0965	12.4477	7.7573	6.204	19.1140	4.2761	0.146069
619.	0.	2.20583	13.0968	12.4477	7.7508	6.224	19.1368	4.2865	0.146484
620.	0.	2.20148	13.0972	12.4477	7.7467	6.239	19.1482	4.2868	0.146811
621.	0.	2.19725	13.0975	12.4477	7.7427	6.256	19.1652	4.2871	0.147130
622.	0.	2.19274	13.0979	12.4477	7.7362	6.275	19.1873	4.2975	0.147519
623.	0.	2.18876	13.0982	12.4477	7.7323	6.292	19.2069	4.2978	0.147821
624.	0.	2.18447	13.0985	12.4477	7.7259	6.311	19.2300	4.3082	0.148191
625.	0.	2.18069	13.0989	12.4477	7.7220	6.329	19.2496	4.3085	0.148476
626.	0.	2.17662	13.0992	12.4477	7.7158	6.348	19.2728	4.3188	0.148829
627.	0.	2.17302	13.0995	12.4477	7.7117	6.362	19.2841	4.3191	0.149096
628.	0.	2.16949	13.0999	12.4477	7.7076	6.376	19.2923	4.3194	0.149359
629.	0.	2.16601	13.1002	12.4477	7.7035	6.389	19.2995	4.3196	0.149616
630.	0.	2.16259	13.1006	12.4477	7.6993	6.402	19.3065	4.3199	0.149869
631.	0.	2.15922	13.1009	12.4477	7.6952	6.415	19.3135	4.3201	0.150118
632.	0.	2.15591	13.1013	12.4477	7.6910	6.427	19.3205	4.3204	0.150364
633.	0.	2.15264	13.1016	12.4477	7.6869	6.440	19.3275	4.3206	0.150605
634.	0.	2.14942	13.1020	12.4477	7.6828	6.452	19.3345	4.3208	0.150843
635.	0.	2.14625	13.1023	12.4477	7.6787	6.464	19.3416	4.3211	0.151077
636.	0.	2.14312	13.1027	12.4477	7.6746	6.476	19.3487	4.3213	0.151307
637.	0.	2.14003	13.1030	12.4477	7.6706	6.489	19.3559	4.3215	0.151534
638.	0.	2.13699	13.1034	12.4477	7.6665	6.501	19.3631	4.3218	0.151758
639.	0.	2.13399	13.1038	12.4477	7.6625	6.512	19.3703	4.3220	0.151979
640.	0.	2.13104	13.1041	12.4477	7.6585	6.524	19.3776	4.3222	0.152196
641.	0.	2.12813	13.1045	12.4477	7.6545	6.536	19.3849	4.3224	0.152410
642.	0.	2.12526	13.1048	12.4477	7.6505	6.548	19.3923	4.3226	0.152621
643.	0.	2.12243	13.1052	12.4477	7.6465	6.560	19.3996	4.3228	0.152829
644.	0.	2.11964	13.1055	12.4477	7.6425	6.572	19.4069	4.3230	0.153034
645.	0.	2.11687	13.1058	12.4477	7.6386	6.583	19.4141	4.3232	0.153236
646.	0.	2.11414	13.1062	12.4477	7.6347	6.595	19.4214	4.3234	0.153436
647.	0.	2.11145	13.1065	12.4477	7.6309	6.606	19.4288	4.3236	0.153633
648.	0.	2.10880	13.1069	12.4477	7.6270	6.617	19.4361	4.3238	0.153827
649.	0.	2.10618	13.1072	12.4477	7.6231	6.628	19.4435	4.3240	0.154019
650.	0.	2.10359	13.1076	12.4477	7.6193	6.639	19.4508	4.3242	0.154208
651.	0.	2.10104	13.1079	12.4477	7.6155	6.651	19.4583	4.3244	0.154395
652.	0.	2.09851	13.1083	12.4477	7.6116	6.662	19.4658	4.3246	0.154579
653.	0.	2.09602	13.1086	12.4477	7.6078	6.673	19.4730	4.3248	0.154761
654.	0.	2.09357	13.1090	12.4477	7.6040	6.684	19.4805	4.3249	0.154940
655.	0.	2.09114	13.1093	12.4477	7.6002	6.694	19.4880	4.3251	0.155117
656.	0.	2.08875	13.1096	12.4477	7.5964	6.705	19.4958	4.3253	0.155293
657.	0.	2.08646	13.1100	12.4477	7.5926	6.719	19.5118	4.3255	0.155466
658.	0.	2.08391	13.1103	12.4477	7.5862	6.736	19.5347	4.3357	0.155702
659.	0.	2.08170	13.1106	12.4477	7.5823	6.748	19.5464	4.3359	0.155866
660.	0.	2.07957	13.1109	12.4477	7.5784	6.762	19.5639	4.3360	0.156029
661.	0.	2.07718	13.1112	12.4477	7.5720	6.778	19.5875	4.3463	0.156253
662.	0.	2.07510	13.1115	12.4477	7.5682	6.790	19.5997	4.3464	0.156408

663.	0.	2.07303	13.1119	12.4477	7.5644	6.801	19.6094	4.3466	0.156562
664.	0.	2.07104	13.1122	12.4477	7.5606	6.815	19.6263	4.3467	0.156713
665.	0.	2.06880	13.1124	12.4477	7.5543	6.831	19.6499	4.3569	0.156926
666.	0.	2.06687	13.1128	12.4477	7.5505	6.843	19.6621	4.3571	0.157070
667.	0.	2.06502	13.1131	12.4477	7.5467	6.857	19.6800	4.3572	0.157213
668.	0.	2.06291	13.1133	12.4477	7.5404	6.874	19.7044	4.3674	0.157416
669.	0.	2.06111	13.1136	12.4477	7.5366	6.885	19.7173	4.3676	0.157552
670.	0.	2.05929	13.1139	12.4477	7.5329	6.896	19.7277	4.3677	0.157688
671.	0.	2.05757	13.1142	12.4477	7.5291	6.910	19.7454	4.3678	0.157821
672.	0.	2.05559	13.1145	12.4477	7.5228	6.926	19.7698	4.3780	0.158015
673.	0.	2.05391	13.1148	12.4477	7.5191	6.938	19.7828	4.3781	0.158142
674.	0.	2.05222	13.1151	12.4477	7.5154	6.948	19.7932	4.3783	0.158268
675.	0.	2.05061	13.1154	12.4477	7.5117	6.962	19.8108	4.3784	0.158393
676.	0.	2.04874	13.1156	12.4477	7.5055	6.978	19.8351	4.3886	0.158578
677.	0.	2.04714	13.1159	12.4477	7.5020	6.989	19.8480	4.3887	0.158698
678.	0.	2.04561	13.1162	12.4477	7.4985	7.002	19.8666	4.3888	0.158817
679.	0.	2.04382	13.1164	12.4477	7.4924	7.017	19.8911	4.3990	0.158994
680.	0.	2.04231	13.1167	12.4477	7.4890	7.028	19.9040	4.3991	0.159108
681.	0.	2.04079	13.1170	12.4477	7.4856	7.038	19.9145	4.3992	0.159220
682.	0.	2.03935	13.1173	12.4477	7.4821	7.050	19.9325	4.3993	0.159332
683.	0.	2.03767	13.1175	12.4477	7.4761	7.066	19.9570	4.4095	0.159501
684.	0.	2.03626	13.1177	12.4477	7.4727	7.076	19.9702	4.4096	0.159608
685.	0.	2.03492	13.1180	12.4477	7.4692	7.089	19.9891	4.4097	0.159714
686.	0.	2.03333	13.1182	12.4477	7.4633	7.105	20.0140	4.4199	0.159877
687.	0.	2.03200	13.1185	12.4477	7.4599	7.115	20.0273	4.4200	0.159978
688.	0.	2.03073	13.1188	12.4477	7.4566	7.128	20.0465	4.4201	0.160078
689.	0.	2.02921	13.1190	12.4477	7.4507	7.143	20.0716	4.4302	0.160235
690.	0.	2.02795	13.1192	12.4477	7.4474	7.153	20.0851	4.4303	0.160332
691.	0.	2.02675	13.1195	12.4477	7.4441	7.166	20.1044	4.4304	0.160427
692.	0.	2.02531	13.1197	12.4477	7.4382	7.181	20.1296	4.4406	0.160578
693.	0.	2.02419	13.1199	12.4477	7.4349	7.195	20.1514	4.4407	0.160669
694.	0.	2.02283	13.1201	12.4477	7.4291	7.210	20.1774	4.4508	0.160816
695.	0.	2.02169	13.1203	12.4477	7.4259	7.220	20.1913	4.4509	0.160903
696.	0.	2.02060	13.1206	12.4477	7.4227	7.233	20.2108	4.4510	0.160991
697.	0.	2.01928	13.1208	12.4477	7.4171	7.247	20.2362	4.4611	0.161133
698.	0.	2.01826	13.1210	12.4477	7.4139	7.260	20.2583	4.4612	0.161216
699.	0.	2.01700	13.1212	12.4477	7.4083	7.275	20.2845	4.4714	0.161354
700.	0.	2.01594	13.1214	12.4477	7.4053	7.284	20.2985	4.4714	0.161434
701.	0.	2.01495	13.1216	12.4477	7.4023	7.295	20.3179	4.4715	0.161514
702.	0.	2.01373	13.1218	12.4477	7.3968	7.309	20.3432	4.4816	0.161648
703.	0.	2.01281	13.1220	12.4477	7.3938	7.321	20.3651	4.4817	0.161724
704.	0.	2.01164	13.1222	12.4477	7.3883	7.335	20.3912	4.4919	0.161854
705.	0.	2.01069	13.1224	12.4477	7.3854	7.343	20.4050	4.4919	0.161928
706.	0.	2.00978	13.1226	12.4477	7.3825	7.354	20.4244	4.4920	0.162001
707.	0.	2.00867	13.1228	12.4477	7.3771	7.367	20.4496	4.5021	0.162127
708.	0.	2.00784	13.1230	12.4477	7.3742	7.379	20.4713	4.5022	0.162196
709.	0.	2.00678	13.1232	12.4477	7.3688	7.393	20.4973	4.5123	0.162318
710.	0.	2.00592	13.1234	12.4477	7.3660	7.401	20.5111	4.5124	0.162385
711.	0.	2.00512	13.1236	12.4477	7.3632	7.412	20.5304	4.5125	0.162452
712.	0.	2.00410	13.1237	12.4477	7.3578	7.425	20.5556	4.5226	0.162571
713.	0.	2.00337	13.1239	12.4477	7.3549	7.436	20.5774	4.5226	0.162634
714.	0.	2.00242	13.1241	12.4477	7.3496	7.450	20.6033	4.5327	0.162749
715.	0.	2.00173	13.1242	12.4477	7.3467	7.462	20.6251	4.5328	0.162810
716.	0.	2.00082	13.1244	12.4477	7.3414	7.475	20.6509	4.5429	0.162922
717.	0.	2.00008	13.1246	12.4477	7.3386	7.483	20.6643	4.5430	0.162981
718.	0.	1.99941	13.1248	12.4477	7.3359	7.493	20.6832	4.5430	0.163039
719.	0.	1.99852	13.1249	12.4477	7.3306	7.506	20.7078	4.5531	0.163148
720.	0.	1.99783	13.1251	12.4477	7.3279	7.513	20.7207	4.5532	0.163204
721.	0.	1.99711	13.1253	12.4477	7.3253	7.520	20.7312	4.5533	0.163260
722.	0.	1.99638	13.1255	12.4477	7.3227	7.526	20.7407	4.5533	0.163316
723.	0.	1.99565	13.1257	12.4477	7.3201	7.532	20.7497	4.5534	0.163371
724.	0.	1.99492	13.1258	12.4477	7.3175	7.538	20.7588	4.5534	0.163426
725.	0.	1.99420	13.1260	12.4477	7.3150	7.544	20.7678	4.5535	0.163481
726.	0.	1.99348	13.1262	12.4477	7.3124	7.550	20.7767	4.5535	0.163536
727.	0.	1.99284	13.1264	12.4477	7.3098	7.559	20.7940	4.5536	0.163590
728.	0.	1.99202	13.1265	12.4477	7.3046	7.571	20.8180	4.5637	0.163694
729.	0.	1.99138	13.1267	12.4477	7.3020	7.578	20.8307	4.5637	0.163746

730.	0.	1.99071	13.1269	12.4477	7.2995	7.584	20.8410	4.5638	0.163798
731.	0.	1.99013	13.1270	12.4477	7.2969	7.594	20.8588	4.5638	0.163849
732.	0.	1.98935	13.1272	12.4477	7.2918	7.606	20.8830	4.5739	0.163950
733.	0.	1.98876	13.1273	12.4477	7.2892	7.613	20.8958	4.5740	0.163999
734.	0.	1.98813	13.1275	12.4477	7.2867	7.619	20.9061	4.5740	0.164048
735.	0.	1.98759	13.1277	12.4477	7.2841	7.629	20.9241	4.5741	0.164097
736.	0.	1.98684	13.1278	12.4477	7.2791	7.641	20.9485	4.5842	0.164195
737.	0.	1.98628	13.1279	12.4477	7.2766	7.649	20.9615	4.5842	0.164242
738.	0.	1.98577	13.1281	12.4477	7.2741	7.659	20.9804	4.5843	0.164289
739.	0.	1.98507	13.1282	13.8874	7.2690	7.671	21.0053	4.5944	0.164384
740.	0.	1.98454	13.1283	13.8874	7.2665	7.678	21.0186	4.5944	0.164429
741.	0.	1.98399	13.1285	13.8874	7.2641	7.685	21.0295	4.5945	0.164474
742.	0.	1.98352	13.1286	13.8874	7.2615	7.695	21.0479	4.5945	0.164518
743.	0.	1.98287	13.1287	13.8874	7.2565	7.707	21.0727	4.6046	0.164611
744.	0.	1.98238	13.1288	13.8874	7.2539	7.715	21.0861	4.6047	0.164653
745.	0.	1.98187	13.1290	13.8874	7.2514	7.722	21.0972	4.6047	0.164696
746.	0.	1.98144	13.1291	13.8874	7.2489	7.732	21.1158	4.6047	0.164738
747.	0.	1.98081	13.1292	13.8874	7.2439	7.744	21.1406	4.6148	0.164828
748.	0.	1.98036	13.1293	13.8874	7.2414	7.751	21.1540	4.6149	0.164869
749.	0.	1.97987	13.1294	13.8874	7.2390	7.757	21.1650	4.6149	0.164909
750.	0.	1.97946	13.1296	13.8874	7.2365	7.767	21.1833	4.6149	0.164950
751.	0.	1.97888	13.1296	13.8874	7.2315	7.779	21.2079	4.6250	0.165037
752.	0.	1.97846	13.1298	13.8874	7.2290	7.786	21.2211	4.6251	0.165076
753.	0.	1.97802	13.1299	13.8874	7.2266	7.793	21.2322	4.6251	0.165114
754.	0.	1.97757	13.1300	13.8874	7.2241	7.799	21.2423	4.6252	0.165153
755.	0.	1.97712	13.1301	13.8874	7.2217	7.806	21.2518	4.6252	0.165191
756.	0.	1.97666	13.1303	13.8874	7.2193	7.812	21.2610	4.6252	0.165230
757.	0.	1.97615	13.1304	13.8874	7.2169	7.815	21.2646	4.6253	0.165268
758.	0.	1.97577	13.1305	13.8874	7.2170	7.814	21.2561	4.6153	0.165258
759.	0.	1.97539	13.1307	13.8874	7.2172	7.814	21.2504	4.6053	0.165250
760.	0.	1.97481	13.1308	13.8874	7.2149	7.816	21.2498	4.6053	0.165290
761.	0.	1.97437	13.1310	13.8874	7.2150	7.814	21.2396	4.5953	0.165283
762.	0.	1.97394	13.1312	13.8874	7.2153	7.813	21.2329	4.5853	0.165276
763.	0.	1.97332	13.1313	13.8874	7.2130	7.815	21.2319	4.5853	0.165319
764.	0.	1.97283	13.1315	13.8874	7.2132	7.812	21.2213	4.5753	0.165313
765.	0.	1.97235	13.1317	13.8874	7.2135	7.812	21.2146	4.5653	0.165310
766.	0.	1.97167	13.1318	13.8874	7.2113	7.813	21.2132	4.5654	0.165355
767.	0.	1.97113	13.1320	13.8874	7.2116	7.810	21.2024	4.5554	0.165352
768.	0.	1.97059	13.1321	13.8874	7.2120	7.810	21.1951	4.5454	0.165350
769.	0.	1.96986	13.1323	13.8874	7.2098	7.811	21.1933	4.5454	0.165398
770.	0.	1.96927	13.1325	13.8874	7.2102	7.809	21.1821	4.5354	0.165396
771.	0.	1.96869	13.1326	13.8874	7.2106	7.809	21.1744	4.5254	0.165397
772.	0.	1.96792	13.1328	13.8874	7.2085	7.810	21.1722	4.5254	0.165447
773.	0.	1.96729	13.1330	13.8874	7.2089	7.808	21.1606	4.5154	0.165448
774.	0.	1.96666	13.1331	13.8874	7.2094	7.808	21.1526	4.5055	0.165450
775.	0.	1.96584	13.1333	13.8874	7.2072	7.809	21.1502	4.5055	0.165502
776.	0.	1.96517	13.1335	13.8874	7.2077	7.807	21.1384	4.4955	0.165505
777.	0.	1.96451	13.1337	13.8874	7.2082	7.807	21.1303	4.4855	0.165510
778.	0.	1.96364	13.1338	13.8874	7.2060	7.809	21.1278	4.4856	0.165565
779.	0.	1.96298	13.1340	13.8874	7.2064	7.810	21.1215	4.4756	0.165570
780.	0.	1.96211	13.1341	13.8874	7.2043	7.813	21.1199	4.4756	0.165626
781.	0.	1.96139	13.1343	13.8874	7.2047	7.811	21.1083	4.4656	0.165632
782.	0.	1.96067	13.1345	13.8874	7.2052	7.812	21.1003	4.4556	0.165640
783.	0.	1.95975	13.1347	13.8874	7.2030	7.814	21.0981	4.4557	0.165698
784.	0.	1.95907	13.1349	13.8874	7.2034	7.819	21.0971	4.4457	0.165707
785.	0.	1.95814	13.1350	13.8874	7.1986	7.834	21.1239	4.4558	0.165818
786.	0.	1.95732	13.1351	13.8874	7.1936	7.853	21.1572	4.4659	0.165925
787.	0.	1.95657	13.1352	13.8874	7.1885	7.872	21.1929	4.4760	0.166030
788.	0.	1.95579	13.1353	13.8874	7.1835	7.888	21.2213	4.4861	0.166132
789.	0.	1.95522	13.1354	13.8874	7.1810	7.901	21.2428	4.4862	0.166183
790.	0.	1.95452	13.1355	13.8874	7.1760	7.919	21.2763	4.4963	0.166283
791.	0.	1.95380	13.1356	13.8874	7.1711	7.934	21.3042	4.5064	0.166380
792.	0.	1.95330	13.1357	13.8874	7.1687	7.947	21.3260	4.5064	0.166427
793.	0.	1.95259	13.1358	13.8874	7.1637	7.961	21.3515	4.5165	0.166523
794.	0.	1.95211	13.1360	13.8874	7.1613	7.973	21.3726	4.5166	0.166567
795.	0.	1.95153	13.1360	13.8874	7.1563	7.991	21.4064	4.5267	0.166660
796.	0.	1.95092	13.1361	13.8874	7.1513	8.006	21.4347	4.5368	0.166751

797.	0.	1.95052	13.1363	13.8874	7.1488	8.018	21.4570	4.5368	0.166792
798.	0.	1.95002	13.1363	13.8874	7.1437	8.036	21.4915	4.5469	0.166880
799.	0.	1.94948	13.1364	13.8874	7.1387	8.051	21.5202	4.5570	0.166967
800.	0.	1.94915	13.1365	13.8874	7.1361	8.064	21.5429	4.5570	0.167005
801.	0.	1.94864	13.1366	13.8874	7.1311	8.078	21.5695	4.5671	0.167089
802.	0.	1.94835	13.1367	13.8874	7.1285	8.091	21.5915	4.5671	0.167125
803.	0.	1.94795	13.1368	13.8874	7.1233	8.109	21.6263	4.5772	0.167207
804.	0.	1.94753	13.1368	13.8874	7.1181	8.124	21.6555	4.5873	0.167288
805.	0.	1.94729	13.1370	13.8874	7.1156	8.137	21.6788	4.5873	0.167321
806.	0.	1.94686	13.1370	13.8874	7.1105	8.151	21.7059	4.5974	0.167400
807.	0.	1.94664	13.1371	13.8874	7.1080	8.163	21.7287	4.5974	0.167432
808.	0.	1.94631	13.1372	13.8874	7.1029	8.181	21.7642	4.6075	0.167509
809.	0.	1.94604	13.1372	13.8874	7.0977	8.200	21.8024	4.6176	0.167585
810.	0.	1.94571	13.1373	13.8874	7.0927	8.215	21.8330	4.6277	0.167660
811.	0.	1.94556	13.1374	13.8874	7.0902	8.227	21.8572	4.6277	0.167689
812.	0.	1.94531	13.1374	13.8874	7.0851	8.245	21.8928	4.6378	0.167762
813.	0.	1.94500	13.1375	13.8874	7.0802	8.259	21.9222	4.6478	0.167833
814.	0.	1.94488	13.1376	13.8874	7.0778	8.271	21.9456	4.6479	0.167859
815.	0.	1.94466	13.1376	13.8874	7.0728	8.287	21.9809	4.6579	0.167930
816.	0.	1.94440	13.1377	13.8874	7.0680	8.301	22.0103	4.6680	0.167999
817.	0.	1.94432	13.1378	13.8874	7.0655	8.313	22.0340	4.6680	0.168023
818.	0.	1.94416	13.1378	13.8874	7.0605	8.330	22.0698	4.6781	0.168090
819.	0.	1.94395	13.1378	13.8874	7.0556	8.344	22.0997	4.6882	0.168156
820.	0.	1.94391	13.1379	13.8874	7.0531	8.356	22.1238	4.6882	0.168178
821.	0.	1.94379	13.1380	13.8874	7.0482	8.373	22.1594	4.6982	0.168243
822.	0.	1.94371	13.1380	13.8874	7.0432	8.392	22.1973	4.7083	0.168307
823.	0.	1.94358	13.1380	13.8874	7.0382	8.406	22.2276	4.7184	0.168369
824.	0.	1.94362	13.1381	13.8874	7.0357	8.418	22.2516	4.7184	0.168388
825.	0.	1.94355	13.1381	13.8874	7.0308	8.435	22.2869	4.7284	0.168449
826.	0.	1.94344	13.1382	13.8874	7.0259	8.450	22.3159	4.7385	0.168509
827.	0.	1.94349	13.1382	13.8874	7.0234	8.462	22.3396	4.7385	0.168527
828.	0.	1.94347	13.1383	13.8874	7.0185	8.479	22.3748	4.7486	0.168586
829.	0.	1.94349	13.1383	13.8874	7.0135	8.497	22.4123	4.7586	0.168643
830.	0.	1.94355	13.1383	13.8874	7.0084	8.516	22.4508	4.7687	0.168700
831.	0.	1.94354	13.1383	13.8874	7.0035	8.531	22.4817	4.7788	0.168756
832.	0.	1.94366	13.1384	13.8874	7.0009	8.543	22.5066	4.7788	0.168770
833.	0.	1.94371	13.1384	13.8874	6.9960	8.561	22.5429	4.7888	0.168825
834.	0.	1.94380	13.1384	13.8874	6.9910	8.580	22.5810	4.7989	0.168879
835.	0.	1.94391	13.1384	13.8874	6.9860	8.599	22.6200	4.8089	0.168932
836.	0.	1.94395	13.1385	13.8874	6.9812	8.614	22.6510	4.8190	0.168985
837.	0.	1.94411	13.1385	13.8874	6.9787	8.625	22.6755	4.8190	0.168997
838.	0.	1.94412	13.1385	13.8874	6.9740	8.638	22.7031	4.8290	0.169049
839.	0.	1.94428	13.1386	13.8874	6.9716	8.649	22.7260	4.8291	0.169060
840.	0.	1.94428	13.1386	13.8874	6.9669	8.661	22.7524	4.8391	0.169111
841.	0.	1.94444	13.1386	13.8874	6.9646	8.671	22.7741	4.8391	0.169121
842.	0.	1.94445	13.1386	13.8874	6.9600	8.682	22.7999	4.8492	0.169172
843.	0.	1.94453	13.1387	13.8874	6.9577	8.688	22.8137	4.8492	0.169182
844.	0.	1.94468	13.1387	13.8874	6.9554	8.697	22.8335	4.8492	0.169193
845.	0.	1.94468	13.1387	13.8874	6.9508	8.708	22.8583	4.8592	0.169243
846.	0.	1.94485	13.1388	13.8874	6.9486	8.717	22.8798	4.8593	0.169252
847.	0.	1.94488	13.1388	13.8874	6.9440	8.728	22.9053	4.8693	0.169301
848.	0.	1.94505	13.1388	13.8874	6.9418	8.738	22.9268	4.8693	0.169310
849.	0.	1.94508	13.1388	13.8874	6.9373	8.749	22.9521	4.8794	0.169359
850.	0.	1.94524	13.1389	13.8874	6.9353	8.759	22.9734	4.8794	0.169368
851.	0.	1.94526	13.1389	13.8874	6.9309	8.770	22.9984	4.8894	0.169416
852.	0.	1.94543	13.1389	13.8874	6.9288	8.780	23.0193	4.8894	0.169424
853.	0.	1.94547	13.1389	13.8874	6.9245	8.791	23.0438	4.8995	0.169471
854.	0.	1.94564	13.1390	13.8874	6.9225	8.800	23.0642	4.8995	0.169479
855.	0.	1.94569	13.1390	13.8874	6.9181	8.811	23.0886	4.9095	0.169525
856.	0.	1.94588	13.1390	13.8874	6.9161	8.820	23.1089	4.9095	0.169533
857.	0.	1.94594	13.1390	13.8874	6.9118	8.831	23.1334	4.9196	0.169578
858.	0.	1.94605	13.1391	13.8874	6.9098	8.836	23.1459	4.9196	0.169586
859.	0.	1.94614	13.1391	13.8874	6.9078	8.841	23.1567	4.9196	0.169593
860.	0.	1.94622	13.1391	13.8874	6.9059	8.845	23.1665	4.9196	0.169600
861.	0.	1.94629	13.1392	13.8874	6.9040	8.849	23.1761	4.9196	0.169608
862.	0.	1.94637	13.1392	13.8874	6.9020	8.853	23.1855	4.9196	0.169615
863.	0.	1.94644	13.1392	13.8874	6.9001	8.857	23.1949	4.9196	0.169623

864.	0.	1.94652	13.1393	13.8874	6.8981	8.861	23.2044	4.9196	0.169630
865.	0.	1.94659	13.1393	13.8874	6.8962	8.864	23.2136	4.9196	0.169637
866.	0.	1.94666	13.1394	13.8874	6.8943	8.868	23.2227	4.9196	0.169645
867.	0.	1.94674	13.1394	13.8874	6.8923	8.872	23.2319	4.9197	0.169652
868.	0.	1.94681	13.1394	13.8874	6.8904	8.875	23.2410	4.9197	0.169660
869.	0.	1.94688	13.1395	13.8874	6.8884	8.879	23.2501	4.9197	0.169667
870.	0.	1.94695	13.1395	13.8874	6.8865	8.883	23.2591	4.9197	0.169675
871.	0.	1.94701	13.1396	13.8874	6.8846	8.887	23.2679	4.9197	0.169683
872.	0.	1.94706	13.1396	13.8874	6.8827	8.891	23.2761	4.9197	0.169691
873.	0.	1.94711	13.1396	13.8874	6.8809	8.894	23.2842	4.9197	0.169699
874.	0.	1.94715	13.1397	13.8874	6.8791	8.898	23.2923	4.9197	0.169708
875.	0.	1.94720	13.1397	13.8874	6.8773	8.901	23.3003	4.9197	0.169716
876.	0.	1.94724	13.1397	13.8874	6.8754	8.904	23.3082	4.9197	0.169724
877.	0.	1.94728	13.1398	13.8874	6.8736	8.907	23.3160	4.9197	0.169732
878.	0.	1.94733	13.1398	13.8874	6.8718	8.911	23.3238	4.9197	0.169740
879.	0.	1.94739	13.1399	13.8874	6.8699	8.914	23.3315	4.9197	0.169748
880.	0.	1.94744	13.1399	13.8874	6.8680	8.917	23.3391	4.9198	0.169756
881.	0.	1.94743	13.1399	13.8874	6.8662	8.916	23.3403	4.9198	0.169764
882.	0.	1.94750	13.1400	13.8874	6.8667	8.913	23.3353	4.9097	0.169735
883.	0.	1.94751	13.1401	13.8874	6.8649	8.913	23.3398	4.9097	0.169743
884.	0.	1.94752	13.1401	13.8874	6.8632	8.915	23.3457	4.9098	0.169752
885.	0.	1.94754	13.1401	13.8874	6.8614	8.916	23.3523	4.9098	0.169760
886.	0.	1.94756	13.1402	13.8874	6.8597	8.918	23.3590	4.9098	0.169769
887.	0.	1.94758	13.1402	13.8874	6.8579	8.919	23.3657	4.9098	0.169778
888.	0.	1.94760	13.1402	13.8874	6.8561	8.921	23.3722	4.9098	0.169786
889.	0.	1.94761	13.1403	13.8874	6.8544	8.922	23.3785	4.9098	0.169795
890.	0.	1.94762	13.1403	13.8874	6.8527	8.924	23.3846	4.9098	0.169804
891.	0.	1.94764	13.1404	13.8874	6.8509	8.925	23.3906	4.9098	0.169813
892.	0.	1.94759	13.1404	13.8874	6.8492	8.923	23.3904	4.9098	0.169821
893.	0.	1.94755	13.1405	13.8874	6.8500	8.916	23.3779	4.8998	0.169793
894.	0.	1.94742	13.1406	13.8874	6.8507	8.903	23.3566	4.8898	0.169765
895.	0.	1.94727	13.1407	13.8874	6.8539	8.885	23.3222	4.8697	0.169700
896.	0.	1.94714	13.1408	13.8874	6.8572	8.868	23.2904	4.8496	0.169636
897.	0.	1.94689	13.1409	13.8874	6.8581	8.853	23.2634	4.8396	0.169610
898.	0.	1.94668	13.1411	13.8874	6.8614	8.834	23.2263	4.8195	0.169546
899.	0.	1.94643	13.1412	13.8874	6.8648	8.814	23.1870	4.7995	0.169482
900.	0.	1.94614	13.1413	13.8874	6.8682	8.793	23.1467	4.7794	0.169419
901.	0.	1.94577	13.1415	13.8874	6.8716	8.769	23.1002	4.7594	0.169356
902.	0.	1.94541	13.1417	13.8874	6.8776	8.739	23.0411	4.7293	0.169254
903.	0.	1.94503	13.1419	13.8874	6.8838	8.712	22.9844	4.6992	0.169153
904.	0.	1.94450	13.1420	13.8874	6.8875	8.685	22.9327	4.6791	0.169093
905.	0.	1.94401	13.1422	13.8874	6.8937	8.656	22.8722	4.6490	0.168993
906.	0.	1.94352	13.1425	13.8874	6.9000	8.629	22.8158	4.6189	0.168894
907.	0.	1.94287	13.1426	13.8874	6.9038	8.604	22.7645	4.5988	0.168839
908.	0.	1.94230	13.1429	13.8874	6.9103	8.579	22.7082	4.5687	0.168741
909.	0.	1.94154	13.1430	13.8874	6.9143	8.554	22.6559	4.5487	0.168690
910.	0.	1.94081	13.1433	13.8874	6.9209	8.526	22.5928	4.5186	0.168595
911.	0.	1.94005	13.1435	13.8874	6.9277	8.500	22.5322	4.4885	0.168502
912.	0.	1.93909	13.1437	13.8874	6.9320	8.475	22.4767	4.4685	0.168458
913.	0.	1.93818	13.1440	13.8874	6.9389	8.447	22.4107	4.4384	0.168368
914.	0.	1.93723	13.1442	13.8874	6.9459	8.421	22.3472	4.4083	0.168281
915.	0.	1.93607	13.1445	13.8874	6.9504	8.396	22.2890	4.3882	0.168244
916.	0.	1.93512	13.1447	13.8874	6.9575	8.378	22.2369	4.3582	0.168161
917.	0.	1.93369	13.1449	13.8874	6.9568	8.371	22.2137	4.3582	0.168232
918.	0.	1.93258	13.1451	13.8874	6.9584	8.366	22.1922	4.3482	0.168249
919.	0.	1.93133	13.1452	13.8874	6.9573	8.367	22.1832	4.3483	0.168318
920.	0.	1.93012	13.1454	13.8874	6.9562	8.369	22.1774	4.3484	0.168386
921.	0.	1.92894	13.1455	13.8874	6.9550	8.372	22.1730	4.3485	0.168454
922.	0.	1.92778	13.1457	13.8874	6.9537	8.376	22.1695	4.3485	0.168521
923.	0.	1.92664	13.1458	13.8874	6.9524	8.379	22.1665	4.3486	0.168588
924.	0.	1.92553	13.1460	13.8874	6.9510	8.383	22.1641	4.3487	0.168654
925.	0.	1.92443	13.1461	13.8874	6.9496	8.386	22.1621	4.3487	0.168719
926.	0.	1.92336	13.1463	13.8874	6.9481	8.390	22.1605	4.3488	0.168784
927.	0.	1.92231	13.1464	13.8874	6.9465	8.394	22.1592	4.3488	0.168848
928.	0.	1.92125	13.1466	13.8874	6.9450	8.397	22.1582	4.3489	0.168911
929.	0.	1.92021	13.1467	13.8874	6.9434	8.401	22.1574	4.3490	0.168974
930.	0.	1.91918	13.1468	13.8874	6.9419	8.405	22.1567	4.3490	0.169037

931.	0.	1.91811	13.1470	13.8874	6.9404	8.405	22.1506	4.3491	0.169099
932.	0.	1.91722	13.1472	13.8874	6.9414	8.403	22.1380	4.3391	0.169110
933.	0.	1.91616	13.1473	13.8874	6.9398	8.406	22.1352	4.3392	0.169173
934.	0.	1.91513	13.1475	13.8874	6.9383	8.409	22.1344	4.3392	0.169236
935.	0.	1.91412	13.1476	13.8874	6.9366	8.413	22.1344	4.3393	0.169298
936.	0.	1.91311	13.1478	13.8874	6.9350	8.417	22.1348	4.3394	0.169360
937.	0.	1.91211	13.1479	13.8874	6.9334	8.421	22.1355	4.3394	0.169421
938.	0.	1.91113	13.1481	13.8874	6.9318	8.426	22.1365	4.3395	0.169482
939.	0.	1.91015	13.1482	13.8874	6.9302	8.430	22.1376	4.3395	0.169542
940.	0.	1.90917	13.1483	13.8874	6.9286	8.434	22.1390	4.3396	0.169602
941.	0.	1.90820	13.1485	13.8874	6.9270	8.438	22.1405	4.3397	0.169662
942.	0.	1.90725	13.1486	13.8874	6.9253	8.443	22.1421	4.3397	0.169721
943.	0.	1.90626	13.1488	13.8874	6.9237	8.444	22.1383	4.3398	0.169779
944.	0.	1.90545	13.1489	13.8874	6.9246	8.443	22.1279	4.3298	0.169787
945.	0.	1.90447	13.1491	13.8874	6.9230	8.446	22.1272	4.3298	0.169847
946.	0.	1.90351	13.1492	13.8874	6.9214	8.450	22.1279	4.3299	0.169906
947.	0.	1.90257	13.1494	13.8874	6.9197	8.454	22.1294	4.3300	0.169964
948.	0.	1.90164	13.1495	13.8874	6.9180	8.457	22.1311	4.3300	0.170022
949.	0.	1.90073	13.1497	13.8874	6.9162	8.461	22.1330	4.3301	0.170080
950.	0.	1.89979	13.1498	13.8874	6.9144	8.462	22.1293	4.3301	0.170137
951.	0.	1.89903	13.1500	13.8874	6.9151	8.460	22.1189	4.3201	0.170144
952.	0.	1.89804	13.1501	13.8874	6.9134	8.458	22.1123	4.3202	0.170202
953.	0.	1.89719	13.1503	13.8874	6.9142	8.452	22.0951	4.3102	0.170210
954.	0.	1.89634	13.1505	13.8874	6.9151	8.449	22.0812	4.3002	0.170219
955.	0.	1.89527	13.1507	13.8874	6.9135	8.447	22.0729	4.3003	0.170280
956.	0.	1.89436	13.1508	13.8874	6.9145	8.440	22.0548	4.2903	0.170290
957.	0.	1.89345	13.1510	13.8874	6.9155	8.436	22.0401	4.2803	0.170302
958.	0.	1.89230	13.1512	13.8874	6.9141	8.433	22.0311	4.2804	0.170366
959.	0.	1.89131	13.1514	13.8874	6.9153	8.427	22.0122	4.2704	0.170379
960.	0.	1.89033	13.1516	13.8874	6.9165	8.422	21.9969	4.2604	0.170393
961.	0.	1.88912	13.1518	13.8874	6.9151	8.419	21.9875	4.2605	0.170460
962.	0.	1.88809	13.1520	13.8874	6.9163	8.413	21.9682	4.2505	0.170475
963.	0.	1.88706	13.1522	13.8874	6.9175	8.409	21.9526	4.2405	0.170493
964.	0.	1.88581	13.1523	13.8874	6.9162	8.406	21.9431	4.2406	0.170562
965.	0.	1.88474	13.1525	13.8874	6.9174	8.400	21.9237	4.2306	0.170580
966.	0.	1.88366	13.1527	13.8874	6.9187	8.397	21.9079	4.2206	0.170599
967.	0.	1.88235	13.1529	13.8874	6.9174	8.394	21.8980	4.2207	0.170671
968.	0.	1.88122	13.1531	13.8874	6.9187	8.388	21.8783	4.2107	0.170691
969.	0.	1.88010	13.1533	13.8874	6.9200	8.384	21.8623	4.2007	0.170713
970.	0.	1.87875	13.1535	13.8874	6.9187	8.381	21.8523	4.2008	0.170788
971.	0.	1.87759	13.1537	13.8874	6.9200	8.374	21.8327	4.1908	0.170810
972.	0.	1.87643	13.1540	13.8874	6.9213	8.370	21.8169	4.1808	0.170834
973.	0.	1.87505	13.1542	13.8874	6.9200	8.368	21.8070	4.1809	0.170912
974.	0.	1.87384	13.1544	13.8874	6.9213	8.362	21.7871	4.1709	0.170936
975.	0.	1.87263	13.1546	13.8874	6.9226	8.358	21.7709	4.1610	0.170963
976.	0.	1.87120	13.1548	13.8874	6.9213	8.356	21.7606	4.1610	0.171043
977.	0.	1.86996	13.1550	13.8874	6.9225	8.350	21.7407	4.1511	0.171070
978.	0.	1.86872	13.1553	13.8874	6.9238	8.347	21.7244	4.1411	0.171100
979.	0.	1.86726	13.1555	13.8874	6.9224	8.346	21.7140	4.1412	0.171183
980.	0.	1.86598	13.1557	13.8874	6.9237	8.340	21.6938	4.1312	0.171212
981.	0.	1.86463	13.1559	13.8874	6.9250	8.333	21.6717	4.1212	0.171244
982.	0.	1.86330	13.1562	13.8874	6.9264	8.330	21.6543	4.1113	0.171277
983.	0.	1.86179	13.1564	13.8874	6.9251	8.331	21.6490	4.1114	0.171365
984.	0.	1.86033	13.1566	13.8874	6.9238	8.334	21.6465	4.1115	0.171452
985.	0.	1.85883	13.1568	13.8874	6.9224	8.334	21.6392	4.1115	0.171538
986.	0.	1.85756	13.1571	13.8874	6.9237	8.332	21.6256	4.1016	0.171570
987.	0.	1.85608	13.1573	13.8874	6.9224	8.334	21.6219	4.1017	0.171657
988.	0.	1.85464	13.1575	13.8874	6.9210	8.336	21.6201	4.1017	0.171744
989.	0.	1.85322	13.1577	13.8874	6.9195	8.340	21.6192	4.1018	0.171829
990.	0.	1.85177	13.1579	13.8874	6.9181	8.340	21.6128	4.1019	0.171913
991.	0.	1.85056	13.1581	13.8874	6.9192	8.338	21.5999	4.0919	0.171944
992.	0.	1.84912	13.1583	13.8874	6.9178	8.340	21.5968	4.0920	0.172029
993.	0.	1.84771	13.1585	13.8874	6.9163	8.343	21.5955	4.0921	0.172114
994.	0.	1.84632	13.1587	13.8874	6.9149	8.346	21.5951	4.0922	0.172198
995.	0.	1.84488	13.1589	13.8874	6.9135	8.346	21.5893	4.0923	0.172281
996.	0.	1.84368	13.1592	13.8874	6.9147	8.343	21.5768	4.0823	0.172310
997.	0.	1.84226	13.1594	13.8874	6.9133	8.345	21.5743	4.0824	0.172394

998.	0.	1.84089	13.1596	13.8874	6.9118	8.347	21.5736	4.0825	0.172477
999.	0.	1.83947	13.1598	13.8874	6.9104	8.347	21.5680	4.0826	0.172560
1000.	0.	1.83828	13.1600	13.8874	6.9116	8.345	21.5556	4.0726	0.172588
1001.	0.	1.83688	13.1602	13.8874	6.9102	8.347	21.5532	4.0727	0.172671
1002.	0.	1.83550	13.1604	13.8874	6.9088	8.350	21.5525	4.0728	0.172754
1003.	0.	1.83415	13.1607	13.8874	6.9073	8.353	21.5524	4.0728	0.172836
1004.	0.	1.83276	13.1609	13.8874	6.9059	8.352	21.5468	4.0729	0.172917
1005.	0.	1.83159	13.1611	13.8874	6.9071	8.350	21.5344	4.0629	0.172944
1006.	0.	1.83021	13.1613	13.8874	6.9057	8.351	21.5315	4.0630	0.173026
1007.	0.	1.82886	13.1615	13.8874	6.9043	8.353	21.5304	4.0631	0.173107
1008.	0.	1.82747	13.1617	13.8874	6.9029	8.352	21.5238	4.0632	0.173187
1009.	0.	1.82616	13.1620	13.8874	6.9042	8.338	21.4933	4.0532	0.173213
1010.	0.	1.82511	13.1623	13.8874	6.9112	8.312	21.4343	4.0231	0.173134
1011.	0.	1.82387	13.1627	13.8874	6.9183	8.283	21.3679	3.9931	0.173060
1012.	0.	1.82250	13.1630	13.8874	6.9257	8.253	21.2973	3.9630	0.172991
1013.	0.	1.82098	13.1634	13.8874	6.9334	8.226	21.2295	3.9329	0.172930
1014.	0.	1.81912	13.1638	13.8874	6.9384	8.200	21.1670	3.9129	0.172932
1015.	0.	1.81734	13.1642	13.8874	6.9464	8.170	21.0928	3.8829	0.172882
1016.	0.	1.81545	13.1646	13.8874	6.9545	8.143	21.0206	3.8528	0.172838
1017.	0.	1.81316	13.1650	13.8874	6.9601	8.117	20.9532	3.8329	0.172861
1018.	0.	1.81104	13.1655	13.8874	6.9686	8.091	20.8801	3.8028	0.172829
1019.	0.	1.80850	13.1659	13.8874	6.9744	8.066	20.8105	3.7829	0.172866
1020.	0.	1.80608	13.1664	13.8874	6.9832	8.037	20.7289	3.7528	0.172847
1021.	0.	1.80351	13.1669	13.8874	6.9923	8.010	20.6489	3.7228	0.172837
1022.	0.	1.80049	13.1674	13.8874	6.9987	7.984	20.5734	3.7029	0.172900
1023.	0.	1.79766	13.1679	13.8874	7.0081	7.957	20.4916	3.6729	0.172905
1024.	0.	1.79435	13.1684	13.8874	7.0148	7.931	20.4131	3.6530	0.172985
1025.	0.	1.79118	13.1690	13.8874	7.0246	7.901	20.3218	3.6230	0.173006
1026.	0.	1.78784	13.1696	13.8874	7.0347	7.873	20.2318	3.5930	0.173038
1027.	0.	1.78398	13.1702	13.8874	7.0423	7.845	20.1462	3.5732	0.173151
1028.	0.	1.78026	13.1708	13.8874	7.0530	7.813	20.0472	3.5432	0.173202
1029.	0.	1.77637	13.1715	13.8874	7.0640	7.783	19.9511	3.5133	0.173265
1030.	0.	1.77194	13.1722	13.8874	7.0723	7.754	19.8599	3.4934	0.173413
1031.	0.	1.76770	13.1729	13.8874	7.0837	7.721	19.7563	3.4635	0.173497
1032.	0.	1.76323	13.1736	13.8874	7.0955	7.687	19.6485	3.4336	0.173594
1033.	0.	1.75855	13.1744	13.8874	7.1075	7.653	19.5378	3.4037	0.173705
1034.	0.	1.75364	13.1752	13.8874	7.1198	7.619	19.4247	3.3738	0.173830
1035.	0.	1.74852	13.1760	13.8874	7.1323	7.586	19.3093	3.3440	0.173971
1036.	0.	1.74318	13.1768	13.8874	7.1451	7.552	19.1928	3.3141	0.174127
1037.	0.	1.73762	13.1777	13.8874	7.1582	7.519	19.0753	3.2843	0.174300
1038.	0.	1.73183	13.1786	13.8874	7.1715	7.487	18.9569	3.2545	0.174489
1039.	0.	1.72583	13.1796	13.8874	7.1851	7.455	18.8369	3.2247	0.174695
1040.	0.	1.71960	13.1805	13.8874	7.1990	7.423	18.7153	3.1949	0.174919
1041.	0.	1.71315	13.1815	13.8874	7.2130	7.391	18.5927	3.1652	0.175160
1042.	0.	1.70648	13.1826	13.8874	7.2273	7.359	18.4692	3.1354	0.175420
1043.	0.	1.69959	13.1837	13.8874	7.2417	7.328	18.3450	3.1057	0.175697
1044.	0.	1.69250	13.1848	13.8874	7.2563	7.297	18.2199	3.0760	0.175994
1045.	0.	1.68519	13.1859	13.8874	7.2711	7.266	18.0939	3.0463	0.176309
1046.	0.	1.67767	13.1871	13.8874	7.2861	7.235	17.9673	3.0166	0.176644
1047.	0.	1.66993	13.1883	13.8874	7.3011	7.205	17.8399	2.9870	0.176999
1048.	0.	1.66372	13.1896	13.8874	7.3154	7.325	18.0309	2.9574	0.177403
1049.	0.	1.63860	13.1891	13.8874	7.2295	7.428	18.2485	3.2808	0.180817
1050.	0.	1.64582	13.1911	13.8874	7.3044	7.255	17.8680	3.0189	0.178925
1051.	0.	1.64734	13.1932	13.8874	7.3707	7.075	17.3989	2.8175	0.177512
1052.	0.	1.64077	13.1952	13.8874	7.4205	6.921	16.9562	2.6971	0.177118
1053.	0.	1.63204	13.1975	13.8874	7.4732	6.761	16.4889	2.5769	0.176876
1054.	0.	1.62256	13.2003	13.8874	7.5397	6.590	15.9683	2.4265	0.176467
1055.	0.	1.60864	13.2033	13.8874	7.6070	6.399	15.4097	2.2865	0.176524
1056.	0.	1.59235	13.2070	13.8874	7.6841	6.192	14.7775	2.1267	0.176680
1057.	0.	1.57264	13.2113	13.8874	7.7626	5.982	14.0975	1.9572	0.177204
1058.	0.	1.54792	13.2164	13.8874	7.8352	5.803	13.4477	1.7885	0.178538
1059.	0.	1.50986	13.2217	13.8874	7.8788	5.691	12.9665	1.6926	0.182638
1060.	0.	1.46287	13.2270	13.8874	7.9006	5.630	12.6231	1.6587	0.188734
1061.	0.	1.41783	13.2322	13.8874	7.9212	5.576	12.3227	1.6246	0.194571
1062.	0.	1.37698	13.2374	13.8874	7.9467	5.494	11.9878	1.5697	0.199680
1063.	0.	1.34099	13.2430	13.8874	7.9815	5.379	11.5980	1.4739	0.203927
1064.	0.	1.30240	13.2489	13.8874	8.0123	5.286	11.2457	1.3788	0.208849

1065.	0.	1.25398	13.2545	13.8874	8.0228	5.250	11.0113	1.3460	0.215968
1066.	0.	1.20468	13.2594	13.8874	8.0247	5.254	10.8581	1.3433	0.223324
1067.	0.	1.16074	13.2637	13.8874	8.0279	5.289	10.7823	1.3397	0.229669
1068.	0.	1.11859	13.2673	13.8874	8.0230	5.349	10.7767	1.3657	0.235690
1069.	0.	1.08381	13.2703	13.8874	8.0222	5.362	10.6924	1.3803	0.240337
1070.	0.	1.06059	13.2734	13.8874	8.0444	5.292	10.4572	1.3230	0.242982
1071.	0.	1.04088	13.2769	13.8874	8.0775	5.175	10.1429	1.2250	0.245035
1072.	0.	1.01609	13.2806	13.8874	8.1038	5.104	9.8949	1.1381	0.248080
1073.	0.	0.97836	13.2841	13.8874	8.1046	5.099	9.7595	1.1336	0.253601
1074.	0.	0.94383	13.2874	13.8874	8.1065	5.075	9.6098	1.1285	0.258482
1075.	0.	0.91864	13.2910	13.8874	8.1312	4.989	9.3671	1.0617	0.261694
1076.	0.	0.89464	13.2954	13.8874	8.1659	4.941	9.1737	0.9648	0.264794
1077.	0.	0.85230	13.2993	13.8874	8.1585	4.979	9.1382	0.9914	0.271387
1078.	0.	0.81909	13.3030	13.8874	8.1580	5.015	9.1009	0.9962	0.276173
1079.	0.	0.79130	13.3065	13.8874	8.1631	5.032	9.0417	0.9900	0.279982
1080.	0.	0.76739	13.3100	13.8874	8.1736	5.040	8.9758	0.9731	0.283145
1081.	0.	0.74399	13.3134	13.8874	8.1817	5.027	8.8883	0.9662	0.286218
1082.	0.	0.72549	13.3171	13.8874	8.2034	4.986	8.7657	0.9285	0.288509
1083.	0.	0.70645	13.3210	13.8874	8.2263	4.935	8.6370	0.8909	0.290920
1084.	0.	0.68657	13.3255	13.8874	8.2514	4.877	8.5048	0.8535	0.293492
1085.	0.	0.66578	13.3304	13.8874	8.2807	4.851	8.4152	0.8163	0.296251
1086.	0.	0.64080	13.3352	13.8874	8.2883	4.889	8.4373	0.8197	0.299724
1087.	0.	0.61710	13.3397	13.8874	8.2831	4.915	8.4382	0.8429	0.302902
1088.	0.	0.60204	13.3443	13.8874	8.3051	4.833	8.2931	0.8147	0.304710
1089.	0.	0.59188	13.3506	13.8874	8.3694	4.655	8.0418	0.7258	0.305757
1090.	0.	0.57738	13.3603	13.8874	8.4307	4.422	7.7126	0.6276	0.307572
1091.	0.	0.52951	13.3798	13.8874	8.8638	4.000	7.6910	0.5352	0.315151
1092.	0.	0.48010	13.4057	13.8874	9.1613	3.654	7.6972	0.4836	0.323633
1093.	0.	0.43912	13.4326	13.8874	9.2711	3.452	7.6370	0.4507	0.330729
1094.	0.	0.40283	13.4603	13.8874	9.3554	3.295	7.5938	0.4170	0.336953
1095.	0.	0.37149	13.4865	13.8874	9.3902	3.283	7.6220	0.3824	0.342352
1096.	0.	0.34197	13.5103	13.8874	9.5270	3.575	7.6605	0.3475	0.347485

PART 3: WHAFIS

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WHAFIS input:  YK-99.dat
WHAFIS output: YK-99.out
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PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-99
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
1000
2000
3000
4000
5000
6000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-99.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-99.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-27.459	1.000	1.000	9.093	22.964	13.189	56.140	0.039	0.000
OF	3.000	-27.343	0.000	9.093	0.000	0.000	0.000	0.000	0.039	0.000
OF	4.000	-27.304	0.000	9.093	0.000	0.000	0.000	0.000	0.039	0.000
OF	9.000	-27.110	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
OF	10.000	-27.071	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
OF	15.000	-26.877	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
OF	16.000	-26.838	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
OF	21.000	-26.644	0.000	9.095	0.000	0.000	0.000	0.000	0.039	0.000
OF	22.000	-26.605	0.000	9.095	0.000	0.000	0.000	0.000	0.048	0.000
OF	27.000	-26.357	0.000	9.096	0.000	0.000	0.000	0.000	0.051	0.000
OF	28.000	-26.301	0.000	9.096	0.000	0.000	0.000	0.000	0.056	0.000
OF	33.000	-26.019	0.000	9.097	0.000	0.000	0.000	0.000	0.056	0.000
OF	34.000	-25.962	0.000	9.098	0.000	0.000	0.000	0.000	0.056	0.000
OF	39.000	-25.680	0.000	9.099	0.000	0.000	0.000	0.000	0.056	0.000
OF	40.000	-25.624	0.000	9.099	0.000	0.000	0.000	0.000	0.056	0.000
OF	45.000	-25.341	0.000	9.101	0.000	0.000	0.000	0.000	0.056	0.000
OF	46.000	-25.285	0.000	9.101	0.000	0.000	0.000	0.000	0.056	0.000
OF	51.000	-25.003	0.000	9.102	0.000	0.000	0.000	0.000	0.056	0.000
OF	52.000	-24.946	0.000	9.102	0.000	0.000	0.000	0.000	0.056	0.000
OF	57.000	-24.664	0.000	9.104	0.000	0.000	0.000	0.000	0.056	0.000
OF	58.000	-24.608	0.000	9.104	0.000	0.000	0.000	0.000	0.056	0.000
OF	63.000	-24.326	0.000	9.105	0.000	0.000	0.000	0.000	0.056	0.000
OF	64.000	-24.269	0.000	9.105	0.000	0.000	0.000	0.000	0.056	0.000
OF	69.000	-23.987	0.000	9.107	0.000	0.000	0.000	0.000	0.056	0.000
OF	70.000	-23.931	0.000	9.107	0.000	0.000	0.000	0.000	0.056	0.000
OF	75.000	-23.649	0.000	9.108	0.000	0.000	0.000	0.000	0.056	0.000
OF	76.000	-23.592	0.000	9.109	0.000	0.000	0.000	0.000	0.056	0.000
OF	81.000	-23.310	0.000	9.110	0.000	0.000	0.000	0.000	0.056	0.000
OF	82.000	-23.253	0.000	9.110	0.000	0.000	0.000	0.000	0.056	0.000
OF	87.000	-22.971	0.000	9.111	0.000	0.000	0.000	0.000	0.056	0.000
OF	88.000	-22.915	0.000	9.112	0.000	0.000	0.000	0.000	0.056	0.000
OF	93.000	-22.633	0.000	9.113	0.000	0.000	0.000	0.000	0.056	0.000
OF	94.000	-22.576	0.000	9.113	0.000	0.000	0.000	0.000	-0.009	0.000
OF	193.600	-23.510	0.000	9.093	0.000	0.000	0.000	0.000	-0.009	0.000
OF	196.800	-23.548	0.000	9.094	0.000	0.000	0.000	0.000	-0.009	0.000
OF	200.100	-23.565	0.000	9.094	0.000	0.000	0.000	0.000	0.002	0.000
OF	203.400	-23.534	0.000	9.094	0.000	0.000	0.000	0.000	0.009	0.000
OF	206.700	-23.503	0.000	9.094	0.000	0.000	0.000	0.000	0.009	0.000
OF	210.000	-23.472	0.000	9.095	0.000	0.000	0.000	0.000	0.009	0.000
OF	213.300	-23.440	0.000	9.095	0.000	0.000	0.000	0.000	0.010	0.000
OF	216.500	-23.409	0.000	9.095	0.000	0.000	0.000	0.000	0.009	0.000
OF	219.800	-23.378	0.000	9.095	0.000	0.000	0.000	0.000	0.009	0.000
OF	223.100	-23.347	0.000	9.096	0.000	0.000	0.000	0.000	0.009	0.000
OF	226.400	-23.316	0.000	9.096	0.000	0.000	0.000	0.000	0.009	0.000
OF	229.700	-23.285	0.000	9.096	0.000	0.000	0.000	0.000	0.012	0.000
OF	232.900	-23.237	0.000	9.096	0.000	0.000	0.000	0.000	0.018	0.000
OF	236.200	-23.170	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
OF	239.500	-23.103	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
OF	242.800	-23.037	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
OF	246.100	-22.970	0.000	9.096	0.000	0.000	0.000	0.000	0.021	0.000
OF	249.300	-22.904	0.000	9.096	0.000	0.000	0.000	0.000	0.021	0.000
OF	252.600	-22.837	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
OF	255.900	-22.770	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
OF	259.200	-22.704	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
OF	262.500	-22.637	0.000	9.097	0.000	0.000	0.000	0.000	0.021	0.000
OF	265.700	-22.570	0.000	9.097	0.000	0.000	0.000	0.000	0.021	0.000
OF	269.000	-22.504	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
OF	272.300	-22.437	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
OF	275.600	-22.370	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
OF	278.900	-22.304	0.000	9.097	0.000	0.000	0.000	0.000	0.026	0.000
OF	282.200	-22.196	0.000	9.097	0.000	0.000	0.000	0.000	0.039	0.000
OF	285.400	-22.049	0.000	9.097	0.000	0.000	0.000	0.000	0.045	0.000
OF	288.700	-21.902	0.000	9.096	0.000	0.000	0.000	0.000	0.045	0.000
OF	292.000	-21.755	0.000	9.096	0.000	0.000	0.000	0.000	0.045	0.000
OF	295.300	-21.608	0.000	9.096	0.000	0.000	0.000	0.000	0.045	0.000
OF	298.600	-21.461	0.000	9.095	0.000	0.000	0.000	0.000	0.045	0.000
OF	301.800	-21.314	0.000	9.095	0.000	0.000	0.000	0.000	0.045	0.000
OF	305.100	-21.166	0.000	9.095	0.000	0.000	0.000	0.000	0.045	0.000
OF	308.400	-21.019	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
OF	311.700	-20.872	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
OF	315.000	-20.725	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
OF	318.200	-20.578	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
OF	321.500	-20.431	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
OF	324.800	-20.284	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	328.100	-20.137	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	331.400	-19.989	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	334.600	-19.842	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	337.900	-19.695	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	341.200	-19.548	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	344.500	-19.401	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
OF	351.000	-19.107	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
OF	354.300	-18.960	0.000	9.094	0.000	0.000	0.000	0.000	0.036	0.000
OF	357.600	-18.867	0.000	9.094	0.000	0.000	0.000	0.000	-0.004	0.000
OF	360.900	-18.987	0.000	9.097	0.000	0.000	0.000	0.000	-0.036	0.000
OF	364.200	-19.107	0.000	9.099	0.000	0.000	0.000	0.000	-0.036	0.000
OF	367.500	-19.226	0.000	9.101	0.000	0.000	0.000	0.000	-0.037	0.000
OF	370.700	-19.346	0.000	9.104	0.000	0.000	0.000	0.000	-0.037	0.000
OF	374.000	-19.465	0.000	9.106	0.000	0.000	0.000	0.000	-0.036	0.000
OF	377.300	-19.585	0.000	9.108	0.000	0.000	0.000	0.000	-0.036	0.000
OF	380.600	-19.705	0.000	9.110	0.000	0.000	0.000	0.000	-0.036	0.000
OF	383.900	-19.824	0.000	9.112	0.000	0.000	0.000	0.000	-0.037	0.000
OF	387.100	-19.944	0.000	9.114	0.000	0.000	0.000	0.000	-0.037	0.000
OF	390.400	-20.064	0.000	9.116	0.000	0.000	0.000	0.000	-0.036	0.000

OF	393.700	-20.183	0.000	9.118	0.000	0.000	0.000	0.000	-0.036	0.000
OF	397.000	-20.303	0.000	9.120	0.000	0.000	0.000	0.000	-0.036	0.000
OF	400.300	-20.422	0.000	9.121	0.000	0.000	0.000	0.000	-0.037	0.000
OF	403.500	-20.542	0.000	9.123	0.000	0.000	0.000	0.000	-0.037	0.000
OF	406.800	-20.662	0.000	9.125	0.000	0.000	0.000	0.000	-0.032	0.000
OF	410.100	-20.752	0.000	9.126	0.000	0.000	0.000	0.000	-0.005	0.000
OF	413.400	-20.694	0.000	9.126	0.000	0.000	0.000	0.000	0.018	0.000
OF	416.700	-20.636	0.000	9.127	0.000	0.000	0.000	0.000	0.018	0.000
OF	419.900	-20.577	0.000	9.127	0.000	0.000	0.000	0.000	0.018	0.000
OF	423.200	-20.519	0.000	9.128	0.000	0.000	0.000	0.000	0.018	0.000
OF	426.500	-20.461	0.000	9.128	0.000	0.000	0.000	0.000	0.018	0.000
OF	429.800	-20.402	0.000	9.128	0.000	0.000	0.000	0.000	0.018	0.000
OF	433.100	-20.344	0.000	9.129	0.000	0.000	0.000	0.000	0.018	0.000
OF	436.400	-20.286	0.000	9.129	0.000	0.000	0.000	0.000	0.018	0.000
OF	439.600	-20.228	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
OF	442.900	-20.169	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
OF	446.200	-20.111	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
OF	449.500	-20.053	0.000	9.131	0.000	0.000	0.000	0.000	0.018	0.000
OF	452.800	-19.994	0.000	9.131	0.000	0.000	0.000	0.000	0.018	0.000
OF	456.000	-19.936	0.000	9.132	0.000	0.000	0.000	0.000	0.018	0.000
OF	459.300	-19.878	0.000	9.132	0.000	0.000	0.000	0.000	0.018	0.000
OF	462.600	-19.819	0.000	9.133	0.000	0.000	0.000	0.000	0.018	0.000
OF	465.900	-19.761	0.000	9.133	0.000	0.000	0.000	0.000	0.018	0.000
OF	469.200	-19.703	0.000	9.134	0.000	0.000	0.000	0.000	0.018	0.000
OF	472.400	-19.645	0.000	9.134	0.000	0.000	0.000	0.000	0.018	0.000
OF	475.700	-19.586	0.000	9.135	0.000	0.000	0.000	0.000	0.018	0.000
OF	479.000	-19.528	0.000	9.135	0.000	0.000	0.000	0.000	0.011	0.000
OF	482.300	-19.516	0.000	9.136	0.000	0.000	0.000	0.000	0.000	0.000
OF	485.600	-19.526	0.000	9.137	0.000	0.000	0.000	0.000	-0.003	0.000
OF	488.800	-19.535	0.000	9.138	0.000	0.000	0.000	0.000	-0.003	0.000
OF	492.100	-19.545	0.000	9.139	0.000	0.000	0.000	0.000	-0.003	0.000
OF	495.400	-19.554	0.000	9.140	0.000	0.000	0.000	0.000	-0.003	0.000
OF	498.700	-19.564	0.000	9.141	0.000	0.000	0.000	0.000	-0.003	0.000
OF	502.000	-19.573	0.000	9.142	0.000	0.000	0.000	0.000	-0.003	0.000
OF	505.200	-19.583	0.000	9.143	0.000	0.000	0.000	0.000	-0.003	0.000
OF	508.500	-19.592	0.000	9.144	0.000	0.000	0.000	0.000	-0.003	0.000
OF	511.800	-19.602	0.000	9.145	0.000	0.000	0.000	0.000	-0.003	0.000
OF	515.100	-19.611	0.000	9.146	0.000	0.000	0.000	0.000	-0.003	0.000
OF	518.400	-19.621	0.000	9.146	0.000	0.000	0.000	0.000	-0.003	0.000
OF	521.700	-19.630	0.000	9.147	0.000	0.000	0.000	0.000	-0.003	0.000
OF	524.900	-19.640	0.000	9.148	0.000	0.000	0.000	0.000	-0.003	0.000
OF	528.200	-19.649	0.000	9.149	0.000	0.000	0.000	0.000	-0.003	0.000
OF	531.500	-19.659	0.000	9.150	0.000	0.000	0.000	0.000	-0.003	0.000
OF	534.800	-19.668	0.000	9.151	0.000	0.000	0.000	0.000	-0.003	0.000
OF	538.100	-19.678	0.000	9.151	0.000	0.000	0.000	0.000	-0.003	0.000
OF	541.300	-19.687	0.000	9.152	0.000	0.000	0.000	0.000	-0.003	0.000
OF	544.600	-19.697	0.000	9.153	0.000	0.000	0.000	0.000	-0.003	0.000
OF	547.900	-19.706	0.000	9.154	0.000	0.000	0.000	0.000	-0.003	0.000
OF	551.200	-19.716	0.000	9.155	0.000	0.000	0.000	0.000	-0.003	0.000
OF	554.500	-19.725	0.000	9.156	0.000	0.000	0.000	0.000	-0.003	0.000
OF	557.700	-19.735	0.000	9.156	0.000	0.000	0.000	0.000	-0.003	0.000
OF	561.000	-19.744	0.000	9.157	0.000	0.000	0.000	0.000	0.000	0.000
OF	564.300	-19.733	0.000	9.158	0.000	0.000	0.000	0.000	0.022	0.000
OF	567.600	-19.596	0.000	9.158	0.000	0.000	0.000	0.000	0.041	0.000
OF	570.900	-19.459	0.000	9.157	0.000	0.000	0.000	0.000	0.042	0.000
OF	574.100	-19.322	0.000	9.157	0.000	0.000	0.000	0.000	0.042	0.000
OF	577.400	-19.186	0.000	9.157	0.000	0.000	0.000	0.000	0.041	0.000
OF	584.000	-18.912	0.000	9.157	0.000	0.000	0.000	0.000	0.041	0.000
OF	587.300	-18.775	0.000	9.157	0.000	0.000	0.000	0.000	0.027	0.000
OF	590.500	-18.737	0.000	9.157	0.000	0.000	0.000	0.000	-0.009	0.000
OF	593.800	-18.832	0.000	9.159	0.000	0.000	0.000	0.000	-0.029	0.000
OF	597.100	-18.927	0.000	9.161	0.000	0.000	0.000	0.000	-0.029	0.000
OF	600.400	-19.022	0.000	9.162	0.000	0.000	0.000	0.000	-0.029	0.000
OF	603.700	-19.117	0.000	9.164	0.000	0.000	0.000	0.000	-0.014	0.000
OF	607.000	-19.111	0.000	9.165	0.000	0.000	0.000	0.000	0.005	0.000
OF	610.200	-19.086	0.000	9.165	0.000	0.000	0.000	0.000	0.008	0.000
OF	613.500	-19.061	0.000	9.166	0.000	0.000	0.000	0.000	0.008	0.000
OF	616.800	-19.035	0.000	9.166	0.000	0.000	0.000	0.000	0.008	0.000
OF	620.100	-19.010	0.000	9.167	0.000	0.000	0.000	0.000	0.008	0.000
OF	623.400	-18.985	0.000	9.168	0.000	0.000	0.000	0.000	0.008	0.000
OF	626.600	-18.960	0.000	9.168	0.000	0.000	0.000	0.000	0.008	0.000
OF	629.900	-18.935	0.000	9.169	0.000	0.000	0.000	0.000	0.008	0.000
OF	633.200	-18.909	0.000	9.170	0.000	0.000	0.000	0.000	0.008	0.000
OF	636.500	-18.884	0.000	9.170	0.000	0.000	0.000	0.000	0.008	0.000
OF	639.800	-18.859	0.000	9.171	0.000	0.000	0.000	0.000	0.008	0.000
OF	643.000	-18.834	0.000	9.171	0.000	0.000	0.000	0.000	0.008	0.000
OF	646.300	-18.809	0.000	9.172	0.000	0.000	0.000	0.000	0.008	0.000
OF	649.600	-18.783	0.000	9.173	0.000	0.000	0.000	0.000	0.008	0.000
OF	652.900	-18.758	0.000	9.173	0.000	0.000	0.000	0.000	0.008	0.000
OF	659.400	-18.708	0.000	9.174	0.000	0.000	0.000	0.000	0.008	0.000
OF	662.700	-18.683	0.000	9.175	0.000	0.000	0.000	0.000	0.008	0.000
OF	669.300	-18.632	0.000	9.176	0.000	0.000	0.000	0.000	0.008	0.000
OF	672.600	-18.607	0.000	9.177	0.000	0.000	0.000	0.000	0.008	0.000
OF	679.100	-18.557	0.000	9.178	0.000	0.000	0.000	0.000	0.008	0.000
OF	682.400	-18.531	0.000	9.179	0.000	0.000	0.000	0.000	0.008	0.000
OF	689.000	-18.481	0.000	9.180	0.000	0.000	0.000	0.000	0.008	0.000
OF	692.300	-18.456	0.000	9.181	0.000	0.000	0.000	0.000	0.008	0.000
OF	698.800	-18.405	0.000	9.182	0.000	0.000	0.000	0.000	0.008	0.000
OF	702.100	-18.380	0.000	9.182	0.000	0.000	0.000	0.000	0.004	0.000
OF	708.700	-18.370	0.000	9.184	0.000	0.000	0.000	0.000	0.001	0.000
OF	711.900	-18.368	0.000	9.185	0.000	0.000	0.000	0.000	0.001	0.000
OF	718.500	-18.362	0.000	9.186	0.000	0.000	0.000	0.000	0.001	0.000
OF	721.800	-18.359	0.000	9.187	0.000	0.000	0.000	0.000	0.001	0.000
OF	728.300	-18.354	0.000	9.188	0.000	0.000	0.000	0.000	0.001	0.000
OF	731.600	-18.351	0.000	9.189	0.000	0.000	0.000	0.000	0.001	0.000
OF	738.200	-18.346	0.000	9.190	0.000	0.000	0.000	0.000	0.001	0.000
OF	741.500	-18.343	0.000	9.191	0.000	0.000	0.000	0.000	0.001	0.000
OF	748.000	-18.338	0.000	9.192	0.000	0.000	0.000	0.000	0.001	0.000
OF	751.300	-18.335	0.000	9.193	0.000	0.000	0.000	0.000	0.001	0.000
OF	757.900	-18.330	0.000	9.194	0.000	0.000	0.000	0.000	0.001	0.000
OF	761.200	-18.327	0.000	9.195	0.000	0.000	0.000	0.000	0.006	0.000
OF	767.700	-18.269	0.000	9.196	0.000	0.000	0.000	0.000	0.010	0.000

OF	771.000	-18.233	0.000	9.196	0.000	0.000	0.000	0.000	0.011	0.000
OF	777.600	-18.162	0.000	9.197	0.000	0.000	0.000	0.000	0.011	0.000
OF	780.800	-18.127	0.000	9.198	0.000	0.000	0.000	0.000	0.011	0.000
OF	787.400	-18.056	0.000	9.198	0.000	0.000	0.000	0.000	0.011	0.000
OF	790.700	-18.020	0.000	9.199	0.000	0.000	0.000	0.000	0.011	0.000
OF	797.200	-17.949	0.000	9.200	0.000	0.000	0.000	0.000	0.011	0.000
OF	800.500	-17.913	0.000	9.200	0.000	0.000	0.000	0.000	0.011	0.000
OF	807.100	-17.842	0.000	9.201	0.000	0.000	0.000	0.000	0.011	0.000
OF	810.400	-17.807	0.000	9.202	0.000	0.000	0.000	0.000	-0.002	0.000
OF	944.900	-18.080	0.000	9.227	0.000	0.000	0.000	0.000	-0.002	0.000
OF	948.200	-18.093	0.000	9.227	0.000	0.000	0.000	0.000	0.001	0.000
OF	954.700	-18.072	0.000	9.228	0.000	0.000	0.000	0.000	0.005	0.000
OF	958.000	-18.046	0.000	9.228	0.000	0.000	0.000	0.000	0.008	0.000
OF	964.600	-17.993	0.000	9.229	0.000	0.000	0.000	0.000	0.008	0.000
OF	967.800	-17.966	0.000	9.229	0.000	0.000	0.000	0.000	0.008	0.000
OF	974.400	-17.913	0.000	9.229	0.000	0.000	0.000	0.000	0.008	0.000
OF	977.700	-17.886	0.000	9.230	0.000	0.000	0.000	0.000	0.008	0.000
OF	984.200	-17.833	0.000	9.230	0.000	0.000	0.000	0.000	0.008	0.000
OF	987.500	-17.806	0.000	9.231	0.000	0.000	0.000	0.000	0.008	0.000
OF	994.100	-17.753	0.000	9.231	0.000	0.000	0.000	0.000	0.008	0.000
OF	997.400	-17.727	0.000	9.231	0.000	0.000	0.000	0.000	0.008	0.000
OF	1003.900	-17.674	0.000	9.232	0.000	0.000	0.000	0.000	0.008	0.000
OF	1007.200	-17.647	0.000	9.232	0.000	0.000	0.000	0.000	0.008	0.000
OF	1013.800	-17.594	0.000	9.233	0.000	0.000	0.000	0.000	0.008	0.000
OF	1017.100	-17.567	0.000	9.233	0.000	0.000	0.000	0.000	0.008	0.000
OF	1023.600	-17.514	0.000	9.234	0.000	0.000	0.000	0.000	0.008	0.000
OF	1026.900	-17.488	0.000	9.234	0.000	0.000	0.000	0.000	0.008	0.000
OF	1033.500	-17.434	0.000	9.235	0.000	0.000	0.000	0.000	0.008	0.000
OF	1036.700	-17.408	0.000	9.235	0.000	0.000	0.000	0.000	0.008	0.000
OF	1043.300	-17.355	0.000	9.235	0.000	0.000	0.000	0.000	0.008	0.000
OF	1046.600	-17.328	0.000	9.236	0.000	0.000	0.000	0.000	0.008	0.000
OF	1053.100	-17.275	0.000	9.236	0.000	0.000	0.000	0.000	0.008	0.000
OF	1056.400	-17.248	0.000	9.237	0.000	0.000	0.000	0.000	0.008	0.000
OF	1063.000	-17.195	0.000	9.237	0.000	0.000	0.000	0.000	0.008	0.000
OF	1066.300	-17.169	0.000	9.237	0.000	0.000	0.000	0.000	0.008	0.000
OF	1072.800	-17.115	0.000	9.238	0.000	0.000	0.000	0.000	0.008	0.000
OF	1076.100	-17.089	0.000	9.238	0.000	0.000	0.000	0.000	0.008	0.000
OF	1082.700	-17.036	0.000	9.239	0.000	0.000	0.000	0.000	0.008	0.000
OF	1086.000	-17.009	0.000	9.240	0.000	0.000	0.000	0.000	0.008	0.000
OF	1095.800	-16.930	0.000	9.241	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1273.000	-17.177	0.000	9.266	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1276.200	-17.193	0.000	9.267	0.000	0.000	0.000	0.000	0.017	0.000
OF	1282.800	-17.012	0.000	9.266	0.000	0.000	0.000	0.000	0.033	0.000
OF	1286.100	-16.867	0.000	9.266	0.000	0.000	0.000	0.000	0.045	0.000
OF	1292.600	-16.576	0.000	9.265	0.000	0.000	0.000	0.000	0.045	0.000
OF	1295.900	-16.431	0.000	9.264	0.000	0.000	0.000	0.000	0.044	0.000
OF	1302.500	-16.140	0.000	9.263	0.000	0.000	0.000	0.000	0.044	0.000
OF	1305.800	-15.995	0.000	9.263	0.000	0.000	0.000	0.000	0.045	0.000
OF	1312.300	-15.704	0.000	9.262	0.000	0.000	0.000	0.000	0.045	0.000
OF	1315.600	-15.559	0.000	9.261	0.000	0.000	0.000	0.000	0.044	0.000
OF	1322.200	-15.268	0.000	9.261	0.000	0.000	0.000	0.000	0.044	0.000
OF	1325.500	-15.122	0.000	9.260	0.000	0.000	0.000	0.000	-0.015	0.000
OF	1417.300	-16.681	0.000	9.288	0.000	0.000	0.000	0.000	-0.017	0.000
OF	1420.600	-16.761	0.000	9.289	0.000	0.000	0.000	0.000	-0.007	0.000
OF	1427.200	-16.750	0.000	9.290	0.000	0.000	0.000	0.000	0.002	0.000
OF	1430.400	-16.739	0.000	9.290	0.000	0.000	0.000	0.000	0.002	0.000
OF	1443.600	-16.716	0.000	9.291	0.000	0.000	0.000	0.000	0.001	0.000
OF	1446.800	-16.723	0.000	9.291	0.000	0.000	0.000	0.000	0.000	0.000
OF	1453.400	-16.720	0.000	9.292	0.000	0.000	0.000	0.000	0.016	0.000
OF	1456.700	-16.560	0.000	9.291	0.000	0.000	0.000	0.000	0.050	0.000
OF	1463.300	-16.228	0.000	9.290	0.000	0.000	0.000	0.000	0.051	0.000
OF	1466.500	-16.062	0.000	9.290	0.000	0.000	0.000	0.000	0.051	0.000
OF	1473.100	-15.731	0.000	9.288	0.000	0.000	0.000	0.000	0.050	0.000
OF	1476.400	-15.565	0.000	9.288	0.000	0.000	0.000	0.000	0.051	0.000
OF	1482.900	-15.234	0.000	9.286	0.000	0.000	0.000	0.000	0.051	0.000
OF	1486.200	-15.068	0.000	9.286	0.000	0.000	0.000	0.000	0.050	0.000
OF	1492.800	-14.737	0.000	9.285	0.000	0.000	0.000	0.000	0.050	0.000
OF	1496.100	-14.571	0.000	9.284	0.000	0.000	0.000	0.000	0.051	0.000
OF	1502.600	-14.239	0.000	9.283	0.000	0.000	0.000	0.000	0.051	0.000
OF	1505.900	-14.074	0.000	9.283	0.000	0.000	0.000	0.000	0.050	0.000
OF	1512.500	-13.742	0.000	9.282	0.000	0.000	0.000	0.000	0.051	0.000
OF	1515.700	-13.577	0.000	9.282	0.000	0.000	0.000	0.000	0.051	0.000
OF	1522.300	-13.245	0.000	9.281	0.000	0.000	0.000	0.000	0.050	0.000
OF	1525.600	-13.079	0.000	9.281	0.000	0.000	0.000	0.000	0.051	0.000
OF	1542.000	-12.251	0.000	9.281	0.000	0.000	0.000	0.000	0.051	0.000
OF	1545.300	-12.085	0.000	9.281	0.000	0.000	0.000	0.000	0.043	0.000
OF	1561.700	-11.408	0.000	9.283	0.000	0.000	0.000	0.000	0.041	0.000
OF	1565.000	-11.285	0.000	9.284	0.000	0.000	0.000	0.000	0.038	0.000
OF	1581.400	-10.670	0.000	9.289	0.000	0.000	0.000	0.000	0.038	0.000
OF	1584.600	-10.547	0.000	9.290	0.000	0.000	0.000	0.000	0.038	0.000
OF	1601.000	-9.933	0.000	9.297	0.000	0.000	0.000	0.000	0.037	0.000
OF	1604.300	-9.810	0.000	9.298	0.000	0.000	0.000	0.000	0.037	0.000
OF	1620.700	-9.196	0.000	9.306	0.000	0.000	0.000	0.000	0.032	0.000
OF	1627.300	-9.077	0.000	9.312	0.000	0.000	0.000	0.000	0.009	0.000
OF	1640.400	-9.016	0.000	9.324	0.000	0.000	0.000	0.000	0.005	0.000
OF	1650.300	-8.970	0.000	9.332	0.000	0.000	0.000	0.000	0.005	0.000
OF	1656.800	-8.929	0.000	9.337	0.000	0.000	0.000	0.000	0.008	0.000
OF	1669.900	-8.811	0.000	9.347	0.000	0.000	0.000	0.000	0.009	0.000
OF	1679.800	-8.723	0.000	9.354	0.000	0.000	0.000	0.000	0.009	0.000
OF	1686.300	-8.664	0.000	9.358	0.000	0.000	0.000	0.000	0.009	0.000
OF	1699.500	-8.546	0.000	9.368	0.000	0.000	0.000	0.000	0.009	0.000
OF	1709.300	-8.458	0.000	9.374	0.000	0.000	0.000	0.000	0.009	0.000
OF	1715.900	-8.399	0.000	9.378	0.000	0.000	0.000	0.000	0.009	0.000
OF	1729.000	-8.282	0.000	9.386	0.000	0.000	0.000	0.000	0.015	0.000
OF	1738.800	-8.043	0.000	9.390	0.000	0.000	0.000	0.000	0.025	0.000
OF	1745.400	-7.875	0.000	9.393	0.000	0.000	0.000	0.000	0.026	0.000
OF	1768.400	-7.284	0.000	9.405	0.000	0.000	0.000	0.000	0.026	0.000
OF	1774.900	-7.116	0.000	9.408	0.000	0.000	0.000	0.000	0.026	0.000
OF	1797.900	-6.525	0.000	9.421	0.000	0.000	0.000	0.000	0.026	0.000
OF	1804.500	-6.351	0.000	9.425	0.000	0.000	0.000	0.000	0.027	0.000
OF	1827.400	-5.724	0.000	9.441	0.000	0.000	0.000	0.000	0.026	0.000
OF	1834.000	-5.593	0.000	9.446	0.000	0.000	0.000	0.000	0.014	0.000

OF	1857.000	-5.306	0.000	9.465	0.000	0.000	0.000	0.000	0.013	0.000
OF	1863.500	-5.225	0.000	9.470	0.000	0.000	0.000	0.000	0.013	0.000
OF	1893.000	-4.856	0.000	9.492	0.000	0.000	0.000	0.000	0.013	0.000
OF	1906.200	-4.679	0.000	9.501	0.000	0.000	0.000	0.000	0.014	0.000
OF	1932.400	-4.303	0.000	9.518	0.000	0.000	0.000	0.000	0.014	0.000
OF	1935.700	-4.260	0.000	9.520	0.000	0.000	0.000	0.000	-0.001	0.000
OF	2007.900	-4.382	0.000	9.564	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2011.200	-4.396	0.000	9.566	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2014.400	-4.409	0.000	9.567	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2017.700	-4.423	0.000	9.568	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2021.000	-4.437	0.000	9.569	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2024.300	-4.450	0.000	9.571	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2027.600	-4.464	0.000	9.572	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2030.800	-4.477	0.000	9.573	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2034.100	-4.491	0.000	9.575	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2037.400	-4.504	0.000	9.575	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2040.700	-4.518	0.000	9.577	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2044.000	-4.531	0.000	9.578	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2047.200	-4.545	0.000	9.579	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2050.500	-4.558	0.000	9.580	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2053.800	-4.572	0.000	9.581	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2057.100	-4.575	0.000	9.582	0.000	0.000	0.000	0.000	-0.001	0.000
OF	2060.400	-4.576	0.000	9.583	0.000	0.000	0.000	0.000	0.000	0.000
OF	2063.600	-4.577	0.000	9.584	0.000	0.000	0.000	0.000	0.000	0.000
OF	2066.900	-4.578	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
OF	2070.200	-4.579	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
OF	2073.500	-4.580	0.000	9.586	0.000	0.000	0.000	0.000	0.000	0.000
OF	2076.800	-4.581	0.000	9.587	0.000	0.000	0.000	0.000	0.000	0.000
OF	2080.000	-4.582	0.000	9.588	0.000	0.000	0.000	0.000	0.000	0.000
OF	2083.300	-4.582	0.000	9.589	0.000	0.000	0.000	0.000	0.000	0.000
OF	2086.600	-4.583	0.000	9.589	0.000	0.000	0.000	0.000	0.000	0.000
OF	2089.900	-4.584	0.000	9.590	0.000	0.000	0.000	0.000	0.000	0.000
OF	2093.200	-4.585	0.000	9.591	0.000	0.000	0.000	0.000	0.000	0.000
OF	2096.500	-4.586	0.000	9.591	0.000	0.000	0.000	0.000	0.000	0.000
OF	2099.700	-4.587	0.000	9.592	0.000	0.000	0.000	0.000	0.000	0.000
OF	2103.000	-4.588	0.000	9.593	0.000	0.000	0.000	0.000	0.000	0.000
OF	2106.300	-4.589	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
OF	2109.600	-4.590	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
OF	2112.900	-4.591	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2116.100	-4.592	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2119.400	-4.593	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2122.700	-4.594	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
OF	2126.000	-4.595	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
OF	2129.300	-4.596	0.000	9.598	0.000	0.000	0.000	0.000	0.000	0.000
OF	2132.500	-4.597	0.000	9.599	0.000	0.000	0.000	0.000	0.000	0.000
OF	2135.800	-4.598	0.000	9.599	0.000	0.000	0.000	0.000	0.000	0.000
OF	2139.100	-4.599	0.000	9.600	0.000	0.000	0.000	0.000	0.000	0.000
OF	2142.400	-4.600	0.000	9.601	0.000	0.000	0.000	0.000	0.000	0.000
OF	2145.700	-4.601	0.000	9.601	0.000	0.000	0.000	0.000	0.000	0.000
OF	2148.900	-4.602	0.000	9.602	0.000	0.000	0.000	0.000	0.000	0.000
OF	2152.200	-4.603	0.000	9.602	0.000	0.000	0.000	0.000	0.000	0.000
OF	2155.500	-4.604	0.000	9.603	0.000	0.000	0.000	0.000	-0.001	0.000
OF	2158.800	-4.611	0.000	9.604	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2162.100	-4.620	0.000	9.604	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2165.300	-4.630	0.000	9.605	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2168.600	-4.639	0.000	9.606	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2171.900	-4.648	0.000	9.606	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2175.200	-4.657	0.000	9.606	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2178.500	-4.667	0.000	9.607	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2181.800	-4.676	0.000	9.608	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2185.000	-4.685	0.000	9.608	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2188.300	-4.694	0.000	9.609	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2191.600	-4.703	0.000	9.609	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2194.900	-4.713	0.000	9.610	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2198.200	-4.722	0.000	9.610	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2201.400	-4.731	0.000	9.611	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2204.700	-4.740	0.000	9.611	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2208.000	-4.750	0.000	9.612	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2211.300	-4.759	0.000	9.612	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2214.600	-4.768	0.000	9.613	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2217.800	-4.777	0.000	9.613	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2221.100	-4.786	0.000	9.613	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2224.400	-4.796	0.000	9.614	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2227.700	-4.805	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2231.000	-4.814	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2234.200	-4.823	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2237.500	-4.833	0.000	9.616	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2240.800	-4.842	0.000	9.616	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2244.100	-4.852	0.000	9.616	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2247.400	-4.862	0.000	9.617	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2250.700	-4.873	0.000	9.617	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2253.900	-4.884	0.000	9.618	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2257.200	-4.896	0.000	9.618	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2260.500	-4.908	0.000	9.618	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2263.800	-4.920	0.000	9.619	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2267.100	-4.933	0.000	9.619	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2270.300	-4.945	0.000	9.620	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2273.600	-4.957	0.000	9.620	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2276.900	-4.969	0.000	9.620	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2280.200	-4.981	0.000	9.621	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2283.500	-4.993	0.000	9.621	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2286.700	-5.006	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2290.000	-5.020	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2293.300	-5.033	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2296.600	-5.047	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2299.900	-5.060	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2303.100	-5.074	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2306.400	-5.087	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2309.700	-5.100	0.000	9.624	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2313.000	-5.114	0.000	9.624	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2316.300	-5.127	0.000	9.624	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2319.500	-5.141	0.000	9.625	0.000	0.000	0.000	0.000	-0.004	0.000

OF	2322.800	-5.154	0.000	9.625	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2326.100	-5.168	0.000	9.625	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2329.400	-5.181	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2332.700	-5.194	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2336.000	-5.208	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2339.200	-5.221	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2342.500	-5.235	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2345.800	-5.248	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2349.100	-5.261	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2352.400	-5.275	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2355.600	-5.288	0.000	9.628	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2358.900	-5.302	0.000	9.628	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2362.200	-5.310	0.000	9.628	0.000	0.000	0.000	0.000	-0.001	0.000
OF	2365.500	-5.308	0.000	9.628	0.000	0.000	0.000	0.000	0.001	0.000
OF	2368.800	-5.306	0.000	9.629	0.000	0.000	0.000	0.000	0.001	0.000
OF	2372.000	-5.304	0.000	9.629	0.000	0.000	0.000	0.000	0.001	0.000
OF	2375.300	-5.302	0.000	9.629	0.000	0.000	0.000	0.000	0.000	0.000
OF	2378.600	-5.307	0.000	9.629	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2381.900	-5.315	0.000	9.629	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2385.200	-5.324	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2388.400	-5.332	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2391.700	-5.341	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2395.000	-5.349	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2398.300	-5.358	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2401.600	-5.366	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2404.900	-5.375	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2408.100	-5.383	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2411.400	-5.392	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2414.700	-5.400	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2418.000	-5.409	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2421.300	-5.417	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2424.500	-5.425	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2427.800	-5.434	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2431.100	-5.442	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2434.400	-5.451	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2437.700	-5.459	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2440.900	-5.468	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2444.200	-5.476	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2447.500	-5.485	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2450.800	-5.493	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2454.100	-5.502	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2457.300	-5.510	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2460.600	-5.519	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
OF	2463.900	-5.527	0.000	9.634	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2467.200	-5.535	0.000	9.634	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2470.500	-5.542	0.000	9.634	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2473.700	-5.549	0.000	9.635	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2477.000	-5.556	0.000	9.635	0.000	0.000	0.000	0.000	0.000	0.000
OF	2480.300	-5.548	0.000	9.635	0.000	0.000	0.000	0.000	0.004	0.000
OF	2483.600	-5.527	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2486.900	-5.505	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2490.200	-5.484	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2493.400	-5.462	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2496.700	-5.441	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2500.000	-5.419	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2503.300	-5.398	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2506.600	-5.376	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2509.800	-5.355	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2513.100	-5.333	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2516.400	-5.312	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2519.700	-5.290	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2523.000	-5.269	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2526.200	-5.247	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2529.500	-5.226	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
OF	2532.800	-5.204	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2536.100	-5.183	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2539.400	-5.161	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2542.600	-5.140	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2545.900	-5.118	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2549.200	-5.097	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2552.500	-5.075	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2555.800	-5.054	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2559.000	-5.032	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2562.300	-5.011	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2565.600	-4.989	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
OF	2568.900	-4.968	0.000	9.637	0.000	0.000	0.000	0.000	0.005	0.000
OF	2572.200	-4.958	0.000	9.637	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2575.500	-4.991	0.000	9.637	0.000	0.000	0.000	0.000	-0.010	0.000
OF	2578.700	-5.024	0.000	9.637	0.000	0.000	0.000	0.000	-0.009	0.000
OF	2582.000	-5.050	0.000	9.637	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2585.300	-5.070	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2588.600	-5.090	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2591.900	-5.111	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2595.100	-5.131	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2598.400	-5.152	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2601.700	-5.172	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2605.000	-5.192	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2608.300	-5.213	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2611.500	-5.233	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2614.800	-5.253	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2618.100	-5.274	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2621.400	-5.294	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2624.700	-5.314	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2627.900	-5.335	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2631.200	-5.355	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2634.500	-5.375	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2637.800	-5.396	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2641.100	-5.416	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2644.400	-5.437	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2647.600	-5.457	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
OF	2650.900	-5.478	0.000	9.642	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2654.200	-5.501	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000

OF	2657.500	-5.524	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2660.800	-5.547	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2664.000	-5.569	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2667.300	-5.592	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2670.600	-5.615	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2673.900	-5.638	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2677.200	-5.661	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2680.400	-5.684	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2683.700	-5.706	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2687.000	-5.729	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2690.300	-5.752	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2693.600	-5.775	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2696.800	-5.798	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2700.100	-5.821	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2703.400	-5.843	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2706.700	-5.866	0.000	9.646	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2710.000	-5.889	0.000	9.646	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2713.200	-5.912	0.000	9.646	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2716.500	-5.936	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2719.800	-5.963	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2723.100	-5.989	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2726.400	-6.016	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2729.700	-6.042	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2732.900	-6.068	0.000	9.647	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2736.200	-6.095	0.000	9.647	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2739.500	-6.121	0.000	9.647	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2742.800	-6.148	0.000	9.647	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2746.100	-6.165	0.000	9.647	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2749.300	-6.181	0.000	9.647	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2752.600	-6.197	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2755.900	-6.213	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2759.200	-6.229	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2762.500	-6.246	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2765.700	-6.262	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2769.000	-6.278	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2772.300	-6.294	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2775.600	-6.310	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2778.900	-6.326	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2782.100	-6.342	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2785.400	-6.358	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2788.700	-6.374	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2792.000	-6.391	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2795.300	-6.407	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2798.600	-6.423	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2801.800	-6.439	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2805.100	-6.455	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2808.400	-6.471	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
OF	2811.700	-6.487	0.000	9.649	0.000	0.000	0.000	0.000	-0.002	0.000
OF	2815.000	-6.488	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2818.200	-6.487	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2821.500	-6.487	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2824.800	-6.486	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2828.100	-6.486	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2831.400	-6.485	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2834.600	-6.485	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2837.900	-6.484	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2841.200	-6.484	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2844.500	-6.483	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2847.800	-6.483	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2851.000	-6.482	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2854.300	-6.482	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2857.600	-6.481	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
OF	2860.900	-6.480	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2864.200	-6.480	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2867.400	-6.479	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2870.700	-6.478	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2874.000	-6.478	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2877.300	-6.477	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2880.600	-6.477	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2883.900	-6.476	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2887.100	-6.475	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2890.400	-6.475	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2893.700	-6.474	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2897.000	-6.474	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2900.300	-6.473	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2903.500	-6.472	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2906.800	-6.472	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2910.100	-6.471	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2913.400	-6.470	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2916.700	-6.470	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2919.900	-6.469	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2923.200	-6.469	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
OF	2926.500	-6.468	0.000	9.650	0.000	0.000	0.000	0.000	0.004	0.000
OF	2929.800	-6.441	0.000	9.650	0.000	0.000	0.000	0.000	0.013	0.000
OF	2933.100	-6.385	0.000	9.650	0.000	0.000	0.000	0.000	0.017	0.000
OF	2936.300	-6.330	0.000	9.650	0.000	0.000	0.000	0.000	0.017	0.000
OF	2939.600	-6.275	0.000	9.649	0.000	0.000	0.000	0.000	0.017	0.000
OF	2942.900	-6.220	0.000	9.649	0.000	0.000	0.000	0.000	0.017	0.000
OF	2946.200	-6.165	0.000	9.649	0.000	0.000	0.000	0.000	0.017	0.000
OF	2949.500	-6.110	0.000	9.649	0.000	0.000	0.000	0.000	0.019	0.000
OF	2952.700	-6.044	0.000	9.649	0.000	0.000	0.000	0.000	0.024	0.000
OF	2956.000	-5.957	0.000	9.649	0.000	0.000	0.000	0.000	0.026	0.000
OF	2959.300	-5.870	0.000	9.648	0.000	0.000	0.000	0.000	0.026	0.000
OF	2962.600	-5.783	0.000	9.648	0.000	0.000	0.000	0.000	0.026	0.000
OF	2965.900	-5.696	0.000	9.648	0.000	0.000	0.000	0.000	0.026	0.000
OF	2969.200	-5.610	0.000	9.647	0.000	0.000	0.000	0.000	0.027	0.000
OF	2972.400	-5.523	0.000	9.647	0.000	0.000	0.000	0.000	0.027	0.000
OF	2975.700	-5.436	0.000	9.647	0.000	0.000	0.000	0.000	0.026	0.000
OF	2979.000	-5.349	0.000	9.646	0.000	0.000	0.000	0.000	0.026	0.000
OF	2982.300	-5.263	0.000	9.646	0.000	0.000	0.000	0.000	0.026	0.000
OF	2985.600	-5.176	0.000	9.646	0.000	0.000	0.000	0.000	0.027	0.000
OF	2988.800	-5.089	0.000	9.646	0.000	0.000	0.000	0.000	0.027	0.000

OF	2992.100	-5.002	0.000	9.646	0.000	0.000	0.000	0.000	0.026	0.000
OF	2995.400	-4.915	0.000	9.645	0.000	0.000	0.000	0.000	0.026	0.000
OF	2998.700	-4.829	0.000	9.645	0.000	0.000	0.000	0.000	0.026	0.000
OF	3002.000	-4.742	0.000	9.645	0.000	0.000	0.000	0.000	0.026	0.000
OF	3005.200	-4.656	0.000	9.644	0.000	0.000	0.000	0.000	0.016	0.000
OF	3008.500	-4.639	0.000	9.645	0.000	0.000	0.000	0.000	0.003	0.000
OF	3011.800	-4.637	0.000	9.645	0.000	0.000	0.000	0.000	0.001	0.000
OF	3015.100	-4.634	0.000	9.645	0.000	0.000	0.000	0.000	0.001	0.000
OF	3018.400	-4.632	0.000	9.645	0.000	0.000	0.000	0.000	0.001	0.000
OF	3021.600	-4.630	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
OF	3024.900	-4.627	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
OF	3028.200	-4.625	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
OF	3031.500	-4.623	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
OF	3034.800	-4.620	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
OF	3038.100	-4.618	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
OF	3041.300	-4.615	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
OF	3044.600	-4.613	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
OF	3047.900	-4.611	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
OF	3051.200	-4.609	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
OF	3054.500	-4.606	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
OF	3057.700	-4.604	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
OF	3061.000	-4.602	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
OF	3064.300	-4.599	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
OF	3067.600	-4.597	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
OF	3070.900	-4.594	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
OF	3074.100	-4.591	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
OF	3077.400	-4.588	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
OF	3080.700	-4.585	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
OF	3084.000	-4.582	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
OF	3087.300	-4.579	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
OF	3090.500	-4.576	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
OF	3093.800	-4.573	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
OF	3097.100	-4.570	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
OF	3100.400	-4.568	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
OF	3103.700	-4.567	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
OF	3106.900	-4.565	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
OF	3110.200	-4.564	0.000	9.651	0.000	0.000	0.000	0.000	0.001	0.000
OF	3113.500	-4.562	0.000	9.651	0.000	0.000	0.000	0.000	0.002	0.000
OF	3116.800	-4.551	0.000	9.651	0.000	0.000	0.000	0.000	0.005	0.000
OF	3120.100	-4.529	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
OF	3123.400	-4.508	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
OF	3126.600	-4.486	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
OF	3129.900	-4.465	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
OF	3133.200	-4.443	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
OF	3136.500	-4.421	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
OF	3139.800	-4.400	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3143.000	-4.378	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3146.300	-4.357	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3149.600	-4.335	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3152.900	-4.313	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3156.200	-4.292	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3159.400	-4.270	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3162.700	-4.249	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
OF	3166.000	-4.227	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3169.300	-4.205	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3172.600	-4.184	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3175.800	-4.162	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3179.100	-4.141	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3182.400	-4.119	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3185.700	-4.097	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3189.000	-4.076	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
OF	3192.300	-4.054	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
OF	3195.500	-4.033	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
OF	3198.800	-4.011	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
OF	3202.100	-3.989	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
OF	3205.400	-3.968	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
OF	3208.700	-3.944	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
OF	3211.900	-3.919	0.000	9.654	0.000	0.000	0.000	0.000	0.008	0.000
OF	3215.200	-3.895	0.000	9.655	0.000	0.000	0.000	0.000	0.007	0.000
OF	3218.500	-3.870	0.000	9.655	0.000	0.000	0.000	0.000	0.007	0.000
OF	3221.800	-3.845	0.000	9.655	0.000	0.000	0.000	0.000	0.006	0.000
OF	3225.100	-3.832	0.000	9.655	0.000	0.000	0.000	0.000	0.003	0.000
OF	3228.300	-3.825	0.000	9.655	0.000	0.000	0.000	0.000	0.002	0.000
OF	3231.600	-3.819	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
OF	3234.900	-3.812	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
OF	3238.200	-3.806	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
OF	3241.500	-3.799	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
OF	3244.700	-3.792	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
OF	3248.000	-3.786	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
OF	3251.300	-3.779	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
OF	3254.600	-3.772	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
OF	3257.900	-3.766	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
OF	3261.100	-3.759	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
OF	3264.400	-3.753	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
OF	3267.700	-3.746	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
OF	3271.000	-3.739	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
OF	3274.300	-3.733	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
OF	3277.600	-3.726	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
OF	3280.800	-3.719	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
OF	3284.100	-3.712	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
OF	3287.400	-3.704	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
OF	3290.700	-3.697	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
OF	3294.000	-3.691	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
OF	3297.200	-3.684	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
OF	3300.500	-3.676	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
OF	3303.800	-3.669	0.000	9.661	0.000	0.000	0.000	0.000	0.002	0.000
OF	3307.100	-3.662	0.000	9.661	0.000	0.000	0.000	0.000	0.003	0.000
OF	3310.400	-3.651	0.000	9.661	0.000	0.000	0.000	0.000	0.017	0.000
OF	3313.600	-3.553	0.000	9.661	0.000	0.000	0.000	0.000	0.032	0.000
OF	3316.900	-3.444	0.000	9.661	0.000	0.000	0.000	0.000	0.033	0.000
OF	3320.200	-3.336	0.000	9.660	0.000	0.000	0.000	0.000	0.030	0.000
OF	3323.500	-3.249	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000

OF	3326.800	-3.164	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3330.000	-3.078	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3333.300	-2.993	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3336.600	-2.907	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3339.900	-2.822	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3343.200	-2.736	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3346.400	-2.650	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3349.700	-2.565	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3353.000	-2.479	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3356.300	-2.394	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3359.600	-2.308	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3362.900	-2.223	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3366.100	-2.137	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
OF	3369.400	-2.052	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
OF	3372.700	-1.966	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
OF	3376.000	-1.880	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
OF	3379.300	-1.795	0.000	9.662	0.000	0.000	0.000	0.000	0.026	0.000
OF	3382.500	-1.709	0.000	9.662	0.000	0.000	0.000	0.000	0.027	0.000
OF	3385.800	-1.618	0.000	9.662	0.000	0.000	0.000	0.000	0.029	0.000
OF	3389.100	-1.519	0.000	9.663	0.000	0.000	0.000	0.000	0.030	0.000
OF	3392.400	-1.419	0.000	9.663	0.000	0.000	0.000	0.000	0.030	0.000
OF	3395.700	-1.320	0.000	9.664	0.000	0.000	0.000	0.000	0.031	0.000
OF	3398.900	-1.220	0.000	9.664	0.000	0.000	0.000	0.000	0.031	0.000
OF	3402.200	-1.121	0.000	9.665	0.000	0.000	0.000	0.000	0.030	0.000
OF	3405.500	-1.021	0.000	9.665	0.000	0.000	0.000	0.000	0.030	0.000
OF	3408.800	-0.922	0.000	9.666	0.000	0.000	0.000	0.000	0.030	0.000
OF	3412.100	-0.822	0.000	9.667	0.000	0.000	0.000	0.000	0.031	0.000
OF	3415.300	-0.723	0.000	9.667	0.000	0.000	0.000	0.000	0.031	0.000
OF	3418.600	-0.623	0.000	9.668	0.000	0.000	0.000	0.000	0.030	0.000
OF	3421.900	-0.524	0.000	9.669	0.000	0.000	0.000	0.000	0.030	0.000
OF	3425.200	-0.424	0.000	9.670	0.000	0.000	0.000	0.000	0.030	0.000
OF	3428.500	-0.325	0.000	9.671	0.000	0.000	0.000	0.000	0.030	0.000
OF	3431.800	-0.225	0.000	9.672	0.000	0.000	0.000	0.000	0.031	0.000
OF	3435.000	-0.126	0.000	9.674	0.000	0.000	0.000	0.000	0.031	0.000
OF	3438.300	-0.026	0.000	9.675	0.000	0.000	0.000	0.000	-0.145	0.000
OF	3441.600	-1.082	0.000	9.686	0.000	0.000	0.000	0.000	-0.032	0.000
OF	3444.900	-0.240	0.000	9.680	0.000	0.000	0.000	0.000	0.230	0.000
IF	3448.200	0.439	0.000	9.675	0.000	0.000	0.000	0.000	0.163	0.000
IF	3451.400	0.820	0.000	9.674	0.000	0.000	0.000	0.000	0.122	0.000
IF	3454.700	1.233	0.000	9.673	0.000	0.000	0.000	0.000	0.133	0.000
IF	3458.000	1.699	0.000	9.672	0.000	0.000	0.000	0.000	0.141	0.000
IF	3461.300	2.166	0.000	9.672	0.000	0.000	0.000	0.000	0.150	0.000
IF	3464.600	2.691	0.000	9.672	0.000	0.000	0.000	0.000	0.167	0.000
IF	3467.800	3.250	0.000	9.674	0.000	0.000	0.000	0.000	0.172	0.000
IF	3471.100	3.810	0.000	9.679	0.000	0.000	0.000	0.000	0.132	0.000
IF	3474.400	4.125	0.000	9.692	0.000	0.000	0.000	0.000	0.068	0.000
IF	3477.700	4.262	0.000	9.712	0.000	0.000	0.000	0.000	0.040	0.000
IF	3481.000	4.392	0.000	9.731	0.000	0.000	0.000	0.000	0.051	0.000
IF	3484.200	4.594	0.000	9.748	0.000	0.000	0.000	0.000	0.081	0.000
IF	3487.500	4.917	0.000	9.762	0.000	0.000	0.000	0.000	0.098	0.000
IF	3490.800	5.240	0.000	9.778	0.000	0.000	0.000	0.000	0.070	0.000
IF	3494.100	5.380	0.000	9.801	0.000	0.000	0.000	0.000	0.027	0.000
IF	3497.400	5.416	0.000	9.825	0.000	0.000	0.000	0.000	0.011	0.000
IF	3500.600	5.452	0.000	9.846	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3503.900	5.401	0.000	9.866	0.000	0.000	0.000	0.000	-0.017	0.000
IF	3507.200	5.340	0.000	9.881	0.000	0.000	0.000	0.000	0.024	0.000
IF	3510.500	5.561	0.000	9.890	0.000	0.000	0.000	0.000	0.081	0.000
IF	3513.800	5.872	0.000	9.897	0.000	0.000	0.000	0.000	0.094	0.000
IF	3517.100	6.178	0.000	9.907	0.000	0.000	0.000	0.000	0.051	0.000
IF	3520.300	6.204	0.000	9.925	0.000	0.000	0.000	0.000	0.008	0.000
IF	3523.600	6.229	0.000	9.941	0.000	0.000	0.000	0.000	0.040	0.000
IF	3526.900	6.466	0.000	9.951	0.000	0.000	0.000	0.000	0.084	0.000
IF	3530.200	6.782	0.000	9.962	0.000	0.000	0.000	0.000	0.040	0.000
IF	3533.500	6.728	0.000	9.983	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3536.700	6.727	0.000	9.999	0.000	0.000	0.000	0.000	0.007	0.000
IF	3540.000	6.771	0.000	10.011	0.000	0.000	0.000	0.000	0.014	0.000
IF	3543.300	6.816	0.000	10.022	0.000	0.000	0.000	0.000	0.014	0.000
IF	3546.600	6.861	0.000	10.032	0.000	0.000	0.000	0.000	0.026	0.000
IF	3549.900	6.988	0.000	10.039	0.000	0.000	0.000	0.000	0.041	0.000
IF	3553.100	7.126	0.000	10.047	0.000	0.000	0.000	0.000	0.043	0.000
IF	3556.400	7.264	0.000	10.056	0.000	0.000	0.000	0.000	0.042	0.000
IF	3559.700	7.403	0.000	10.065	0.000	0.000	0.000	0.000	0.021	0.000
IF	3563.000	7.402	0.000	10.076	0.000	0.000	0.000	0.000	-0.014	0.000
IF	3566.300	7.309	0.000	10.087	0.000	0.000	0.000	0.000	0.002	0.000
IF	3569.500	7.411	0.000	10.092	0.000	0.000	0.000	0.000	0.065	0.000
IF	3572.800	7.731	0.000	10.096	0.000	0.000	0.000	0.000	0.097	0.000
IF	3576.100	8.050	0.000	10.102	0.000	0.000	0.000	0.000	0.097	0.000
IF	3579.400	8.370	0.000	10.127	0.000	0.000	0.000	0.000	0.078	0.000
IF	3582.700	8.566	0.000	10.155	0.000	0.000	0.000	0.000	0.050	0.000
IF	3586.000	8.699	0.000	10.178	0.000	0.000	0.000	0.000	0.041	0.000
IF	3589.200	8.832	0.000	10.198	0.000	0.000	0.000	0.000	0.041	0.000
IF	3592.500	8.965	0.000	10.216	0.000	0.000	0.000	0.000	0.040	0.000
IF	3595.800	9.097	0.000	10.233	0.000	0.000	0.000	0.000	0.040	0.000
IF	3597.500	9.167	0.000	10.233	0.000	0.000	0.000	0.000	0.036	0.000
IF	3624.000	10.115	0.000	10.233	0.000	0.000	0.000	0.000	0.019	0.000
IF	3640.500	9.984	0.000	10.233	0.000	0.000	0.000	0.000	-0.025	0.000
IF	3649.000	9.491	0.000	10.233	0.000	0.000	0.000	0.000	-0.036	0.000
IF	3656.000	9.426	0.000	10.233	0.000	0.000	0.000	0.000	-0.021	0.000
IF	3674.000	8.967	0.000	10.233	0.000	0.000	0.000	0.000	-0.023	0.000
IF	3677.500	8.934	0.000	10.233	0.000	0.000	0.000	0.000	-0.035	0.000
IF	3688.000	8.474	0.000	10.233	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3694.500	8.671	0.000	10.233	0.000	0.000	0.000	0.000	0.008	0.000
IF	3709.000	8.639	0.000	10.233	0.000	0.000	0.000	0.000	0.004	0.000
IF	3721.000	8.770	0.000	10.233	0.000	0.000	0.000	0.000	0.056	0.000
IF	3726.500	9.626	0.000	10.233	0.000	0.000	0.000	0.000	0.005	0.000
IF	3740.500	8.868	0.000	10.233	0.000	0.000	0.000	0.000	0.000	0.000
IF	3759.000	9.623	0.000	10.233	0.000	0.000	0.000	0.000	0.043	0.000
IF	3772.200	10.233	0.000	10.233	0.000	0.000	0.000	0.000	0.046	0.000
AS	3785.800	9.460	0.000	9.460	0.000	0.000	0.000	0.000	-0.049	0.000
IF	3792.500	9.131	0.000	9.460	0.000	0.000	0.000	0.000	-0.025	0.000
IF	3805.500	8.967	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
IF	3815.500	9.131	0.000	9.460	0.000	0.000	0.000	0.000	-0.014	0.000

IF	3825.000	8.704	0.000	9.460	0.000	0.000	0.000	0.000	0.014	0.000
IF	3839.300	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.053	0.000
AS	3996.900	9.408	0.000	9.408	0.000	0.000	0.000	0.000	-0.032	0.000
IF	4005.500	9.134	0.000	9.408	0.000	0.000	0.000	0.000	-0.006	0.000
IF	4029.500	9.200	0.000	9.408	0.000	0.000	0.000	0.000	-0.014	0.000
IF	4073.500	8.219	0.000	9.409	0.000	0.000	0.000	0.000	-0.002	0.000
IF	4083.000	9.104	0.000	9.409	0.000	0.000	0.000	0.000	-0.038	0.000
IF	4091.000	7.559	0.000	9.409	0.000	0.000	0.000	0.000	-0.165	0.000
IF	4111.500	4.406	0.000	9.410	0.000	0.000	0.000	0.000	-0.066	0.000
IF	4147.000	3.848	0.000	9.411	0.000	0.000	0.000	0.000	-0.004	0.000
IF	4151.500	4.242	0.000	9.411	0.000	0.000	0.000	0.000	-0.024	0.000
OF	4370.000	-1.500	0.000	9.415	0.000	0.000	0.000	0.000	0.005	0.000
IF	4488.000	6.014	0.000	9.418	0.000	0.000	0.000	0.000	0.057	0.000
IF	4498.500	5.817	0.000	9.418	0.000	0.000	0.000	0.000	0.006	0.000
IF	4528.000	6.250	0.000	9.418	0.000	0.000	0.000	0.000	0.061	0.000
IF	4539.500	8.317	0.000	9.418	0.000	0.000	0.000	0.000	0.077	0.000
IF	4548.500	7.821	0.000	9.418	0.000	0.000	0.000	0.000	-0.016	0.000
IF	4561.000	7.982	0.000	9.418	0.000	0.000	0.000	0.000	0.010	0.000
IF	4572.000	8.048	0.000	9.418	0.000	0.000	0.000	0.000	0.014	0.000
IF	4580.500	8.245	0.000	9.418	0.000	0.000	0.000	0.000	0.056	0.000
IF	4596.600	9.418	0.000	9.418	0.000	0.000	0.000	0.000	0.073	0.000
AS	4766.400	9.460	0.000	9.460	0.000	0.000	0.000	0.000	-0.214	0.000
IF	4772.500	8.156	0.000	9.460	0.000	0.000	0.000	0.000	-0.067	0.000
IF	4792.500	7.720	0.000	9.460	0.000	0.000	0.000	0.000	-0.010	0.000
IF	4808.500	7.785	0.000	9.460	0.000	0.000	0.000	0.000	0.012	0.000
IF	4816.500	7.995	0.000	9.460	0.000	0.000	0.000	0.000	0.080	0.000
IF	4829.400	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.113	0.000
AS	4845.100	9.460	0.000	9.460	0.000	0.000	0.000	0.000	-0.083	0.000
IF	4847.500	9.262	0.000	9.460	0.000	0.000	0.000	0.000	-0.013	0.000
IF	4865.000	9.196	0.000	9.460	0.000	0.000	0.000	0.000	-0.021	0.000
IF	4879.000	8.616	0.000	9.460	0.000	0.000	0.000	0.000	-0.027	0.000
IF	4886.500	8.606	0.000	9.460	0.000	0.000	0.000	0.000	-0.006	0.000
IF	4897.000	8.507	0.000	9.460	0.000	0.000	0.000	0.000	0.033	0.000
IF	4912.600	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.061	0.000
AS	5381.500	9.453	0.000	9.453	0.000	0.000	0.000	0.000	-0.155	0.000
IF	5383.500	9.144	0.000	9.453	0.000	0.000	0.000	0.000	-0.026	0.000
IF	5397.000	9.049	0.000	9.453	0.000	0.000	0.000	0.000	-0.060	0.000
IF	5411.500	7.474	0.000	9.453	0.000	0.000	0.000	0.000	-0.080	0.000
IF	5424.500	6.847	0.000	9.453	0.000	0.000	0.000	0.000	-0.025	0.000
IF	5444.500	6.654	0.000	9.453	0.000	0.000	0.000	0.000	0.020	0.000
IF	5449.000	7.339	0.000	9.453	0.000	0.000	0.000	0.000	-0.033	0.000
IF	5462.500	6.063	0.000	9.453	0.000	0.000	0.000	0.000	-0.054	0.000
IF	5487.500	5.272	0.000	9.453	0.000	0.000	0.000	0.000	-0.036	0.000
IF	5495.500	4.862	0.000	9.453	0.000	0.000	0.000	0.000	-0.002	0.000
IF	5594.500	5.062	0.000	9.458	0.000	0.000	0.000	0.000	0.006	0.000
IF	5601.000	5.522	0.000	9.459	0.000	0.000	0.000	0.000	0.036	0.000
IF	5617.500	5.883	0.000	9.460	0.000	0.000	0.000	0.000	0.031	0.000
IF	5623.000	6.211	0.000	9.460	0.000	0.000	0.000	0.000	0.011	0.000
IF	5638.000	6.109	0.000	9.460	0.000	0.000	0.000	0.000	0.012	0.000
IF	5644.000	6.470	0.000	9.460	0.000	0.000	0.000	0.000	0.030	0.000
IF	5671.000	7.093	0.000	9.460	0.000	0.000	0.000	0.000	0.023	0.000
IF	5680.500	7.290	0.000	9.460	0.000	0.000	0.000	0.000	0.025	0.000
IF	5690.500	7.585	0.000	9.460	0.000	0.000	0.000	0.000	0.039	0.000
IF	5713.000	8.570	0.000	9.460	0.000	0.000	0.000	0.000	0.041	0.000
IF	5721.000	8.832	0.000	9.460	0.000	0.000	0.000	0.000	0.057	0.000
IF	5728.700	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.082	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-27.459	1.000	1.000	9.093	22.964	13.189	56.140	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.000	-27.343	0.000	9.093	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000	-27.304	0.000	9.093	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.000	-27.110	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	10.000	-27.071	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	15.000	-26.877	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.000	-26.838	0.000	9.094	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	21.000	-26.644	0.000	9.095	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	22.000	-26.605	0.000	9.095	0.000	0.000	0.000	0.000	0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	27.000	-26.357	0.000	9.096	0.000	0.000	0.000	0.000	0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	28.000	-26.301	0.000	9.096	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	33.000	-26.019	0.000	9.097	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	34.000	-25.962	0.000	9.098	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	39.000	-25.680	0.000	9.099	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES

OF	40.000	-25.624	0.000	9.099	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.000	-25.341	0.000	9.101	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	46.000	-25.285	0.000	9.101	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	51.000	-25.003	0.000	9.102	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.000	-24.946	0.000	9.102	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	57.000	-24.664	0.000	9.104	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	58.000	-24.608	0.000	9.104	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	63.000	-24.326	0.000	9.105	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	64.000	-24.269	0.000	9.105	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	69.000	-23.987	0.000	9.107	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	70.000	-23.931	0.000	9.107	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.000	-23.649	0.000	9.108	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	76.000	-23.592	0.000	9.109	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	81.000	-23.310	0.000	9.110	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-23.253	0.000	9.110	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	87.000	-22.971	0.000	9.111	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.000	-22.915	0.000	9.112	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	93.000	-22.633	0.000	9.113	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	94.000	-22.576	0.000	9.113	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.600	-23.510	0.000	9.093	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.800	-23.548	0.000	9.094	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.100	-23.565	0.000	9.094	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	203.400	-23.534	0.000	9.094	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.700	-23.503	0.000	9.094	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	210.000	-23.472	0.000	9.095	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	213.300	-23.440	0.000	9.095	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.500	-23.409	0.000	9.095	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	219.800	-23.378	0.000	9.095	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	223.100	-23.347	0.000	9.096	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	226.400	-23.316	0.000	9.096	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.700	-23.285	0.000	9.096	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	232.900	-23.237	0.000	9.096	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	236.200	-23.170	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	239.500	-23.103	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	242.800	-23.037	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	246.100	-22.970	0.000	9.096	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.300	-22.904	0.000	9.096	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	252.600	-22.837	0.000	9.096	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.900	-22.770	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-22.704	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-22.637	0.000	9.097	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-22.570	0.000	9.097	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-22.504	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-22.437	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-22.370	0.000	9.097	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-22.304	0.000	9.097	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-22.196	0.000	9.097	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-22.049	0.000	9.097	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-21.902	0.000	9.096	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-21.755	0.000	9.096	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-21.608	0.000	9.096	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-21.461	0.000	9.095	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-21.314	0.000	9.095	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-21.166	0.000	9.095	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-21.019	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-20.872	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-20.725	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-20.578	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-20.431	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-20.284	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-20.137	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-19.989	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-19.842	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-19.695	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-19.548	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-19.401	0.000	9.093	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-19.107	0.000	9.094	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-18.960	0.000	9.094	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	357.600	-18.867	0.000	9.094	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-18.987	0.000	9.097	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-19.107	0.000	9.099	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	367.500	-19.226	0.000	9.101	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.700	-19.346	0.000	9.104	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	374.000	-19.465	0.000	9.106	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.300	-19.585	0.000	9.108	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	380.600	-19.705	0.000	9.110	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.900	-19.824	0.000	9.112	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	387.100	-19.944	0.000	9.114	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	390.400	-20.064	0.000	9.116	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	393.700	-20.183	0.000	9.118	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	397.000	-20.303	0.000	9.120	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	400.300	-20.422	0.000	9.121	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	403.500	-20.542	0.000	9.123	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	406.800	-20.662	0.000	9.125	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	410.100	-20.752	0.000	9.126	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	413.400	-20.694	0.000	9.126	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	416.700	-20.636	0.000	9.127	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	419.900	-20.577	0.000	9.127	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	423.200	-20.519	0.000	9.128	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	426.500	-20.461	0.000	9.128	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	429.800	-20.402	0.000	9.128	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	433.100	-20.344	0.000	9.129	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	436.400	-20.286	0.000	9.129	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	439.600	-20.228	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	442.900	-20.169	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	446.200	-20.111	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	449.500	-20.053	0.000	9.131	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	452.800	-19.994	0.000	9.131	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	456.000	-19.936	0.000	9.132	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	459.300	-19.878	0.000	9.132	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	462.600	-19.819	0.000	9.133	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	465.900	-19.761	0.000	9.133	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	469.200	-19.703	0.000	9.134	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	472.400	-19.645	0.000	9.134	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	475.700	-19.586	0.000	9.135	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	479.000	-19.528	0.000	9.135	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	482.300	-19.516	0.000	9.136	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	485.600	-19.526	0.000	9.137	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	488.800	-19.535	0.000	9.138	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	492.100	-19.545	0.000	9.139	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	495.400	-19.554	0.000	9.140	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	498.700	-19.564	0.000	9.141	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	502.000	-19.573	0.000	9.142	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	505.200	-19.583	0.000	9.143	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	508.500	-19.592	0.000	9.144	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	511.800	-19.602	0.000	9.145	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	515.100	-19.611	0.000	9.146	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	518.400	-19.621	0.000	9.146	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	521.700	-19.630	0.000	9.147	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	524.900	-19.640	0.000	9.148	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	528.200	-19.649	0.000	9.149	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	531.500	-19.659	0.000	9.150	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	534.800	-19.668	0.000	9.151	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	538.100	-19.678	0.000	9.151	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	541.300	-19.687	0.000	9.152	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	544.600	-19.697	0.000	9.153	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	547.900	-19.706	0.000	9.154	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	551.200	-19.716	0.000	9.155	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	554.500	-19.725	0.000	9.156	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	557.700	-19.735	0.000	9.156	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	561.000	-19.744	0.000	9.157	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	564.300	-19.733	0.000	9.158	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	567.600	-19.596	0.000	9.158	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	570.900	-19.459	0.000	9.157	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	574.100	-19.322	0.000	9.157	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	577.400	-19.186	0.000	9.157	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	584.000	-18.912	0.000	9.157	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	587.300	-18.775	0.000	9.157	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	590.500	-18.737	0.000	9.157	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	593.800	-18.832	0.000	9.159	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	597.100	-18.927	0.000	9.161	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	600.400	-19.022	0.000	9.162	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	603.700	-19.117	0.000	9.164	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	607.000	-19.111	0.000	9.165	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	610.200	-19.086	0.000	9.165	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	613.500	-19.061	0.000	9.166	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	616.800	-19.035	0.000	9.166	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	620.100	-19.010	0.000	9.167	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	623.400	-18.985	0.000	9.168	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	626.600	-18.960	0.000	9.168	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	629.900	-18.935	0.000	9.169	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	633.200	-18.909	0.000	9.170	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	636.500	-18.884	0.000	9.170	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	639.800	-18.859	0.000	9.171	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	643.000	-18.834	0.000	9.171	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	646.300	-18.809	0.000	9.172	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	649.600	-18.783	0.000	9.173	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	652.900	-18.758	0.000	9.173	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	659.400	-18.708	0.000	9.174	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	662.700	-18.683	0.000	9.175	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	669.300	-18.632	0.000	9.176	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	672.600	-18.607	0.000	9.177	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	679.100	-18.557	0.000	9.178	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	682.400	-18.531	0.000	9.179	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	689.000	-18.481	0.000	9.180	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	692.300	-18.456	0.000	9.181	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	698.800	-18.405	0.000	9.182	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	702.100	-18.380	0.000	9.182	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	708.700	-18.370	0.000	9.184	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	711.900	-18.368	0.000	9.185	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	718.500	-18.362	0.000	9.186	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	721.800	-18.359	0.000	9.187	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	728.300	-18.354	0.000	9.188	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	731.600	-18.351	0.000	9.189	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	738.200	-18.346	0.000	9.190	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	741.500	-18.343	0.000	9.191	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	748.000	-18.338	0.000	9.192	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	751.300	-18.335	0.000	9.193	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	757.900	-18.330	0.000	9.194	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	761.200	-18.327	0.000	9.195	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	767.700	-18.269	0.000	9.196	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	771.000	-18.233	0.000	9.196	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	777.600	-18.162	0.000	9.197	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	780.800	-18.127	0.000	9.198	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	787.400	-18.056	0.000	9.198	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	790.700	-18.020	0.000	9.199	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	797.200	-17.949	0.000	9.200	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	800.500	-17.913	0.000	9.200	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	807.100	-17.842	0.000	9.201	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	810.400	-17.807	0.000	9.202	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	944.900	-18.080	0.000	9.227	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	948.200	-18.093	0.000	9.227	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	954.700	-18.072	0.000	9.228	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	958.000	-18.046	0.000	9.228	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	964.600	-17.993	0.000	9.229	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	967.800	-17.966	0.000	9.229	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	974.400	-17.913	0.000	9.229	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	977.700	-17.886	0.000	9.230	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	984.200	-17.833	0.000	9.230	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	987.500	-17.806	0.000	9.231	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	994.100	-17.753	0.000	9.231	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	997.400	-17.727	0.000	9.231	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1003.900	-17.674	0.000	9.232	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1007.200	-17.647	0.000	9.232	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1013.800	-17.594	0.000	9.233	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1017.100	-17.567	0.000	9.233	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1023.600	-17.514	0.000	9.234	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1026.900	-17.488	0.000	9.234	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1033.500	-17.434	0.000	9.235	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1036.700	-17.408	0.000	9.235	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1043.300	-17.355	0.000	9.235	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1046.600	-17.328	0.000	9.236	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1053.100	-17.275	0.000	9.236	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1056.400	-17.248	0.000	9.237	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1063.000	-17.195	0.000	9.237	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1066.300	-17.169	0.000	9.237	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1072.800	-17.115	0.000	9.238	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1076.100	-17.089	0.000	9.238	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1082.700	-17.036	0.000	9.239	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1086.000	-17.009	0.000	9.240	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1095.800	-16.930	0.000	9.241	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1273.000	-17.177	0.000	9.266	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1276.200	-17.193	0.000	9.267	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1282.800	-17.012	0.000	9.266	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1286.100	-16.867	0.000	9.266	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1292.600	-16.576	0.000	9.265	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1295.900	-16.431	0.000	9.264	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1302.500	-16.140	0.000	9.263	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1305.800	-15.995	0.000	9.263	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1312.300	-15.704	0.000	9.262	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1315.600	-15.559	0.000	9.261	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1322.200	-15.268	0.000	9.261	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1325.500	-15.122	0.000	9.260	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1417.300	-16.681	0.000	9.288	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1420.600	-16.761	0.000	9.289	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1427.200	-16.750	0.000	9.290	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1430.400	-16.739	0.000	9.290	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1443.600	-16.716	0.000	9.291	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1446.800	-16.723	0.000	9.291	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1453.400	-16.720	0.000	9.292	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1456.700	-16.560	0.000	9.291	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1463.300	-16.228	0.000	9.290	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1466.500	-16.062	0.000	9.290	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1473.100	-15.731	0.000	9.288	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1476.400	-15.565	0.000	9.288	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1482.900	-15.234	0.000	9.286	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1486.200	-15.068	0.000	9.286	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1492.800	-14.737	0.000	9.285	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1496.100	-14.571	0.000	9.284	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1502.600	-14.239	0.000	9.283	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1505.900	-14.074	0.000	9.283	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1512.500	-13.742	0.000	9.282	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1515.700	-13.577	0.000	9.282	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1522.300	-13.245	0.000	9.281	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1525.600	-13.079	0.000	9.281	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1542.000	-12.251	0.000	9.281	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1545.300	-12.085	0.000	9.281	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1561.700	-11.408	0.000	9.283	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1565.000	-11.285	0.000	9.284	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1581.400	-10.670	0.000	9.289	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1584.600	-10.547	0.000	9.290	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1601.000	-9.933	0.000	9.297	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1604.300	-9.810	0.000	9.298	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1620.700	-9.196	0.000	9.306	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1627.300	-9.077	0.000	9.312	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1640.400	-9.016	0.000	9.324	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1650.300	-8.970	0.000	9.332	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1656.800	-8.929	0.000	9.337	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1669.900	-8.811	0.000	9.347	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1679.800	-8.723	0.000	9.354	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1686.300	-8.664	0.000	9.358	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1699.500	-8.546	0.000	9.368	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1709.300	-8.458	0.000	9.374	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1715.900	-8.399	0.000	9.378	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1729.000	-8.282	0.000	9.386	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1738.800	-8.043	0.000	9.390	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1745.400	-7.875	0.000	9.393	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1768.400	-7.284	0.000	9.405	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1774.900	-7.116	0.000	9.408	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1797.900	-6.525	0.000	9.421	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1804.500	-6.351	0.000	9.425	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1827.400	-5.724	0.000	9.441	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1834.000	-5.593	0.000	9.446	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1857.000	-5.306	0.000	9.465	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1863.500	-5.225	0.000	9.470	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1893.000	-4.856	0.000	9.492	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1906.200	-4.679	0.000	9.501	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1932.400	-4.303	0.000	9.518	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1935.700	-4.260	0.000	9.520	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2007.900	-4.382	0.000	9.564	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2011.200	-4.396	0.000	9.566	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2014.400	-4.409	0.000	9.567	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2017.700	-4.423	0.000	9.568	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2021.000	-4.437	0.000	9.569	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2024.300	-4.450	0.000	9.571	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2027.600	-4.464	0.000	9.572	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2030.800	-4.477	0.000	9.573	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2034.100	-4.491	0.000	9.575	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2037.400	-4.504	0.000	9.575	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2040.700	-4.518	0.000	9.577	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2044.000	-4.531	0.000	9.578	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2047.200	-4.545	0.000	9.579	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2050.500	-4.558	0.000	9.580	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2053.800	-4.572	0.000	9.581	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2057.100	-4.575	0.000	9.582	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2060.400	-4.576	0.000	9.583	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2063.600	-4.577	0.000	9.584	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2066.900	-4.578	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2070.200	-4.579	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2073.500	-4.580	0.000	9.586	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2076.800	-4.581	0.000	9.587	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2080.000	-4.582	0.000	9.588	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2083.300	-4.582	0.000	9.589	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2086.600	-4.583	0.000	9.589	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2089.900	-4.584	0.000	9.590	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2093.200	-4.585	0.000	9.591	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2096.500	-4.586	0.000	9.591	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2099.700	-4.587	0.000	9.592	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2103.000	-4.588	0.000	9.593	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2106.300	-4.589	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2109.600	-4.590	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2112.900	-4.591	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2116.100	-4.592	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2119.400	-4.593	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2122.700	-4.594	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2126.000	-4.595	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2129.300	-4.596	0.000	9.598	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2132.500	-4.597	0.000	9.599	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2135.800	-4.598	0.000	9.599	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2139.100	-4.599	0.000	9.600	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2142.400	-4.600	0.000	9.601	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2145.700	-4.601	0.000	9.601	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2148.900	-4.602	0.000	9.602	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2152.200	-4.603	0.000	9.602	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2155.500	-4.604	0.000	9.603	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2158.800	-4.611	0.000	9.604	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2162.100	-4.620	0.000	9.604	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2165.300	-4.630	0.000	9.605	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2168.600	-4.639	0.000	9.606	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2171.900	-4.648	0.000	9.606	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2175.200	-4.657	0.000	9.606	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2178.500	-4.667	0.000	9.607	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2181.800	-4.676	0.000	9.608	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2185.000	-4.685	0.000	9.608	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2188.300	-4.694	0.000	9.609	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2191.600	-4.703	0.000	9.609	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2194.900	-4.713	0.000	9.610	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2198.200	-4.722	0.000	9.610	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2201.400	-4.731	0.000	9.611	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2204.700	-4.740	0.000	9.611	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2208.000	-4.750	0.000	9.612	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2211.300	-4.759	0.000	9.612	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2214.600	-4.768	0.000	9.613	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2217.800	-4.777	0.000	9.613	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2221.100	-4.786	0.000	9.613	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2224.400	-4.796	0.000	9.614	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2227.700	-4.805	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2231.000	-4.814	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2234.200	-4.823	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2237.500	-4.833	0.000	9.616	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2240.800	-4.842	0.000	9.616	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2244.100	-4.852	0.000	9.616	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2247.400	-4.862	0.000	9.617	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2250.700	-4.873	0.000	9.617	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2253.900	-4.884	0.000	9.618	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2257.200	-4.896	0.000	9.618	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2260.500	-4.908	0.000	9.618	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2263.800	-4.920	0.000	9.619	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2267.100	-4.933	0.000	9.619	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2270.300	-4.945	0.000	9.620	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2273.600	-4.957	0.000	9.620	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2276.900	-4.969	0.000	9.620	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2280.200	-4.981	0.000	9.621	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2283.500	-4.993	0.000	9.621	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2286.700	-5.006	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2290.000	-5.020	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2293.300	-5.033	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2296.600	-5.047	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2299.900	-5.060	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2303.100	-5.074	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2306.400	-5.087	0.000	9.623	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2309.700	-5.100	0.000	9.624	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2313.000	-5.114	0.000	9.624	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2316.300	-5.127	0.000	9.624	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2319.500	-5.141	0.000	9.625	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2322.800	-5.154	0.000	9.625	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2326.100	-5.168	0.000	9.625	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2329.400	-5.181	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2332.700	-5.194	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2336.000	-5.208	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2339.200	-5.221	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2342.500	-5.235	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2345.800	-5.248	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2349.100	-5.261	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2352.400	-5.275	0.000	9.627	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2355.600	-5.288	0.000	9.628	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2358.900	-5.302	0.000	9.628	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2362.200	-5.310	0.000	9.628	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2365.500	-5.308	0.000	9.628	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2368.800	-5.306	0.000	9.629	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2372.000	-5.304	0.000	9.629	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2375.300	-5.302	0.000	9.629	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2378.600	-5.307	0.000	9.629	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2381.900	-5.315	0.000	9.629	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2385.200	-5.324	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2388.400	-5.332	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2391.700	-5.341	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2395.000	-5.349	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2398.300	-5.358	0.000	9.630	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2401.600	-5.366	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2404.900	-5.375	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2408.100	-5.383	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2411.400	-5.392	0.000	9.631	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2414.700	-5.400	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2418.000	-5.409	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2421.300	-5.417	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2424.500	-5.425	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2427.800	-5.434	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2431.100	-5.442	0.000	9.632	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2434.400	-5.451	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2437.700	-5.459	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2440.900	-5.468	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2444.200	-5.476	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2447.500	-5.485	0.000	9.633	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2450.800	-5.493	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2454.100	-5.502	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2457.300	-5.510	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2460.600	-5.519	0.000	9.634	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2463.900	-5.527	0.000	9.634	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2467.200	-5.535	0.000	9.634	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2470.500	-5.542	0.000	9.634	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2473.700	-5.549	0.000	9.635	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2477.000	-5.556	0.000	9.635	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2480.300	-5.548	0.000	9.635	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2483.600	-5.527	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2486.900	-5.505	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2490.200	-5.484	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2493.400	-5.462	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2496.700	-5.441	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2500.000	-5.419	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2503.300	-5.398	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2506.600	-5.376	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2509.800	-5.355	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2513.100	-5.333	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2516.400	-5.312	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2519.700	-5.290	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2523.000	-5.269	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2526.200	-5.247	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2529.500	-5.226	0.000	9.635	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2532.800	-5.204	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2536.100	-5.183	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2539.400	-5.161	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2542.600	-5.140	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2545.900	-5.118	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2549.200	-5.097	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2552.500	-5.075	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2555.800	-5.054	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2559.000	-5.032	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2562.300	-5.011	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2565.600	-4.989	0.000	9.636	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2568.900	-4.968	0.000	9.637	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2572.200	-4.958	0.000	9.637	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2575.500	-4.991	0.000	9.637	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2578.700	-5.024	0.000	9.637	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2582.000	-5.050	0.000	9.637	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2585.300	-5.070	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2588.600	-5.090	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2591.900	-5.111	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2595.100	-5.131	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2598.400	-5.152	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2601.700	-5.172	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2605.000	-5.192	0.000	9.639	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2608.300	-5.213	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2611.500	-5.233	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2614.800	-5.253	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2618.100	-5.274	0.000	9.640	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2621.400	-5.294	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2624.700	-5.314	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2627.900	-5.335	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2631.200	-5.355	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2634.500	-5.375	0.000	9.641	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2637.800	-5.396	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2641.100	-5.416	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2644.400	-5.437	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2647.600	-5.457	0.000	9.642	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2650.900	-5.478	0.000	9.642	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2654.200	-5.501	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2657.500	-5.524	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2660.800	-5.547	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2664.000	-5.569	0.000	9.643	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2667.300	-5.592	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2670.600	-5.615	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2673.900	-5.638	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2677.200	-5.661	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2680.400	-5.684	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2683.700	-5.706	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2687.000	-5.729	0.000	9.644	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2690.300	-5.752	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2693.600	-5.775	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2696.800	-5.798	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2700.100	-5.821	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2703.400	-5.843	0.000	9.645	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2706.700	-5.866	0.000	9.646	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2710.000	-5.889	0.000	9.646	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2713.200	-5.912	0.000	9.646	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2716.500	-5.936	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2719.800	-5.963	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2723.100	-5.989	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2726.400	-6.016	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2729.700	-6.042	0.000	9.646	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2732.900	-6.068	0.000	9.647	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2736.200	-6.095	0.000	9.647	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2739.500	-6.121	0.000	9.647	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2742.800	-6.148	0.000	9.647	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2746.100	-6.165	0.000	9.647	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2749.300	-6.181	0.000	9.647	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2752.600	-6.197	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2755.900	-6.213	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2759.200	-6.229	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2762.500	-6.246	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2765.700	-6.262	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2769.000	-6.278	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2772.300	-6.294	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2775.600	-6.310	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2778.900	-6.326	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2782.100	-6.342	0.000	9.648	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2785.400	-6.358	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2788.700	-6.374	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2792.000	-6.391	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2795.300	-6.407	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2798.600	-6.423	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2801.800	-6.439	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2805.100	-6.455	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2808.400	-6.471	0.000	9.649	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2811.700	-6.487	0.000	9.649	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2815.000	-6.488	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2818.200	-6.487	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2821.500	-6.487	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2824.800	-6.486	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2828.100	-6.486	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2831.400	-6.485	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2834.600	-6.485	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2837.900	-6.484	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2841.200	-6.484	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2844.500	-6.483	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2847.800	-6.483	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2851.000	-6.482	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2854.300	-6.482	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2857.600	-6.481	0.000	9.649	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2860.900	-6.480	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2864.200	-6.480	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2867.400	-6.479	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2870.700	-6.478	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2874.000	-6.478	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2877.300	-6.477	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2880.600	-6.477	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2883.900	-6.476	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2887.100	-6.475	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2890.400	-6.475	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2893.700	-6.474	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2897.000	-6.474	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2900.300	-6.473	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2903.500	-6.472	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2906.800	-6.472	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2910.100	-6.471	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2913.400	-6.470	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2916.700	-6.470	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2919.900	-6.469	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2923.200	-6.469	0.000	9.650	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2926.500	-6.468	0.000	9.650	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2929.800	-6.441	0.000	9.650	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2933.100	-6.385	0.000	9.650	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2936.300	-6.330	0.000	9.650	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2939.600	-6.275	0.000	9.649	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2942.900	-6.220	0.000	9.649	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2946.200	-6.165	0.000	9.649	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2949.500	-6.110	0.000	9.649	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2952.700	-6.044	0.000	9.649	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	2956.000	-5.957	0.000	9.649	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2959.300	-5.870	0.000	9.648	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2962.600	-5.783	0.000	9.648	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2965.900	-5.696	0.000	9.648	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2969.200	-5.610	0.000	9.647	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2972.400	-5.523	0.000	9.647	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2975.700	-5.436	0.000	9.647	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2979.000	-5.349	0.000	9.646	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2982.300	-5.263	0.000	9.646	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2985.600	-5.176	0.000	9.646	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2988.800	-5.089	0.000	9.646	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2992.100	-5.002	0.000	9.646	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2995.400	-4.915	0.000	9.645	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2998.700	-4.829	0.000	9.645	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3002.000	-4.742	0.000	9.645	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3005.200	-4.656	0.000	9.644	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3008.500	-4.639	0.000	9.645	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3011.800	-4.637	0.000	9.645	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3015.100	-4.634	0.000	9.645	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3018.400	-4.632	0.000	9.645	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3021.600	-4.630	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3024.900	-4.627	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3028.200	-4.625	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3031.500	-4.623	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3034.800	-4.620	0.000	9.646	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3038.100	-4.618	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3041.300	-4.615	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3044.600	-4.613	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3047.900	-4.611	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3051.200	-4.609	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3054.500	-4.606	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3057.700	-4.604	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3061.000	-4.602	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3064.300	-4.599	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	3067.600	-4.597	0.000	9.648	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3070.900	-4.594	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3074.100	-4.591	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3077.400	-4.588	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3080.700	-4.585	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3084.000	-4.582	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3087.300	-4.579	0.000	9.649	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3090.500	-4.576	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3093.800	-4.573	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3097.100	-4.570	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3100.400	-4.568	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3103.700	-4.567	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3106.900	-4.565	0.000	9.650	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3110.200	-4.564	0.000	9.651	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3113.500	-4.562	0.000	9.651	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3116.800	-4.551	0.000	9.651	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3120.100	-4.529	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3123.400	-4.508	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3126.600	-4.486	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3129.900	-4.465	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3133.200	-4.443	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3136.500	-4.421	0.000	9.651	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3139.800	-4.400	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3143.000	-4.378	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3146.300	-4.357	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3149.600	-4.335	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3152.900	-4.313	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3156.200	-4.292	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3159.400	-4.270	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3162.700	-4.249	0.000	9.652	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3166.000	-4.227	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3169.300	-4.205	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3172.600	-4.184	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3175.800	-4.162	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	3179.100	-4.141	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3182.400	-4.119	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3185.700	-4.097	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3189.000	-4.076	0.000	9.653	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3192.300	-4.054	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3195.500	-4.033	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3198.800	-4.011	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3202.100	-3.989	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3205.400	-3.968	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3208.700	-3.944	0.000	9.654	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3211.900	-3.919	0.000	9.654	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3215.200	-3.895	0.000	9.655	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3218.500	-3.870	0.000	9.655	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3221.800	-3.845	0.000	9.655	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3225.100	-3.832	0.000	9.655	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3228.300	-3.825	0.000	9.655	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3231.600	-3.819	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3234.900	-3.812	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3238.200	-3.806	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3241.500	-3.799	0.000	9.656	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3244.700	-3.792	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3248.000	-3.786	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3251.300	-3.779	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3254.600	-3.772	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3257.900	-3.766	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3261.100	-3.759	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3264.400	-3.753	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3267.700	-3.746	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3271.000	-3.739	0.000	9.658	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3274.300	-3.733	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3277.600	-3.726	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3280.800	-3.719	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3284.100	-3.712	0.000	9.659	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3287.400	-3.704	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	3290.700	-3.697	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3294.000	-3.691	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3297.200	-3.684	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3300.500	-3.676	0.000	9.660	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3303.800	-3.669	0.000	9.661	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3307.100	-3.662	0.000	9.661	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3310.400	-3.651	0.000	9.661	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3313.600	-3.553	0.000	9.661	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3316.900	-3.444	0.000	9.661	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3320.200	-3.336	0.000	9.660	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3323.500	-3.249	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3326.800	-3.164	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3330.000	-3.078	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3333.300	-2.993	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3336.600	-2.907	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3339.900	-2.822	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3343.200	-2.736	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3346.400	-2.650	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3349.700	-2.565	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3353.000	-2.479	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3356.300	-2.394	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3359.600	-2.308	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3362.900	-2.223	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3366.100	-2.137	0.000	9.660	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3369.400	-2.052	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3372.700	-1.966	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3376.000	-1.880	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3379.300	-1.795	0.000	9.662	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3382.500	-1.709	0.000	9.662	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3385.800	-1.618	0.000	9.662	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3389.100	-1.519	0.000	9.663	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3392.400	-1.419	0.000	9.663	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3395.700	-1.320	0.000	9.664	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3398.900	-1.220	0.000	9.664	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	3402.200	-1.121	0.000	9.665	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3405.500	-1.021	0.000	9.665	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3408.800	-0.922	0.000	9.666	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3412.100	-0.822	0.000	9.667	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3415.300	-0.723	0.000	9.667	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3418.600	-0.623	0.000	9.668	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3421.900	-0.524	0.000	9.669	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3425.200	-0.424	0.000	9.670	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3428.500	-0.325	0.000	9.671	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3431.800	-0.225	0.000	9.672	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3435.000	-0.126	0.000	9.674	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3438.300	-0.026	0.000	9.675	0.000	0.000	0.000	0.000	-0.145	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3441.600	-1.082	0.000	9.686	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3444.900	-0.240	0.000	9.680	0.000	0.000	0.000	0.000	0.230	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3448.200	0.439	0.000	9.675	0.000	0.000	0.000	0.000	0.163	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3451.400	0.820	0.000	9.674	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3454.700	1.233	0.000	9.673	0.000	0.000	0.000	0.000	0.133	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3458.000	1.699	0.000	9.672	0.000	0.000	0.000	0.000	0.141	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3461.300	2.166	0.000	9.672	0.000	0.000	0.000	0.000	0.150	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3464.600	2.691	0.000	9.672	0.000	0.000	0.000	0.000	0.167	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3467.800	3.250	0.000	9.674	0.000	0.000	0.000	0.000	0.172	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3471.100	3.810	0.000	9.679	0.000	0.000	0.000	0.000	0.132	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3474.400	4.125	0.000	9.692	0.000	0.000	0.000	0.000	0.068	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3477.700	4.262	0.000	9.712	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3481.000	4.392	0.000	9.731	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3484.200	4.594	0.000	9.748	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3487.500	4.917	0.000	9.762	0.000	0.000	0.000	0.000	0.098	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3490.800	5.240	0.000	9.778	0.000	0.000	0.000	0.000	0.070	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3494.100	5.380	0.000	9.801	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3497.400	5.416	0.000	9.825	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3500.600	5.452	0.000	9.846	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3503.900	5.401	0.000	9.866	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3507.200	5.340	0.000	9.881	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3510.500	5.561	0.000	9.890	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	3513.800	5.872	0.000	9.897	0.000	0.000	0.000	0.000	0.094	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3517.100	6.178	0.000	9.907	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3520.300	6.204	0.000	9.925	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3523.600	6.229	0.000	9.941	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3526.900	6.466	0.000	9.951	0.000	0.000	0.000	0.000	0.084	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3530.200	6.782	0.000	9.962	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3533.500	6.728	0.000	9.983	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3536.700	6.727	0.000	9.999	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3540.000	6.771	0.000	10.011	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3543.300	6.816	0.000	10.022	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3546.600	6.861	0.000	10.032	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3549.900	6.988	0.000	10.039	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3553.100	7.126	0.000	10.047	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3556.400	7.264	0.000	10.056	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3559.700	7.403	0.000	10.065	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3563.000	7.402	0.000	10.076	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3566.300	7.309	0.000	10.087	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3569.500	7.411	0.000	10.092	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3572.800	7.731	0.000	10.096	0.000	0.000	0.000	0.000	0.097	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3576.100	8.050	0.000	10.102	0.000	0.000	0.000	0.000	0.097	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3579.400	8.370	0.000	10.127	0.000	0.000	0.000	0.000	0.078	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3582.700	8.566	0.000	10.155	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3586.000	8.699	0.000	10.178	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3589.200	8.832	0.000	10.198	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3592.500	8.965	0.000	10.216	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3595.800	9.097	0.000	10.233	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3597.500	9.167	0.000	10.233	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3624.000	10.115	0.000	10.233	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3640.500	9.984	0.000	10.233	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3649.000	9.491	0.000	10.233	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3656.000	9.426	0.000	10.233	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3674.000	8.967	0.000	10.233	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3677.500	8.934	0.000	10.233	0.000	0.000	0.000	0.000	-0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3688.000	8.474	0.000	10.233	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	3694.500	8.671	0.000	10.233	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3709.000	8.639	0.000	10.233	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3721.000	8.770	0.000	10.233	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3726.500	9.626	0.000	10.233	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3740.500	8.868	0.000	10.233	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3759.000	9.623	0.000	10.233	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3772.200	10.233	0.000	10.233	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	3785.800	9.460	0.000	9.460	0.000	0.000	0.000	0.000	-0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3792.500	9.131	0.000	9.460	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3805.500	8.967	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3815.500	9.131	0.000	9.460	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3825.000	8.704	0.000	9.460	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3839.300	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	3996.900	9.408	0.000	9.408	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4005.500	9.134	0.000	9.408	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4029.500	9.200	0.000	9.408	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4073.500	8.219	0.000	9.409	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4083.000	9.104	0.000	9.409	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4091.000	7.559	0.000	9.409	0.000	0.000	0.000	0.000	-0.165	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4111.500	4.406	0.000	9.410	0.000	0.000	0.000	0.000	-0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4147.000	3.848	0.000	9.411	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4151.500	4.242	0.000	9.411	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4370.000	-1.500	0.000	9.415	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4488.000	6.014	0.000	9.418	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4498.500	5.817	0.000	9.418	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4528.000	6.250	0.000	9.418	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4539.500	8.317	0.000	9.418	0.000	0.000	0.000	0.000	0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4548.500	7.821	0.000	9.418	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4561.000	7.982	0.000	9.418	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4572.000	8.048	0.000	9.418	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4580.500	8.245	0.000	9.418	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4596.600	9.418	0.000	9.418	0.000	0.000	0.000	0.000	0.073	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	4766.400	9.460	0.000	9.460	0.000	0.000	0.000	0.000	-0.214	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4772.500	8.156	0.000	9.460	0.000	0.000	0.000	0.000	-0.067	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	4792.500	7.720	0.000	9.460	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4808.500	7.785	0.000	9.460	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4816.500	7.995	0.000	9.460	0.000	0.000	0.000	0.000	0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4829.400	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.113	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	4845.100	9.460	0.000	9.460	0.000	0.000	0.000	0.000	-0.083	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4847.500	9.262	0.000	9.460	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4865.000	9.196	0.000	9.460	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4879.000	8.616	0.000	9.460	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4886.500	8.606	0.000	9.460	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4897.000	8.507	0.000	9.460	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4912.600	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	5381.500	9.453	0.000	9.453	0.000	0.000	0.000	0.000	-0.155	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5383.500	9.144	0.000	9.453	0.000	0.000	0.000	0.000	-0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5397.000	9.049	0.000	9.453	0.000	0.000	0.000	0.000	-0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5411.500	7.474	0.000	9.453	0.000	0.000	0.000	0.000	-0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5424.500	6.847	0.000	9.453	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5444.500	6.654	0.000	9.453	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5449.000	7.339	0.000	9.453	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5462.500	6.063	0.000	9.453	0.000	0.000	0.000	0.000	-0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5487.500	5.272	0.000	9.453	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5495.500	4.862	0.000	9.453	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5594.500	5.062	0.000	9.458	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5601.000	5.522	0.000	9.459	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5617.500	5.883	0.000	9.460	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5623.000	6.211	0.000	9.460	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5638.000	6.109	0.000	9.460	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5644.000	6.470	0.000	9.460	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5671.000	7.093	0.000	9.460	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5680.500	7.290	0.000	9.460	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5690.500	7.585	0.000	9.460	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5713.000	8.570	0.000	9.460	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5721.000	8.832	0.000	9.460	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5728.700	9.460	0.000	9.460	0.000	0.000	0.000	0.000	0.082	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	22.96	13.19	25.17
OF	3.00	22.95	13.19	25.16
OF	4.00	22.95	13.19	25.16
OF	9.00	22.92	13.19	25.14
OF	10.00	22.92	13.19	25.14
OF	15.00	22.90	13.19	25.12
OF	16.00	22.90	13.19	25.12
OF	21.00	22.87	13.19	25.10
OF	22.00	22.87	13.19	25.10
OF	27.00	22.83	13.19	25.08
OF	28.00	22.83	13.19	25.08
OF	33.00	22.79	13.19	25.05
OF	34.00	22.78	13.19	25.05
OF	39.00	22.74	13.19	25.02
OF	40.00	22.74	13.19	25.01
OF	45.00	22.69	13.19	24.99
OF	46.00	22.69	13.19	24.98
OF	51.00	22.64	13.19	24.95
OF	52.00	22.64	13.19	24.95
OF	57.00	22.60	13.19	24.92
OF	58.00	22.59	13.19	24.92
OF	63.00	22.55	13.19	24.89
OF	64.00	22.54	13.19	24.88
OF	69.00	22.49	13.19	24.85
OF	70.00	22.49	13.19	24.85
OF	75.00	22.44	13.19	24.82
OF	76.00	22.44	13.19	24.81
OF	81.00	22.39	13.19	24.78
OF	82.00	22.38	13.19	24.78
OF	87.00	22.34	13.19	24.75
OF	88.00	22.33	13.19	24.74
OF	93.00	22.28	13.19	24.71
OF	94.00	22.27	13.19	24.70
OF	193.60	22.45	13.19	24.81
OF	196.80	22.46	13.19	24.82
OF	200.10	22.47	13.19	24.82
OF	203.40	22.47	13.19	24.82
OF	206.70	22.47	13.19	24.82
OF	210.00	22.46	13.19	24.82
OF	213.30	22.46	13.19	24.82
OF	216.50	22.46	13.19	24.82
OF	219.80	22.46	13.19	24.82
OF	223.10	22.46	13.19	24.82
OF	226.40	22.46	13.19	24.82
OF	229.70	22.46	13.19	24.82
OF	232.90	22.45	13.19	24.81
OF	236.20	22.45	13.19	24.81
OF	239.50	22.44	13.19	24.80
OF	242.80	22.43	13.19	24.80
OF	246.10	22.42	13.19	24.79
OF	249.30	22.41	13.19	24.79
OF	252.60	22.41	13.19	24.78
OF	255.90	22.40	13.19	24.78
OF	259.20	22.39	13.19	24.77
OF	262.50	22.38	13.19	24.76
OF	265.70	22.37	13.19	24.76
OF	269.00	22.37	13.19	24.75
OF	272.30	22.36	13.19	24.75
OF	275.60	22.35	13.19	24.74
OF	278.90	22.34	13.19	24.73
OF	282.20	22.32	13.19	24.72
OF	285.40	22.30	13.19	24.71
OF	288.70	22.29	13.19	24.70
OF	292.00	22.32	13.19	24.72
OF	295.30	22.34	13.19	24.73
OF	298.60	22.36	13.19	24.75
OF	301.80	22.38	13.19	24.76
OF	305.10	22.40	13.19	24.77
OF	308.40	22.29	13.19	24.70
OF	311.70	22.19	13.19	24.63
OF	315.00	22.09	13.19	24.55
OF	318.20	21.98	13.19	24.48
OF	321.50	21.88	13.19	24.41
OF	324.80	21.78	13.19	24.34
OF	328.10	21.67	13.19	24.26
OF	331.40	21.57	13.19	24.19
OF	334.60	21.46	13.19	24.12
OF	337.90	21.36	13.19	24.05
OF	341.20	21.26	13.19	23.97
OF	344.50	21.15	13.19	23.90
OF	351.00	20.95	13.19	23.76
OF	354.30	20.84	13.19	23.68
OF	357.60	20.78	13.19	23.64
OF	360.90	20.76	13.19	23.63
OF	364.20	20.74	13.19	23.61
OF	367.50	20.72	13.19	23.60
OF	370.70	20.70	13.19	23.59
OF	374.00	20.68	13.19	23.58
OF	377.30	20.70	13.19	23.60
OF	380.60	20.73	13.19	23.62
OF	383.90	20.75	13.19	23.64
OF	387.10	20.78	13.19	23.66
OF	390.40	20.81	13.19	23.68
OF	393.70	20.84	13.19	23.71
OF	397.00	20.87	13.19	23.73
OF	400.30	20.90	13.19	23.75
OF	403.50	20.92	13.19	23.77
OF	406.80	20.95	13.19	23.79
OF	410.10	20.97	13.19	23.81

OF	413.40	20.97	13.19	23.80
OF	416.70	20.96	13.19	23.80
OF	419.90	20.95	13.19	23.79
OF	423.20	20.95	13.19	23.79
OF	426.50	20.94	13.19	23.79
OF	429.80	20.93	13.19	23.78
OF	433.10	20.93	13.19	23.78
OF	436.40	20.92	13.19	23.77
OF	439.60	20.91	13.19	23.77
OF	442.90	20.91	13.19	23.76
OF	446.20	20.90	13.19	23.76
OF	449.50	20.89	13.19	23.76
OF	452.80	20.88	13.19	23.75
OF	456.00	20.88	13.19	23.75
OF	459.30	20.87	13.19	23.74
OF	462.60	20.86	13.19	23.74
OF	465.90	20.86	13.19	23.73
OF	469.20	20.86	13.19	23.73
OF	472.40	20.87	13.19	23.74
OF	475.70	20.87	13.19	23.75
OF	479.00	20.88	13.19	23.75
OF	482.30	20.88	13.19	23.76
OF	485.60	20.88	13.19	23.75
OF	488.80	20.88	13.19	23.75
OF	492.10	20.88	13.19	23.75
OF	495.40	20.88	13.19	23.75
OF	498.70	20.87	13.19	23.75
OF	502.00	20.87	13.19	23.75
OF	505.20	20.87	13.19	23.75
OF	508.50	20.87	13.19	23.75
OF	511.80	20.87	13.19	23.75
OF	515.10	20.87	13.19	23.75
OF	518.40	20.86	13.19	23.75
OF	521.70	20.86	13.19	23.75
OF	524.90	20.86	13.19	23.75
OF	528.20	20.86	13.19	23.75
OF	531.50	20.86	13.19	23.75
OF	534.80	20.85	13.19	23.75
OF	538.10	20.85	13.19	23.75
OF	541.30	20.85	13.19	23.75
OF	544.60	20.85	13.19	23.75
OF	547.90	20.85	13.19	23.75
OF	551.20	20.85	13.19	23.75
OF	554.50	20.86	13.19	23.76
OF	557.70	20.86	13.19	23.76
OF	561.00	20.87	13.19	23.77
OF	564.30	20.87	13.19	23.77
OF	567.60	20.89	13.19	23.78
OF	570.90	20.91	13.19	23.80
OF	574.10	20.93	13.19	23.81
OF	577.40	20.95	13.19	23.83
OF	584.00	20.85	13.19	23.75
OF	587.30	20.76	13.19	23.69
OF	590.50	20.73	13.19	23.67
OF	593.80	20.71	13.19	23.66
OF	597.10	20.70	13.19	23.65
OF	600.40	20.68	13.19	23.64
OF	603.70	20.67	13.19	23.63
OF	607.00	20.67	13.19	23.63
OF	610.20	20.67	13.19	23.63
OF	613.50	20.67	13.19	23.64
OF	616.80	20.68	13.19	23.64
OF	620.10	20.68	13.19	23.64
OF	623.40	20.68	13.19	23.65
OF	626.60	20.69	13.19	23.65
OF	629.90	20.69	13.19	23.65
OF	633.20	20.70	13.19	23.66
OF	636.50	20.70	13.19	23.66
OF	639.80	20.70	13.19	23.66
OF	643.00	20.71	13.19	23.67
OF	646.30	20.71	13.19	23.67
OF	649.60	20.71	13.19	23.67
OF	652.90	20.72	13.19	23.67
OF	659.40	20.72	13.19	23.68
OF	662.70	20.70	13.19	23.67
OF	669.30	20.67	13.19	23.64
OF	672.60	20.65	13.19	23.63
OF	679.10	20.62	13.19	23.61
OF	682.40	20.60	13.19	23.60
OF	689.00	20.56	13.19	23.57
OF	692.30	20.55	13.19	23.56
OF	698.80	20.51	13.19	23.54
OF	702.10	20.49	13.19	23.53
OF	708.70	20.49	13.19	23.53
OF	711.90	20.49	13.19	23.53
OF	718.50	20.48	13.19	23.52
OF	721.80	20.48	13.19	23.52
OF	728.30	20.48	13.19	23.52
OF	731.60	20.48	13.19	23.52
OF	738.20	20.48	13.19	23.52
OF	741.50	20.47	13.19	23.52
OF	748.00	20.47	13.19	23.52
OF	751.30	20.47	13.19	23.52
OF	757.90	20.47	13.19	23.52
OF	761.20	20.47	13.19	23.52
OF	767.70	20.42	13.19	23.49
OF	771.00	20.40	13.19	23.48
OF	777.60	20.35	13.19	23.44
OF	780.80	20.33	13.19	23.43
OF	787.40	20.28	13.19	23.39
OF	790.70	20.25	13.19	23.37
OF	797.20	20.20	13.19	23.34

OF	800.50	20.18	13.19	23.32
OF	807.10	20.13	13.19	23.29
OF	810.40	20.10	13.19	23.27
OF	944.90	20.04	13.19	23.26
OF	948.20	20.04	13.19	23.25
OF	954.70	20.04	13.19	23.26
OF	958.00	20.05	13.19	23.26
OF	964.60	20.05	13.19	23.27
OF	967.80	20.06	13.19	23.27
OF	974.40	20.06	13.19	23.27
OF	977.70	20.07	13.19	23.28
OF	984.20	20.08	13.19	23.28
OF	987.50	20.08	13.19	23.29
OF	994.10	20.08	13.19	23.29
OF	997.40	20.07	13.19	23.28
OF	1003.90	20.03	13.19	23.25
OF	1007.20	20.01	13.19	23.24
OF	1013.80	19.97	13.19	23.21
OF	1017.10	19.95	13.19	23.20
OF	1023.60	19.92	13.19	23.18
OF	1026.90	19.90	13.19	23.16
OF	1033.50	19.86	13.19	23.14
OF	1036.70	19.84	13.19	23.12
OF	1043.30	19.80	13.19	23.10
OF	1046.60	19.79	13.19	23.09
OF	1053.10	19.75	13.19	23.06
OF	1056.40	19.73	13.19	23.05
OF	1063.00	19.69	13.19	23.02
OF	1066.30	19.67	13.19	23.01
OF	1072.80	19.64	13.19	22.98
OF	1076.10	19.62	13.19	22.97
OF	1082.70	19.58	13.19	22.95
OF	1086.00	19.56	13.19	22.93
OF	1095.80	19.51	13.19	22.90
	1219.84	19.46	13.19	22.88
OF	1273.00	19.45	13.19	22.88
OF	1276.20	19.44	13.19	22.88
OF	1282.80	19.47	13.19	22.90
OF	1286.10	19.48	13.19	22.90
OF	1292.60	19.27	13.19	22.75
OF	1295.90	19.17	13.19	22.68
OF	1302.50	18.96	13.19	22.53
OF	1305.80	18.86	13.19	22.46
OF	1312.30	18.65	13.19	22.31
OF	1315.60	18.54	13.19	22.24
OF	1322.20	18.33	13.19	22.09
OF	1325.50	18.23	13.19	22.02
OF	1417.30	18.39	13.19	22.16
OF	1420.60	18.41	13.19	22.18
OF	1427.20	18.41	13.19	22.18
OF	1430.40	18.41	13.19	22.18
OF	1443.60	18.41	13.19	22.18
OF	1446.80	18.42	13.19	22.18
OF	1453.40	18.42	13.19	22.19
OF	1456.70	18.39	13.19	22.17
OF	1463.30	18.33	13.19	22.12
OF	1466.50	18.30	13.19	22.10
OF	1473.10	18.24	13.19	22.06
OF	1476.40	18.22	13.19	22.04
OF	1482.90	18.27	13.19	22.07
OF	1486.20	18.21	13.19	22.03
OF	1492.80	17.97	13.19	21.86
OF	1496.10	17.85	13.19	21.78
OF	1502.60	17.61	13.19	21.61
OF	1505.90	17.49	13.19	21.53
OF	1512.50	17.25	13.19	21.36
OF	1515.70	17.13	13.19	21.28
OF	1522.30	16.89	13.19	21.11
OF	1525.60	16.78	13.19	21.02
OF	1542.00	16.18	13.19	20.60
OF	1545.30	16.06	13.19	20.52
OF	1561.70	15.57	13.19	20.18
OF	1565.00	15.48	13.19	20.12
OF	1581.40	15.04	13.19	19.81
OF	1584.60	14.95	13.19	19.75
OF	1601.00	14.50	13.19	19.45
OF	1604.30	14.42	13.19	19.39
OF	1620.70	13.97	13.19	19.09
OF	1627.30	13.89	13.19	19.04
OF	1640.40	13.85	13.19	19.02
OF	1650.30	13.83	13.19	19.01
OF	1656.80	13.80	13.19	19.00
OF	1669.90	13.72	13.19	18.95
OF	1679.80	13.66	13.19	18.92
OF	1686.30	13.62	13.19	18.89
OF	1699.50	13.54	13.19	18.85
OF	1709.30	13.48	13.19	18.81
OF	1715.90	13.44	13.19	18.79
OF	1729.00	13.36	13.19	18.74
OF	1738.80	13.19	13.19	18.62
OF	1745.40	13.07	13.19	18.54
OF	1768.40	12.64	13.19	18.26
OF	1774.90	12.52	13.19	18.17
OF	1797.90	12.10	13.19	17.89
OF	1804.50	11.97	13.19	17.80
OF	1827.40	11.52	13.19	17.50
OF	1834.00	11.43	13.19	17.44
OF	1857.00	11.23	13.19	17.32
OF	1863.50	11.17	13.19	17.29
OF	1893.00	10.91	13.19	17.13
OF	1906.20	10.79	13.19	17.05
OF	1932.40	10.52	13.19	16.88

OF	1935.70	10.49	13.19	16.86
OF	2007.90	10.52	13.19	16.93
OF	2011.20	10.53	13.19	16.94
OF	2014.40	10.53	13.19	16.94
OF	2017.70	10.54	13.19	16.95
OF	2021.00	10.54	13.19	16.95
OF	2024.30	10.55	13.19	16.96
OF	2027.60	10.55	13.19	16.96
OF	2030.80	10.56	13.19	16.96
OF	2034.10	10.57	13.19	16.97
OF	2037.40	10.57	13.19	16.97
OF	2040.70	10.57	13.19	16.98
OF	2044.00	10.58	13.19	16.98
OF	2047.20	10.58	13.19	16.99
OF	2050.50	10.59	13.19	16.99
OF	2053.80	10.59	13.19	17.00
OF	2057.10	10.60	13.19	17.00
OF	2060.40	10.60	13.19	17.00
OF	2063.60	10.60	13.19	17.01
OF	2066.90	10.61	13.19	17.01
OF	2070.20	10.61	13.19	17.01
OF	2073.50	10.61	13.19	17.01
OF	2076.80	10.61	13.19	17.02
OF	2080.00	10.61	13.19	17.02
OF	2083.30	10.62	13.19	17.02
OF	2086.60	10.62	13.19	17.02
OF	2089.90	10.62	13.19	17.03
OF	2093.20	10.62	13.19	17.03
OF	2096.50	10.63	13.19	17.03
OF	2099.70	10.63	13.19	17.03
OF	2103.00	10.63	13.19	17.04
OF	2106.30	10.63	13.19	17.04
OF	2109.60	10.64	13.19	17.04
OF	2112.90	10.64	13.19	17.04
OF	2116.10	10.64	13.19	17.05
OF	2119.40	10.64	13.19	17.05
OF	2122.70	10.65	13.19	17.05
OF	2126.00	10.65	13.19	17.05
OF	2129.30	10.65	13.19	17.05
OF	2132.50	10.65	13.19	17.06
OF	2135.80	10.66	13.19	17.06
OF	2139.10	10.66	13.19	17.06
OF	2142.40	10.66	13.19	17.06
OF	2145.70	10.66	13.19	17.07
OF	2148.90	10.67	13.19	17.07
OF	2152.20	10.67	13.19	17.07
OF	2155.50	10.67	13.19	17.07
OF	2158.80	10.67	13.19	17.08
OF	2162.10	10.68	13.19	17.08
OF	2165.30	10.68	13.19	17.08
OF	2168.60	10.69	13.19	17.09
OF	2171.90	10.69	13.19	17.09
OF	2175.20	10.69	13.19	17.09
OF	2178.50	10.70	13.19	17.10
OF	2181.80	10.70	13.19	17.10
OF	2185.00	10.71	13.19	17.10
OF	2188.30	10.71	13.19	17.11
OF	2191.60	10.71	13.19	17.11
OF	2194.90	10.72	13.19	17.11
OF	2198.20	10.72	13.19	17.12
OF	2201.40	10.73	13.19	17.12
OF	2204.70	10.73	13.19	17.12
OF	2208.00	10.73	13.19	17.13
OF	2211.30	10.74	13.19	17.13
OF	2214.60	10.74	13.19	17.13
OF	2217.80	10.75	13.19	17.14
OF	2221.10	10.75	13.19	17.14
OF	2224.40	10.76	13.19	17.14
OF	2227.70	10.76	13.19	17.15
OF	2231.00	10.76	13.19	17.15
OF	2234.20	10.77	13.19	17.15
OF	2237.50	10.77	13.19	17.16
OF	2240.80	10.78	13.19	17.16
OF	2244.10	10.78	13.19	17.16
OF	2247.40	10.78	13.19	17.17
OF	2250.70	10.79	13.19	17.17
OF	2253.90	10.79	13.19	17.17
OF	2257.20	10.80	13.19	17.18
OF	2260.50	10.80	13.19	17.18
OF	2263.80	10.81	13.19	17.18
OF	2267.10	10.81	13.19	17.19
OF	2270.30	10.82	13.19	17.19
OF	2273.60	10.82	13.19	17.19
OF	2276.90	10.82	13.19	17.20
OF	2280.20	10.83	13.19	17.20
OF	2283.50	10.83	13.19	17.20
OF	2286.70	10.84	13.19	17.21
OF	2290.00	10.84	13.19	17.21
OF	2293.30	10.85	13.19	17.22
OF	2296.60	10.85	13.19	17.22
OF	2299.90	10.86	13.19	17.22
OF	2303.10	10.86	13.19	17.23
OF	2306.40	10.87	13.19	17.23
OF	2309.70	10.87	13.19	17.23
OF	2313.00	10.88	13.19	17.24
OF	2316.30	10.88	13.19	17.24
OF	2319.50	10.89	13.19	17.25
OF	2322.80	10.89	13.19	17.25
OF	2326.10	10.90	13.19	17.25
OF	2329.40	10.90	13.19	17.26
OF	2332.70	10.90	13.19	17.26
OF	2336.00	10.91	13.19	17.26

OF	2339.20	10.91	13.19	17.27
OF	2342.50	10.92	13.19	17.27
OF	2345.80	10.92	13.19	17.27
OF	2349.10	10.93	13.19	17.28
OF	2352.40	10.93	13.19	17.28
OF	2355.60	10.94	13.19	17.28
OF	2358.90	10.94	13.19	17.29
OF	2362.20	10.95	13.19	17.29
OF	2365.50	10.95	13.19	17.29
OF	2368.80	10.95	13.19	17.29
OF	2372.00	10.95	13.19	17.30
OF	2375.30	10.95	13.19	17.30
OF	2378.60	10.96	13.19	17.30
OF	2381.90	10.96	13.19	17.30
OF	2385.20	10.96	13.19	17.31
OF	2388.40	10.97	13.19	17.31
OF	2391.70	10.97	13.19	17.31
OF	2395.00	10.98	13.19	17.31
OF	2398.30	10.98	13.19	17.32
OF	2401.60	10.98	13.19	17.32
OF	2404.90	10.99	13.19	17.32
OF	2408.10	10.99	13.19	17.32
OF	2411.40	11.00	13.19	17.33
OF	2414.70	11.00	13.19	17.33
OF	2418.00	11.00	13.19	17.33
OF	2421.30	11.01	13.19	17.34
OF	2424.50	11.01	13.19	17.34
OF	2427.80	11.01	13.19	17.34
OF	2431.10	11.02	13.19	17.34
OF	2434.40	11.02	13.19	17.35
OF	2437.70	11.03	13.19	17.35
OF	2440.90	11.03	13.19	17.35
OF	2444.20	11.03	13.19	17.36
OF	2447.50	11.04	13.19	17.36
OF	2450.80	11.04	13.19	17.36
OF	2454.10	11.04	13.19	17.37
OF	2457.30	11.05	13.19	17.37
OF	2460.60	11.05	13.19	17.37
OF	2463.90	11.06	13.19	17.37
OF	2467.20	11.06	13.19	17.38
OF	2470.50	11.06	13.19	17.38
OF	2473.70	11.07	13.19	17.38
OF	2477.00	11.07	13.19	17.38
OF	2480.30	11.07	13.19	17.38
OF	2483.60	11.07	13.19	17.38
OF	2486.90	11.07	13.19	17.38
OF	2490.20	11.07	13.19	17.38
OF	2493.40	11.06	13.19	17.38
OF	2496.70	11.06	13.19	17.38
OF	2500.00	11.06	13.19	17.38
OF	2503.30	11.06	13.19	17.38
OF	2506.60	11.06	13.19	17.37
OF	2509.80	11.05	13.19	17.37
OF	2513.10	11.05	13.19	17.37
OF	2516.40	11.05	13.19	17.37
OF	2519.70	11.05	13.19	17.37
OF	2523.00	11.05	13.19	17.37
OF	2526.20	11.04	13.19	17.37
OF	2529.50	11.04	13.19	17.36
OF	2532.80	11.04	13.19	17.36
OF	2536.10	11.04	13.19	17.36
OF	2539.40	11.04	13.19	17.36
OF	2542.60	11.03	13.19	17.36
OF	2545.90	11.03	13.19	17.36
OF	2549.20	11.03	13.19	17.36
OF	2552.50	11.03	13.19	17.36
OF	2555.80	11.03	13.19	17.35
OF	2559.00	11.02	13.19	17.35
OF	2562.30	11.02	13.19	17.35
OF	2565.60	11.02	13.19	17.35
OF	2568.90	11.02	13.19	17.35
OF	2572.20	11.02	13.19	17.35
OF	2575.50	11.03	13.19	17.36
OF	2578.70	11.03	13.19	17.36
OF	2582.00	11.04	13.19	17.37
OF	2585.30	11.05	13.19	17.37
OF	2588.60	11.05	13.19	17.38
OF	2591.90	11.06	13.19	17.38
OF	2595.10	11.07	13.19	17.39
OF	2598.40	11.07	13.19	17.39
OF	2601.70	11.08	13.19	17.40
OF	2605.00	11.09	13.19	17.40
OF	2608.30	11.09	13.19	17.41
OF	2611.50	11.10	13.19	17.41
OF	2614.80	11.11	13.19	17.41
OF	2618.10	11.11	13.19	17.42
OF	2621.40	11.12	13.19	17.42
OF	2624.70	11.12	13.19	17.43
OF	2627.90	11.13	13.19	17.43
OF	2631.20	11.14	13.19	17.44
OF	2634.50	11.14	13.19	17.44
OF	2637.80	11.15	13.19	17.45
OF	2641.10	11.16	13.19	17.45
OF	2644.40	11.16	13.19	17.46
OF	2647.60	11.17	13.19	17.46
OF	2650.90	11.17	13.19	17.46
OF	2654.20	11.18	13.19	17.47
OF	2657.50	11.19	13.19	17.47
OF	2660.80	11.19	13.19	17.48
OF	2664.00	11.20	13.19	17.48
OF	2667.30	11.21	13.19	17.49
OF	2670.60	11.21	13.19	17.49

OF	2673.90	11.22	13.19	17.50
OF	2677.20	11.23	13.19	17.50
OF	2680.40	11.23	13.19	17.51
OF	2683.70	11.24	13.19	17.51
OF	2687.00	11.25	13.19	17.52
OF	2690.30	11.25	13.19	17.52
OF	2693.60	11.26	13.19	17.53
OF	2696.80	11.27	13.19	17.53
OF	2700.10	11.27	13.19	17.54
OF	2703.40	11.28	13.19	17.54
OF	2706.70	11.29	13.19	17.55
OF	2710.00	11.29	13.19	17.55
OF	2713.20	11.30	13.19	17.56
OF	2716.50	11.31	13.19	17.56
OF	2719.80	11.31	13.19	17.57
OF	2723.10	11.32	13.19	17.57
OF	2726.40	11.33	13.19	17.58
OF	2729.70	11.33	13.19	17.58
OF	2732.90	11.34	13.19	17.59
OF	2736.20	11.35	13.19	17.59
OF	2739.50	11.36	13.19	17.60
OF	2742.80	11.36	13.19	17.60
OF	2746.10	11.37	13.19	17.60
OF	2749.30	11.37	13.19	17.61
OF	2752.60	11.38	13.19	17.61
OF	2755.90	11.38	13.19	17.62
OF	2759.20	11.39	13.19	17.62
OF	2762.50	11.39	13.19	17.62
OF	2765.70	11.40	13.19	17.63
OF	2769.00	11.40	13.19	17.63
OF	2772.30	11.41	13.19	17.63
OF	2775.60	11.41	13.19	17.64
OF	2778.90	11.42	13.19	17.64
OF	2782.10	11.43	13.19	17.65
OF	2785.40	11.43	13.19	17.65
OF	2788.70	11.44	13.19	17.65
OF	2792.00	11.44	13.19	17.66
OF	2795.30	11.45	13.19	17.66
OF	2798.60	11.45	13.19	17.66
OF	2801.80	11.46	13.19	17.67
OF	2805.10	11.46	13.19	17.67
OF	2808.40	11.47	13.19	17.68
OF	2811.70	11.47	13.19	17.68
OF	2815.00	11.47	13.19	17.68
OF	2818.20	11.48	13.19	17.68
OF	2821.50	11.48	13.19	17.68
OF	2824.80	11.48	13.19	17.69
OF	2828.10	11.48	13.19	17.69
OF	2831.40	11.48	13.19	17.69
OF	2834.60	11.49	13.19	17.69
OF	2837.90	11.49	13.19	17.69
OF	2841.20	11.49	13.19	17.69
OF	2844.50	11.49	13.19	17.69
OF	2847.80	11.50	13.19	17.70
OF	2851.00	11.50	13.19	17.70
OF	2854.30	11.50	13.19	17.70
OF	2857.60	11.50	13.19	17.70
OF	2860.90	11.50	13.19	17.70
OF	2864.20	11.51	13.19	17.70
OF	2867.40	11.51	13.19	17.71
OF	2870.70	11.51	13.19	17.71
OF	2874.00	11.51	13.19	17.71
OF	2877.30	11.52	13.19	17.71
OF	2880.60	11.52	13.19	17.71
OF	2883.90	11.52	13.19	17.71
OF	2887.10	11.52	13.19	17.71
OF	2890.40	11.52	13.19	17.72
OF	2893.70	11.53	13.19	17.72
OF	2897.00	11.53	13.19	17.72
OF	2900.30	11.53	13.19	17.72
OF	2903.50	11.53	13.19	17.72
OF	2906.80	11.53	13.19	17.72
OF	2910.10	11.54	13.19	17.73
OF	2913.40	11.54	13.19	17.73
OF	2916.70	11.54	13.19	17.73
OF	2919.90	11.54	13.19	17.73
OF	2923.20	11.55	13.19	17.73
OF	2926.50	11.55	13.19	17.73
OF	2929.80	11.54	13.19	17.73
OF	2933.10	11.54	13.19	17.73
OF	2936.30	11.53	13.19	17.72
OF	2939.60	11.52	13.19	17.71
OF	2942.90	11.51	13.19	17.71
OF	2946.20	11.50	13.19	17.70
OF	2949.50	11.50	13.19	17.70
OF	2952.70	11.49	13.19	17.69
OF	2956.00	11.47	13.19	17.68
OF	2959.30	11.46	13.19	17.67
OF	2962.60	11.44	13.19	17.66
OF	2965.90	11.43	13.19	17.65
OF	2969.20	11.41	13.19	17.64
OF	2972.40	11.40	13.19	17.63
OF	2975.70	11.38	13.19	17.61
OF	2979.00	11.37	13.19	17.60
OF	2982.30	11.33	13.19	17.58
OF	2985.60	11.27	13.19	17.53
OF	2988.80	11.20	13.19	17.49
OF	2992.10	11.14	13.19	17.44
OF	2995.40	11.07	13.19	17.39
OF	2998.70	11.01	13.19	17.35
OF	3002.00	10.94	13.19	17.31
OF	3005.20	10.88	13.19	17.26

OF	3008.50	10.87	13.19	17.25
OF	3011.80	10.87	13.19	17.25
OF	3015.10	10.86	13.19	17.25
OF	3018.40	10.86	13.19	17.25
OF	3021.60	10.86	13.19	17.25
OF	3024.90	10.86	13.19	17.25
OF	3028.20	10.86	13.19	17.25
OF	3031.50	10.86	13.19	17.24
OF	3034.80	10.85	13.19	17.24
OF	3038.10	10.85	13.19	17.24
OF	3041.30	10.85	13.19	17.24
OF	3044.60	10.85	13.19	17.24
OF	3047.90	10.85	13.19	17.24
OF	3051.20	10.85	13.19	17.24
OF	3054.50	10.84	13.19	17.24
OF	3057.70	10.84	13.19	17.24
OF	3061.00	10.84	13.19	17.24
OF	3064.30	10.84	13.19	17.24
OF	3067.60	10.84	13.19	17.23
OF	3070.90	10.84	13.19	17.23
OF	3074.10	10.83	13.19	17.23
OF	3077.40	10.83	13.19	17.23
OF	3080.70	10.83	13.19	17.23
OF	3084.00	10.83	13.19	17.23
OF	3087.30	10.83	13.19	17.23
OF	3090.50	10.82	13.19	17.23
OF	3093.80	10.82	13.19	17.23
OF	3097.10	10.82	13.19	17.22
OF	3100.40	10.82	13.19	17.22
OF	3103.70	10.82	13.19	17.22
OF	3106.90	10.82	13.19	17.22
OF	3110.20	10.82	13.19	17.22
OF	3113.50	10.81	13.19	17.22
OF	3116.80	10.81	13.19	17.22
OF	3120.10	10.79	13.19	17.20
OF	3123.40	10.77	13.19	17.19
OF	3126.60	10.76	13.19	17.18
OF	3129.90	10.74	13.19	17.17
OF	3133.20	10.73	13.19	17.16
OF	3136.50	10.71	13.19	17.15
OF	3139.80	10.69	13.19	17.14
OF	3143.00	10.68	13.19	17.13
OF	3146.30	10.66	13.19	17.12
OF	3149.60	10.65	13.19	17.10
OF	3152.90	10.63	13.19	17.09
OF	3156.20	10.61	13.19	17.08
OF	3159.40	10.60	13.19	17.07
OF	3162.70	10.58	13.19	17.06
OF	3166.00	10.57	13.19	17.05
OF	3169.30	10.55	13.19	17.04
OF	3172.60	10.53	13.19	17.03
OF	3175.80	10.52	13.19	17.02
OF	3179.10	10.50	13.19	17.00
OF	3182.40	10.49	13.19	16.99
OF	3185.70	10.47	13.19	16.98
OF	3189.00	10.45	13.19	16.97
OF	3192.30	10.44	13.19	16.96
OF	3195.50	10.42	13.19	16.95
OF	3198.80	10.41	13.19	16.94
OF	3202.10	10.39	13.19	16.93
OF	3205.40	10.37	13.19	16.92
OF	3208.70	10.36	13.19	16.90
OF	3211.90	10.34	13.19	16.89
OF	3215.20	10.32	13.19	16.88
OF	3218.50	10.30	13.19	16.87
OF	3221.80	10.28	13.19	16.85
OF	3225.10	10.27	13.19	16.85
OF	3228.30	10.27	13.19	16.84
OF	3231.60	10.27	13.19	16.84
OF	3234.90	10.26	13.19	16.84
OF	3238.20	10.26	13.19	16.84
OF	3241.50	10.25	13.19	16.83
OF	3244.70	10.25	13.19	16.83
OF	3248.00	10.24	13.19	16.83
OF	3251.30	10.24	13.19	16.82
OF	3254.60	10.23	13.19	16.82
OF	3257.90	10.23	13.19	16.82
OF	3261.10	10.22	13.19	16.81
OF	3264.40	10.22	13.19	16.81
OF	3267.70	10.21	13.19	16.81
OF	3271.00	10.21	13.19	16.80
OF	3274.30	10.20	13.19	16.80
OF	3277.60	10.20	13.19	16.80
OF	3280.80	10.19	13.19	16.79
OF	3284.10	10.19	13.19	16.79
OF	3287.40	10.18	13.19	16.79
OF	3290.70	10.18	13.19	16.78
OF	3294.00	10.17	13.19	16.78
OF	3297.20	10.17	13.19	16.78
OF	3300.50	10.16	13.19	16.77
OF	3303.80	10.16	13.19	16.77
OF	3307.10	10.15	13.19	16.77
OF	3310.40	10.14	13.19	16.76
OF	3313.60	10.07	13.19	16.71
OF	3316.90	9.99	13.19	16.65
OF	3320.20	9.91	13.19	16.60
OF	3323.50	9.84	13.19	16.55
OF	3326.80	9.78	13.19	16.51
OF	3330.00	9.72	13.19	16.46
OF	3333.30	9.65	13.19	16.42
OF	3336.60	9.59	13.19	16.37
OF	3339.90	9.53	13.19	16.33

OF	3343.20	9.46	13.19	16.28
OF	3346.40	9.40	13.19	16.24
OF	3349.70	9.33	13.19	16.19
OF	3353.00	9.27	13.19	16.15
OF	3356.30	9.21	13.19	16.10
OF	3359.60	9.14	13.19	16.06
OF	3362.90	9.08	13.19	16.01
OF	3366.10	9.01	13.19	15.97
OF	3369.40	8.95	13.19	15.93
OF	3372.70	8.89	13.19	15.88
OF	3376.00	8.82	13.19	15.84
OF	3379.30	8.76	13.19	15.79
OF	3382.50	8.69	13.19	15.75
OF	3385.80	8.63	13.19	15.70
OF	3389.10	8.55	13.19	15.65
OF	3392.40	8.48	13.19	15.60
OF	3395.70	8.40	13.19	15.55
OF	3398.90	8.33	13.19	15.49
OF	3402.20	8.26	13.19	15.44
OF	3405.50	8.18	13.19	15.39
OF	3408.80	8.11	13.19	15.34
OF	3412.10	8.03	13.19	15.29
OF	3415.30	7.96	13.19	15.24
OF	3418.60	7.88	13.19	15.19
OF	3421.90	7.81	13.19	15.14
OF	3425.20	7.74	13.19	15.08
OF	3428.50	7.66	13.19	15.03
OF	3431.80	7.59	13.19	14.98
OF	3435.00	7.51	13.19	14.93
OF	3438.30	7.44	13.19	14.88
OF	3441.60	7.64	13.19	15.03
OF	3444.90	7.48	13.19	14.92
IF	3448.20	7.09	13.19	14.64
IF	3451.40	6.80	13.19	14.43
IF	3454.70	6.49	13.19	14.21
IF	3458.00	6.13	13.19	13.96
IF	3461.30	5.78	13.19	13.72
IF	3464.60	5.38	13.19	13.44
IF	3467.80	4.95	13.19	13.14
IF	3471.10	4.53	13.19	12.85
IF	3474.40	4.30	13.19	12.70
IF	3477.70	4.21	13.19	12.66
IF	3481.00	4.13	13.19	12.62
IF	3484.20	3.98	13.19	12.54
IF	3487.50	3.75	13.19	12.38
IF	3490.80	3.51	13.19	12.24
IF	3494.10	3.42	13.19	12.20
IF	3497.40	3.41	13.19	12.21
IF	3500.60	3.40	13.19	12.23
IF	3503.90	3.42	13.19	12.26
IF	3507.20	3.44	13.19	12.29
IF	3510.50	3.35	13.19	12.24
IF	3513.80	3.12	13.19	12.08
IF	3517.10	2.89	13.19	11.93
IF	3520.30	2.88	13.19	11.94
IF	3523.60	2.88	13.19	11.95
IF	3526.90	2.70	13.19	11.84
IF	3530.20	2.47	13.19	11.69
IF	3533.50	2.48	13.19	11.72
IF	3536.70	2.49	13.19	11.74
IF	3540.00	2.48	13.19	11.75
IF	3543.30	2.48	13.19	11.76
IF	3546.60	2.46	13.19	11.75
IF	3549.90	2.37	13.19	11.70
IF	3553.10	2.27	13.19	11.63
IF	3556.40	2.17	13.19	11.57
IF	3559.70	2.07	13.19	11.51
IF	3563.00	2.07	13.19	11.53
IF	3566.30	2.09	13.19	11.55
IF	3569.50	2.08	13.19	11.54
IF	3572.80	1.84	13.19	11.38
IF	3576.10	1.59	13.19	11.22
IF	3579.40	1.37	13.19	11.08
IF	3582.70	1.24	13.19	11.02
IF	3586.00	1.15	13.19	10.98
IF	3589.20	1.06	13.19	10.94
IF	3592.50	0.97	13.19	10.90
IF	3595.80	0.88	13.19	10.85
IF	3597.50	0.83	13.19	10.81
IF	3624.00	0.09	13.19	10.30
IF	3640.50	0.19	13.19	10.37
IF	3649.00	0.28	13.19	10.43
IF	3656.00	0.37	13.19	10.49
IF	3674.00	0.49	13.19	10.58
IF	3677.50	0.52	13.19	10.60
IF	3688.00	0.56	13.19	10.63
IF	3694.50	0.62	13.19	10.67
IF	3709.00	0.71	13.19	10.73
IF	3721.00	0.79	13.19	10.79
IF	3726.50	0.47	13.19	10.56
IF	3740.50	0.52	13.19	10.60
IF	3759.00	0.48	13.19	10.57
IF	3772.20	0.01	13.19	10.24
AS	3785.80	0.00	0.00	9.46
IF	3792.50	0.05	0.27	9.50
IF	3805.50	0.11	0.38	9.53
IF	3815.50	0.13	0.44	9.55
IF	3825.00	0.17	0.48	9.58
IF	3839.30	0.01	0.53	9.47
AS	3996.90	0.00	0.00	9.41
IF	4005.50	0.06	0.29	9.45
IF	4029.50	0.11	0.45	9.49

IF	4073.50	0.26	0.60	9.59
IF	4083.00	0.18	0.62	9.54
IF	4091.00	0.26	0.64	9.59
IF	4111.50	0.34	0.68	9.65
IF	4147.00	0.41	0.75	9.70
IF	4151.50	0.41	0.75	9.70
	4304.45	0.66	0.95	9.87
OF	4370.00	0.75	1.01	9.94
IF	4488.00	0.89	1.11	10.04
IF	4498.50	0.90	1.11	10.05
IF	4528.00	0.93	1.13	10.07
IF	4539.50	0.65	1.14	9.87
IF	4548.50	0.70	1.15	9.91
IF	4561.00	0.71	1.16	9.92
IF	4572.00	0.71	1.16	9.92
IF	4580.50	0.69	1.17	9.90
IF	4596.60	0.01	1.18	9.42
AS	4766.40	0.00	0.00	9.46
IF	4772.50	0.05	0.26	9.49
IF	4792.50	0.13	0.42	9.55
IF	4808.50	0.18	0.49	9.58
IF	4816.50	0.20	0.52	9.60
IF	4829.40	0.01	0.56	9.47
AS	4845.10	0.00	0.00	9.46
IF	4847.50	0.03	0.20	9.48
IF	4865.00	0.10	0.38	9.53
IF	4879.00	0.15	0.46	9.57
IF	4886.50	0.17	0.49	9.58
IF	4897.00	0.20	0.52	9.60
IF	4912.60	0.01	0.57	9.47
AS	5381.50	0.00	0.00	9.45
IF	5383.50	0.03	0.19	9.47
IF	5397.00	0.09	0.35	9.52
IF	5411.50	0.14	0.44	9.55
IF	5424.50	0.18	0.49	9.58
IF	5444.50	0.23	0.56	9.61
IF	5449.00	0.24	0.57	9.62
IF	5462.50	0.27	0.61	9.64
IF	5487.50	0.32	0.66	9.68
IF	5495.50	0.34	0.68	9.69
IF	5594.50	0.51	0.84	9.82
IF	5601.00	0.52	0.85	9.83
IF	5617.50	0.55	0.87	9.84
IF	5623.00	0.56	0.87	9.85
IF	5638.00	0.58	0.89	9.87
IF	5644.00	0.59	0.90	9.87
IF	5671.00	0.63	0.93	9.90
IF	5680.50	0.63	0.94	9.90
IF	5690.50	0.64	0.95	9.91
IF	5713.00	0.50	0.97	9.81
IF	5721.00	0.40	0.98	9.74
IF	5728.70	0.01	0.98	9.47

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN 3772.20 AND 3785.80
BETWEEN 3839.30 AND 3996.90
BETWEEN 4596.60 AND 4766.40
BETWEEN 4829.40 AND 4845.10
BETWEEN 4912.60 AND 5381.50

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
9.00	1.00	9.09
21.00	1.00	9.10
27.00	1.00	9.10
33.00	1.00	9.10
34.00	1.00	9.10
39.00	1.00	9.10
45.00	1.00	9.10
51.00	1.00	9.10
57.00	1.00	9.10
63.00	1.00	9.10
69.00	1.00	9.11
75.00	1.00	9.11
76.00	1.00	9.11
81.00	1.00	9.11
87.00	1.00	9.11
88.00	1.00	9.11
93.00	1.00	9.11
193.60	1.00	9.09
196.80	1.00	9.09
210.00	1.00	9.10
223.10	1.00	9.10
255.90	1.00	9.10
288.70	1.00	9.10
298.60	1.00	9.10
308.40	1.00	9.09
324.80	1.00	9.09
351.00	1.00	9.09
360.90	1.00	9.10
364.20	1.00	9.10
367.50	1.00	9.10
370.70	1.00	9.10
374.00	1.00	9.11
377.30	1.00	9.11
380.60	1.00	9.11
383.90	1.00	9.11
387.10	1.00	9.11
390.40	1.00	9.12
393.70	1.00	9.12
397.00	1.00	9.12
400.30	1.00	9.12
403.50	1.00	9.12
406.80	1.00	9.12

410.10	1.00	9.13
416.70	1.00	9.13
423.20	1.00	9.13
433.10	1.00	9.13
439.60	1.00	9.13
449.50	1.00	9.13
456.00	1.00	9.13
462.60	1.00	9.13
469.20	1.00	9.13
475.70	1.00	9.14
482.30	1.00	9.14
485.60	1.00	9.14
488.80	1.00	9.14
492.10	1.00	9.14
495.40	1.00	9.14
498.70	1.00	9.14
502.00	1.00	9.14
505.20	1.00	9.14
508.50	1.00	9.14
511.80	1.00	9.15
515.10	1.00	9.15
521.70	1.00	9.15
524.90	1.00	9.15
528.20	1.00	9.15
531.50	1.00	9.15
534.80	1.00	9.15
541.30	1.00	9.15
544.60	1.00	9.15
547.90	1.00	9.15
551.20	1.00	9.15
554.50	1.00	9.16
561.00	1.00	9.16
564.30	1.00	9.16
570.90	1.00	9.16
593.80	1.00	9.16
597.10	1.00	9.16
600.40	1.00	9.16
603.70	1.00	9.16
607.00	1.00	9.16
613.50	1.00	9.17
620.10	1.00	9.17
623.40	1.00	9.17
629.90	1.00	9.17
633.20	1.00	9.17
639.80	1.00	9.17
646.30	1.00	9.17
649.60	1.00	9.17
659.40	1.00	9.17
662.70	1.00	9.18
669.30	1.00	9.18
672.60	1.00	9.18
679.10	1.00	9.18
682.40	1.00	9.18
689.00	1.00	9.18
692.30	1.00	9.18
698.80	1.00	9.18
708.70	1.00	9.18
711.90	1.00	9.19
718.50	1.00	9.19
721.80	1.00	9.19
728.30	1.00	9.19
731.60	1.00	9.19
738.20	1.00	9.19
741.50	1.00	9.19
748.00	1.00	9.19
751.30	1.00	9.19
757.90	1.00	9.19
761.20	1.00	9.19
767.70	1.00	9.20
777.60	1.00	9.20
780.80	1.00	9.20
790.70	1.00	9.20
797.20	1.00	9.20
807.10	1.00	9.20
810.40	1.00	9.20
944.90	1.00	9.23
948.20	1.00	9.23
954.70	1.00	9.23
964.60	1.00	9.23
977.70	1.00	9.23
987.50	1.00	9.23
1003.90	1.00	9.23
1013.80	1.00	9.23
1023.60	1.00	9.23
1033.50	1.00	9.23
1046.60	1.00	9.24
1056.40	1.00	9.24
1072.80	1.00	9.24
1082.70	1.00	9.24
1086.00	1.00	9.24
1095.80	1.00	9.24
1273.00	1.00	9.27
1276.20	1.00	9.27
1282.80	1.00	9.27
1292.60	1.00	9.27
1295.90	1.00	9.26
1302.50	1.00	9.26
1312.30	1.00	9.26
1315.60	1.00	9.26
1325.50	1.00	9.26
1417.30	1.00	9.29
1420.60	1.00	9.29

1427.20	1.00	9.29
1443.60	1.00	9.29
1453.40	1.00	9.29
1456.70	1.00	9.29
1463.30	1.00	9.29
1473.10	1.00	9.29
1482.90	1.00	9.29
1492.80	1.00	9.28
1496.10	1.00	9.28
1502.60	1.00	9.28
1512.50	1.00	9.28
1522.30	1.00	9.28
1561.70	1.00	9.28
1565.00	1.00	9.28
1581.40	1.00	9.29
1584.60	1.00	9.29
1601.00	1.00	9.30
1604.30	1.00	9.30
1620.70	1.00	9.31
1627.30	1.00	9.31
1640.40	1.00	9.32
1650.30	1.00	9.33
1656.80	1.00	9.34
1669.90	1.00	9.35
1679.80	1.00	9.35
1686.30	1.00	9.36
1699.50	1.00	9.37
1709.30	1.00	9.37
1715.90	1.00	9.38
1729.00	1.00	9.39
1738.80	1.00	9.39
1745.40	1.00	9.39
1768.40	1.00	9.40
1774.90	1.00	9.41
1797.90	1.00	9.42
1804.50	1.00	9.43
1827.40	1.00	9.44
1834.00	1.00	9.45
1857.00	1.00	9.47
1863.50	1.00	9.47
1893.00	1.00	9.49
1906.20	1.00	9.50
1932.40	1.00	9.52
1935.70	1.00	9.52
2007.90	1.00	9.56
2011.20	1.00	9.57
2014.40	1.00	9.57
2017.70	1.00	9.57
2021.00	1.00	9.57
2024.30	1.00	9.57
2027.60	1.00	9.57
2030.80	1.00	9.57
2034.10	1.00	9.57
2040.70	1.00	9.58
2044.00	1.00	9.58
2047.20	1.00	9.58
2050.50	1.00	9.58
2053.80	1.00	9.58
2057.10	1.00	9.58
2060.40	1.00	9.58
2063.60	1.00	9.58
2066.90	1.00	9.59
2073.50	1.00	9.59
2076.80	1.00	9.59
2080.00	1.00	9.59
2083.30	1.00	9.59
2089.90	1.00	9.59
2093.20	1.00	9.59
2099.70	1.00	9.59
2103.00	1.00	9.59
2106.30	1.00	9.59
2112.90	1.00	9.60
2116.10	1.00	9.60
2122.70	1.00	9.60
2129.30	1.00	9.60
2132.50	1.00	9.60
2139.10	1.00	9.60
2142.40	1.00	9.60
2148.90	1.00	9.60
2155.50	1.00	9.60
2158.80	1.00	9.60
2165.30	1.00	9.60
2168.60	1.00	9.61
2178.50	1.00	9.61
2181.80	1.00	9.61
2188.30	1.00	9.61
2194.90	1.00	9.61
2201.40	1.00	9.61
2208.00	1.00	9.61
2214.60	1.00	9.61
2224.40	1.00	9.61
2227.70	1.00	9.61
2237.50	1.00	9.62
2247.40	1.00	9.62
2253.90	1.00	9.62
2263.80	1.00	9.62
2270.30	1.00	9.62
2280.20	1.00	9.62
2286.70	1.00	9.62
2296.60	1.00	9.62
2309.70	1.00	9.62
2319.50	1.00	9.62

2329.40	1.00	9.63
2342.50	1.00	9.63
2355.60	1.00	9.63
2368.80	1.00	9.63
2385.20	1.00	9.63
2401.60	1.00	9.63
2414.70	1.00	9.63
2434.40	1.00	9.63
2450.80	1.00	9.63
2473.70	1.00	9.64
2532.80	1.00	9.64
2568.90	1.00	9.64
2585.30	1.00	9.64
2595.10	1.00	9.64
2608.30	1.00	9.64
2621.40	1.00	9.64
2637.80	1.00	9.64
2654.20	1.00	9.64
2667.30	1.00	9.64
2690.30	1.00	9.65
2706.70	1.00	9.65
2732.90	1.00	9.65
2752.60	1.00	9.65
2785.40	1.00	9.65
2860.90	1.00	9.65
2939.60	1.00	9.65
2959.30	1.00	9.65
2969.20	1.00	9.65
2979.00	1.00	9.65
2995.40	1.00	9.65
3005.20	1.00	9.64
3008.50	1.00	9.65
3021.60	1.00	9.65
3038.10	1.00	9.65
3054.50	1.00	9.65
3070.90	1.00	9.65
3090.50	1.00	9.65
3110.20	1.00	9.65
3139.80	1.00	9.65
3166.00	1.00	9.65
3192.30	1.00	9.65
3215.20	1.00	9.65
3231.60	1.00	9.66
3244.70	1.00	9.66
3257.90	1.00	9.66
3274.30	1.00	9.66
3287.40	1.00	9.66
3303.80	1.00	9.66
3320.20	1.00	9.66
3369.40	1.00	9.66
3379.30	1.00	9.66
3389.10	1.00	9.66
3395.70	1.00	9.66
3402.20	1.00	9.66
3408.80	1.00	9.67
3412.10	1.00	9.67
3418.60	1.00	9.67
3421.90	1.00	9.67
3425.20	1.00	9.67
3428.50	1.00	9.67
3431.80	1.00	9.67
3435.00	1.00	9.67
3438.30	1.00	9.68
3441.60	1.00	9.69
3444.90	1.00	9.68
3448.20	1.00	9.68
3451.40	1.00	9.67
3454.70	1.00	9.67
3458.00	1.00	9.67
3467.80	1.00	9.67
3471.10	1.00	9.68
3474.40	1.00	9.69
3477.70	1.00	9.71
3481.00	1.00	9.73
3484.20	1.00	9.75
3487.50	1.00	9.76
3490.80	1.00	9.78
3494.10	1.00	9.80
3497.40	1.00	9.82
3500.60	1.00	9.85
3503.90	1.00	9.87
3507.20	1.00	9.88
3510.50	1.00	9.89
3513.80	1.00	9.90
3517.10	1.00	9.91
3520.30	1.00	9.93
3523.60	1.00	9.94
3526.90	1.00	9.95
3530.20	1.00	9.96
3533.50	1.00	9.98
3536.70	1.00	10.00
3540.00	1.00	10.01
3543.30	1.00	10.02
3546.60	1.00	10.03
3549.90	1.00	10.04
3553.10	1.00	10.05
3556.40	1.00	10.06
3559.70	1.00	10.06
3563.00	1.00	10.08
3566.30	1.00	10.09
3569.50	1.00	10.09
3572.80	1.00	10.10

3576.10	1.00	10.10
3579.40	1.00	10.13
3582.70	1.00	10.15
3586.00	1.00	10.18
3589.20	1.00	10.20
3592.50	1.00	10.22
3595.80	1.00	10.23
3785.80	1.00	9.46
3996.90	1.00	9.41
4073.50	1.00	9.41
4111.50	1.00	9.41
4147.00	1.00	9.41
4370.00	1.00	9.41
4488.00	1.00	9.42
4766.40	1.00	9.46
5381.50	1.00	9.45
5594.50	1.00	9.46
5601.00	1.00	9.46
5617.50	1.00	9.46

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
3515.50	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	25.17	V23	EL=25	130
4.00	25.16	V23	EL=25	130
9.00	25.14	V23	EL=25	130
16.00	25.12	V23	EL=25	130
21.00	25.10	V23	EL=25	130
22.00	25.10	V23	EL=25	130
27.00	25.08	V23	EL=25	130
28.00	25.08	V23	EL=25	130
33.00	25.05	V23	EL=25	130
34.00	25.05	V23	EL=25	130
39.00	25.02	V23	EL=25	130
40.00	25.01	V23	EL=25	130
45.00	24.99	V23	EL=25	130
46.00	24.98	V23	EL=25	130
51.00	24.95	V23	EL=25	130
52.00	24.95	V23	EL=25	130
57.00	24.92	V23	EL=25	130
58.00	24.92	V23	EL=25	130
63.00	24.89	V23	EL=25	130
64.00	24.88	V23	EL=25	130
69.00	24.85	V23	EL=25	130
70.00	24.85	V23	EL=25	130
75.00	24.82	V23	EL=25	130
76.00	24.81	V23	EL=25	130
81.00	24.78	V23	EL=25	130
82.00	24.78	V23	EL=25	130
87.00	24.75	V23	EL=25	130
88.00	24.74	V23	EL=25	130
93.00	24.71	V23	EL=25	130
94.00	24.70	V23	EL=25	130
193.60	24.81	V23	EL=25	130
196.80	24.82	V23	EL=25	130
206.70	24.82	V23	EL=25	130
210.00	24.82	V23	EL=25	130
219.80	24.82	V23	EL=25	130
223.10	24.82	V23	EL=25	130
252.60	24.78	V23	EL=25	130
255.90	24.78	V23	EL=25	130
285.40	24.71	V23	EL=25	130

288.70	24.70	V23	EL=25	130
295.30	24.73	V23	EL=25	130
298.60	24.75	V23	EL=25	130
305.10	24.77	V23	EL=25	130
308.40	24.70	V23	EL=25	130
317.39	24.50	V23	EL=24	130
321.50	24.41	V23	EL=24	130
324.80	24.34	V23	EL=24	130
344.50	23.90	V23	EL=24	130
351.00	23.76	V23	EL=24	130
357.60	23.64	V23	EL=24	130
360.90	23.63	V23	EL=24	130
364.20	23.61	V23	EL=24	130
367.50	23.60	V23	EL=24	130
370.70	23.59	V23	EL=24	130
374.00	23.58	V23	EL=24	130
377.30	23.60	V23	EL=24	130
380.60	23.62	V23	EL=24	130
383.90	23.64	V23	EL=24	130
387.10	23.66	V23	EL=24	130
390.40	23.68	V23	EL=24	130
393.70	23.71	V23	EL=24	130
397.00	23.73	V23	EL=24	130
400.30	23.75	V23	EL=24	130
403.50	23.77	V23	EL=24	130
406.80	23.79	V23	EL=24	130
410.10	23.81	V23	EL=24	130
413.40	23.80	V23	EL=24	130
416.70	23.80	V23	EL=24	130
419.90	23.79	V23	EL=24	130
423.20	23.79	V23	EL=24	130
429.80	23.78	V23	EL=24	130
433.10	23.78	V23	EL=24	130
436.40	23.77	V23	EL=24	130
439.60	23.77	V23	EL=24	130
446.20	23.76	V23	EL=24	130
449.50	23.76	V23	EL=24	130
452.80	23.75	V23	EL=24	130
456.00	23.75	V23	EL=24	130
459.30	23.74	V23	EL=24	130
462.60	23.74	V23	EL=24	130
465.90	23.73	V23	EL=24	130
469.20	23.73	V23	EL=24	130
472.40	23.74	V23	EL=24	130
475.70	23.75	V23	EL=24	130
479.00	23.75	V23	EL=24	130
482.30	23.76	V23	EL=24	130
485.60	23.75	V23	EL=24	130
488.80	23.75	V23	EL=24	130
492.10	23.75	V23	EL=24	130
495.40	23.75	V23	EL=24	130

498.70	23.75	V23	EL=24	130
502.00	23.75	V23	EL=24	130
505.20	23.75	V23	EL=24	130
508.50	23.75	V23	EL=24	130
511.80	23.75	V23	EL=24	130
515.10	23.75	V23	EL=24	130
518.40	23.75	V23	EL=24	130
521.70	23.75	V23	EL=24	130
524.90	23.75	V23	EL=24	130
528.20	23.75	V23	EL=24	130
531.50	23.75	V23	EL=24	130
534.80	23.75	V23	EL=24	130
538.10	23.75	V23	EL=24	130
541.30	23.75	V23	EL=24	130
544.60	23.75	V23	EL=24	130
547.90	23.75	V23	EL=24	130
551.20	23.75	V23	EL=24	130
554.50	23.76	V23	EL=24	130
557.70	23.76	V23	EL=24	130
561.00	23.77	V23	EL=24	130
564.30	23.77	V23	EL=24	130
567.60	23.78	V23	EL=24	130
570.90	23.80	V23	EL=24	130
590.50	23.67	V23	EL=24	130
593.80	23.66	V23	EL=24	130
597.10	23.65	V23	EL=24	130
600.40	23.64	V23	EL=24	130
603.70	23.63	V23	EL=24	130
607.00	23.63	V23	EL=24	130
610.20	23.63	V23	EL=24	130
613.50	23.64	V23	EL=24	130
616.80	23.64	V23	EL=24	130
620.10	23.64	V23	EL=24	130
623.40	23.65	V23	EL=24	130
626.60	23.65	V23	EL=24	130
629.90	23.65	V23	EL=24	130
633.20	23.66	V23	EL=24	130
636.50	23.66	V23	EL=24	130
639.80	23.66	V23	EL=24	130
643.00	23.67	V23	EL=24	130
646.30	23.67	V23	EL=24	130
649.60	23.67	V23	EL=24	130
652.90	23.67	V23	EL=24	130
659.40	23.68	V23	EL=24	130
662.70	23.67	V23	EL=24	130
669.30	23.64	V23	EL=24	130
672.60	23.63	V23	EL=24	130
679.10	23.61	V23	EL=24	130
682.40	23.60	V23	EL=24	130
689.00	23.57	V23	EL=24	130
692.30	23.56	V23	EL=24	130

698.80	23.54	V23	EL=24	130
702.10	23.53	V23	EL=24	130
708.70	23.53	V23	EL=24	130
711.90	23.53	V23	EL=24	130
718.50	23.52	V23	EL=24	130
721.80	23.52	V23	EL=24	130
728.30	23.52	V23	EL=24	130
731.60	23.52	V23	EL=24	130
738.20	23.52	V23	EL=24	130
741.50	23.52	V23	EL=24	130
748.00	23.52	V23	EL=24	130
751.30	23.52	V23	EL=24	130
757.90	23.52	V23	EL=24	130
761.20	23.52	V23	EL=24	130
766.15	23.50	V23	EL=23	130
767.70	23.49	V23	EL=23	130
771.00	23.48	V23	EL=23	130
777.60	23.44	V23	EL=23	130
780.80	23.43	V23	EL=23	130
787.40	23.39	V23	EL=23	130
790.70	23.37	V23	EL=23	130
797.20	23.34	V23	EL=23	130
800.50	23.32	V23	EL=23	130
807.10	23.29	V23	EL=23	130
810.40	23.27	V23	EL=23	130
944.90	23.26	V23	EL=23	130
948.20	23.25	V23	EL=23	130
954.70	23.26	V23	EL=23	130
958.00	23.26	V23	EL=23	130
964.60	23.27	V23	EL=23	130
974.40	23.27	V23	EL=23	130
977.70	23.28	V23	EL=23	130
984.20	23.28	V23	EL=23	130
987.50	23.29	V23	EL=23	130
997.40	23.28	V23	EL=23	130
1003.90	23.25	V23	EL=23	130
1007.20	23.24	V23	EL=23	130
1013.80	23.21	V23	EL=23	130
1017.10	23.20	V23	EL=23	130
1023.60	23.18	V23	EL=23	130
1026.90	23.16	V23	EL=23	130
1033.50	23.14	V23	EL=23	130
1043.30	23.10	V23	EL=23	130
1046.60	23.09	V23	EL=23	130
1053.10	23.06	V23	EL=23	130
1056.40	23.05	V23	EL=23	130
1066.30	23.01	V23	EL=23	130
1072.80	22.98	V23	EL=23	130
1076.10	22.97	V23	EL=23	130
1082.70	22.95	V23	EL=23	130
1086.00	22.93	V23	EL=23	130

1095.80	22.90	V23	EL=23	130
1273.00	22.88	V23	EL=23	130
1276.20	22.88	V23	EL=23	130
1282.80	22.90	V23	EL=23	130
1286.10	22.90	V23	EL=23	130
1292.60	22.75	V23	EL=23	130
1295.90	22.68	V23	EL=23	130
1302.50	22.53	V23	EL=23	130
1304.05	22.50	V23	EL=22	130
1305.80	22.46	V23	EL=22	130
1312.30	22.31	V23	EL=22	130
1315.60	22.24	V23	EL=22	130
1322.20	22.09	V23	EL=22	130
1325.50	22.02	V23	EL=22	130
1417.30	22.16	V23	EL=22	130
1420.60	22.18	V23	EL=22	130
1427.20	22.18	V23	EL=22	130
1430.40	22.18	V23	EL=22	130
1443.60	22.18	V23	EL=22	130
1446.80	22.18	V23	EL=22	130
1453.40	22.19	V23	EL=22	130
1456.70	22.17	V23	EL=22	130
1463.30	22.12	V23	EL=22	130
1466.50	22.10	V23	EL=22	130
1473.10	22.06	V23	EL=22	130
1476.40	22.04	V23	EL=22	130
1482.90	22.07	V23	EL=22	130
1486.20	22.03	V23	EL=22	130
1492.80	21.86	V23	EL=22	130
1496.10	21.78	V23	EL=22	130
1502.60	21.61	V23	EL=22	130
1505.90	21.53	V23	EL=22	130
1507.00	21.50	V23	EL=21	130
1512.50	21.36	V23	EL=21	130
1515.70	21.28	V23	EL=21	130
1522.30	21.11	V23	EL=21	130
1545.30	20.52	V23	EL=21	130
1546.31	20.50	V23	EL=20	130
1561.70	20.18	V23	EL=20	130
1565.00	20.12	V23	EL=20	130
1581.40	19.81	V23	EL=20	130
1584.60	19.75	V23	EL=20	130
1598.32	19.50	V23	EL=19	130
1601.00	19.45	V23	EL=19	130
1604.30	19.39	V23	EL=19	130
1620.70	19.09	V23	EL=19	130
1627.30	19.04	V23	EL=19	130
1640.40	19.02	V23	EL=19	130
1650.30	19.01	V23	EL=19	130
1656.80	19.00	V23	EL=19	130
1669.90	18.95	V23	EL=19	130

1679.80	18.92	V23	EL=19	130
1686.30	18.89	V23	EL=19	130
1699.50	18.85	V23	EL=19	130
1709.30	18.81	V23	EL=19	130
1715.90	18.79	V23	EL=19	130
1729.00	18.74	V23	EL=19	130
1738.80	18.62	V23	EL=19	130
1745.40	18.54	V23	EL=19	130
1748.73	18.50	V23	EL=18	130
1768.40	18.26	V23	EL=18	130
1774.90	18.17	V23	EL=18	130
1797.90	17.89	V23	EL=18	130
1804.50	17.80	V23	EL=18	130
1827.40	17.50	V23	EL=18	130
1827.90	17.50	V23	EL=17	130
1834.00	17.44	V23	EL=17	130
1857.00	17.32	V23	EL=17	130
1863.50	17.29	V23	EL=17	130
1893.00	17.13	V23	EL=17	130
1906.20	17.05	V23	EL=17	130
1932.40	16.88	V23	EL=17	130
1935.70	16.86	V23	EL=17	130
2007.90	16.93	V23	EL=17	130
2011.20	16.94	V23	EL=17	130
2014.40	16.94	V23	EL=17	130
2017.70	16.95	V23	EL=17	130
2021.00	16.95	V23	EL=17	130
2024.30	16.96	V23	EL=17	130
2027.60	16.96	V23	EL=17	130
2030.80	16.96	V23	EL=17	130
2034.10	16.97	V23	EL=17	130
2037.40	16.97	V23	EL=17	130
2040.70	16.98	V23	EL=17	130
2044.00	16.98	V23	EL=17	130
2047.20	16.99	V23	EL=17	130
2050.50	16.99	V23	EL=17	130
2053.80	17.00	V23	EL=17	130
2057.10	17.00	V23	EL=17	130
2060.40	17.00	V23	EL=17	130
2063.60	17.01	V23	EL=17	130
2066.90	17.01	V23	EL=17	130
2070.20	17.01	V23	EL=17	130
2073.50	17.01	V23	EL=17	130
2076.80	17.02	V23	EL=17	130
2080.00	17.02	V23	EL=17	130
2083.30	17.02	V23	EL=17	130
2086.60	17.02	V23	EL=17	130
2089.90	17.03	V23	EL=17	130
2093.20	17.03	V23	EL=17	130
2096.50	17.03	V23	EL=17	130
2099.70	17.03	V23	EL=17	130

2103.00	17.04	V23	EL=17	130
2106.30	17.04	V23	EL=17	130
2109.60	17.04	V23	EL=17	130
2112.90	17.04	V23	EL=17	130
2116.10	17.05	V23	EL=17	130
2119.40	17.05	V23	EL=17	130
2122.70	17.05	V23	EL=17	130
2126.00	17.05	V23	EL=17	130
2129.30	17.05	V23	EL=17	130
2132.50	17.06	V23	EL=17	130
2135.80	17.06	V23	EL=17	130
2139.10	17.06	V23	EL=17	130
2142.40	17.06	V23	EL=17	130
2145.70	17.07	V23	EL=17	130
2148.90	17.07	V23	EL=17	130
2152.20	17.07	V23	EL=17	130
2155.50	17.07	V23	EL=17	130
2158.80	17.08	V23	EL=17	130
2162.10	17.08	V23	EL=17	130
2165.30	17.08	V23	EL=17	130
2168.60	17.09	V23	EL=17	130
2175.20	17.09	V23	EL=17	130
2178.50	17.10	V23	EL=17	130
2181.80	17.10	V23	EL=17	130
2185.00	17.10	V23	EL=17	130
2188.30	17.11	V23	EL=17	130
2191.60	17.11	V23	EL=17	130
2194.90	17.11	V23	EL=17	130
2198.20	17.12	V23	EL=17	130
2201.40	17.12	V23	EL=17	130
2204.70	17.12	V23	EL=17	130
2208.00	17.13	V23	EL=17	130
2211.30	17.13	V23	EL=17	130
2214.60	17.13	V23	EL=17	130
2221.10	17.14	V23	EL=17	130
2224.40	17.14	V23	EL=17	130
2227.70	17.15	V23	EL=17	130
2234.20	17.15	V23	EL=17	130
2237.50	17.16	V23	EL=17	130
2244.10	17.16	V23	EL=17	130
2247.40	17.17	V23	EL=17	130
2250.70	17.17	V23	EL=17	130
2253.90	17.17	V23	EL=17	130
2260.50	17.18	V23	EL=17	130
2263.80	17.18	V23	EL=17	130
2267.10	17.19	V23	EL=17	130
2270.30	17.19	V23	EL=17	130
2276.90	17.20	V23	EL=17	130
2280.20	17.20	V23	EL=17	130
2283.50	17.20	V23	EL=17	130
2286.70	17.21	V23	EL=17	130

2293.30	17.22	V23	EL=17	130
2296.60	17.22	V23	EL=17	130
2306.40	17.23	V23	EL=17	130
2309.70	17.23	V23	EL=17	130
2316.30	17.24	V23	EL=17	130
2319.50	17.25	V23	EL=17	130
2326.10	17.25	V23	EL=17	130
2329.40	17.26	V23	EL=17	130
2339.20	17.27	V23	EL=17	130
2342.50	17.27	V23	EL=17	130
2352.40	17.28	V23	EL=17	130
2355.60	17.28	V23	EL=17	130
2365.50	17.29	V23	EL=17	130
2368.80	17.29	V23	EL=17	130
2381.90	17.30	V23	EL=17	130
2385.20	17.31	V23	EL=17	130
2398.30	17.32	V23	EL=17	130
2401.60	17.32	V23	EL=17	130
2411.40	17.33	V23	EL=17	130
2414.70	17.33	V23	EL=17	130
2431.10	17.34	V23	EL=17	130
2434.40	17.35	V23	EL=17	130
2447.50	17.36	V23	EL=17	130
2450.80	17.36	V23	EL=17	130
2470.50	17.38	V23	EL=17	130
2473.70	17.38	V23	EL=17	130
2529.50	17.36	V23	EL=17	130
2532.80	17.36	V23	EL=17	130
2565.60	17.35	V23	EL=17	130
2568.90	17.35	V23	EL=17	130
2582.00	17.37	V23	EL=17	130
2585.30	17.37	V23	EL=17	130
2591.90	17.38	V23	EL=17	130
2595.10	17.39	V23	EL=17	130
2605.00	17.40	V23	EL=17	130
2608.30	17.41	V23	EL=17	130
2618.10	17.42	V23	EL=17	130
2621.40	17.42	V23	EL=17	130
2634.50	17.44	V23	EL=17	130
2637.80	17.45	V23	EL=17	130
2650.90	17.46	V23	EL=17	130
2654.20	17.47	V23	EL=17	130
2664.00	17.48	V23	EL=17	130
2667.30	17.49	V23	EL=17	130
2675.09	17.50	V23	EL=18	130
2687.00	17.52	V23	EL=18	130
2690.30	17.52	V23	EL=18	130
2703.40	17.54	V23	EL=18	130
2706.70	17.55	V23	EL=18	130
2729.70	17.58	V23	EL=18	130
2732.90	17.59	V23	EL=18	130

2749.30	17.61	V23	EL=18	130
2752.60	17.61	V23	EL=18	130
2782.10	17.65	V23	EL=18	130
2785.40	17.65	V23	EL=18	130
2857.60	17.70	V23	EL=18	130
2860.90	17.70	V23	EL=18	130
2936.30	17.72	V23	EL=18	130
2939.60	17.71	V23	EL=18	130
2956.00	17.68	V23	EL=18	130
2959.30	17.67	V23	EL=18	130
2965.90	17.65	V23	EL=18	130
2969.20	17.64	V23	EL=18	130
2975.70	17.61	V23	EL=18	130
2979.00	17.60	V23	EL=18	130
2987.86	17.50	V23	EL=17	130
2992.10	17.44	V23	EL=17	130
2995.40	17.39	V23	EL=17	130
3002.00	17.31	V23	EL=17	130
3005.20	17.26	V23	EL=17	130
3008.50	17.25	V23	EL=17	130
3018.40	17.25	V23	EL=17	130
3021.60	17.25	V23	EL=17	130
3034.80	17.24	V23	EL=17	130
3038.10	17.24	V23	EL=17	130
3051.20	17.24	V23	EL=17	130
3054.50	17.24	V23	EL=17	130
3067.60	17.23	V23	EL=17	130
3070.90	17.23	V23	EL=17	130
3087.30	17.23	V23	EL=17	130
3090.50	17.23	V23	EL=17	130
3106.90	17.22	V23	EL=17	130
3110.20	17.22	V23	EL=17	130
3136.50	17.15	V23	EL=17	130
3139.80	17.14	V23	EL=17	130
3162.70	17.06	V23	EL=17	130
3166.00	17.05	V23	EL=17	130
3189.00	16.97	V23	EL=17	130
3192.30	16.96	V23	EL=17	130
3211.90	16.89	V23	EL=17	130
3215.20	16.88	V23	EL=17	130
3228.30	16.84	V23	EL=17	130
3231.60	16.84	V23	EL=17	130
3241.50	16.83	V23	EL=17	130
3244.70	16.83	V23	EL=17	130
3254.60	16.82	V23	EL=17	130
3257.90	16.82	V23	EL=17	130
3271.00	16.80	V23	EL=17	130
3274.30	16.80	V23	EL=17	130
3284.10	16.79	V23	EL=17	130
3287.40	16.79	V23	EL=17	130
3300.50	16.77	V23	EL=17	130

3303.80	16.77	V23	EL=17	130
3316.90	16.65	V23	EL=17	130
3320.20	16.60	V23	EL=17	130
3327.26	16.50	V23	EL=16	130
3366.10	15.97	V23	EL=16	130
3369.40	15.93	V23	EL=16	130
3376.00	15.84	V23	EL=16	130
3379.30	15.79	V23	EL=16	130
3385.80	15.70	V23	EL=16	130
3389.10	15.65	V23	EL=16	130
3392.40	15.60	V23	EL=16	130
3395.70	15.55	V23	EL=16	130
3398.56	15.50	V23	EL=15	130
3398.90	15.49	V23	EL=15	130
3402.20	15.44	V23	EL=15	130
3405.50	15.39	V23	EL=15	130
3408.80	15.34	V23	EL=15	130
3412.10	15.29	V23	EL=15	130
3415.30	15.24	V23	EL=15	130
3418.60	15.19	V23	EL=15	130
3421.90	15.14	V23	EL=15	130
3425.20	15.08	V23	EL=15	130
3428.50	15.03	V23	EL=15	130
3431.80	14.98	V23	EL=15	130
3435.00	14.93	V23	EL=15	130
3438.30	14.88	V23	EL=15	130
3441.60	15.03	V23	EL=15	130
3444.90	14.92	V23	EL=15	130
3448.20	14.64	V23	EL=15	130
3450.35	14.50	V23	EL=14	130
3451.40	14.43	V23	EL=14	130
3454.70	14.21	V23	EL=14	130
3458.00	13.96	V23	EL=14	130
3463.86	13.50	V23	EL=13	130
3464.60	13.44	V23	EL=13	130
3467.80	13.14	V23	EL=13	130
3471.10	12.85	V23	EL=13	130
3474.40	12.70	V24	EL=13	140
3477.70	12.66	V24	EL=13	140
3481.00	12.62	V24	EL=13	140
3484.20	12.54	V24	EL=13	140
3485.00	12.50	V24	EL=12	140
3487.50	12.38	V24	EL=12	140
3490.80	12.24	V24	EL=12	140
3494.10	12.20	V24	EL=12	140
3497.40	12.21	V24	EL=12	140
3500.60	12.23	V24	EL=12	140
3503.90	12.26	V24	EL=12	140
3507.20	12.29	V24	EL=12	140
3510.50	12.24	V24	EL=12	140
3513.80	12.08	V24	EL=12	140

3515.50	12.00	A18	EL=12	90
3517.10	11.93	A18	EL=12	90
3520.30	11.94	A18	EL=12	90
3523.60	11.95	A18	EL=12	90
3526.90	11.84	A18	EL=12	90
3530.20	11.69	A18	EL=12	90
3533.50	11.72	A18	EL=12	90
3536.70	11.74	A18	EL=12	90
3540.00	11.75	A18	EL=12	90
3543.30	11.76	A18	EL=12	90
3546.60	11.75	A18	EL=12	90
3549.90	11.70	A18	EL=12	90
3553.10	11.63	A18	EL=12	90
3556.40	11.57	A18	EL=12	90
3559.70	11.51	A18	EL=12	90
3563.00	11.53	A18	EL=12	90
3566.30	11.55	A18	EL=12	90
3569.50	11.54	A18	EL=12	90
3570.40	11.50	A18	EL=11	90
3572.80	11.38	A18	EL=11	90
3576.10	11.22	A18	EL=11	90
3579.40	11.08	A18	EL=11	90
3582.70	11.02	A18	EL=11	90
3586.00	10.98	A18	EL=11	90
3589.20	10.94	A18	EL=11	90
3592.50	10.90	A18	EL=11	90
3595.80	10.85	A18	EL=11	90
3613.61	10.50	A18	EL=10	90
3658.15	10.50	A18	EL=11	90
3761.65	10.50	A18	EL=10	90
3772.20	10.24			
3785.80	9.46	A18	EL= 9	90
3793.52	9.50	A18	EL=10	90
3834.85	9.50	A18	EL= 9	90
3839.30	9.47			
3996.90	9.41	A18	EL= 9	90
4029.50	9.49	A18	EL= 9	90
4034.92	9.50	A18	EL=10	90
4073.50	9.59	A18	EL=10	90
4091.00	9.59	A18	EL=10	90
4111.50	9.65	A18	EL=10	90
4147.00	9.70	A18	EL=10	90
4151.50	9.70	A18	EL=10	90
4370.00	9.94	A18	EL=10	90
4488.00	10.04	A18	EL=10	90
4594.01	9.50	A18	EL= 9	90
4596.60	9.42			
4766.40	9.46	A18	EL= 9	90
4774.35	9.50	A18	EL=10	90
4826.02	9.50	A18	EL= 9	90
4829.40	9.47			
4845.10	9.46	A18	EL= 9	90
4854.40	9.50	A18	EL=10	90

```
                    4908.60          9.50
                                                A18  EL= 9      90
                    4912.60          9.47
                    5381.50          9.45
                                                A18  EL= 9      90
                    5392.13          9.50
                                                A18  EL=10      90
                    5495.50          9.69
                                                A18  EL=10      90
                    5594.50          9.82
                                                A18  EL=10      90
                    5601.00          9.83
                                                A18  EL=10      90
                    5617.50          9.84
                                                A18  EL=10      90
                    5727.72          9.50
                                                A18  EL= 9      90
                    5728.70          9.47
                          ZONE TERMINATED AT END OF TRANSECT
                          PART 7   POSTSCRIPT NOTES
            PS#  1   START(384293.9656,4801521.0524)
            PS#  2   END(383114.6088,4802916.6908)
-1.000000e+00
```

YK-99
100-year WHAFIS Output
Zero Station: -70.43639503, 43.36475506
Onshore Dir: 130.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE
20
15
10
5
0
-5
-3000
-2500
-2000
-1500
-1000
-500
0
500
1000
1500
2000

_____
PART 5: RUNUP2

for transect: YK-99

Station locations shifted by: -1.19 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-99

Incident significant wave height: 14.35 feet

Peak wave period: 13.19 seconds

Mean wave height: 8.98 feet

Local Depth below SWEL: 36.55 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 36.55
    Period, T = 11.21
    Waveheight, H = 8.98
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*11.21*11.21/6.28 = 643.57
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 643.57/11.21 = 57.41
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/11.21 = 0.56
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.56*0.56*36.55/32.17 = 0.36
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 32.26
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(57.41/32.26) = 1.33
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 8.98/1.33 = 6.74
```

Deepwater mean wave height: 6.74 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-99

RUNUP2 SWEL:
9.10
9.10
9.10
9.10

9.10
9.10
9.10
9.10
9.10

RUNUP2 deepwater mean wave heights:
6.40
6.40
6.40
6.74
6.74
6.74
7.07
7.07
7.07

RUNUP2 mean wave periods:
10.65
11.21
11.77
10.65
11.21
11.77
10.65
11.21
11.77

RUNUP2 runup above SWEL:
0.05
0.05
0.05
0.05
0.05
0.08
0.06
0.08
0.11

RUNUP2 Mean runup height above SWEL: 0.06 feet

RUNUP2 2-percent runup height above SWEL: 0.14 feet

RUNUP2 2-percent runup elevation: 9.24 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 14.35 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 10.76 feet

Peak wave period: 13.19 seconds

Average beach Slope: 1:96.45 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =    10.76
Wave Period,                        T  =    13.19
Beach Slope,                        S  =    0.010

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 4.1,  3.7,   3.4,    2.8,    1.9]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 3.74 feet

ACES Beach 2-percent runup elevation: 12.84 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-99                                                     1
25.0
  -27.46 -3445.8 0.8
  -22.41 -3348.8 0.8
  -22.41 -3172.8 0.8
  -18.85 -3088.8 0.8
  -18.85 -2860.8 0.8
  -17.69 -2624.8 0.8
  -17.69 -2444.8 0.8
  -16.92 -2347.8 0.8
  -16.92 -2160.8 0.8
  -14.66 -2109.8 0.8
  -14.66 -1951.8 0.8
  -9.11 -1822.8 0.8
  -8.27 -1715.8 0.8
  -5.63 -1614.8 0.8
  -4.13 -1499.8 0.8
  -4.13 -264.8 0.8
  -3.66 -135.8 0.8
  0.31  1.2    0.8
  4.05  26.7   0.8
1 10.11 178.2  0.8
 9.1   6.40  10.65
 9.1   6.40  11.21
 9.1   6.40  11.77
 9.1   6.74  10.65
 9.1   6.74  11.21
 9.1   6.74  11.77
 9.1   7.07  10.65
 9.1   7.07  11.21
 9.1   7.07  11.77
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-344.5	-27.4		
			.00	80.80
2	-334.8	-22.4		
			FLAT	80.80
3	-317.2	-22.4		
			2.33	80.80
4	-308.8	-18.8		
			FLAT	80.80
5	-286.0	-18.8		
			19.67	80.80
6	-262.4	-17.6		
			FLAT	80.80
7	-244.4	-17.6		
			13.86	80.80
8	-234.7	-16.9		
			FLAT	80.80
9	-216.0	-16.9		
			2.22	80.80
10	-210.9	-14.6		
			FLAT	80.80
11	-195.1	-14.6		
			-296.34	80.80
12	-1822.0	-9.1		
			127.38	.80
13	-1715.0	-8.3		
			38.26	.80
14	-1614.0	-5.6		
			76.67	.80
15	-1499.0	-4.1		
			FLAT	.80
16	-264.8	-4.1		
			274.47	.80
17	-135.8	-3.7		
			34.51	.80
18	1.2	.3		
			6.82	.80
19	26.7	4.1		
			25.00	.80
20	178.2	10.1		

LAST SLOPE 25.00 LAST ROUGHNESS .80

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.10	6.40	10.65	11	19	.05	12.13
9.10	6.40	11.21	11	19	.05	12.38
9.10	6.40	11.77	11	19	.05	12.63
9.10	6.74	10.65	11	19	.05	12.64
9.10	6.74	11.21	11	19	.05	12.90
9.10	6.74	11.77	11	19	.08	13.16
9.10	7.07	10.65	11	19	.06	13.14
9.10	7.07	11.21	11	19	.08	13.41
9.10	7.07	11.77	11	19	.11	13.67

Runup2 2% runup elevation for Transect: YK-99
Two Percent Run-up Elevation is 9.2 Feet-NAVD88
Run-up Height is 0.1 Feet
Ground
Swel
2% Runup
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-3500
-3000
-2500
-2000
-1500
-1000
-500
0
500

Transect Number: YK-99-1
43.39
43.385
43.38
43.375
43.37
43.365
43.36
43.355
Latitude
-70.46
-70.45
-70.44
-70.43
-70.42
-70.41
Longitude
Crow Hill
19m
Trott Island

Elevation profile
20
15
10
5
0
-5
-10
-15
Elevation (ft)
-2000
-1500
-1000
-500
0
500
1000
1500
2000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-99-1

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -73.5 ft
LON: -70.4357 deg E
LAT: 43.3717 deg N
Bottom ELEV: -1.3558 ft-NAVD88
TWL: 9.4014 ft-NAVD88
HS: 2.0382 ft
TP: 7.945 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 107.7246 deg CCW from East

TAW/RUNUP input

toe sta: 40 ft
toe elev: 1.0597 ft-NAVD88
top sta: 194 ft
top elev: 10.5741 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-99-1: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-100
0
100
200
300
400
500
600

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-99-1zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-99-1.swn
swan output name:     2_swan/swanfiles/YK-99-1.dat

Boundary Conditions:
    TWL- 2.8655 meters
    HS-  0.62125 meters
    PER- 7.945 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.30665 feet
SWAN output at toe:
    SETUP- -0.0047506 feet
    HS-    2.142 feet
    PER-   7.9359 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.30665 feet
SWAN output at toe:
    SETUP- -0.0047506 feet
    HS-    2.142 feet
    PER-   7.9359 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-99-1
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-2000
-1500
-1000
-500
0
500
1000
1500
2000

```
                    Execution started at 20200401.174317


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      74       0.   74     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      74   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-99-1zmeters_xmeters.grd'    1      0       FREE

 !-----------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   0.62125     7.945     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      74  74    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-99-1.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC              75 MYC              1
                     : MCGRD            76
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  56.00 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   1.34 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  50.67 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  76.00 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  84.00 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  86.67 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  92.00 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in  93.34 % of wet grid points ( 99.50 % required)

iteration   10; sweep 1
iteration   10; sweep 2
iteration   10; sweep 3
iteration   10; sweep 4
accuracy OK in  93.34 % of wet grid points ( 99.50 % required)

iteration   11; sweep 1
iteration   11; sweep 2
iteration   11; sweep 3
iteration   11; sweep 4
accuracy OK in  93.34 % of wet grid points ( 99.50 % required)

iteration   12; sweep 1
iteration   12; sweep 2
iteration   12; sweep 3
iteration   12; sweep 4
accuracy OK in  94.67 % of wet grid points ( 99.50 % required)

iteration   13; sweep 1
iteration   13; sweep 2
iteration   13; sweep 3
iteration   13; sweep 4
accuracy OK in  96.00 % of wet grid points ( 99.50 % required)

iteration   14; sweep 1
iteration   14; sweep 2
iteration   14; sweep 3
iteration   14; sweep 4
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	0.62444	7.9224	8.0345	7.1834	359.999	31.5352	3.2800	0.000000
1.	0.	0.62494	7.9228	8.0345	7.1647	359.999	31.4489	3.2700	-0.000011
2.	0.	0.62533	7.9231	8.0345	7.1462	359.999	31.3361	3.2600	-0.000023
3.	0.	0.62602	7.9235	8.0345	7.1283	360.000	31.2151	3.2400	-0.000047
4.	0.	0.62648	7.9238	8.0345	7.1103	360.000	31.1219	3.2299	-0.000058
5.	0.	0.62697	7.9242	8.0345	7.0926	360.000	31.0539	3.2199	-0.000070
6.	0.	0.62747	7.9245	8.0345	7.0751	360.000	30.9897	3.2099	-0.000081
7.	0.	0.62797	7.9248	8.0345	7.0579	360.000	30.9264	3.1999	-0.000092
8.	0.	0.62847	7.9252	8.0345	7.0410	360.000	30.8632	3.1899	-0.000104
9.	0.	0.62887	7.9255	8.0345	7.0244	360.000	30.7774	3.1799	-0.000116
10.	0.	0.62958	7.9258	8.0345	7.0084	360.000	30.6854	3.1599	-0.000140
11.	0.	0.63005	7.9262	8.0345	6.9919	360.000	30.6139	3.1498	-0.000152
12.	0.	0.63054	7.9265	8.0345	6.9757	360.000	30.5485	3.1398	-0.000165
13.	0.	0.63104	7.9268	8.0345	6.9598	360.000	30.4855	3.1298	-0.000178
14.	0.	0.63155	7.9271	8.0345	6.9440	360.000	30.4232	3.1198	-0.000191
15.	0.	0.63206	7.9274	8.0345	6.9284	360.000	30.3614	3.1098	-0.000204
16.	0.	0.63248	7.9277	8.0345	6.9131	360.000	30.2783	3.0998	-0.000218
17.	0.	0.63297	7.9281	8.0345	6.8984	0.000	30.1240	3.0798	-0.000244
18.	0.	0.63385	7.9285	8.0345	6.8847	0.001	29.8823	3.0397	-0.000300
19.	0.	0.63499	7.9289	8.0345	6.8711	0.001	29.5930	2.9896	-0.000373
20.	0.	0.63620	7.9294	8.0345	6.8566	0.001	29.2934	2.9395	-0.000451
21.	0.	0.63701	7.9299	8.0345	6.8412	0.001	28.8372	2.8895	-0.000535
22.	0.	0.64134	7.9307	8.0345	6.8292	0.008	28.4983	2.7592	-0.000765
23.	0.	0.64243	7.9312	8.0345	6.8055	0.007	28.7946	2.7692	-0.000751
24.	0.	0.64068	7.9312	8.0345	6.7762	0.005	29.4840	2.8895	-0.000548
25.	0.	0.63958	7.9313	8.0345	6.7537	359.999	29.7558	2.9596	-0.000436
26.	0.	0.64079	7.9316	8.0345	6.7400	359.999	29.6706	2.9295	-0.000483
27.	0.	0.64158	7.9322	8.0345	6.7262	0.013	29.4608	2.8995	-0.000530
28.	0.	0.64244	7.9325	8.0345	6.7122	0.008	29.2595	2.8694	-0.000580
29.	0.	0.64305	7.9328	8.0345	6.6973	0.006	29.0869	2.8494	-0.000614
30.	0.	0.64329	7.9331	8.0345	6.6823	0.005	28.7974	2.8294	-0.000649
31.	0.	0.64495	7.9336	8.0345	6.6709	0.003	28.3584	2.7592	-0.000774
32.	0.	0.64665	7.9341	8.0345	6.6581	0.003	27.8995	2.6891	-0.000908
33.	0.	0.64865	7.9346	8.0345	6.6435	0.003	27.4834	2.6189	-0.001051
34.	0.	0.64971	7.9352	8.0345	6.6259	0.002	26.9795	2.5688	-0.001162
35.	0.	0.65289	7.9359	8.0345	6.6121	0.002	26.1215	2.4486	-0.001448
36.	0.	0.66127	7.9372	8.0345	6.6003	0.001	24.8982	2.2179	-0.002107
37.	0.	0.67154	7.9388	8.0345	6.5755	0.001	23.5360	1.9870	-0.002964
38.	0.	0.68438	7.9408	8.0345	6.5327	0.001	22.1392	1.7559	-0.004102
39.	0.	0.70022	7.9435	8.0345	6.4665	0.001	20.7233	1.5244	-0.005647
40.	0.	0.71440	7.9466	8.0345	6.3751	0.001	19.3964	1.3327	-0.007269
41.	0.	0.72702	7.9497	8.0345	6.2403	0.001	17.3804	1.1409	-0.009149
42.	0.	0.75942	7.9503	8.0345	6.0342	359.953	14.6177	0.6742	-0.015810
43.	0.	0.52523	8.0143	8.0345	6.4653	358.763	14.8969	0.3527	0.032660
44.	0.	0.33655	9.8296	10.0005	6.4108	356.311	14.9364	0.4293	0.069292
45.	0.	0.30861	9.8925	10.0005	5.6230	355.210	13.8720	0.4731	0.073122
46.	0.	0.32780	9.9098	10.0005	4.5049	357.096	13.0492	0.4918	0.071828
47.	0.	0.32055	9.9181	10.0005	4.1778	357.313	13.1244	0.5030	0.073038
48.	0.	0.31036	9.9313	10.0005	4.0712	357.392	13.1939	0.5143	0.074300
49.	0.	0.30132	9.9411	10.0005	4.0122	357.469	13.0984	0.5052	0.075239
50.	0.	0.29284	9.9506	10.0005	3.9844	357.499	12.9269	0.4860	0.076025
51.	0.	0.28380	9.9606	10.0005	3.9675	357.501	12.8181	0.4668	0.076845
52.	0.	0.27370	9.9721	10.0005	3.9344	357.496	12.7851	0.4778	0.077847
53.	0.	0.26629	9.9829	10.0005	3.9223	357.502	12.6594	0.4685	0.078478
54.	0.	0.25956	9.9928	10.0005	3.9228	357.535	12.4281	0.4490	0.079000
55.	0.	0.25230	10.0023	10.0005	3.9360	357.596	12.1225	0.4195	0.079543
56.	0.	0.24344	10.0181	10.0005	3.9485	357.651	11.8104	0.3903	0.080264
57.	0.	0.23326	10.0305	10.0005	3.9562	357.719	11.4913	0.3712	0.081174
58.	0.	0.22303	10.0374	10.0005	3.9782	357.804	11.1708	0.3421	0.082075
59.	0.	0.21149	10.0425	10.0005	3.9938	357.908	10.8427	0.3232	0.083180

60.	0.	0.19995	4.1586	4.1664	4.0217	357.973	10.6808	0.2943	0.084291
61.	0.	0.18664	4.1560	4.1664	3.9955	358.022	10.8312	0.3257	0.085722
62.	0.	0.17996	4.1538	4.1664	3.9908	358.072	10.8294	0.3263	0.086320
63.	0.	0.17524	4.1518	4.1664	3.9958	358.108	10.8193	0.3167	0.086709
64.	0.	0.17011	4.1500	4.1664	3.9812	358.139	10.9542	0.3272	0.087178
65.	0.	0.16639	4.1486	4.1664	3.9643	358.161	11.1393	0.3375	0.087509
66.	0.	0.16360	8.0478	8.0345	3.9460	358.215	11.1164	0.3477	0.087747
67.	0.	0.16337	8.0444	8.0345	3.9677	358.319	10.6430	0.3177	0.087689
68.	0.	0.16183	8.0384	8.0345	4.0480	358.462	9.9539	0.2476	0.087627
69.	0.	0.15180	8.0342	8.0345	4.1188	358.643	9.6247	0.2086	0.088621
70.	0.	0.13811	8.0444	8.0345	4.0995	358.839	9.4903	0.2302	0.090156
71.	0.	0.13157	8.0381	8.0345	4.1407	359.015	9.0884	0.2007	0.090745
72.	0.	0.12158	8.0321	8.0345	4.2289	359.110	9.4130	0.1618	0.091816
73.	0.	0.10496	8.0293	8.0345	4.1640	359.217	9.7247	0.2535	0.093466
74.	0.	0.10693	8.0270	8.0345	4.2303	359.329	9.6838	0.1732	0.093193

PART 3: WHAFIS

WHAFIS input: YK-99-1.dat
WHAFIS output: YK-99-1.out

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-99-1
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
200
400
600
800
1000
1200
1400
1600
1800
Transect Profile
SWAN 1-D points
TSWL

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-99-1.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-99-1.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-1.356	1.000	1.000	9.401	3.261	7.945	56.140	0.011	0.000
OF	1.000	-1.344	0.000	9.401	0.000	0.000	0.000	0.000	0.011	0.000
OF	2.000	-1.333	0.000	9.401	0.000	0.000	0.000	0.000	0.012	0.000
OF	3.000	-1.321	0.000	9.401	0.000	0.000	0.000	0.000	0.011	0.000
OF	4.000	-1.310	0.000	9.401	0.000	0.000	0.000	0.000	0.011	0.000
OF	5.000	-1.299	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	6.000	-1.287	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	7.000	-1.276	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	8.000	-1.264	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	9.000	-1.253	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	10.000	-1.242	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	11.000	-1.230	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	12.000	-1.219	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	13.000	-1.207	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	14.000	-1.196	0.000	9.402	0.000	0.000	0.000	0.000	0.012	0.000
OF	15.000	-1.184	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	16.000	-1.173	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	17.000	-1.161	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	18.000	-1.150	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	19.000	-1.138	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	20.000	-1.127	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	21.000	-1.116	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	22.000	-1.104	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	23.000	-1.093	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	24.000	-1.081	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	25.000	-1.070	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	26.000	-1.059	0.000	9.402	0.000	0.000	0.000	0.000	0.012	0.000
OF	27.000	-1.047	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
OF	28.000	-1.036	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	29.000	-1.024	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	30.000	-1.013	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	31.000	-1.001	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	32.000	-0.990	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	33.000	-0.979	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	34.000	-0.967	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	35.000	-0.956	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	36.000	-0.944	0.000	9.403	0.000	0.000	0.000	0.000	0.012	0.000
OF	37.000	-0.933	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	38.000	-0.921	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	39.000	-0.910	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	40.000	-0.898	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	41.000	-0.887	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	42.000	-0.876	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	43.000	-0.864	0.000	9.403	0.000	0.000	0.000	0.000	0.012	0.000
OF	44.000	-0.853	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	45.000	-0.841	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	46.000	-0.830	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	47.000	-0.818	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	48.000	-0.807	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	49.000	-0.795	0.000	9.403	0.000	0.000	0.000	0.000	0.012	0.000
OF	50.000	-0.784	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	51.000	-0.773	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	52.000	-0.761	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	53.000	-0.750	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	54.000	-0.738	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
OF	55.000	-0.727	0.000	9.403	0.000	0.000	0.000	0.000	0.015	0.000
OF	56.000	-0.708	0.000	9.403	0.000	0.000	0.000	0.000	0.034	0.000
OF	57.000	-0.660	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	58.000	-0.610	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	59.000	-0.562	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	60.000	-0.513	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	61.000	-0.464	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	62.000	-0.415	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	63.000	-0.366	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	64.000	-0.317	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	65.000	-0.269	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	66.000	-0.220	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	67.000	-0.171	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	68.000	-0.122	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	69.000	-0.073	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
OF	70.000	-0.024	0.000	9.403	0.000	0.000	0.000	0.000	0.142	0.000
IF	73.500	0.568	0.000	9.403	0.000	0.000	0.000	0.000	-0.030	0.000
OF	81.000	-0.351	0.000	9.403	0.000	0.000	0.000	0.000	-0.038	0.000
OF	90.000	-0.056	0.000	9.403	0.000	0.000	0.000	0.000	0.027	0.000
IF	99.000	0.141	0.000	9.403	0.000	0.000	0.000	0.000	0.046	0.000
IF	106.500	0.699	0.000	9.403	0.000	0.000	0.000	0.000	0.063	0.000
IF	113.500	1.060	0.000	9.403	0.000	0.000	0.000	0.000	0.145	0.000
IF	121.000	2.799	0.000	9.403	0.000	0.000	0.000	0.000	0.231	0.000
IF	128.000	4.406	0.000	9.403	0.000	0.000	0.000	0.000	0.209	0.000
IF	134.500	5.620	0.000	9.403	0.000	0.000	0.000	0.000	0.301	0.000
IF	141.100	8.352	0.000	9.509	0.000	0.000	0.000	0.000	0.262	0.000
IF	144.400	8.218	0.000	9.629	0.000	0.000	0.000	0.000	-0.041	0.000
IF	147.600	8.083	0.000	9.641	0.000	0.000	0.000	0.000	-0.030	0.000
IF	150.900	8.025	0.000	9.637	0.000	0.000	0.000	0.000	-0.014	0.000
IF	154.200	7.995	0.000	9.641	0.000	0.000	0.000	0.000	-0.009	0.000
IF	157.500	7.964	0.000	9.645	0.000	0.000	0.000	0.000	-0.001	0.000
IF	160.800	7.991	0.000	9.648	0.000	0.000	0.000	0.000	0.016	0.000
IF	164.000	8.068	0.000	9.651	0.000	0.000	0.000	0.000	0.018	0.000
IF	167.300	8.107	0.000	9.653	0.000	0.000	0.000	0.000	0.003	0.000
IF	170.600	8.090	0.000	9.657	0.000	0.000	0.000	0.000	0.002	0.000
IF	173.900	8.116	0.000	9.659	0.000	0.000	0.000	0.000	0.017	0.000
IF	177.200	8.201	0.000	9.661	0.000	0.000	0.000	0.000	0.026	0.000
IF	180.400	8.285	0.000	9.662	0.000	0.000	0.000	0.000	0.026	0.000

IF	183.700	8.370	0.000	9.665	0.000	0.000	0.000	0.000	0.026	0.000
IF	187.000	8.454	0.000	9.668	0.000	0.000	0.000	0.000	0.025	0.000
IF	190.300	8.536	0.000	9.671	0.000	0.000	0.000	0.000	0.025	0.000
IF	193.600	8.618	0.000	9.674	0.000	0.000	0.000	0.000	0.025	0.000
IF	196.800	8.700	0.000	9.678	0.000	0.000	0.000	0.000	-0.002	0.000
IF	200.100	8.608	0.000	9.683	0.000	0.000	0.000	0.000	-0.012	0.000
IF	203.400	8.620	0.000	9.685	0.000	0.000	0.000	0.000	0.004	0.000
IF	206.700	8.632	0.000	9.686	0.000	0.000	0.000	0.000	0.001	0.000
IF	210.000	8.623	0.000	9.687	0.000	0.000	0.000	0.000	-0.007	0.000
IF	213.300	8.589	0.000	9.689	0.000	0.000	0.000	0.000	-0.010	0.000
IF	216.500	8.555	0.000	9.689	0.000	0.000	0.000	0.000	0.011	0.000
IF	219.800	8.659	0.000	9.689	0.000	0.000	0.000	0.000	0.048	0.000
IF	223.100	8.875	0.000	9.689	0.000	0.000	0.000	0.000	0.054	0.000
IF	226.400	9.014	0.000	9.692	0.000	0.000	0.000	0.000	0.011	0.000
IF	229.700	8.948	0.000	9.697	0.000	0.000	0.000	0.000	0.003	0.000
IF	232.900	9.034	0.000	9.699	0.000	0.000	0.000	0.000	0.035	0.000
IF	236.200	9.177	0.000	9.703	0.000	0.000	0.000	0.000	-0.024	0.000
IF	239.500	8.878	0.000	9.708	0.000	0.000	0.000	0.000	-0.004	0.000
IF	242.800	9.154	0.000	9.707	0.000	0.000	0.000	0.000	0.084	0.000
IF	246.000	9.426	0.000	9.707	0.000	0.000	0.000	0.000	0.065	0.000
IF	251.000	9.688	0.000	9.707	0.000	0.000	0.000	0.000	0.010	0.000
IF	256.000	9.524	0.000	9.707	0.000	0.000	0.000	0.000	0.003	0.000
IF	257.600	9.707	0.000	9.707	0.000	0.000	0.000	0.000	0.114	0.000
AS	319.600	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.025	0.000
IF	320.000	9.616	0.000	9.626	0.000	0.000	0.000	0.000	0.000	0.000
IF	320.200	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.050	0.000
AS	334.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.099	0.000
IF	338.000	9.259	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
IF	351.000	9.557	0.000	9.626	0.000	0.000	0.000	0.000	0.012	0.000
IF	358.000	9.491	0.000	9.626	0.000	0.000	0.000	0.000	-0.025	0.000
IF	372.000	9.029	0.000	9.626	0.000	0.000	0.000	0.000	-0.073	0.000
IF	388.500	7.257	0.000	9.626	0.000	0.000	0.000	0.000	-0.071	0.000
IF	400.500	6.995	0.000	9.626	0.000	0.000	0.000	0.000	0.010	0.000
IF	409.000	7.454	0.000	9.626	0.000	0.000	0.000	0.000	0.027	0.000
IF	416.500	7.421	0.000	9.626	0.000	0.000	0.000	0.000	-0.011	0.000
IF	423.500	7.290	0.000	9.626	0.000	0.000	0.000	0.000	-0.018	0.000
IF	431.500	7.159	0.000	9.626	0.000	0.000	0.000	0.000	0.004	0.000
IF	441.500	7.356	0.000	9.626	0.000	0.000	0.000	0.000	-0.008	0.000
IF	448.000	7.028	0.000	9.625	0.000	0.000	0.000	0.000	-0.079	0.000
IF	451.500	6.568	0.000	9.625	0.000	0.000	0.000	0.000	-0.017	0.000
IF	459.500	6.831	0.000	9.625	0.000	0.000	0.000	0.000	-0.009	0.000
IF	469.500	6.404	0.000	9.624	0.000	0.000	0.000	0.000	-0.019	0.000
IF	480.500	6.437	0.000	9.624	0.000	0.000	0.000	0.000	-0.030	0.000
IF	490.000	5.781	0.000	9.623	0.000	0.000	0.000	0.000	-0.032	0.000
IF	499.000	5.846	0.000	9.623	0.000	0.000	0.000	0.000	0.006	0.000
IF	511.500	5.912	0.000	9.622	0.000	0.000	0.000	0.000	-0.013	0.000
IF	520.000	5.584	0.000	9.621	0.000	0.000	0.000	0.000	0.003	0.000
IF	523.500	5.945	0.000	9.621	0.000	0.000	0.000	0.000	-0.010	0.000
IF	533.000	5.453	0.000	9.621	0.000	0.000	0.000	0.000	-0.007	0.000
IF	546.500	5.781	0.000	9.620	0.000	0.000	0.000	0.000	0.001	0.000
IF	558.000	5.486	0.000	9.619	0.000	0.000	0.000	0.000	-0.038	0.000
IF	565.500	5.059	0.000	9.619	0.000	0.000	0.000	0.000	-0.022	0.000
IF	570.000	5.223	0.000	9.618	0.000	0.000	0.000	0.000	0.051	0.000
IF	578.500	5.715	0.000	9.618	0.000	0.000	0.000	0.000	0.034	0.000
IF	589.500	5.879	0.000	9.618	0.000	0.000	0.000	0.000	-0.015	0.000
IF	596.000	5.453	0.000	9.617	0.000	0.000	0.000	0.000	-0.021	0.000
IF	602.000	5.617	0.000	9.617	0.000	0.000	0.000	0.000	0.021	0.000
IF	612.000	5.781	0.000	9.617	0.000	0.000	0.000	0.000	-0.014	0.000
IF	623.000	5.321	0.000	9.616	0.000	0.000	0.000	0.000	-0.007	0.000
IF	634.000	5.617	0.000	9.616	0.000	0.000	0.000	0.000	0.010	0.000
IF	645.000	5.551	0.000	9.615	0.000	0.000	0.000	0.000	-0.034	0.000
IF	655.000	4.895	0.000	9.615	0.000	0.000	0.000	0.000	-0.074	0.000
IF	664.000	4.140	0.000	9.614	0.000	0.000	0.000	0.000	-0.052	0.000
IF	675.000	3.845	0.000	9.613	0.000	0.000	0.000	0.000	0.033	0.000
IF	689.000	4.961	0.000	9.613	0.000	0.000	0.000	0.000	0.055	0.000
IF	700.000	5.223	0.000	9.612	0.000	0.000	0.000	0.000	-0.010	0.000
IF	709.500	4.764	0.000	9.612	0.000	0.000	0.000	0.000	-0.016	0.000
IF	716.000	4.961	0.000	9.611	0.000	0.000	0.000	0.000	0.024	0.000
IF	719.000	4.993	0.000	9.611	0.000	0.000	0.000	0.000	0.007	0.000
IF	725.500	5.026	0.000	9.611	0.000	0.000	0.000	0.000	0.014	0.000
IF	735.500	5.223	0.000	9.610	0.000	0.000	0.000	0.000	-0.003	0.000
IF	745.000	4.961	0.000	9.610	0.000	0.000	0.000	0.000	0.007	0.000
IF	754.500	5.354	0.000	9.609	0.000	0.000	0.000	0.000	0.007	0.000
IF	763.500	5.092	0.000	9.609	0.000	0.000	0.000	0.000	-0.034	0.000
IF	771.000	4.797	0.000	9.609	0.000	0.000	0.000	0.000	0.010	0.000
IF	777.000	5.223	0.000	9.609	0.000	0.000	0.000	0.000	0.048	0.000
IF	786.000	5.518	0.000	9.608	0.000	0.000	0.000	0.000	0.016	0.000
IF	800.000	5.584	0.000	9.608	0.000	0.000	0.000	0.000	0.019	0.000
IF	816.000	6.076	0.000	9.608	0.000	0.000	0.000	0.000	0.041	0.000
IF	835.500	7.028	0.000	9.607	0.000	0.000	0.000	0.000	0.036	0.000
IF	850.500	7.323	0.000	9.607	0.000	0.000	0.000	0.000	0.030	0.000
IF	862.500	7.848	0.000	9.607	0.000	0.000	0.000	0.000	0.034	0.000
IF	879.500	8.307	0.000	9.606	0.000	0.000	0.000	0.000	0.033	0.000
IF	890.000	8.766	0.000	9.606	0.000	0.000	0.000	0.000	-0.055	0.000
IF	897.500	7.316	0.000	9.606	0.000	0.000	0.000	0.000	-0.057	0.000
IF	921.500	6.962	0.000	9.605	0.000	0.000	0.000	0.000	0.032	0.000
IF	944.500	8.796	0.000	9.605	0.000	0.000	0.000	0.000	0.029	0.000
IF	964.500	8.205	0.000	9.605	0.000	0.000	0.000	0.000	-0.027	0.000
IF	987.500	7.618	0.000	9.605	0.000	0.000	0.000	0.000	-0.008	0.000
IF	1005.000	7.874	0.000	9.594	0.000	0.000	0.000	0.000	-0.019	0.000
IF	1016.500	7.060	0.000	9.592	0.000	0.000	0.000	0.000	-0.017	0.000
IF	1034.000	7.389	0.000	9.589	0.000	0.000	0.000	0.000	0.001	0.000
IF	1041.500	7.093	0.000	9.587	0.000	0.000	0.000	0.000	-0.019	0.000
IF	1047.500	7.126	0.000	9.586	0.000	0.000	0.000	0.000	0.023	0.000
IF	1057.500	7.454	0.000	9.584	0.000	0.000	0.000	0.000	0.037	0.000
IF	1068.000	7.881	0.000	9.583	0.000	0.000	0.000	0.000	0.063	0.000
IF	1082.000	8.996	0.000	9.583	0.000	0.000	0.000	0.000	0.037	0.000
IF	1092.000	8.760	0.000	9.583	0.000	0.000	0.000	0.000	-0.027	0.000
IF	1093.000	8.694	0.000	9.583	0.000	0.000	0.000	0.000	0.039	0.000
IF	1100.500	9.094	0.000	9.583	0.000	0.000	0.000	0.000	0.059	0.000
IF	1108.000	9.583	0.000	9.583	0.000	0.000	0.000	0.000	0.065	0.000
AS	1173.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.198	0.000

IF	1173.500	9.587	0.000	9.626	0.000	0.000	0.000	0.000	-0.059	0.000
IF	1179.500	9.259	0.000	9.626	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1188.500	9.554	0.000	9.626	0.000	0.000	0.000	0.000	0.034	0.000
IF	1190.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.040	0.000
AS	1226.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.034	0.000
IF	1226.500	9.619	0.000	9.626	0.000	0.000	0.000	0.000	-0.034	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-1.356	1.000	1.000	9.401	3.261	7.945	56.140	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1.000	-1.344	0.000	9.401	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2.000	-1.333	0.000	9.401	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.000	-1.321	0.000	9.401	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000	-1.310	0.000	9.401	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	5.000	-1.299	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	6.000	-1.287	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	7.000	-1.276	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	8.000	-1.264	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.000	-1.253	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	10.000	-1.242	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	11.000	-1.230	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	12.000	-1.219	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.000	-1.207	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	14.000	-1.196	0.000	9.402	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	15.000	-1.184	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.000	-1.173	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	17.000	-1.161	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	18.000	-1.150	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.000	-1.138	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	20.000	-1.127	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	21.000	-1.116	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	22.000	-1.104	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-1.093	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	24.000	-1.081	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	25.000	-1.070	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.000	-1.059	0.000	9.402	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	27.000	-1.047	0.000	9.402	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	28.000	-1.036	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	29.000	-1.024	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	30.000	-1.013	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	31.000	-1.001	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	32.000	-0.990	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	33.000	-0.979	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	34.000	-0.967	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	35.000	-0.956	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	36.000	-0.944	0.000	9.403	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	37.000	-0.933	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	38.000	-0.921	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.000	-0.910	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	40.000	-0.898	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	41.000	-0.887	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	42.000	-0.876	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	43.000	-0.864	0.000	9.403	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	44.000	-0.853	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.000	-0.841	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	46.000	-0.830	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	47.000	-0.818	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	48.000	-0.807	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.000	-0.795	0.000	9.403	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	50.000	-0.784	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	51.000	-0.773	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.000	-0.761	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	53.000	-0.750	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	54.000	-0.738	0.000	9.403	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	55.000	-0.727	0.000	9.403	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	56.000	-0.708	0.000	9.403	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	57.000	-0.660	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	58.000	-0.610	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	59.000	-0.562	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	60.000	-0.513	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	61.000	-0.464	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.000	-0.415	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	63.000	-0.366	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	64.000	-0.317	0.000	9.403	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	65.000	-0.269	0.000	9.403	0.000	0.000	0.000	0.000		0.049	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	66.000	-0.220	0.000	9.403	0.000	0.000	0.000	0.000		0.049	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	67.000	-0.171	0.000	9.403	0.000	0.000	0.000	0.000		0.049	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	68.000	-0.122	0.000	9.403	0.000	0.000	0.000	0.000		0.049	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	69.000	-0.073	0.000	9.403	0.000	0.000	0.000	0.000		0.049	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	70.000	-0.024	0.000	9.403	0.000	0.000	0.000	0.000		0.142	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	73.500	0.568	0.000	9.403	0.000	0.000	0.000	0.000		-0.030	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	81.000	-0.351	0.000	9.403	0.000	0.000	0.000	0.000		-0.038	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	90.000	-0.056	0.000	9.403	0.000	0.000	0.000	0.000		0.027	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	99.000	0.141	0.000	9.403	0.000	0.000	0.000	0.000		0.046	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	106.500	0.699	0.000	9.403	0.000	0.000	0.000	0.000		0.063	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	113.500	1.060	0.000	9.403	0.000	0.000	0.000	0.000		0.145	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	121.000	2.799	0.000	9.403	0.000	0.000	0.000	0.000		0.231	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	128.000	4.406	0.000	9.403	0.000	0.000	0.000	0.000		0.209	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	134.500	5.620	0.000	9.403	0.000	0.000	0.000	0.000		0.301	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	141.100	8.352	0.000	9.509	0.000	0.000	0.000	0.000		0.262	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	144.400	8.218	0.000	9.629	0.000	0.000	0.000	0.000		-0.041	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	147.600	8.083	0.000	9.641	0.000	0.000	0.000	0.000		-0.030	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	150.900	8.025	0.000	9.637	0.000	0.000	0.000	0.000		-0.014	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	154.200	7.995	0.000	9.641	0.000	0.000	0.000	0.000		-0.009	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	157.500	7.964	0.000	9.645	0.000	0.000	0.000	0.000		-0.001	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	160.800	7.991	0.000	9.648	0.000	0.000	0.000	0.000		0.016	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	164.000	8.068	0.000	9.651	0.000	0.000	0.000	0.000		0.018	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	167.300	8.107	0.000	9.653	0.000	0.000	0.000	0.000		0.003	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	170.600	8.090	0.000	9.657	0.000	0.000	0.000	0.000		0.002	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	173.900	8.116	0.000	9.659	0.000	0.000	0.000	0.000		0.017	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	177.200	8.201	0.000	9.661	0.000	0.000	0.000	0.000		0.026	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	180.400	8.285	0.000	9.662	0.000	0.000	0.000	0.000		0.026	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	183.700	8.370	0.000	9.665	0.000	0.000	0.000	0.000		0.026	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	187.000	8.454	0.000	9.668	0.000	0.000	0.000	0.000		0.025	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	190.300	8.536	0.000	9.671	0.000	0.000	0.000	0.000		0.025	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	193.600	8.618	0.000	9.674	0.000	0.000	0.000	0.000		0.025	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	196.800	8.700	0.000	9.678	0.000	0.000	0.000	0.000		-0.002	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	200.100	8.608	0.000	9.683	0.000	0.000	0.000	0.000		-0.012	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	203.400	8.620	0.000	9.685	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	206.700	8.632	0.000	9.686	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	210.000	8.623	0.000	9.687	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	213.300	8.589	0.000	9.689	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	216.500	8.555	0.000	9.689	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	219.800	8.659	0.000	9.689	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	223.100	8.875	0.000	9.689	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	226.400	9.014	0.000	9.692	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	229.700	8.948	0.000	9.697	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	232.900	9.034	0.000	9.699	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	236.200	9.177	0.000	9.703	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	239.500	8.878	0.000	9.708	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	242.800	9.154	0.000	9.707	0.000	0.000	0.000	0.000	0.084	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	246.000	9.426	0.000	9.707	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	251.000	9.688	0.000	9.707	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	256.000	9.524	0.000	9.707	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	257.600	9.707	0.000	9.707	0.000	0.000	0.000	0.000	0.114	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	319.600	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	320.000	9.616	0.000	9.626	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	320.200	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	334.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.099	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	338.000	9.259	0.000	9.626	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	351.000	9.557	0.000	9.626	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	358.000	9.491	0.000	9.626	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	372.000	9.029	0.000	9.626	0.000	0.000	0.000	0.000	-0.073	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	388.500	7.257	0.000	9.626	0.000	0.000	0.000	0.000	-0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	400.500	6.995	0.000	9.626	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	409.000	7.454	0.000	9.626	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	416.500	7.421	0.000	9.626	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	423.500	7.290	0.000	9.626	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	431.500	7.159	0.000	9.626	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	441.500	7.356	0.000	9.626	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	448.000	7.028	0.000	9.625	0.000	0.000	0.000	0.000	-0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	451.500	6.568	0.000	9.625	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	459.500	6.831	0.000	9.625	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	469.500	6.404	0.000	9.624	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	480.500	6.437	0.000	9.624	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	490.000	5.781	0.000	9.623	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	499.000	5.846	0.000	9.623	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	511.500	5.912	0.000	9.622	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	520.000	5.584	0.000	9.621	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	523.500	5.945	0.000	9.621	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	533.000	5.453	0.000	9.621	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	546.500	5.781	0.000	9.620	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	558.000	5.486	0.000	9.619	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	565.500	5.059	0.000	9.619	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	570.000	5.223	0.000	9.618	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	578.500	5.715	0.000	9.618	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	589.500	5.879	0.000	9.618	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	596.000	5.453	0.000	9.617	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	602.000	5.617	0.000	9.617	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	612.000	5.781	0.000	9.617	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	623.000	5.321	0.000	9.616	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	634.000	5.617	0.000	9.616	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	645.000	5.551	0.000	9.615	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	655.000	4.895	0.000	9.615	0.000	0.000	0.000	0.000	-0.074	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	664.000	4.140	0.000	9.614	0.000	0.000	0.000	0.000	-0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	675.000	3.845	0.000	9.613	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	689.000	4.961	0.000	9.613	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	700.000	5.223	0.000	9.612	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	709.500	4.764	0.000	9.612	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	716.000	4.961	0.000	9.611	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	719.000	4.993	0.000	9.611	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	725.500	5.026	0.000	9.611	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	735.500	5.223	0.000	9.610	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	745.000	4.961	0.000	9.610	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	754.500	5.354	0.000	9.609	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	763.500	5.092	0.000	9.609	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	771.000	4.797	0.000	9.609	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	777.000	5.223	0.000	9.609	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	786.000	5.518	0.000	9.608	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	800.000	5.584	0.000	9.608	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	816.000	6.076	0.000	9.608	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	835.500	7.028	0.000	9.607	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	850.500	7.323	0.000	9.607	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	862.500	7.848	0.000	9.607	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	879.500	8.307	0.000	9.606	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	890.000	8.766	0.000	9.606	0.000	0.000	0.000	0.000	-0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	897.500	7.316	0.000	9.606	0.000	0.000	0.000	0.000	-0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	921.500	6.962	0.000	9.605	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	944.500	8.796	0.000	9.605	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	964.500	8.205	0.000	9.605	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	987.500	7.618	0.000	9.605	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1005.000	7.874	0.000	9.594	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1016.500	7.060	0.000	9.592	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1034.000	7.389	0.000	9.589	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1041.500	7.093	0.000	9.587	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1047.500	7.126	0.000	9.586	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1057.500	7.454	0.000	9.584	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1068.000	7.881	0.000	9.583	0.000	0.000	0.000	0.000	0.063	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1082.000	8.996	0.000	9.583	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1092.000	8.760	0.000	9.583	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1093.000	8.694	0.000	9.583	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1100.500	9.094	0.000	9.583	0.000	0.000	0.000	0.000	0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1108.000	9.583	0.000	9.583	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1173.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.198	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1173.500	9.587	0.000	9.626	0.000	0.000	0.000	0.000	-0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1179.500	9.259	0.000	9.626	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1188.500	9.554	0.000	9.626	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1190.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1226.300	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1226.500	9.619	0.000	9.626	0.000	0.000	0.000	0.000	-0.034	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

1

PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	3.26	7.95	11.68
OF	1.00	3.26	7.95	11.68
OF	2.00	3.26	7.95	11.69
OF	3.00	3.27	7.95	11.69
OF	4.00	3.27	7.95	11.69
OF	5.00	3.27	7.95	11.69
OF	6.00	3.27	7.95	11.69
OF	7.00	3.27	7.95	11.69
OF	8.00	3.27	7.95	11.69
OF	9.00	3.28	7.95	11.69
OF	10.00	3.28	7.95	11.70
OF	11.00	3.28	7.95	11.70
OF	12.00	3.28	7.95	11.70
OF	13.00	3.28	7.95	11.70
OF	14.00	3.28	7.95	11.70
OF	15.00	3.29	7.95	11.70
OF	16.00	3.29	7.95	11.70
OF	17.00	3.29	7.95	11.70
OF	18.00	3.29	7.95	11.71
OF	19.00	3.29	7.95	11.71
OF	20.00	3.29	7.95	11.71
OF	21.00	3.30	7.95	11.71
OF	22.00	3.30	7.95	11.71
OF	23.00	3.30	7.95	11.71
OF	24.00	3.30	7.95	11.71
OF	25.00	3.30	7.95	11.71
OF	26.00	3.30	7.95	11.71
OF	27.00	3.31	7.95	11.72
OF	28.00	3.31	7.95	11.72
OF	29.00	3.31	7.95	11.72
OF	30.00	3.31	7.95	11.72
OF	31.00	3.31	7.95	11.72
OF	32.00	3.31	7.95	11.72
OF	33.00	3.32	7.95	11.72
OF	34.00	3.32	7.95	11.72
OF	35.00	3.32	7.95	11.73
OF	36.00	3.32	7.95	11.73
OF	37.00	3.32	7.95	11.73
OF	38.00	3.32	7.95	11.73
OF	39.00	3.33	7.95	11.73
OF	40.00	3.33	7.95	11.73
OF	41.00	3.33	7.95	11.73
OF	42.00	3.33	7.95	11.73
OF	43.00	3.33	7.95	11.74
OF	44.00	3.33	7.95	11.74
OF	45.00	3.34	7.95	11.74
OF	46.00	3.34	7.95	11.74
OF	47.00	3.34	7.95	11.74
OF	48.00	3.34	7.95	11.74
OF	49.00	3.34	7.95	11.74
OF	50.00	3.34	7.95	11.74
OF	51.00	3.35	7.95	11.75
OF	52.00	3.35	7.95	11.75
OF	53.00	3.35	7.95	11.75
OF	54.00	3.35	7.95	11.75
OF	55.00	3.35	7.95	11.75
OF	56.00	3.36	7.95	11.75
OF	57.00	3.36	7.95	11.76
OF	58.00	3.37	7.95	11.76
OF	59.00	3.37	7.95	11.76
OF	60.00	3.38	7.95	11.77
OF	61.00	3.38	7.95	11.77
OF	62.00	3.39	7.95	11.78
OF	63.00	3.40	7.95	11.78
OF	64.00	3.40	7.95	11.79
OF	65.00	3.41	7.95	11.79
OF	66.00	3.42	7.95	11.79
OF	67.00	3.42	7.95	11.80
OF	68.00	3.43	7.95	11.80
OF	69.00	3.43	7.95	11.81
OF	70.00	3.44	7.95	11.81
IF	73.50	3.52	7.95	11.87
OF	81.00	3.41	7.95	11.79
OF	90.00	3.45	7.95	11.82
IF	99.00	3.48	7.95	11.84
IF	106.50	3.55	7.95	11.89
IF	113.50	3.61	7.95	11.93
IF	121.00	3.83	7.95	12.09
IF	128.00	3.60	7.95	11.93
IF	134.50	2.90	7.95	11.43
IF	141.10	0.90	7.95	10.14
IF	144.40	0.95	7.95	10.29
IF	147.60	0.97	7.95	10.32
IF	150.90	0.98	7.95	10.33
IF	154.20	0.99	7.95	10.34
IF	157.50	1.00	7.95	10.35
IF	160.80	1.01	7.95	10.35
IF	164.00	1.00	7.95	10.35
IF	167.30	1.00	7.95	10.35
IF	170.60	1.01	7.95	10.36
IF	173.90	1.01	7.95	10.36
IF	177.20	1.00	7.95	10.36
IF	180.40	0.99	7.95	10.35
IF	183.70	0.98	7.95	10.35
IF	187.00	0.94	7.95	10.33

IF	190.30	0.88	7.95	10.29
IF	193.60	0.82	7.95	10.25
IF	196.80	0.76	7.95	10.21
IF	200.10	0.78	7.95	10.23
IF	203.40	0.78	7.95	10.23
IF	206.70	0.79	7.95	10.24
IF	210.00	0.79	7.95	10.24
IF	213.30	0.80	7.95	10.25
IF	216.50	0.81	7.95	10.26
IF	219.80	0.80	7.95	10.25
IF	223.10	0.63	7.95	10.13
IF	226.40	0.53	7.95	10.06
IF	229.70	0.55	7.95	10.08
IF	232.90	0.52	7.95	10.06
IF	236.20	0.41	7.95	9.99
IF	239.50	0.46	7.95	10.03
IF	242.80	0.43	7.95	10.01
IF	246.00	0.22	7.95	9.86
IF	251.00	0.01	7.95	9.72
IF	256.00	0.14	7.95	9.80
IF	257.60	0.01	7.95	9.71
AS	319.60	0.00	0.00	9.63
IF	320.00	0.01	0.13	9.63
IF	320.20	0.01	0.14	9.63
AS	334.30	0.00	0.00	9.63
IF	338.00	0.04	0.22	9.65
IF	351.00	0.05	0.36	9.66
IF	358.00	0.08	0.40	9.68
IF	372.00	0.16	0.47	9.74
IF	388.50	0.21	0.53	9.77
IF	400.50	0.24	0.57	9.79
IF	409.00	0.26	0.59	9.81
IF	416.50	0.27	0.61	9.82
IF	423.50	0.29	0.63	9.83
IF	431.50	0.30	0.65	9.84
IF	441.50	0.33	0.67	9.85
IF	448.00	0.34	0.68	9.86
IF	451.50	0.34	0.69	9.87
IF	459.50	0.36	0.70	9.88
IF	469.50	0.38	0.72	9.89
IF	480.50	0.40	0.74	9.90
IF	490.00	0.42	0.75	9.91
IF	499.00	0.43	0.77	9.93
IF	511.50	0.45	0.79	9.94
IF	520.00	0.47	0.80	9.95
IF	523.50	0.47	0.80	9.95
IF	533.00	0.49	0.82	9.96
IF	546.50	0.51	0.84	9.98
IF	558.00	0.53	0.85	9.99
IF	565.50	0.54	0.86	10.00
IF	570.00	0.55	0.87	10.00
IF	578.50	0.56	0.88	10.01
IF	589.50	0.58	0.89	10.02
IF	596.00	0.59	0.90	10.03
IF	602.00	0.60	0.90	10.04
IF	612.00	0.61	0.91	10.05
IF	623.00	0.63	0.93	10.06
IF	634.00	0.64	0.94	10.07
IF	645.00	0.66	0.95	10.08
IF	655.00	0.67	0.96	10.09
IF	664.00	0.69	0.97	10.09
IF	675.00	0.70	0.98	10.10
IF	689.00	0.72	0.99	10.12
IF	700.00	0.73	1.00	10.13
IF	709.50	0.75	1.01	10.14
IF	716.00	0.76	1.02	10.14
IF	719.00	0.76	1.02	10.14
IF	725.50	0.77	1.02	10.15
IF	735.50	0.78	1.03	10.16
IF	745.00	0.79	1.04	10.17
IF	754.50	0.81	1.05	10.17
IF	763.50	0.82	1.06	10.18
IF	771.00	0.83	1.06	10.19
IF	777.00	0.83	1.07	10.19
IF	786.00	0.84	1.07	10.20
IF	800.00	0.86	1.09	10.21
IF	816.00	0.88	1.10	10.22
IF	835.50	0.88	1.11	10.22
IF	850.50	0.88	1.12	10.22
IF	862.50	0.82	1.13	10.18
IF	879.50	0.72	1.14	10.11
IF	890.00	0.54	1.15	9.98
IF	897.50	0.61	1.16	10.03
IF	921.50	0.67	1.17	10.08
IF	944.50	0.53	1.19	9.97
IF	964.50	0.59	1.20	10.02
IF	987.50	0.66	1.21	10.07
IF	1005.00	0.69	1.22	10.07
IF	1016.50	0.74	1.23	10.11
IF	1034.00	0.76	1.24	10.12
IF	1041.50	0.78	1.25	10.14
IF	1047.50	0.79	1.25	10.14
IF	1057.50	0.80	1.25	10.14
IF	1068.00	0.80	1.26	10.14
IF	1082.00	0.41	1.27	9.87
IF	1092.00	0.44	1.27	9.89
IF	1093.00	0.44	1.27	9.89
IF	1100.50	0.35	1.28	9.83
IF	1108.00	0.01	1.28	9.59
AS	1173.30	0.00	0.00	9.63
IF	1173.50	0.01	0.12	9.64
IF	1179.50	0.05	0.26	9.66

IF	1188.50	0.05	0.35	9.66
IF	1190.30	0.01	0.36	9.63
AS	1226.30	0.00	0.00	9.63
IF	1226.50	0.01	0.12	9.63

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN 257.60 AND 319.60
BETWEEN 320.20 AND 334.30
BETWEEN 1108.00 AND 1173.30
BETWEEN 1190.30 AND 1226.30

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
5.00	1.00	9.40
28.00	1.00	9.40
141.10	1.00	9.51
144.40	1.00	9.63
147.60	1.00	9.64
150.90	1.00	9.64
154.20	1.00	9.64
157.50	1.00	9.65
160.80	1.00	9.65
164.00	1.00	9.65
167.30	1.00	9.65
170.60	1.00	9.66
173.90	1.00	9.66
177.20	1.00	9.66
180.40	1.00	9.66
183.70	1.00	9.66
187.00	1.00	9.67
190.30	1.00	9.67
193.60	1.00	9.67
196.80	1.00	9.68
200.10	1.00	9.68
203.40	1.00	9.69
206.70	1.00	9.69
210.00	1.00	9.69
213.30	1.00	9.69
226.40	1.00	9.69
229.70	1.00	9.70
232.90	1.00	9.70
236.20	1.00	9.70
239.50	1.00	9.71
242.80	1.00	9.71
319.60	1.00	9.63
448.00	1.00	9.62
469.50	1.00	9.62
490.00	1.00	9.62
511.50	1.00	9.62
520.00	1.00	9.62
546.50	1.00	9.62
558.00	1.00	9.62
570.00	1.00	9.62
596.00	1.00	9.62
623.00	1.00	9.62
645.00	1.00	9.61
664.00	1.00	9.61
675.00	1.00	9.61
700.00	1.00	9.61
716.00	1.00	9.61
735.50	1.00	9.61
754.50	1.00	9.61
786.00	1.00	9.61
835.50	1.00	9.61
879.50	1.00	9.61
921.50	1.00	9.60
1005.00	1.00	9.59
1016.50	1.00	9.59
1034.00	1.00	9.59
1041.50	1.00	9.59
1047.50	1.00	9.59
1057.50	1.00	9.58
1068.00	1.00	9.58
1173.30	1.00	9.63

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
133.55	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	11.68	V23 EL=12	130
4.00	11.69	V23 EL=12	130
5.00	11.69	V23 EL=12	130
27.00	11.72	V23 EL=12	130
28.00	11.72	V23 EL=12	130
133.55	11.50	A18 EL=12	90
133.59	11.50	A18 EL=11	90
134.50	11.43	A18 EL=11	90
139.25	10.50	A18 EL=10	90
141.10	10.14	A18 EL=10	90
144.40	10.29	A18 EL=10	90
147.60	10.32	A18 EL=10	90
150.90	10.33		

		A18	EL=10	90
154.20	10.34			
		A18	EL=10	90
157.50	10.35			
		A18	EL=10	90
160.80	10.35			
		A18	EL=10	90
164.00	10.35			
		A18	EL=10	90
167.30	10.35			
		A18	EL=10	90
170.60	10.36			
		A18	EL=10	90
173.90	10.36			
		A18	EL=10	90
177.20	10.36			
		A18	EL=10	90
180.40	10.35			
		A18	EL=10	90
183.70	10.35			
		A18	EL=10	90
187.00	10.33			
		A18	EL=10	90
190.30	10.29			
		A18	EL=10	90
193.60	10.25			
		A18	EL=10	90
196.80	10.21			
		A18	EL=10	90
200.10	10.23			
		A18	EL=10	90
203.40	10.23			
		A18	EL=10	90
206.70	10.24			
		A18	EL=10	90
210.00	10.24			
		A18	EL=10	90
213.30	10.25			
		A18	EL=10	90
223.10	10.13			
		A18	EL=10	90
226.40	10.06			
		A18	EL=10	90
229.70	10.08			
		A18	EL=10	90
232.90	10.06			
		A18	EL=10	90
236.20	9.99			
		A18	EL=10	90
239.50	10.03			
		A18	EL=10	90
242.80	10.01			
		A18	EL=10	90
257.60	9.71			
319.60	9.63			
		A18	EL=10	90
320.20	9.63			
334.30	9.63			
		A18	EL=10	90
441.50	9.85			
		A18	EL=10	90
448.00	9.86			
		A18	EL=10	90
459.50	9.88			
		A18	EL=10	90
469.50	9.89			
		A18	EL=10	90
480.50	9.90			
		A18	EL=10	90
490.00	9.91			
		A18	EL=10	90
499.00	9.93			
		A18	EL=10	90
511.50	9.94			
		A18	EL=10	90
520.00	9.95			
		A18	EL=10	90
533.00	9.96			
		A18	EL=10	90
546.50	9.98			
		A18	EL=10	90
558.00	9.99			
		A18	EL=10	90
565.50	10.00			
		A18	EL=10	90
570.00	10.00			
		A18	EL=10	90
589.50	10.02			
		A18	EL=10	90
596.00	10.03			
		A18	EL=10	90
612.00	10.05			
		A18	EL=10	90
623.00	10.06			
		A18	EL=10	90
634.00	10.07			
		A18	EL=10	90
645.00	10.08			
		A18	EL=10	90
655.00	10.09			
		A18	EL=10	90
664.00	10.09			

```
                                                    A18  EL=10      90
                    675.00          10.10
                                                    A18  EL=10      90
                    689.00          10.12
                                                    A18  EL=10      90
                    700.00          10.13
                                                    A18  EL=10      90
                    709.50          10.14
                                                    A18  EL=10      90
                    716.00          10.14
                                                    A18  EL=10      90
                    725.50          10.15
                                                    A18  EL=10      90
                    735.50          10.16
                                                    A18  EL=10      90
                    745.00          10.17
                                                    A18  EL=10      90
                    754.50          10.17
                                                    A18  EL=10      90
                    777.00          10.19
                                                    A18  EL=10      90
                    786.00          10.20
                                                    A18  EL=10      90
                    816.00          10.22
                                                    A18  EL=10      90
                    835.50          10.22
                                                    A18  EL=10      90
                    862.50          10.18
                                                    A18  EL=10      90
                    879.50          10.11
                                                    A18  EL=10      90
                    897.50          10.03
                                                    A18  EL=10      90
                    921.50          10.08
                                                    A18  EL=10      90
                    987.50          10.07
                                                    A18  EL=10      90
                   1005.00          10.07
                                                    A18  EL=10      90
                   1016.50          10.11
                                                    A18  EL=10      90
                   1034.00          10.12
                                                    A18  EL=10      90
                   1041.50          10.14
                                                    A18  EL=10      90
                   1047.50          10.14
                                                    A18  EL=10      90
                   1057.50          10.14
                                                    A18  EL=10      90
                   1068.00          10.14
                                                    A18  EL=10      90
                   1108.00           9.59
                   1173.30           9.63
                                                    A18  EL=10      90
                   1190.30           9.63
                   1226.30           9.63
                                                    A18  EL=10      90
                   1226.50           9.63
                         ZONE TERMINATED AT END OF TRANSECT
                         PART 7   POSTSCRIPT NOTES
              PS#  1   START(383686.1918,4803090.2879)
              PS#  2   END(383576.4041,4803600.7391)
-1.000000e+00
```

YK-99-1
100-year WHAFIS Output
Zero Station: -70.43575197, 43.37185729
Onshore Dir: 102.1 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
0
200
400
600
800
1000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-99-1
Two Percent Run-up Elevation is 12.5 Feet-NAVD88
Run-up Height is 3.1 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
14
12
10
8
6
4
2
0
-2
50
100
150
200
250
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-99-1
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-99-1sta_ele_include.csv';   % file with station, elevation, include
                                        % third colunm is 0 for excluded points
imgname='logfiles/YK-99-1-runup';
SWEL=9.4014;  % 100-yr still water level including wave setup.
H0=2.142;    % significant wave height at toe of structure
Tp=7.9359;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=1;   % this may get changed automatically below
gamma_rough=1;
gamma_beta=1;
gamma_perm=1;

setupAtToe=-0.0047506;
maxSetup=0.30665;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-99-1'

plotTitle =

Iterative TAW for YK-99-1



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                 9.3966494

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                 9.7032994



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          266.322655115062


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                 6.1836494


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                12.6096494


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

           62.226972657228

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          221.143651153487


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          221.143651153487

toe_sta

toe_sta =

           62.226972657228




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 144.0 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.04 feet


ans =

-!!-       SWEL is adjusted to 9.44 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
    21
    22
    23




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0
```

```
R2=R2_new
Z2=R2+SWEL
% determine slope for this iteration
top_sta=-999;
for kk=1:length(sta)-1
   if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
      top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
      break;
   end
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% get the length of the slope (not accounting for berm)
Lslope=top_sta-toe_sta

% loop over profile segments to determine berm factor
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
```

```
        sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
    end
    if TAW_VALID == 0
       TAW_ALWAYS_VALID=0;
    end

    if (Irb*gamma_berm < 1.8)
       R2_new=gamma*H0*1.77*Irb
    else
       R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
    end


    % check to see if we need to evaluate a shallow foreshore
    if berm_width > 0.25 * L0;
       disp ('!   Berm_width is greater than 1/4 wave length')
       disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
       % do the foreshore calculation
       fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
       % get upper slope
       fore_toe_sta=-999;
       fore_toe_dep=-999;
       for kk=length(dep)-1:-1:1
          ddep=dep(kk+1)-dep(kk);
          dsta=sta(kk+1)-sta(kk);
          s=ddep/dsta;
          if s < 1/15
             break
          end
          fore_toe_sta=sta(kk);
          fore_toe_dep=dep(kk);
          upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
       end
       fore_Irb=upper_slope/(sqrt(fore_H0/L0));
       fore_gamma=gamma_perm*gamma_beta*gamma_rough;
       if (fore_Irb < 1.8)
          fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
       else
          fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
       end
       if berm_width >= L0
          R2_new=fore_R2
          disp ('berm is wider than one wavelength, use full shallow foreshore solution');
       else
          w2=(berm_width-0.25*L0)/(0.75*L0)
          w1=1-w2
          R2_new=w2*fore_R2 + w1*R2_new
       end
    end % end berm width check
    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;
    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                6.1836494
toe_sta =
            62.226972657228
top_sta =
          221.143651153487
Z2 =
                12.6096494
H0 =
                     2.142
Tp =
                    7.9359
T0 =
          7.21445454545455
R2 =
                     6.426
Z2 =
          15.8707037567363
top_sta =
          264.630174113033
Lslope =
```

```
          202.403201455805
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 5
dh =
           1.0892242567363
rdh_sum =
         0.151202837587871
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 6
dh =
           1.1302347567363
rdh_sum =
         0.313335777760792
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 7
dh =
           1.1712452567363
rdh_sum =
         0.486704385326514
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 8
dh =
           1.2122557567363
rdh_sum =
         0.671604063627069
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 9
dh =
           1.2532662567363
rdh_sum =
         0.868319787377875
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 10
dh =
           1.2942767567363
rdh_sum =
          1.07712584493842
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 11
dh =
           1.3352872567363
rdh_sum =
          1.29828559024764
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 12
dh =
           1.3762977567363
rdh_sum =
          1.53205120464829
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 13
dh =
           1.4014897567363
rdh_sum =
          1.77368049172652
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 14
dh =
           1.4108637567363
rdh_sum =
          2.01825852347265
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 15
dh =
           1.4202377567363
rdh_sum =
           2.2657973698659
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 16
dh =
           1.4296117567363
rdh_sum =
          2.51630896097204
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 17
dh =
           1.4389857567363
rdh_sum =
          2.76980508637963
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 18
dh =
           1.4483592567363
rdh_sum =
          3.02629723452129
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 19
dh =
           1.4577327567363
rdh_sum =
```

```
          3.28579691114652
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 20
dh =
           1.4671067567363
rdh_sum =
          3.54831564123295
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 21
dh =
           1.4764807567363
rdh_sum =
          3.81386464697113
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 22
dh =
           1.4858547567363
rdh_sum =
          4.08245500735574
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 23
dh =
           1.4870262567363
rdh_sum =
          4.35142622761641
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 24
dh =
           1.4717937567363
rdh_sum =
          4.61545870169228
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 25
dh =
           1.4483592567363
rdh_sum =
          4.87195084983394
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 26
dh =
           1.4249247567363
rdh_sum =
          5.12097458609211
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 27
dh =
           1.4014902567363
rdh_sum =
          5.36260403012914
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 28
dh =
           1.3780557567363
rdh_sum =
          5.59691548532961
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 29
dh =
           1.3546212567363
rdh_sum =
          5.82398741626599
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 30
dh =
           1.3383067567363
rdh_sum =
          6.04606683764641
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 31
dh =
           1.3362337567363
rdh_sum =
          6.26751472001163
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 32
dh =
           1.3412812567363
rdh_sum =
          6.49050144379266
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 33
dh =
           1.3463287567363
rdh_sum =
          6.71503080434821
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 34
dh =
           1.3513762567363
rdh_sum =
```

```
          6.94110657590136
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 35
dh =
           1.3564237567363
rdh_sum =
          7.16873251148779
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 36
dh =
           1.3614712567363
rdh_sum =
          7.39791234290438
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
           1.3511057567363
rdh_sum =
          7.62390514555731
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
           1.3253277567363
rdh_sum =
          7.84204115327452
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
           1.2995497567363
rdh_sum =
          8.05242108825342
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
           1.2737717567363
rdh_sum =
           8.2551484442717
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
           1.2479937567363
rdh_sum =
          8.45032944970455
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
           1.2222157567363
rdh_sum =
          8.63807302956468
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
           1.1964377567363
rdh_sum =
          8.81849076657866
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
           1.1706597567363
rdh_sum =
          8.99169686131365
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
           1.1448817567363
rdh_sum =
          9.15780809136853
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
           1.1191037567363
rdh_sum =
          9.31694376964425
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
           1.0933257567363
rdh_sum =
          9.46922570170817
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
           1.0675477567363
rdh_sum =
          9.61477814226764
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 49
dh =
           1.0417697567363
rdh_sum =
```

```
          9.75372775076844
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 50
dh =
           1.0159917567363
rdh_sum =
          9.88620354613386
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 51
dh =
         0.990604256736299
rdh_sum =
          10.0124319492909
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 52
dh =
         0.965607256736298
rdh_sum =
          10.1326356195752
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 53
dh =
         0.940610256736299
rdh_sum =
          10.2469421757321
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 54
dh =
           0.9156132567363
rdh_sum =
          10.3554812180484
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 55
dh =
         0.890616256736299
rdh_sum =
          10.4583842848048
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 56
dh =
         0.865619256736299
rdh_sum =
          10.5557848080761
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 57
dh =
         0.840622756736298
rdh_sum =
          10.6478181748891
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
         0.815626256736298
rdh_sum =
          10.7346214642595
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 59
dh =
         0.790629256736299
rdh_sum =
          10.8163334120985
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 60
dh =
           0.7656322567363
rdh_sum =
          10.8930945710975
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 61
dh =
         0.756727256736298
rdh_sum =
          10.9681263186944
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 62
dh =
         0.780005756736298
rdh_sum =
           11.047716954516
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 63
dh =
         0.819375756736299
rdh_sum =
          11.1352959522884
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 64
dh =
         0.837237756736299
rdh_sum =
```

```
          11.2266130033956
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 65
dh =
         0.833592256736299
rdh_sum =
          11.3171614297328
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 66
dh =
           0.8299472567363
rdh_sum =
          11.4069442624037
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 67
dh =
         0.826301756736299
rdh_sum =
          11.4959643279439
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 68
dh =
         0.822656256736298
rdh_sum =
          11.5842245635611
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 69
dh =
         0.819010756736299
rdh_sum =
          11.6717279118934
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 70
dh =
           0.8153652567363
rdh_sum =
          11.7584773209881
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 71
dh =
         0.811720256736299
rdh_sum =
          11.8444758470799
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 72
dh =
           0.8080747567363
rdh_sum =
          11.9297263457666
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 73
dh =
           0.8114322567363
rdh_sum =
          12.0156656688532
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 74
dh =
         0.821792756736301
rdh_sum =
          12.1037463564099
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 75
dh =
           0.8321532567363
rdh_sum =
          12.1939921862321
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 76
dh =
         0.842513756736299
rdh_sum =
          12.2864268111333
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 77
dh =
           0.8528742567363
rdh_sum =
          12.3810737575803
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 78
dh =
         0.863235256736299
rdh_sum =
           12.477956532794
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 79
dh =
           0.8735957567363
rdh_sum =
```

```
          12.5770982991415
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 80
dh =
         0.883956256736299
rdh_sum =
          12.6785221959238
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 81
dh =
         0.894316756736298
rdh_sum =
          12.7822512307076
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 82
dh =
         0.885682756736299
rdh_sum =
          12.8840576675476
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 83
dh =
           0.8390602567363
rdh_sum =
          12.9757600737699
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 84
dh =
           0.7734432567363
rdh_sum =
          13.0540530435747
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 85
dh =
         0.707826756736299
rdh_sum =
          13.1199129152626
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 86
dh =
         0.642210256736298
rdh_sum =
          13.1743447033655
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 87
dh =
         0.576593256736299
rdh_sum =
           13.218379802676
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 88
dh =
         0.510976256736299
rdh_sum =
          13.2530737671592
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 89
dh =
           0.4453592567363
rdh_sum =
          13.2795037754089
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
           0.4226457567363
rdh_sum =
           13.303327722907
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
         0.442835756736299
rdh_sum =
           13.329461693213
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
         0.463025756736299
rdh_sum =
          13.3580095635588
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
dh =
           0.4832157567363
rdh_sum =
          13.3890746820197
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
         0.503405256736301
rdh_sum =
```

```
          13.4227597787067
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 95
dh =
           0.5235947567363
rdh_sum =
          13.4591670704896
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 96
dh =
         0.503194756736299
rdh_sum =
          13.4928243224003
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 99
dh =
         0.183576256736298
rdh_sum =
          13.4973482653468
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 100
dh =
         0.240307256736299
rdh_sum =
          13.5050919855488
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 101
dh =
         0.363338756736299
rdh_sum =
          13.5227358070771
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
         0.486370256736299
rdh_sum =
          13.5542035216754
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
           0.5575527567363
rdh_sum =
          13.5954183319647
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
       -0.0336427432637016
rdh_sum =
          13.5954859605948
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 112
dh =
       -0.0861362432637005
rdh_sum =
          13.5959292274424
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 113
dh =
        -0.138629743263699
rdh_sum =
          13.5970771277448
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 114
dh =
          -0.1911232432637
rdh_sum =
          13.5992581926854
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 115
dh =
        -0.222291243263701
rdh_sum =
          13.6022078720858
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 116
dh =
        -0.210808243263701
rdh_sum =
          13.6048609396571
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 117
dh =
          -0.1780002432637
rdh_sum =
           13.606752955123
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 118
dh =
        -0.145191743263702
rdh_sum =
```

```
          13.6080120517493
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 119
dh =
          -0.1123832432637
rdh_sum =
          13.6087665382036
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 120
dh =
          -0.1169402432637
rdh_sum =
          13.6095834351459
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
   107
rB =
         0.528647764612378
rdh_mean =
         0.127192368552765
gamma_berm =
         0.538592196698795
gamma_berm =
                       0.6
slope =
         0.101538042842554
Irb =
          1.13219989629533
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
                       0.6
ans =
!!! - - Iribaren number:   0.68 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.8 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          2.57553285289221
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
                1.361585082
upper_slope =
        0.0749899999999997
upper_slope =
         0.074990013768382
upper_slope =
        0.0749900271627767
upper_slope =
        0.0749900267988116
upper_slope =
        0.0749900396667073
upper_slope =
         0.074990039149069
upper_slope =
        0.0749900515263559
upper_slope =
        0.0755198983560698
upper_slope =
        0.0760364374959384
upper_slope =
        0.0765401640840408
upper_slope =
        0.0770315489959536
w2 =
         0.202357731345444
w1 =
         0.797642268654556
R2_new =
          2.57975154372212
R2del =
          3.84624845627788
Z2 =
          12.0244553004584
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                 6.1836494
toe_sta =
           62.226972657228
top_sta =
          213.340022675802
Z2 =
```

```
          12.0244553004584
H0 =
                     2.142
Tp =
                    7.9359
T0 =
          7.21445454545455
R2 =
          2.57975154372212
Z2 =
          12.0244553004584
top_sta =
          213.340022675802
Lslope =
          151.113050018574
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 5
dh =
           1.0892242567363
rdh_sum =
         0.151202837587871
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 6
dh =
           1.1302347567363
rdh_sum =
         0.313335777760792
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 7
dh =
           1.1712452567363
rdh_sum =
         0.486704385326514
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 8
dh =
           1.2122557567363
rdh_sum =
         0.671604063627069
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 9
dh =
           1.2532662567363
rdh_sum =
         0.868319787377875
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 10
dh =
           1.2942767567363
rdh_sum =
          1.07712584493842
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 11
dh =
           1.3352872567363
rdh_sum =
          1.29828559024764
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 12
dh =
           1.3762977567363
rdh_sum =
          1.53205120464829
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 13
dh =
           1.4014897567363
rdh_sum =
          1.77368049172652
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 14
dh =
           1.4108637567363
rdh_sum =
          2.01825852347265
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 15
dh =
           1.4202377567363
rdh_sum =
           2.2657973698659
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 16
dh =
           1.4296117567363
rdh_sum =
          2.51630896097204
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 17
dh =
```

```
           1.4389857567363
rdh_sum =
          2.76980508637963
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 18
dh =
           1.4483592567363
rdh_sum =
          3.02629723452129
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 19
dh =
           1.4577327567363
rdh_sum =
          3.28579691114652
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 20
dh =
           1.4671067567363
rdh_sum =
          3.54831564123295
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 21
dh =
           1.4764807567363
rdh_sum =
          3.81386464697113
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 22
dh =
           1.4858547567363
rdh_sum =
          4.08245500735574
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 23
dh =
           1.4870262567363
rdh_sum =
          4.35142622761641
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 24
dh =
           1.4717937567363
rdh_sum =
          4.61545870169228
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 25
dh =
           1.4483592567363
rdh_sum =
          4.87195084983394
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 26
dh =
           1.4249247567363
rdh_sum =
          5.12097458609211
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 27
dh =
           1.4014902567363
rdh_sum =
          5.36260403012914
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 28
dh =
           1.3780557567363
rdh_sum =
          5.59691548532961
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 29
dh =
           1.3546212567363
rdh_sum =
          5.82398741626599
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 30
dh =
           1.3383067567363
rdh_sum =
          6.04606683764641
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 31
dh =
           1.3362337567363
rdh_sum =
          6.26751472001163
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 32
dh =
```

```
           1.3412812567363
rdh_sum =
          6.49050144379266
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 33
dh =
           1.3463287567363
rdh_sum =
          6.71503080434821
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 34
dh =
           1.3513762567363
rdh_sum =
          6.94110657590136
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 35
dh =
           1.3564237567363
rdh_sum =
          7.16873251148779
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 36
dh =
           1.3614712567363
rdh_sum =
          7.39791234290438
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
           1.3511057567363
rdh_sum =
          7.62390514555731
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
           1.3253277567363
rdh_sum =
          7.84204115327452
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
           1.2995497567363
rdh_sum =
          8.05242108825342
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
           1.2737717567363
rdh_sum =
           8.2551484442717
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
           1.2479937567363
rdh_sum =
          8.45032944970455
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
           1.2222157567363
rdh_sum =
          8.63807302956468
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
           1.1964377567363
rdh_sum =
          8.81849076657866
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
           1.1706597567363
rdh_sum =
          8.99169686131365
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
dh =
           1.1448817567363
rdh_sum =
          9.15780809136853
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
           1.1191037567363
rdh_sum =
          9.31694376964425
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
```

```
           1.0933257567363
rdh_sum =
          9.46922570170817
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 48
dh =
           1.0675477567363
rdh_sum =
          9.61477814226764
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 49
dh =
           1.0417697567363
rdh_sum =
          9.75372775076844
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 50
dh =
           1.0159917567363
rdh_sum =
          9.88620354613386
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 51
dh =
         0.990604256736299
rdh_sum =
          10.0124319492909
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 52
dh =
         0.965607256736298
rdh_sum =
          10.1326356195752
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 53
dh =
         0.940610256736299
rdh_sum =
          10.2469421757321
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 54
dh =
           0.9156132567363
rdh_sum =
          10.3554812180484
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 55
dh =
         0.890616256736299
rdh_sum =
          10.4583842848048
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 56
dh =
         0.865619256736299
rdh_sum =
          10.5557848080761
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 57
dh =
         0.840622756736298
rdh_sum =
          10.6478181748891
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
         0.815626256736298
rdh_sum =
          10.7346214642595
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 59
dh =
         0.790629256736299
rdh_sum =
          10.8163334120985
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 60
dh =
           0.7656322567363
rdh_sum =
          10.8930945710975
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 61
dh =
         0.756727256736298
rdh_sum =
          10.9681263186944
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 62
dh =
```

```
         0.780005756736298
rdh_sum =
           11.047716954516
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 63
dh =
         0.819375756736299
rdh_sum =
          11.1352959522884
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 64
dh =
         0.837237756736299
rdh_sum =
          11.2266130033956
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 65
dh =
         0.833592256736299
rdh_sum =
          11.3171614297328
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 66
dh =
           0.8299472567363
rdh_sum =
          11.4069442624037
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 67
dh =
         0.826301756736299
rdh_sum =
          11.4959643279439
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 68
dh =
         0.822656256736298
rdh_sum =
          11.5842245635611
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 69
dh =
         0.819010756736299
rdh_sum =
          11.6717279118934
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 70
dh =
           0.8153652567363
rdh_sum =
          11.7584773209881
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 71
dh =
         0.811720256736299
rdh_sum =
          11.8444758470799
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 72
dh =
           0.8080747567363
rdh_sum =
          11.9297263457666
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 73
dh =
           0.8114322567363
rdh_sum =
          12.0156656688532
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 74
dh =
         0.821792756736301
rdh_sum =
          12.1037463564099
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 75
dh =
           0.8321532567363
rdh_sum =
          12.1939921862321
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 76
dh =
         0.842513756736299
rdh_sum =
          12.2864268111333
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 77
dh =
```

```
           0.8528742567363
rdh_sum =
          12.3810737575803
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 78
dh =
         0.863235256736299
rdh_sum =
           12.477956532794
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 79
dh =
           0.8735957567363
rdh_sum =
          12.5770982991415
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 80
dh =
         0.883956256736299
rdh_sum =
          12.6785221959238
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 81
dh =
         0.894316756736298
rdh_sum =
          12.7822512307076
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 82
dh =
         0.885682756736299
rdh_sum =
          12.8840576675476
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 83
dh =
           0.8390602567363
rdh_sum =
          12.9757600737699
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 84
dh =
           0.7734432567363
rdh_sum =
          13.0540530435747
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 85
dh =
         0.707826756736299
rdh_sum =
          13.1199129152626
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 86
dh =
         0.642210256736298
rdh_sum =
          13.1743447033655
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 87
dh =
         0.576593256736299
rdh_sum =
           13.218379802676
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 88
dh =
         0.510976256736299
rdh_sum =
          13.2530737671592
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 89
dh =
           0.4453592567363
rdh_sum =
          13.2795037754089
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 90
dh =
           0.4226457567363
rdh_sum =
           13.303327722907
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 91
dh =
         0.442835756736299
rdh_sum =
           13.329461693213
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 92
dh =
```

```
         0.463025756736299
rdh_sum =
          13.3580095635588
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 93
dh =
           0.4832157567363
rdh_sum =
          13.3890746820197
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 94
dh =
         0.503405256736301
rdh_sum =
          13.4227597787067
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 95
dh =
           0.5235947567363
rdh_sum =
          13.4591670704896
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 96
dh =
         0.503194756736299
rdh_sum =
          13.4928243224003
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 99
dh =
         0.183576256736298
rdh_sum =
          13.4973482653468
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 100
dh =
         0.240307256736299
rdh_sum =
          13.5050919855488
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 101
dh =
         0.363338756736299
rdh_sum =
          13.5227358070771
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 102
dh =
         0.486370256736299
rdh_sum =
          13.5542035216754
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 103
dh =
           0.5575527567363
rdh_sum =
          13.5954183319647
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 111
dh =
       -0.0336427432637016
rdh_sum =
          13.5958379028196
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 112
dh =
       -0.0861362432637005
rdh_sum =
           13.598586156761
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 113
dh =
        -0.138629743263699
rdh_sum =
          13.6056944342812
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 114
dh =
          -0.1911232432637
rdh_sum =
          13.6191762645875
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 115
dh =
        -0.222291243263701
rdh_sum =
          13.6373847674904
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 116
dh =
```

```
        -0.210808243263701
rdh_sum =
          13.6537707294956
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 117
dh =
          -0.1780002432637
rdh_sum =
          13.6654717365485
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 118
dh =
        -0.145191743263702
rdh_sum =
          13.6732670820121
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 119
dh =
          -0.1123832432637
rdh_sum =
          13.6779423703512
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 120
dh =
          -0.1169402432637
rdh_sum =
          13.6830038460605
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
   107
rB =
         0.708079149926812
rdh_mean =
         0.127878540617387
gamma_berm =
         0.382468978407429
gamma_berm =
                       0.6
slope =
         0.132405396997012
Irb =
          1.47638631346688
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
                       0.6
ans =
!!! - - Iribaren number:   0.89 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.6 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.35848949141971
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
               1.361585082
upper_slope =
        0.0749899999999997
upper_slope =
        0.0749900468603061
upper_slope =
        0.0749900895254236
upper_slope =
        0.0749900856897194
upper_slope =
        0.0749901232537879
upper_slope =
        0.0749901183897912
upper_slope =
        0.0749901518601576
upper_slope =
        0.0765139928837686
upper_slope =
        0.0779302940482169
upper_slope =
        0.0792500512406242
upper_slope =
        0.0804828106607154
w2 =
         0.202357731345444
w1 =
         0.797642268654556
R2_new =
```

```
          3.22781036235442
R2del =
         0.648058818632296
Z2 =
          12.6725141190907
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                 6.1836494
toe_sta =
           62.226972657228
top_sta =
          221.981959182434
Z2 =
          12.6725141190907
H0 =
                     2.142
Tp =
                    7.9359
T0 =
          7.21445454545455
R2 =
          3.22781036235442
Z2 =
          12.6725141190907
top_sta =
          221.981959182434
Lslope =
          159.754986525206
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 5
dh =
           1.0892242567363
rdh_sum =
         0.151202837587871
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 6
dh =
           1.1302347567363
rdh_sum =
         0.313335777760792
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 7
dh =
           1.1712452567363
rdh_sum =
         0.486704385326514
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 8
dh =
           1.2122557567363
rdh_sum =
         0.671604063627069
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 9
dh =
           1.2532662567363
rdh_sum =
         0.868319787377875
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 10
dh =
           1.2942767567363
rdh_sum =
          1.07712584493842
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 11
dh =
           1.3352872567363
rdh_sum =
          1.29828559024764
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 12
dh =
           1.3762977567363
rdh_sum =
          1.53205120464829
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 13
dh =
           1.4014897567363
rdh_sum =
          1.77368049172652
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 14
dh =
           1.4108637567363
rdh_sum =
          2.01825852347265
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 15
dh =
           1.4202377567363
rdh_sum =
           2.2657973698659
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 16
dh =
           1.4296117567363
rdh_sum =
          2.51630896097204
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 17
dh =
           1.4389857567363
rdh_sum =
          2.76980508637963
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 18
dh =
           1.4483592567363
rdh_sum =
          3.02629723452129
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 19
dh =
           1.4577327567363
rdh_sum =
          3.28579691114652
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 20
dh =
           1.4671067567363
rdh_sum =
          3.54831564123295
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 21
dh =
           1.4764807567363
rdh_sum =
          3.81386464697113
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 22
dh =
           1.4858547567363
rdh_sum =
          4.08245500735574
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 23
dh =
           1.4870262567363
rdh_sum =
          4.35142622761641
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 24
dh =
           1.4717937567363
rdh_sum =
          4.61545870169228
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 25
dh =
           1.4483592567363
rdh_sum =
          4.87195084983394
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 26
dh =
           1.4249247567363
rdh_sum =
          5.12097458609211
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 27
dh =
           1.4014902567363
rdh_sum =
          5.36260403012914
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 28
dh =
           1.3780557567363
rdh_sum =
          5.59691548532961
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 29
dh =
           1.3546212567363
rdh_sum =
          5.82398741626599
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 30
dh =
           1.3383067567363
rdh_sum =
          6.04606683764641
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 31
dh =
           1.3362337567363
rdh_sum =
          6.26751472001163
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 32
dh =
           1.3412812567363
rdh_sum =
          6.49050144379266
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 33
dh =
           1.3463287567363
rdh_sum =
          6.71503080434821
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 34
dh =
           1.3513762567363
rdh_sum =
          6.94110657590136
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 35
dh =
           1.3564237567363
rdh_sum =
          7.16873251148779
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 36
dh =
           1.3614712567363
rdh_sum =
          7.39791234290438
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
           1.3511057567363
rdh_sum =
          7.62390514555731
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
           1.3253277567363
rdh_sum =
          7.84204115327452
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
           1.2995497567363
rdh_sum =
          8.05242108825342
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
           1.2737717567363
rdh_sum =
           8.2551484442717
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
           1.2479937567363
rdh_sum =
          8.45032944970455
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
           1.2222157567363
rdh_sum =
          8.63807302956468
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
           1.1964377567363
rdh_sum =
          8.81849076657866
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
           1.1706597567363
rdh_sum =
          8.99169686131365
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
           1.1448817567363
rdh_sum =
          9.15780809136853
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
           1.1191037567363
rdh_sum =
          9.31694376964425
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
dh =
           1.0933257567363
rdh_sum =
          9.46922570170817
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
           1.0675477567363
rdh_sum =
          9.61477814226764
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 49
dh =
           1.0417697567363
rdh_sum =
          9.75372775076844
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 50
dh =
           1.0159917567363
rdh_sum =
          9.88620354613386
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 51
dh =
         0.990604256736299
rdh_sum =
          10.0124319492909
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 52
dh =
         0.965607256736298
rdh_sum =
          10.1326356195752
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 53
dh =
         0.940610256736299
rdh_sum =
          10.2469421757321
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 54
dh =
           0.9156132567363
rdh_sum =
          10.3554812180484
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 55
dh =
         0.890616256736299
rdh_sum =
          10.4583842848048
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 56
dh =
         0.865619256736299
rdh_sum =
          10.5557848080761
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 57
dh =
         0.840622756736298
rdh_sum =
          10.6478181748891
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
         0.815626256736298
rdh_sum =
          10.7346214642595
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 59
dh =
         0.790629256736299
rdh_sum =
          10.8163334120985
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 60
dh =
           0.7656322567363
rdh_sum =
          10.8930945710975
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 61
dh =
         0.756727256736298
rdh_sum =
          10.9681263186944
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 62
dh =
         0.780005756736298
rdh_sum =
           11.047716954516
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 63
dh =
         0.819375756736299
rdh_sum =
          11.1352959522884
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 64
dh =
         0.837237756736299
rdh_sum =
          11.2266130033956
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 65
dh =
         0.833592256736299
rdh_sum =
          11.3171614297328
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 66
dh =
           0.8299472567363
rdh_sum =
          11.4069442624037
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 67
dh =
         0.826301756736299
rdh_sum =
          11.4959643279439
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 68
dh =
         0.822656256736298
rdh_sum =
          11.5842245635611
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 69
dh =
         0.819010756736299
rdh_sum =
          11.6717279118934
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 70
dh =
           0.8153652567363
rdh_sum =
          11.7584773209881
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 71
dh =
         0.811720256736299
rdh_sum =
          11.8444758470799
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 72
dh =
           0.8080747567363
rdh_sum =
          11.9297263457666
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 73
dh =
           0.8114322567363
rdh_sum =
          12.0156656688532
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 74
dh =
         0.821792756736301
rdh_sum =
          12.1037463564099
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 75
dh =
           0.8321532567363
rdh_sum =
          12.1939921862321
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 76
dh =
         0.842513756736299
rdh_sum =
          12.2864268111333
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 77
dh =
           0.8528742567363
rdh_sum =
          12.3810737575803
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 78
dh =
         0.863235256736299
rdh_sum =
           12.477956532794
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 79
dh =
           0.8735957567363
rdh_sum =
          12.5770982991415
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 80
dh =
         0.883956256736299
rdh_sum =
          12.6785221959238
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 81
dh =
         0.894316756736298
rdh_sum =
          12.7822512307076
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 82
dh =
         0.885682756736299
rdh_sum =
          12.8840576675476
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 83
dh =
           0.8390602567363
rdh_sum =
          12.9757600737699
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 84
dh =
           0.7734432567363
rdh_sum =
          13.0540530435747
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 85
dh =
         0.707826756736299
rdh_sum =
          13.1199129152626
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 86
dh =
         0.642210256736298
rdh_sum =
          13.1743447033655
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 87
dh =
         0.576593256736299
rdh_sum =
           13.218379802676
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 88
dh =
         0.510976256736299
rdh_sum =
          13.2530737671592
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 89
dh =
           0.4453592567363
rdh_sum =
          13.2795037754089
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
           0.4226457567363
rdh_sum =
           13.303327722907
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
         0.442835756736299
rdh_sum =
           13.329461693213
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
         0.463025756736299
rdh_sum =
          13.3580095635588
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
           0.4832157567363
rdh_sum =
          13.3890746820197
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
         0.503405256736301
rdh_sum =
          13.4227597787067
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 95
dh =
           0.5235947567363
rdh_sum =
          13.4591670704896
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 96
dh =
         0.503194756736299
rdh_sum =
          13.4928243224003
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 99
dh =
         0.183576256736298
rdh_sum =
          13.4973482653468
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 100
dh =
         0.240307256736299
rdh_sum =
          13.5050919855488
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 101
dh =
         0.363338756736299
rdh_sum =
          13.5227358070771
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
         0.486370256736299
rdh_sum =
          13.5542035216754
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
           0.5575527567363
rdh_sum =
          13.5954183319647
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
       -0.0336427432637016
rdh_sum =
          13.5956863518373
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 112
dh =
       -0.0861362432637005
rdh_sum =
          13.5974424163652
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 113
dh =
        -0.138629743263699
rdh_sum =
          13.6019868196658
ans =
```

```
Berm Factor Calculation: Iteration 3, Profile Segment: 114
dh =
          -0.1911232432637
rdh_sum =
           13.6106125789783
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 115
dh =
        -0.222291243263701
rdh_sum =
           13.6222692080817
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 116
dh =
        -0.210808243263701
rdh_sum =
           13.6327567588217
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 117
dh =
          -0.1780002432637
rdh_sum =
           13.6402415152792
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 118
dh =
        -0.145191743263702
rdh_sum =
           13.6452255837132
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 119
dh =
          -0.1123832432637
rdh_sum =
            13.648213669594
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 120
dh =
          -0.1169402432637
rdh_sum =
           13.6514487278381
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
   107
rB =
         0.669775650371437
rdh_mean =
          0.12758363297045
gamma_berm =
         0.415676760378097
gamma_berm =
                       0.6
slope =
         0.123000026092138
Irb =
          1.37151172986248
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
                       0.6
ans =
!!! - - Iribaren number:   0.82 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.1 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           3.11992036913809
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
               1.361585082
upper_slope =
        0.0749899999999996
upper_slope =
        0.0749900333533904
upper_slope =
        0.0749900645536965
upper_slope =
        0.0749900625352556
upper_slope =
         0.074990090958817
upper_slope =
        0.0749900882821374
upper_slope =
```

```
        0.0749901143446532
upper_slope =
        0.0761479691864119
upper_slope =
        0.0772432067484291
upper_slope =
        0.0782807728482262
upper_slope =
        0.0792651058052282
w2 =
         0.202357731345444
w1 =
         0.797642268654556
R2_new =
          3.02921212729136
R2del =
         0.198598235063055
Z2 =
          12.4739158840277
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
                 6.1836494
toe_sta =
           62.226972657228
top_sta =
          219.333629604316
Z2 =
          12.4739158840277
H0 =
                     2.142
Tp =
                    7.9359
T0 =
          7.21445454545455
R2 =
          3.02921212729136
Z2 =
          12.4739158840277
top_sta =
          219.333629604316
Lslope =
          157.106656947088
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 5
dh =
           1.0892242567363
rdh_sum =
         0.151202837587871
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 6
dh =
           1.1302347567363
rdh_sum =
         0.313335777760792
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 7
dh =
           1.1712452567363
rdh_sum =
         0.486704385326514
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 8
dh =
           1.2122557567363
rdh_sum =
         0.671604063627069
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 9
dh =
           1.2532662567363
rdh_sum =
         0.868319787377875
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 10
dh =
           1.2942767567363
rdh_sum =
          1.07712584493842
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 11
dh =
           1.3352872567363
rdh_sum =
          1.29828559024764
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 12
dh =
           1.3762977567363
rdh_sum =
```

```
          1.53205120464829
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 13
dh =
           1.4014897567363
rdh_sum =
          1.77368049172652
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 14
dh =
           1.4108637567363
rdh_sum =
          2.01825852347265
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 15
dh =
           1.4202377567363
rdh_sum =
           2.2657973698659
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 16
dh =
           1.4296117567363
rdh_sum =
          2.51630896097204
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 17
dh =
           1.4389857567363
rdh_sum =
          2.76980508637963
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 18
dh =
           1.4483592567363
rdh_sum =
          3.02629723452129
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 19
dh =
           1.4577327567363
rdh_sum =
          3.28579691114652
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 20
dh =
           1.4671067567363
rdh_sum =
          3.54831564123295
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 21
dh =
           1.4764807567363
rdh_sum =
          3.81386464697113
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 22
dh =
           1.4858547567363
rdh_sum =
          4.08245500735574
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 23
dh =
           1.4870262567363
rdh_sum =
          4.35142622761641
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 24
dh =
           1.4717937567363
rdh_sum =
          4.61545870169228
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 25
dh =
           1.4483592567363
rdh_sum =
          4.87195084983394
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 26
dh =
           1.4249247567363
rdh_sum =
          5.12097458609211
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 27
dh =
           1.4014902567363
rdh_sum =
```

```
          5.36260403012914
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 28
dh =
           1.3780557567363
rdh_sum =
          5.59691548532961
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 29
dh =
           1.3546212567363
rdh_sum =
          5.82398741626599
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 30
dh =
           1.3383067567363
rdh_sum =
          6.04606683764641
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 31
dh =
           1.3362337567363
rdh_sum =
          6.26751472001163
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 32
dh =
           1.3412812567363
rdh_sum =
          6.49050144379266
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 33
dh =
           1.3463287567363
rdh_sum =
          6.71503080434821
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 34
dh =
           1.3513762567363
rdh_sum =
          6.94110657590136
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 35
dh =
           1.3564237567363
rdh_sum =
          7.16873251148779
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 36
dh =
           1.3614712567363
rdh_sum =
          7.39791234290438
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 37
dh =
           1.3511057567363
rdh_sum =
          7.62390514555731
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 38
dh =
           1.3253277567363
rdh_sum =
          7.84204115327452
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 39
dh =
           1.2995497567363
rdh_sum =
          8.05242108825342
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
           1.2737717567363
rdh_sum =
           8.2551484442717
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
           1.2479937567363
rdh_sum =
          8.45032944970455
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
           1.2222157567363
rdh_sum =
```

```
          8.63807302956468
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
           1.1964377567363
rdh_sum =
          8.81849076657866
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
           1.1706597567363
rdh_sum =
          8.99169686131365
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 45
dh =
           1.1448817567363
rdh_sum =
          9.15780809136853
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 46
dh =
           1.1191037567363
rdh_sum =
          9.31694376964425
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 47
dh =
           1.0933257567363
rdh_sum =
          9.46922570170817
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 48
dh =
           1.0675477567363
rdh_sum =
          9.61477814226764
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 49
dh =
           1.0417697567363
rdh_sum =
          9.75372775076844
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 50
dh =
           1.0159917567363
rdh_sum =
          9.88620354613386
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 51
dh =
         0.990604256736299
rdh_sum =
          10.0124319492909
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 52
dh =
         0.965607256736298
rdh_sum =
          10.1326356195752
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 53
dh =
         0.940610256736299
rdh_sum =
          10.2469421757321
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 54
dh =
           0.9156132567363
rdh_sum =
          10.3554812180484
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 55
dh =
         0.890616256736299
rdh_sum =
          10.4583842848048
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 56
dh =
         0.865619256736299
rdh_sum =
          10.5557848080761
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 57
dh =
         0.840622756736298
rdh_sum =
```

```
          10.6478181748891
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 58
dh =
         0.815626256736298
rdh_sum =
          10.7346214642595
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 59
dh =
         0.790629256736299
rdh_sum =
          10.8163334120985
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 60
dh =
           0.7656322567363
rdh_sum =
          10.8930945710975
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 61
dh =
         0.756727256736298
rdh_sum =
          10.9681263186944
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 62
dh =
         0.780005756736298
rdh_sum =
           11.047716954516
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 63
dh =
         0.819375756736299
rdh_sum =
          11.1352959522884
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 64
dh =
         0.837237756736299
rdh_sum =
          11.2266130033956
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 65
dh =
         0.833592256736299
rdh_sum =
          11.3171614297328
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 66
dh =
           0.8299472567363
rdh_sum =
          11.4069442624037
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 67
dh =
         0.826301756736299
rdh_sum =
          11.4959643279439
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 68
dh =
         0.822656256736298
rdh_sum =
          11.5842245635611
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 69
dh =
         0.819010756736299
rdh_sum =
          11.6717279118934
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 70
dh =
           0.8153652567363
rdh_sum =
          11.7584773209881
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 71
dh =
         0.811720256736299
rdh_sum =
          11.8444758470799
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 72
dh =
           0.8080747567363
rdh_sum =
```

```
          11.9297263457666
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 73
dh =
           0.8114322567363
rdh_sum =
          12.0156656688532
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 74
dh =
         0.821792756736301
rdh_sum =
          12.1037463564099
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 75
dh =
           0.8321532567363
rdh_sum =
          12.1939921862321
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 76
dh =
         0.842513756736299
rdh_sum =
          12.2864268111333
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 77
dh =
           0.8528742567363
rdh_sum =
          12.3810737575803
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 78
dh =
         0.863235256736299
rdh_sum =
           12.477956532794
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 79
dh =
           0.8735957567363
rdh_sum =
          12.5770982991415
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 80
dh =
         0.883956256736299
rdh_sum =
          12.6785221959238
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 81
dh =
         0.894316756736298
rdh_sum =
          12.7822512307076
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 82
dh =
         0.885682756736299
rdh_sum =
          12.8840576675476
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 83
dh =
           0.8390602567363
rdh_sum =
          12.9757600737699
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 84
dh =
           0.7734432567363
rdh_sum =
          13.0540530435747
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 85
dh =
         0.707826756736299
rdh_sum =
          13.1199129152626
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 86
dh =
         0.642210256736298
rdh_sum =
          13.1743447033655
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 87
dh =
         0.576593256736299
rdh_sum =
```

```
           13.218379802676
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 88
dh =
         0.510976256736299
rdh_sum =
          13.2530737671592
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 89
dh =
           0.4453592567363
rdh_sum =
          13.2795037754089
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 90
dh =
           0.4226457567363
rdh_sum =
           13.303327722907
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 91
dh =
         0.442835756736299
rdh_sum =
           13.329461693213
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 92
dh =
         0.463025756736299
rdh_sum =
          13.3580095635588
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 93
dh =
           0.4832157567363
rdh_sum =
          13.3890746820197
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 94
dh =
         0.503405256736301
rdh_sum =
          13.4227597787067
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 95
dh =
           0.5235947567363
rdh_sum =
          13.4591670704896
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 96
dh =
         0.503194756736299
rdh_sum =
          13.4928243224003
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 99
dh =
         0.183576256736298
rdh_sum =
          13.4973482653468
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 100
dh =
         0.240307256736299
rdh_sum =
          13.5050919855488
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 101
dh =
         0.363338756736299
rdh_sum =
          13.5227358070771
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 102
dh =
         0.486370256736299
rdh_sum =
          13.5542035216754
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 103
dh =
           0.5575527567363
rdh_sum =
          13.5954183319647
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 111
dh =
       -0.0336427432637016
rdh_sum =
```

```
          13.5957226434831
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 112
dh =
       -0.0861362432637005
rdh_sum =
          13.5977163566135
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 113
dh =
        -0.138629743263699
rdh_sum =
          13.6028751040111
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 114
dh =
          -0.1911232432637
rdh_sum =
          13.6126651400801
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 115
dh =
        -0.222291243263701
rdh_sum =
          13.6258933179201
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 116
dh =
        -0.210808243263701
rdh_sum =
           13.637795435817
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 117
dh =
          -0.1780002432637
rdh_sum =
          13.6462909006194
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 118
dh =
        -0.145191743263702
rdh_sum =
          13.6519486374239
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 119
dh =
          -0.1123832432637
rdh_sum =
          13.6553409126061
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 120
dh =
          -0.1169402432637
rdh_sum =
          13.6590135263059
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
   107
rB =
         0.681065984594379
rdh_mean =
          0.12765433202155
gamma_berm =
         0.405875038731616
gamma_berm =
                       0.6
slope =
          0.12553754066391
Irb =
          1.39980628483498
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
                       0.6
ans =
!!! - - Iribaren number:   0.84 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.0 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.18428493596774
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
```

```
                1.361585082
upper_slope =
        0.0749899999999997
upper_slope =
         0.074990036584969
upper_slope =
        0.0749900705874969
upper_slope =
        0.0749900681811293
upper_slope =
        0.0749900989001326
upper_slope =
        0.0749900957437753
upper_slope =
        0.0749901237102064
upper_slope =
        0.0762399688901144
upper_slope =
        0.0774170081829483
upper_slope =
        0.0785274231687968
upper_slope =
        0.0795767148923705
w2 =
         0.202357731345444
w1 =
         0.797642268654556
R2_new =
          3.08267737234194
R2del =
        0.0534652450505795
Z2 =
          12.5273811290782
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
                 6.1836494
toe_sta =
           62.226972657228
top_sta =
          220.046594600323
Z2 =
          12.5273811290782
H0 =
                     2.142
Tp =
                    7.9359
T0 =
          7.21445454545455
R2 =
          3.08267737234194
Z2 =
          12.5273811290782
top_sta =
          220.046594600323
Lslope =
          157.819621943095
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 5
dh =
           1.0892242567363
rdh_sum =
         0.151202837587871
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 6
dh =
           1.1302347567363
rdh_sum =
         0.313335777760792
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 7
dh =
           1.1712452567363
rdh_sum =
         0.486704385326514
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 8
dh =
           1.2122557567363
rdh_sum =
         0.671604063627069
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 9
dh =
           1.2532662567363
rdh_sum =
         0.868319787377875
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 10
dh =
```

```
           1.2942767567363
rdh_sum =
          1.07712584493842
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 11
dh =
           1.3352872567363
rdh_sum =
          1.29828559024764
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 12
dh =
           1.3762977567363
rdh_sum =
          1.53205120464829
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 13
dh =
           1.4014897567363
rdh_sum =
          1.77368049172652
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 14
dh =
           1.4108637567363
rdh_sum =
          2.01825852347265
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 15
dh =
           1.4202377567363
rdh_sum =
           2.2657973698659
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 16
dh =
           1.4296117567363
rdh_sum =
          2.51630896097204
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 17
dh =
           1.4389857567363
rdh_sum =
          2.76980508637963
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 18
dh =
           1.4483592567363
rdh_sum =
          3.02629723452129
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 19
dh =
           1.4577327567363
rdh_sum =
          3.28579691114652
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 20
dh =
           1.4671067567363
rdh_sum =
          3.54831564123295
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 21
dh =
           1.4764807567363
rdh_sum =
          3.81386464697113
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 22
dh =
           1.4858547567363
rdh_sum =
          4.08245500735574
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 23
dh =
           1.4870262567363
rdh_sum =
          4.35142622761641
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 24
dh =
           1.4717937567363
rdh_sum =
          4.61545870169228
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 25
dh =
```

```
           1.4483592567363
rdh_sum =
          4.87195084983394
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 26
dh =
           1.4249247567363
rdh_sum =
          5.12097458609211
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 27
dh =
           1.4014902567363
rdh_sum =
          5.36260403012914
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 28
dh =
           1.3780557567363
rdh_sum =
          5.59691548532961
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 29
dh =
           1.3546212567363
rdh_sum =
          5.82398741626599
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 30
dh =
           1.3383067567363
rdh_sum =
          6.04606683764641
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 31
dh =
           1.3362337567363
rdh_sum =
          6.26751472001163
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 32
dh =
           1.3412812567363
rdh_sum =
          6.49050144379266
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 33
dh =
           1.3463287567363
rdh_sum =
          6.71503080434821
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 34
dh =
           1.3513762567363
rdh_sum =
          6.94110657590136
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 35
dh =
           1.3564237567363
rdh_sum =
          7.16873251148779
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 36
dh =
           1.3614712567363
rdh_sum =
          7.39791234290438
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 37
dh =
           1.3511057567363
rdh_sum =
          7.62390514555731
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 38
dh =
           1.3253277567363
rdh_sum =
          7.84204115327452
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 39
dh =
           1.2995497567363
rdh_sum =
          8.05242108825342
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
```

```
           1.2737717567363
rdh_sum =
           8.2551484442717
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
           1.2479937567363
rdh_sum =
          8.45032944970455
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
           1.2222157567363
rdh_sum =
          8.63807302956468
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 43
dh =
           1.1964377567363
rdh_sum =
          8.81849076657866
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 44
dh =
           1.1706597567363
rdh_sum =
          8.99169686131365
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 45
dh =
           1.1448817567363
rdh_sum =
          9.15780809136853
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 46
dh =
           1.1191037567363
rdh_sum =
          9.31694376964425
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 47
dh =
           1.0933257567363
rdh_sum =
          9.46922570170817
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 48
dh =
           1.0675477567363
rdh_sum =
          9.61477814226764
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 49
dh =
           1.0417697567363
rdh_sum =
          9.75372775076844
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 50
dh =
           1.0159917567363
rdh_sum =
          9.88620354613386
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 51
dh =
         0.990604256736299
rdh_sum =
          10.0124319492909
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 52
dh =
         0.965607256736298
rdh_sum =
          10.1326356195752
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 53
dh =
         0.940610256736299
rdh_sum =
          10.2469421757321
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 54
dh =
           0.9156132567363
rdh_sum =
          10.3554812180484
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 55
dh =
```

```
         0.890616256736299
rdh_sum =
          10.4583842848048
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 56
dh =
         0.865619256736299
rdh_sum =
          10.5557848080761
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 57
dh =
         0.840622756736298
rdh_sum =
          10.6478181748891
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 58
dh =
         0.815626256736298
rdh_sum =
          10.7346214642595
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 59
dh =
         0.790629256736299
rdh_sum =
          10.8163334120985
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 60
dh =
           0.7656322567363
rdh_sum =
          10.8930945710975
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 61
dh =
         0.756727256736298
rdh_sum =
          10.9681263186944
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 62
dh =
         0.780005756736298
rdh_sum =
           11.047716954516
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 63
dh =
         0.819375756736299
rdh_sum =
          11.1352959522884
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 64
dh =
         0.837237756736299
rdh_sum =
          11.2266130033956
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 65
dh =
         0.833592256736299
rdh_sum =
          11.3171614297328
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 66
dh =
           0.8299472567363
rdh_sum =
          11.4069442624037
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 67
dh =
         0.826301756736299
rdh_sum =
          11.4959643279439
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 68
dh =
         0.822656256736298
rdh_sum =
          11.5842245635611
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 69
dh =
         0.819010756736299
rdh_sum =
          11.6717279118934
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 70
dh =
```

```
           0.8153652567363
rdh_sum =
          11.7584773209881
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 71
dh =
         0.811720256736299
rdh_sum =
          11.8444758470799
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 72
dh =
           0.8080747567363
rdh_sum =
          11.9297263457666
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 73
dh =
           0.8114322567363
rdh_sum =
          12.0156656688532
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 74
dh =
         0.821792756736301
rdh_sum =
          12.1037463564099
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 75
dh =
           0.8321532567363
rdh_sum =
          12.1939921862321
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 76
dh =
         0.842513756736299
rdh_sum =
          12.2864268111333
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 77
dh =
           0.8528742567363
rdh_sum =
          12.3810737575803
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 78
dh =
         0.863235256736299
rdh_sum =
           12.477956532794
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 79
dh =
           0.8735957567363
rdh_sum =
          12.5770982991415
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 80
dh =
         0.883956256736299
rdh_sum =
          12.6785221959238
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 81
dh =
         0.894316756736298
rdh_sum =
          12.7822512307076
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 82
dh =
         0.885682756736299
rdh_sum =
          12.8840576675476
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 83
dh =
           0.8390602567363
rdh_sum =
          12.9757600737699
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 84
dh =
           0.7734432567363
rdh_sum =
          13.0540530435747
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 85
dh =
```

```
         0.707826756736299
rdh_sum =
          13.1199129152626
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 86
dh =
         0.642210256736298
rdh_sum =
          13.1743447033655
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 87
dh =
         0.576593256736299
rdh_sum =
           13.218379802676
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 88
dh =
         0.510976256736299
rdh_sum =
          13.2530737671592
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 89
dh =
           0.4453592567363
rdh_sum =
          13.2795037754089
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 90
dh =
           0.4226457567363
rdh_sum =
           13.303327722907
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 91
dh =
         0.442835756736299
rdh_sum =
           13.329461693213
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 92
dh =
         0.463025756736299
rdh_sum =
          13.3580095635588
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 93
dh =
           0.4832157567363
rdh_sum =
          13.3890746820197
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 94
dh =
         0.503405256736301
rdh_sum =
          13.4227597787067
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 95
dh =
           0.5235947567363
rdh_sum =
          13.4591670704896
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 96
dh =
         0.503194756736299
rdh_sum =
          13.4928243224003
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 99
dh =
         0.183576256736298
rdh_sum =
          13.4973482653468
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 100
dh =
         0.240307256736299
rdh_sum =
          13.5050919855488
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 101
dh =
         0.363338756736299
rdh_sum =
          13.5227358070771
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 102
dh =
```

```
         0.486370256736299
rdh_sum =
          13.5542035216754
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 103
dh =
           0.5575527567363
rdh_sum =
          13.5954183319647
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 111
dh =
       -0.0336427432637016
rdh_sum =
          13.5957121802295
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 112
dh =
       -0.0861362432637005
rdh_sum =
          13.5976373801105
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 113
dh =
        -0.138629743263699
rdh_sum =
          13.6026190302111
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 114
dh =
          -0.1911232432637
rdh_sum =
          13.6120734839766
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 115
dh =
        -0.222291243263701
rdh_sum =
          13.6248487351997
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 116
dh =
        -0.210808243263701
rdh_sum =
           13.636343153669
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 117
dh =
          -0.1780002432637
rdh_sum =
          13.6445472887743
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 118
dh =
        -0.145191743263702
rdh_sum =
          13.6500108296017
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 119
dh =
          -0.1123832432637
rdh_sum =
          13.6532865830673
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 120
dh =
          -0.1169402432637
rdh_sum =
          13.6568330570931
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
   107
rB =
         0.677989204907491
rdh_mean =
         0.127633953804609
gamma_berm =
         0.408545237951696
gamma_berm =
                       0.6
slope =
         0.124828392784613
Irb =
          1.39189893175902
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
```

```
     1
gamma_rough =
     1
gamma =
                        0.6
ans =
!!! - - Iribaren number:   0.84 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.0 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          3.16629725756114
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
                1.361585082
upper_slope =
        0.0749899999999997
upper_slope =
        0.0749900356549523
upper_slope =
        0.0749900688548871
upper_slope =
        0.0749900665632834
upper_slope =
         0.074990096628955
upper_slope =
        0.0749900936136906
upper_slope =
        0.0749901210412159
upper_slope =
        0.0762137934656641
upper_slope =
        0.0773676347160195
upper_slope =
        0.0784574565346839
upper_slope =
        0.0794884431578102
w2 =
         0.202357731345444
w1 =
         0.797642268654556
R2_new =
          3.06772757778519
R2del =
        0.0149497945567498
Z2 =
          12.5124313345215
ans =
!----------------- STARTING ITERATION 6 -----------------!
Ztoe =
                6.1836494
toe_sta =
           62.226972657228
top_sta =
          219.847237425277
Z2 =
          12.5124313345215
H0 =
                    2.142
Tp =
                   7.9359
T0 =
          7.21445454545455
R2 =
          3.06772757778519
Z2 =
          12.5124313345215
top_sta =
          219.847237425277
Lslope =
          157.620264768049
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 5
dh =
           1.0892242567363
rdh_sum =
         0.151202837587871
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 6
dh =
           1.1302347567363
rdh_sum =
         0.313335777760792
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 7
dh =
           1.1712452567363
rdh_sum =
         0.486704385326514
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 8
dh =
           1.2122557567363
rdh_sum =
         0.671604063627069
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 9
dh =
           1.2532662567363
rdh_sum =
         0.868319787377875
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 10
dh =
           1.2942767567363
rdh_sum =
          1.07712584493842
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 11
dh =
           1.3352872567363
rdh_sum =
          1.29828559024764
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 12
dh =
           1.3762977567363
rdh_sum =
          1.53205120464829
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 13
dh =
           1.4014897567363
rdh_sum =
          1.77368049172652
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 14
dh =
           1.4108637567363
rdh_sum =
          2.01825852347265
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 15
dh =
           1.4202377567363
rdh_sum =
           2.2657973698659
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 16
dh =
           1.4296117567363
rdh_sum =
          2.51630896097204
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 17
dh =
           1.4389857567363
rdh_sum =
          2.76980508637963
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 18
dh =
           1.4483592567363
rdh_sum =
          3.02629723452129
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 19
dh =
           1.4577327567363
rdh_sum =
          3.28579691114652
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 20
dh =
           1.4671067567363
rdh_sum =
          3.54831564123295
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 21
dh =
           1.4764807567363
rdh_sum =
          3.81386464697113
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 22
dh =
           1.4858547567363
rdh_sum =
          4.08245500735574
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 23
dh =
           1.4870262567363
rdh_sum =
          4.35142622761641
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 24
dh =
           1.4717937567363
rdh_sum =
          4.61545870169228
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 25
dh =
           1.4483592567363
rdh_sum =
          4.87195084983394
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 26
dh =
           1.4249247567363
rdh_sum =
          5.12097458609211
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 27
dh =
           1.4014902567363
rdh_sum =
          5.36260403012914
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 28
dh =
           1.3780557567363
rdh_sum =
          5.59691548532961
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 29
dh =
           1.3546212567363
rdh_sum =
          5.82398741626599
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 30
dh =
           1.3383067567363
rdh_sum =
          6.04606683764641
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 31
dh =
           1.3362337567363
rdh_sum =
          6.26751472001163
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 32
dh =
           1.3412812567363
rdh_sum =
          6.49050144379266
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 33
dh =
           1.3463287567363
rdh_sum =
          6.71503080434821
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 34
dh =
           1.3513762567363
rdh_sum =
          6.94110657590136
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 35
dh =
           1.3564237567363
rdh_sum =
          7.16873251148779
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 36
dh =
           1.3614712567363
rdh_sum =
          7.39791234290438
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 37
dh =
           1.3511057567363
rdh_sum =
          7.62390514555731
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 38
dh =
           1.3253277567363
rdh_sum =
          7.84204115327452
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 39
dh =
           1.2995497567363
rdh_sum =
          8.05242108825342
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 40
dh =
           1.2737717567363
rdh_sum =
           8.2551484442717
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 41
dh =
           1.2479937567363
rdh_sum =
          8.45032944970455
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 42
dh =
           1.2222157567363
rdh_sum =
          8.63807302956468
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 43
dh =
           1.1964377567363
rdh_sum =
          8.81849076657866
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 44
dh =
           1.1706597567363
rdh_sum =
          8.99169686131365
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 45
dh =
           1.1448817567363
rdh_sum =
          9.15780809136853
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 46
dh =
           1.1191037567363
rdh_sum =
          9.31694376964425
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 47
dh =
           1.0933257567363
rdh_sum =
          9.46922570170817
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 48
dh =
           1.0675477567363
rdh_sum =
          9.61477814226764
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 49
dh =
           1.0417697567363
rdh_sum =
          9.75372775076844
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 50
dh =
           1.0159917567363
rdh_sum =
          9.88620354613386
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 51
dh =
         0.990604256736299
rdh_sum =
          10.0124319492909
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 52
dh =
         0.965607256736298
rdh_sum =
          10.1326356195752
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 53
dh =
         0.940610256736299
rdh_sum =
          10.2469421757321
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 54
dh =
           0.9156132567363
rdh_sum =
          10.3554812180484
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 55
dh =
         0.890616256736299
rdh_sum =
          10.4583842848048
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 56
dh =
         0.865619256736299
rdh_sum =
          10.5557848080761
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 57
dh =
         0.840622756736298
rdh_sum =
          10.6478181748891
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 58
dh =
         0.815626256736298
rdh_sum =
          10.7346214642595
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 59
dh =
         0.790629256736299
rdh_sum =
          10.8163334120985
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 60
dh =
           0.7656322567363
rdh_sum =
          10.8930945710975
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 61
dh =
         0.756727256736298
rdh_sum =
          10.9681263186944
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 62
dh =
         0.780005756736298
rdh_sum =
           11.047716954516
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 63
dh =
         0.819375756736299
rdh_sum =
          11.1352959522884
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 64
dh =
         0.837237756736299
rdh_sum =
          11.2266130033956
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 65
dh =
         0.833592256736299
rdh_sum =
          11.3171614297328
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 66
dh =
           0.8299472567363
rdh_sum =
          11.4069442624037
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 67
dh =
         0.826301756736299
rdh_sum =
          11.4959643279439
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 68
dh =
         0.822656256736298
rdh_sum =
          11.5842245635611
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 69
dh =
         0.819010756736299
rdh_sum =
          11.6717279118934
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 70
dh =
           0.8153652567363
rdh_sum =
          11.7584773209881
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 71
dh =
         0.811720256736299
rdh_sum =
          11.8444758470799
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 72
dh =
           0.8080747567363
rdh_sum =
          11.9297263457666
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 73
dh =
           0.8114322567363
rdh_sum =
          12.0156656688532
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 74
dh =
         0.821792756736301
rdh_sum =
          12.1037463564099
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 75
dh =
           0.8321532567363
rdh_sum =
          12.1939921862321
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 76
dh =
         0.842513756736299
rdh_sum =
          12.2864268111333
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 77
dh =
           0.8528742567363
rdh_sum =
          12.3810737575803
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 78
dh =
         0.863235256736299
rdh_sum =
           12.477956532794
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 79
dh =
           0.8735957567363
rdh_sum =
          12.5770982991415
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 80
dh =
         0.883956256736299
rdh_sum =
          12.6785221959238
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 81
dh =
         0.894316756736298
rdh_sum =
          12.7822512307076
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 82
dh =
         0.885682756736299
rdh_sum =
          12.8840576675476
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 83
dh =
           0.8390602567363
rdh_sum =
          12.9757600737699
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 84
dh =
           0.7734432567363
rdh_sum =
          13.0540530435747
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 85
dh =
         0.707826756736299
rdh_sum =
          13.1199129152626
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 86
dh =
         0.642210256736298
rdh_sum =
          13.1743447033655
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 87
dh =
         0.576593256736299
rdh_sum =
           13.218379802676
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 88
dh =
         0.510976256736299
rdh_sum =
          13.2530737671592
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 89
dh =
           0.4453592567363
rdh_sum =
          13.2795037754089
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 90
dh =
           0.4226457567363
rdh_sum =
           13.303327722907
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 91
dh =
         0.442835756736299
rdh_sum =
           13.329461693213
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 92
dh =
         0.463025756736299
rdh_sum =
          13.3580095635588
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 93
dh =
           0.4832157567363
rdh_sum =
          13.3890746820197
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 94
dh =
         0.503405256736301
rdh_sum =
          13.4227597787067
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 95
dh =
           0.5235947567363
rdh_sum =
          13.4591670704896
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 96
dh =
         0.503194756736299
rdh_sum =
          13.4928243224003
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 99
dh =
         0.183576256736298
rdh_sum =
          13.4973482653468
ans =
```

```
Berm Factor Calculation: Iteration 6, Profile Segment: 100
dh =
         0.240307256736299
rdh_sum =
          13.5050919855488
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 101
dh =
         0.363338756736299
rdh_sum =
          13.5227358070771
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 102
dh =
         0.486370256736299
rdh_sum =
          13.5542035216754
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 103
dh =
           0.5575527567363
rdh_sum =
          13.5954183319647
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 111
dh =
       -0.0336427432637016
rdh_sum =
          13.5957150509144
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 112
dh =
       -0.0861362432637005
rdh_sum =
          13.5976590482675
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 113
dh =
        -0.138629743263699
rdh_sum =
          13.6026892885245
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 114
dh =
          -0.1911232432637
rdh_sum =
          13.6122358195303
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 115
dh =
        -0.222291243263701
rdh_sum =
          13.6251353485881
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 116
dh =
        -0.210808243263701
rdh_sum =
           13.636741633821
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 117
dh =
          -0.1780002432637
rdh_sum =
          13.6450257032442
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 118
dh =
        -0.145191743263702
rdh_sum =
          13.6505425258127
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 119
dh =
          -0.1123832432637
rdh_sum =
          13.6538502488505
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 120
dh =
          -0.1169402432637
rdh_sum =
           13.657431331368
ans =
!------- End Berm Factor Calculation, Iter: 6 ---------!
berm_width =
   107
rB =
         0.678846721628462
rdh_mean =
```

```
         0.127639545152972
gamma_berm =
         0.407800965148781
gamma_berm =
                       0.6
slope =
         0.125024670722706
Irb =
          1.39408752881026
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
                       0.6
ans =
!!! - - Iribaren number:   0.84 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.0 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.17127588688769
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
               1.361585082
upper_slope =
        0.0749899999999997
upper_slope =
        0.0749900359102045
upper_slope =
        0.0749900693307287
upper_slope =
        0.0749900670078763
upper_slope =
        0.0749900972534412
upper_slope =
        0.0749900941996931
upper_slope =
        0.0749901217758419
upper_slope =
        0.0762210014987774
upper_slope =
         0.077381236900161
upper_slope =
        0.0784767400942829
upper_slope =
        0.0795127813981428
w2 =
         0.202357731345444
w1 =
         0.797642268654556
R2_new =
          3.07186474320676
R2del =
        0.0041371654215645
Z2 =
          12.5165684999431
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          12.5165684999431
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-99-1

Station locations shifted by: -3.36 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-99-1

Incident significant wave height: 2.04 feet

Peak wave period: 7.94 seconds

Mean wave height: 1.28 feet

Local Depth below SWEL: 10.76 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 10.76
    Period, T = 6.75
    Waveheight, H = 1.28
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*6.75*6.75/6.28 = 233.53
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 233.53/6.75 = 34.58
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/6.75 = 0.93
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.93*0.93*10.76/32.17 = 0.29
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 17.71
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(34.58/17.71) = 1.40
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 1.28/1.40 = 0.91
```

Deepwater mean wave height: 0.91 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-99-1

RUNUP2 SWEL:
9.40
9.40
9.40
9.40

9.40
9.40
9.40
9.40
9.40

RUNUP2 deepwater mean wave heights:
0.87
0.87
0.87
0.91
0.91
0.91
0.96
0.96
0.96

RUNUP2 mean wave periods:
6.42
6.75
7.09
6.42
6.75
7.09
6.42
6.75
7.09

RUNUP2 runup above SWEL:
0.14
0.16
0.18
0.15
0.16
0.18
0.16
0.18
0.19

RUNUP2 Mean runup height above SWEL: 0.17 feet

RUNUP2 2-percent runup height above SWEL: 0.37 feet

RUNUP2 2-percent runup elevation: 9.77 feet-NAVD88

RUNUP2 Messages:
Nonfatal Error, Check Output

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 2.04 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 1.46 feet

Peak wave period: 7.94 seconds

Average beach Slope: 1:22.42 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     1.46
Wave Period,                        T  =     7.94
Beach Slope,                        S  =    0.045

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 2.5,  2.0,   1.9,    1.5,    1.0]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 2.03 feet

ACES Beach 2-percent runup elevation: 11.43 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-99-1                                                   1
14.0
  -1.36 -70.1  1.0
  -0.71 -14.1  1.0
  -0.02 -0.1   1.0
  0.57  3.4    1.0
  0.57  28.9   1.0
  0.70  36.4   1.0
  1.06  43.4   1.0
  4.41  57.9   1.0
  5.62  64.4   1.0
  8.38  70.4   1.0
  8.38  102.4  1.0
  8.44  116.4  1.0
  8.70  126.9  1.0
  8.70  147.9  1.0
  9.03  155.4  1.0
  9.03  161.9  1.0
  9.33  164.9  1.0
  9.43  175.9  1.0
  9.69  185.9  1.0
1 10.57 197.4  1.0
 9.4   0.87  6.42
 9.4   0.87  6.75
 9.4   0.87  7.09
 9.4   0.91  6.42
 9.4   0.91  6.75
 9.4   0.91  7.09
 9.4   0.96  6.42
 9.4   0.96  6.75
 9.4   0.96  7.09
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-70.1	-1.4		
			.00	1.00
2	-14.1	-.7		
			20.29	1.00
3	-.1	.0		
			5.93	1.00
4	3.4	.6		
			FLAT	1.00
5	28.9	.6		
			57.69	1.00
6	36.4	.7		
			19.44	1.00
7	43.4	1.1		
			4.33	1.00
8	57.9	4.4		
			5.37	1.00
9	64.4	5.6		
			2.17	1.00
10	70.4	8.4		
			FLAT	1.00
11	102.4	8.4		
			233.33	1.00
12	116.4	8.4		
			40.38	1.00
13	126.9	8.7		
			FLAT	1.00
14	147.9	8.7		
			22.73	1.00
15	155.4	9.0		
			FLAT	1.00
16	161.9	9.0		
			10.00	1.00
17	164.9	9.3		
			110.00	1.00
18	175.9	9.4		
			38.46	1.00
19	185.9	9.7		
			13.07	1.00
20	197.4	10.6		

LAST SLOPE 14.00 LAST ROUGHNESS 1.00

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.40	.87	6.42	9	18	.14	1.51
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.87	6.75	9	18	.16	1.55
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.87	7.09	9	18	.18	1.59
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.91	6.42	9	18	.15	1.56
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.91	6.75	9	18	.16	1.60
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.91	7.09	9	18	.18	1.64
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.96	6.42	9	18	.16	1.62
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.96	6.75	9	18	.18	1.66
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						
9.40	.96	7.09	9	18	.19	1.71
COMPOSITE SLOPE USED BUT WAVE MAY REFLECT, NOT BREAK						

Runup2 2% runup elevation for Transect: YK-99-1
Ground
Swel
2% Runup
Two Percent Run-up Elevation is 9.8 Feet-NAVD88
Run-up Height is 0.4 Feet
Elevation (ft)
Station (ft)
16
14
12
10
8
6
4
2
0
-2
-100
-50
0
50
100
150
200

Transect Number: YK-99-2
Latitude
Longitude
43.38
43.375
43.37
43.365
43.36
43.355
43.35
43.345
-70.46
-70.45
-70.44
-70.43
-70.42
-70.41
Crow Hill
19m
Trott Island
uohn Island
sino Hill

Elevation profile
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-20
0
500
1000
1500
2000
2500

DATA LOG FOR TRANSECT ID: YK-99-2

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: 1402 ft
LON: -70.4318 deg E
LAT: 43.3651 deg N
Bottom ELEV: -16.2385 ft-NAVD88
TWL: 9.3261 ft-NAVD88
HS: 4.4534 ft
TP: 11.615 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 70.417 deg CCW from East

TAW/RUNUP input

toe sta: 1622.5 ft
toe elev: 0.86286 ft-NAVD88
top sta: 1675 ft
top elev: 11.5584 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-99-2: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
1400
1500
1600
1700
1800
1900
2000
2100
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-99-2zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-99-2.swn
swan output name:     2_swan/swanfiles/YK-99-2.dat

Boundary Conditions:
    TWL- 2.8426 meters
    HS-  1.3574 meters
    PER- 11.615 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.93903 feet
SWAN output at toe:
    SETUP- -0.039442 feet
    HS-    5.0379 feet
    PER-   11.3516 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.93903 feet
SWAN output at toe:
    SETUP- -0.039442 feet
    HS-    5.0379 feet
    PER-   11.3516 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-99-2
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500

```
                    Execution started at 20200401.174317


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      79       0.   79     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      79   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-99-2zmeters_xmeters.grd'    1      0       FREE

 !-----------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   1.3574     11.615     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      79  79    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-99-2.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC              80 MYC              1
                     : MCGRD            81
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  63.75 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   1.25 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  56.25 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  82.50 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  96.25 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  98.75 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	1.35537	11.3150	11.1572	10.4792	0.000	31.5057	7.7900	0.000000
1.	0.	1.35565	11.3151	11.1572	10.4722	0.000	31.4682	7.7800	-0.000009
2.	0.	1.35603	11.3153	11.1572	10.4653	0.000	31.4438	7.7700	-0.000019
3.	0.	1.35616	11.3154	11.1572	10.4581	0.000	31.4239	7.7700	-0.000018
4.	0.	1.35649	11.3156	11.1572	10.4513	0.000	31.3925	7.7600	-0.000028
5.	0.	1.35678	11.3157	11.1572	10.4444	0.000	31.3573	7.7500	-0.000037
6.	0.	1.35707	11.3159	11.1572	10.4376	0.000	31.3209	7.7400	-0.000046
7.	0.	1.35726	11.3160	11.1572	10.4308	0.000	31.2716	7.7299	-0.000056
8.	0.	1.35614	11.3162	11.1572	10.4238	0.000	31.0211	7.7099	-0.000070
9.	0.	1.35796	11.3167	11.1572	10.4215	0.000	30.6170	7.5298	-0.000239
10.	0.	1.35938	11.3173	11.1572	10.4181	0.000	30.1618	7.3596	-0.000408
11.	0.	1.36109	11.3179	11.1572	10.4137	0.000	29.6885	7.1894	-0.000593
12.	0.	1.36320	11.3186	11.1572	10.4085	0.000	29.2105	7.0192	-0.000793
13.	0.	1.36577	11.3193	11.1572	10.4021	0.000	28.7330	6.8490	-0.001011
14.	0.	1.36880	11.3201	11.1572	10.3945	0.000	28.2666	6.6788	-0.001246
15.	0.	1.37221	11.3209	11.1572	10.3853	360.000	27.8505	6.5085	-0.001492
16.	0.	1.37636	11.3218	11.1572	10.3747	360.000	27.4303	6.3282	-0.001772
17.	0.	1.38058	11.3227	11.1572	10.3618	360.000	27.0112	6.1579	-0.002058
18.	0.	1.38538	11.3237	11.1572	10.3467	360.000	26.6141	5.9876	-0.002368
19.	0.	1.38957	11.3247	11.1572	10.3285	360.000	26.2544	5.8474	-0.002641
20.	0.	1.39377	11.3257	11.1572	10.3081	360.000	25.9135	5.7171	-0.002912
21.	0.	1.39829	11.3267	11.1572	10.2859	360.000	25.5766	5.5868	-0.003200
22.	0.	1.40313	11.3279	11.1572	10.2614	360.000	25.2389	5.4565	-0.003506
23.	0.	1.40827	11.3291	11.1572	10.2348	360.000	24.8992	5.3262	-0.003834
24.	0.	1.41371	11.3303	11.1572	10.2061	360.000	24.5603	5.1958	-0.004182
25.	0.	1.41946	11.3317	11.1572	10.1751	360.000	24.2475	5.0655	-0.004547
26.	0.	1.42551	11.3331	11.1572	10.1419	360.000	23.9367	4.9351	-0.004937
27.	0.	1.43193	11.3346	11.1572	10.1063	360.000	23.6310	4.8046	-0.005354
28.	0.	1.43817	11.3362	11.1572	10.0680	0.000	23.3329	4.6842	-0.005765
29.	0.	1.44471	11.3378	11.1572	10.0275	0.000	23.0363	4.5638	-0.006205
30.	0.	1.45156	11.3395	11.1572	9.9849	0.000	22.7368	4.4433	-0.006675
31.	0.	1.45876	11.3413	11.1572	9.9402	0.000	22.4411	4.3228	-0.007180
32.	0.	1.46563	11.3431	11.1572	9.8931	0.000	22.1432	4.2123	-0.007675
33.	0.	1.47351	11.3450	11.1572	9.8446	0.000	21.8496	4.0917	-0.008252
34.	0.	1.48069	11.3469	11.1572	9.7933	0.000	21.6255	3.9912	-0.008766
35.	0.	1.48415	11.3486	11.1572	9.7387	0.000	21.4786	3.9510	-0.008980
36.	0.	1.48772	11.3502	11.1572	9.6856	0.000	21.3568	3.9108	-0.009199
37.	0.	1.49130	11.3518	11.1572	9.6341	0.000	21.2431	3.8706	-0.009421
38.	0.	1.49487	11.3533	11.1572	9.5840	0.000	21.1312	3.8304	-0.009647
39.	0.	1.49852	11.3547	11.1572	9.5338	0.000	21.0196	3.7901	-0.009877
40.	0.	1.50219	11.3560	11.1572	9.4843	0.000	20.9076	3.7499	-0.010111
41.	0.	1.50581	11.3572	11.1572	9.4360	0.000	20.7951	3.7097	-0.010348
42.	0.	1.50939	11.3583	11.1572	9.3890	0.000	20.6818	3.6694	-0.010589
43.	0.	1.51292	11.3593	11.1572	9.3433	0.000	20.5679	3.6292	-0.010832
44.	0.	1.51639	11.3602	11.1572	9.2986	0.001	20.4538	3.5889	-0.011076
45.	0.	1.51979	11.3611	11.1572	9.2553	0.001	20.3416	3.5487	-0.011322
46.	0.	1.52310	11.3618	11.1572	9.2131	0.001	20.2321	3.5084	-0.011567
47.	0.	1.52631	11.3624	11.1572	9.1722	0.001	20.1236	3.4682	-0.011811
48.	0.	1.52941	11.3629	11.1572	9.1324	0.001	20.0152	3.4279	-0.012053
49.	0.	1.53239	11.3632	11.1572	9.0936	0.002	19.9068	3.3877	-0.012293
50.	0.	1.53518	11.3635	11.1572	9.0560	0.003	19.7889	3.3475	-0.012530
51.	0.	1.53866	11.3637	11.1572	9.0200	0.004	19.6675	3.2972	-0.012843
52.	0.	1.54135	11.3638	11.1572	8.9820	0.008	19.5427	3.2569	-0.013079
53.	0.	1.54586	11.3637	11.1572	8.9297	0.013	19.4135	3.2066	-0.013395
54.	0.	1.55019	11.3635	11.1572	8.8749	0.015	19.2823	3.1563	-0.013690
55.	0.	1.55390	11.3632	11.1572	8.8222	0.014	19.1540	3.1061	-0.013950
56.	0.	1.55633	11.3627	11.1572	8.7767	360.000	19.0406	3.0559	-0.014141
57.	0.	1.55701	11.3620	11.1572	8.7340	359.974	18.9271	3.0158	-0.014190
58.	0.	1.55843	11.3612	11.1572	8.6909	359.953	18.8011	2.9657	-0.014326
59.	0.	1.55948	11.3602	11.1572	8.6472	359.936	18.6706	2.9156	-0.014437

60.	0.	1.56056	11.3590	11.1572	8.6036	359.921	18.6418	2.8655	-0.014507
61.	0.	1.55176	11.3575	11.1572	8.5476	359.911	18.7065	2.9266	-0.013397
62.	0.	1.55033	11.3562	11.1572	8.4912	359.902	18.5314	2.9168	-0.013163
63.	0.	1.56301	11.3553	11.1572	8.4482	359.892	18.1791	2.7353	-0.014662
64.	0.	1.56675	11.3544	11.1572	8.4191	359.875	17.8784	2.5946	-0.015418
65.	0.	1.56231	11.3534	11.1572	8.3834	359.882	17.7266	2.5148	-0.015153
66.	0.	1.54906	11.3524	11.1572	8.3213	359.851	17.7414	2.5365	-0.013519
67.	0.	1.53555	11.3516	11.1572	8.2630	359.813	17.5379	2.5580	-0.012022
68.	0.	1.54493	11.3516	11.1572	8.2468	359.760	17.1404	2.3262	-0.013846
69.	0.	1.53562	11.3515	11.1572	8.1972	359.710	16.8414	2.2469	-0.013092
70.	0.	1.52283	11.3515	11.1572	8.1451	359.665	16.5370	2.1781	-0.011906
71.	0.	1.51386	11.3518	11.1572	8.0839	359.669	16.1613	2.0687	-0.011275
72.	0.	1.50308	11.3523	11.1572	8.0093	359.690	15.7548	1.9496	-0.010375
73.	0.	1.48715	11.3528	11.1572	7.9361	359.738	15.3518	1.8312	-0.008846
74.	0.	1.46665	11.3531	11.1572	7.8560	359.798	14.8743	1.7133	-0.006679
75.	0.	1.44557	11.3531	11.1572	7.7797	359.891	13.9831	1.5451	-0.004922
76.	0.	1.46268	11.3540	11.1572	7.7159	359.899	12.5744	1.1177	-0.012297
77.	0.	1.13944	11.5233	11.1572	8.3917	358.519	12.0986	0.7685	0.058507
78.	0.	0.71026	11.9158	12.4477	9.5087	357.307	13.0305	0.4683	0.168266
79.	0.	0.28161	15.5924	15.4936	11.3246	357.999	16.4542	0.1662	0.286218

PART 3: WHAFIS

```
WHAFIS input:  YK-99-2.dat
WHAFIS output: YK-99-2.out
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PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-99-2
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-1500
-1000
-500
0
500
1000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-99-2.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-99-2.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-16.238	1.000	1.000	9.326	7.125	11.615	56.140	0.009	0.000
OF	1.000	-16.229	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	2.000	-16.221	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	3.000	-16.212	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	4.000	-16.203	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	5.000	-16.195	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	6.000	-16.186	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	7.000	-16.177	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	8.000	-16.169	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	9.000	-16.160	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	10.000	-16.151	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	11.000	-16.142	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	12.000	-16.134	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	13.000	-16.125	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	14.000	-16.116	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	15.000	-16.108	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	16.000	-16.099	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	17.000	-16.090	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	18.000	-16.082	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	19.000	-16.073	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	20.000	-16.064	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	21.000	-16.055	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	22.000	-16.047	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	23.000	-16.038	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	24.000	-16.029	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
OF	25.000	-16.021	0.000	9.326	0.000	0.000	0.000	0.000	0.015	0.000
OF	26.000	-15.998	0.000	9.326	0.000	0.000	0.000	0.000	0.097	0.000
OF	27.000	-15.826	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
OF	28.000	-15.655	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
OF	29.000	-15.483	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
OF	30.000	-15.312	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
OF	31.000	-15.140	0.000	9.326	0.000	0.000	0.000	0.000	0.172	0.000
OF	32.000	-14.968	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
OF	33.000	-14.797	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
OF	34.000	-14.625	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	35.000	-14.454	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	36.000	-14.283	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	37.000	-14.111	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	38.000	-13.940	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	39.000	-13.768	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	40.000	-13.597	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	41.000	-13.425	0.000	9.325	0.000	0.000	0.000	0.000	0.172	0.000
OF	42.000	-13.253	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	43.000	-13.082	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	44.000	-12.910	0.000	9.325	0.000	0.000	0.000	0.000	0.172	0.000
OF	45.000	-12.738	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	46.000	-12.567	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	47.000	-12.395	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	48.000	-12.224	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	49.000	-12.053	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	50.000	-11.881	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	51.000	-11.710	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	52.000	-11.538	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	53.000	-11.367	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	54.000	-11.195	0.000	9.325	0.000	0.000	0.000	0.000	0.172	0.000
OF	55.000	-11.023	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	56.000	-10.852	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	57.000	-10.680	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	58.000	-10.509	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	59.000	-10.337	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
OF	60.000	-10.166	0.000	9.325	0.000	0.000	0.000	0.000	0.152	0.000
OF	61.000	-10.033	0.000	9.325	0.000	0.000	0.000	0.000	0.131	0.000
OF	62.000	-9.903	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	63.000	-9.773	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	64.000	-9.643	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	65.000	-9.512	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	66.000	-9.382	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	67.000	-9.252	0.000	9.325	0.000	0.000	0.000	0.000	0.131	0.000
OF	68.000	-9.121	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	69.000	-8.991	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	70.000	-8.861	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	71.000	-8.731	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	72.000	-8.600	0.000	9.325	0.000	0.000	0.000	0.000	0.131	0.000
OF	73.000	-8.470	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
OF	74.000	-8.340	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	75.000	-8.209	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	76.000	-8.079	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	77.000	-7.949	0.000	9.324	0.000	0.000	0.000	0.000	0.131	0.000
OF	78.000	-7.818	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	79.000	-7.688	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	80.000	-7.558	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	81.000	-7.427	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	82.000	-7.297	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	83.000	-7.167	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	84.000	-7.037	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	85.000	-6.906	0.000	9.324	0.000	0.000	0.000	0.000	0.131	0.000
OF	86.000	-6.776	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	87.000	-6.646	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
OF	88.000	-6.515	0.000	9.324	0.000	0.000	0.000	0.000	0.128	0.000
OF	89.000	-6.390	0.000	9.324	0.000	0.000	0.000	0.000	0.122	0.000
OF	90.000	-6.272	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	91.000	-6.155	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
OF	92.000	-6.037	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000

OF	93.000	-5.919	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	94.000	-5.802	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	95.000	-5.684	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	96.000	-5.567	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
OF	97.000	-5.449	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	98.000	-5.332	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	99.000	-5.214	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
OF	100.000	-5.097	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
OF	101.000	-4.979	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	102.000	-4.861	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	103.000	-4.744	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	104.000	-4.626	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
OF	105.000	-4.509	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	106.000	-4.391	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	107.000	-4.274	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
OF	108.000	-4.156	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	109.000	-4.038	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
OF	110.000	-3.921	0.000	9.324	0.000	0.000	0.000	0.000	0.112	0.000
OF	111.000	-3.814	0.000	9.324	0.000	0.000	0.000	0.000	0.073	0.000
OF	112.000	-3.774	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	113.000	-3.734	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	114.000	-3.694	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	115.000	-3.654	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	116.000	-3.614	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	117.000	-3.574	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	118.000	-3.535	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	119.000	-3.495	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	120.000	-3.455	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	121.000	-3.415	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	122.000	-3.375	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	123.000	-3.335	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	124.000	-3.295	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	125.000	-3.255	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	126.000	-3.215	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	127.000	-3.175	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
OF	128.000	-3.136	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	129.000	-3.096	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	130.000	-3.056	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	131.000	-3.016	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	132.000	-2.976	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	133.000	-2.936	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	134.000	-2.896	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	135.000	-2.856	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	136.000	-2.816	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	137.000	-2.777	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	138.000	-2.737	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	139.000	-2.697	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	140.000	-2.657	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	141.000	-2.617	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	142.000	-2.577	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	143.000	-2.537	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	144.000	-2.497	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	145.000	-2.457	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	146.000	-2.418	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	147.000	-2.378	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	148.000	-2.338	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	149.000	-2.298	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	150.000	-2.258	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	151.000	-2.218	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	152.000	-2.178	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	153.000	-2.138	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	154.000	-2.099	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	155.000	-2.059	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	156.000	-2.019	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	157.000	-1.979	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	158.000	-1.939	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	159.000	-1.899	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	160.000	-1.859	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	161.000	-1.819	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	162.000	-1.779	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	163.000	-1.740	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	164.000	-1.700	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
OF	165.000	-1.660	0.000	9.323	0.000	0.000	0.000	0.000	0.044	0.000
OF	166.000	-1.611	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
OF	167.000	-1.563	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
OF	168.000	-1.515	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
OF	169.000	-1.467	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
OF	170.000	-1.419	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	171.000	-1.371	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	172.000	-1.323	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	173.000	-1.275	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	174.000	-1.226	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	175.000	-1.178	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	176.000	-1.130	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	177.000	-1.082	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	178.000	-1.034	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
OF	179.000	-0.986	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	180.000	-0.938	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	181.000	-0.889	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	182.000	-0.841	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	183.000	-0.793	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	184.000	-0.745	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	185.000	-0.697	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	186.000	-0.649	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	187.000	-0.601	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	188.000	-0.552	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	189.000	-0.504	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
OF	190.000	-0.456	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	191.000	-0.408	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	192.000	-0.360	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	193.000	-0.312	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	194.000	-0.264	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000

OF	195.000	-0.215	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	196.000	-0.167	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	197.000	-0.119	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	198.000	-0.071	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
OF	199.000	-0.023	0.000	9.326	0.000	0.000	0.000	0.000	-0.183	0.000
OF	201.500	-0.712	0.000	9.327	0.000	0.000	0.000	0.000	0.016	0.000
IF	205.000	0.075	0.000	9.327	0.000	0.000	0.000	0.000	0.169	0.000
IF	212.000	1.060	0.000	9.328	0.000	0.000	0.000	0.000	0.051	0.000
IF	220.500	0.863	0.000	9.328	0.000	0.000	0.000	0.000	0.054	0.000
IF	223.000	1.650	0.000	9.328	0.000	0.000	0.000	0.000	0.134	0.000
IF	230.500	2.208	0.000	9.328	0.000	0.000	0.000	0.000	0.105	0.000
IF	245.500	4.012	0.000	9.328	0.000	0.000	0.000	0.000	0.216	0.000
IF	252.600	6.987	0.000	9.518	0.000	0.000	0.000	0.000	0.418	0.000
IF	255.900	8.357	0.000	9.878	0.000	0.000	0.000	0.000	0.415	0.000
IF	259.200	9.727	0.000	10.265	0.000	0.000	0.000	0.000	0.415	0.000
IF	260.500	10.265	0.000	10.265	0.000	0.000	0.000	0.000	0.414	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-16.238	1.000	1.000	9.326	7.125	11.615	56.140	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1.000	-16.229	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2.000	-16.221	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.000	-16.212	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000	-16.203	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	5.000	-16.195	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	6.000	-16.186	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	7.000	-16.177	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	8.000	-16.169	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.000	-16.160	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	10.000	-16.151	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	11.000	-16.142	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	12.000	-16.134	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.000	-16.125	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	14.000	-16.116	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	15.000	-16.108	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.000	-16.099	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	17.000	-16.090	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	18.000	-16.082	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.000	-16.073	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	20.000	-16.064	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	21.000	-16.055	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	22.000	-16.047	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-16.038	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	24.000	-16.029	0.000	9.326	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	25.000	-16.021	0.000	9.326	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.000	-15.998	0.000	9.326	0.000	0.000	0.000	0.000	0.097	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	27.000	-15.826	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	28.000	-15.655	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	29.000	-15.483	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	30.000	-15.312	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	31.000	-15.140	0.000	9.326	0.000	0.000	0.000	0.000	0.172	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	32.000	-14.968	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	33.000	-14.797	0.000	9.326	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	34.000	-14.625	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	35.000	-14.454	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	36.000	-14.283	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	37.000	-14.111	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	38.000	-13.940	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	39.000	-13.768	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	40.000	-13.597	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	41.000	-13.425	0.000	9.325	0.000	0.000	0.000	0.000	0.172	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	42.000	-13.253	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	43.000	-13.082	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	44.000	-12.910	0.000	9.325	0.000	0.000	0.000	0.000	0.172	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	45.000	-12.738	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	46.000	-12.567	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	47.000	-12.395	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	48.000	-12.224	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	49.000	-12.053	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	50.000	-11.881	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	51.000	-11.710	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	52.000	-11.538	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	53.000	-11.367	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	54.000	-11.195	0.000	9.325	0.000	0.000	0.000	0.000	0.172	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	55.000	-11.023	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	56.000	-10.852	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	57.000	-10.680	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	58.000	-10.509	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	59.000	-10.337	0.000	9.325	0.000	0.000	0.000	0.000	0.171	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	60.000	-10.166	0.000	9.325	0.000	0.000	0.000	0.000	0.152	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	61.000	-10.033	0.000	9.325	0.000	0.000	0.000	0.000	0.131	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.000	-9.903	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	63.000	-9.773	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	64.000	-9.643	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	65.000	-9.512	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	66.000	-9.382	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	67.000	-9.252	0.000	9.325	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	68.000	-9.121	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	69.000	-8.991	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	70.000	-8.861	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	71.000	-8.731	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	72.000	-8.600	0.000	9.325	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	73.000	-8.470	0.000	9.325	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	74.000	-8.340	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.000	-8.209	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	76.000	-8.079	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	77.000	-7.949	0.000	9.324	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	78.000	-7.818	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	79.000	-7.688	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	80.000	-7.558	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	81.000	-7.427	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-7.297	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	83.000	-7.167	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	84.000	-7.037	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.000	-6.906	0.000	9.324	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	86.000	-6.776	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	87.000	-6.646	0.000	9.324	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.000	-6.515	0.000	9.324	0.000	0.000	0.000	0.000	0.128	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	89.000	-6.390	0.000	9.324	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	90.000	-6.272	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.000	-6.155	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	92.000	-6.037	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	93.000	-5.919	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	94.000	-5.802	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.000	-5.684	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	96.000	-5.567	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	97.000	-5.449	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.000	-5.332	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	99.000	-5.214	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	100.000	-5.097	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.000	-4.979	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	102.000	-4.861	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	103.000	-4.744	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	104.000	-4.626	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-4.509	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	106.000	-4.391	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	107.000	-4.274	0.000	9.324	0.000	0.000	0.000	0.000	0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.000	-4.156	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	109.000	-4.038	0.000	9.324	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	110.000	-3.921	0.000	9.324	0.000	0.000	0.000	0.000	0.112	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.000	-3.814	0.000	9.324	0.000	0.000	0.000	0.000	0.073	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	112.000	-3.774	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	113.000	-3.734	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.000	-3.694	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	115.000	-3.654	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	116.000	-3.614	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	117.000	-3.574	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.000	-3.535	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	119.000	-3.495	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	120.000	-3.455	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.000	-3.415	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	122.000	-3.375	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	123.000	-3.335	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.000	-3.295	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	125.000	-3.255	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	126.000	-3.215	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	127.000	-3.175	0.000	9.324	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-3.136	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	129.000	-3.096	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	130.000	-3.056	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.000	-3.016	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	132.000	-2.976	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	133.000	-2.936	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.000	-2.896	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	135.000	-2.856	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	136.000	-2.816	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.000	-2.777	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	138.000	-2.737	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	139.000	-2.697	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	140.000	-2.657	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.000	-2.617	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	142.000	-2.577	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	143.000	-2.537	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.000	-2.497	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	145.000	-2.457	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	146.000	-2.418	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.000	-2.378	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	148.000	-2.338	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	149.000	-2.298	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.000	-2.258	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	151.000	-2.218	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	152.000	-2.178	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	153.000	-2.138	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.000	-2.099	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	155.000	-2.059	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	156.000	-2.019	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.000	-1.979	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	158.000	-1.939	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	159.000	-1.899	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.000	-1.859	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	161.000	-1.819	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	162.000	-1.779	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	163.000	-1.740	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-1.700	0.000	9.323	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	165.000	-1.660	0.000	9.323	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	166.000	-1.611	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.000	-1.563	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	168.000	-1.515	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	169.000	-1.467	0.000	9.323	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.000	-1.419	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	171.000	-1.371	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	172.000	-1.323	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.000	-1.275	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	174.000	-1.226	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	175.000	-1.178	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	176.000	-1.130	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.000	-1.082	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	178.000	-1.034	0.000	9.324	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	179.000	-0.986	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.000	-0.938	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	181.000	-0.889	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	182.000	-0.841	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.000	-0.793	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	184.000	-0.745	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	185.000	-0.697	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	186.000	-0.649	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	187.000	-0.601	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	188.000	-0.552	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	189.000	-0.504	0.000	9.325	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	190.000	-0.456	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	191.000	-0.408	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	192.000	-0.360	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.000	-0.312	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	194.000	-0.264	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	195.000	-0.215	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.000	-0.167	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	197.000	-0.119	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	198.000	-0.071	0.000	9.326	0.000	0.000	0.000	0.000	0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	199.000	-0.023	0.000	9.326	0.000	0.000	0.000	0.000	-0.183	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	201.500	-0.712	0.000	9.327	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	205.000	0.075	0.000	9.327	0.000	0.000	0.000	0.000	0.169	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	212.000	1.060	0.000	9.328	0.000	0.000	0.000	0.000	0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	220.500	0.863	0.000	9.328	0.000	0.000	0.000	0.000	0.054	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	223.000	1.650	0.000	9.328	0.000	0.000	0.000	0.000	0.134	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	230.500	2.208	0.000	9.328	0.000	0.000	0.000	0.000	0.105	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	245.500	4.012	0.000	9.328	0.000	0.000	0.000	0.000	0.216	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	252.600	6.987	0.000	9.518	0.000	0.000	0.000	0.000	0.418	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	255.900	8.357	0.000	9.878	0.000	0.000	0.000	0.000	0.415	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	259.200	9.727	0.000	10.265	0.000	0.000	0.000	0.000	0.415	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	260.500	10.265	0.000	10.265	0.000	0.000	0.000	0.000	0.414	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

1

PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	7.12	11.61	14.31
OF	1.00	7.13	11.62	14.31
OF	2.00	7.13	11.62	14.31
OF	3.00	7.13	11.62	14.32
OF	4.00	7.13	11.62	14.32
OF	5.00	7.13	11.62	14.32
OF	6.00	7.13	11.62	14.32
OF	7.00	7.13	11.62	14.32
OF	8.00	7.13	11.62	14.32
OF	9.00	7.13	11.62	14.32
OF	10.00	7.13	11.62	14.32
OF	11.00	7.14	11.62	14.32
OF	12.00	7.14	11.62	14.32
OF	13.00	7.14	11.62	14.32
OF	14.00	7.14	11.62	14.32
OF	15.00	7.14	11.62	14.32
OF	16.00	7.14	11.62	14.32
OF	17.00	7.14	11.62	14.32
OF	18.00	7.14	11.62	14.33
OF	19.00	7.14	11.62	14.33
OF	20.00	7.14	11.62	14.33
OF	21.00	7.15	11.62	14.33
OF	22.00	7.15	11.62	14.33
OF	23.00	7.15	11.62	14.33
OF	24.00	7.15	11.62	14.33
OF	25.00	7.15	11.62	14.33
OF	26.00	7.15	11.62	14.33
OF	27.00	7.17	11.62	14.34
OF	28.00	7.18	11.62	14.35
OF	29.00	7.20	11.62	14.36
OF	30.00	7.21	11.62	14.38
OF	31.00	7.23	11.62	14.39
OF	32.00	7.25	11.62	14.40
OF	33.00	7.26	11.62	14.41
OF	34.00	7.28	11.62	14.42
OF	35.00	7.30	11.62	14.43
OF	36.00	7.31	11.62	14.44
OF	37.00	7.33	11.62	14.46
OF	38.00	7.35	11.62	14.47
OF	39.00	7.36	11.62	14.48
OF	40.00	7.38	11.62	14.49
OF	41.00	7.40	11.62	14.51
OF	42.00	7.42	11.62	14.52
OF	43.00	7.44	11.62	14.53
OF	44.00	7.46	11.62	14.54
OF	45.00	7.48	11.62	14.56
OF	46.00	7.49	11.62	14.57
OF	47.00	7.51	11.62	14.59
OF	48.00	7.53	11.62	14.60
OF	49.00	7.55	11.62	14.61
OF	50.00	7.57	11.62	14.63
OF	51.00	7.60	11.62	14.64
OF	52.00	7.62	11.62	14.66
OF	53.00	7.64	11.62	14.67
OF	54.00	7.66	11.62	14.69

OF	55.00	7.68	11.62	14.70
OF	56.00	7.70	11.62	14.72
OF	57.00	7.73	11.62	14.73
OF	58.00	7.75	11.62	14.75
OF	59.00	7.77	11.62	14.77
OF	60.00	7.79	11.62	14.78
OF	61.00	7.81	11.62	14.79
OF	62.00	7.83	11.62	14.81
OF	63.00	7.85	11.62	14.82
OF	64.00	7.87	11.62	14.83
OF	65.00	7.89	11.62	14.85
OF	66.00	7.91	11.62	14.86
OF	67.00	7.93	11.62	14.87
OF	68.00	7.95	11.62	14.89
OF	69.00	7.97	11.62	14.90
OF	70.00	7.99	11.62	14.92
OF	71.00	8.01	11.62	14.93
OF	72.00	8.03	11.62	14.94
OF	73.00	8.05	11.62	14.96
OF	74.00	8.07	11.62	14.97
OF	75.00	8.09	11.62	14.99
OF	76.00	8.11	11.62	15.00
OF	77.00	8.13	11.62	15.02
OF	78.00	8.16	11.62	15.03
OF	79.00	8.18	11.62	15.05
OF	80.00	8.20	11.62	15.07
OF	81.00	8.23	11.62	15.08
OF	82.00	8.25	11.62	15.10
OF	83.00	8.27	11.62	15.11
OF	84.00	8.30	11.62	15.13
OF	85.00	8.32	11.62	15.15
OF	86.00	8.35	11.62	15.17
OF	87.00	8.37	11.62	15.18
OF	88.00	8.40	11.62	15.20
OF	89.00	8.42	11.62	15.22
OF	90.00	8.44	11.62	15.24
OF	91.00	8.47	11.62	15.25
OF	92.00	8.49	11.62	15.27
OF	93.00	8.52	11.62	15.29
OF	94.00	8.52	11.62	15.29
OF	95.00	8.51	11.62	15.28
OF	96.00	8.50	11.62	15.27
OF	97.00	8.48	11.62	15.26
OF	98.00	8.47	11.62	15.25
OF	99.00	8.46	11.62	15.25
OF	100.00	8.45	11.62	15.24
OF	101.00	8.44	11.62	15.23
OF	102.00	8.42	11.62	15.22
OF	103.00	8.41	11.62	15.21
OF	104.00	8.40	11.62	15.20
OF	105.00	8.39	11.62	15.19
OF	106.00	8.37	11.62	15.18
OF	107.00	8.36	11.62	15.18
OF	108.00	8.35	11.62	15.17
OF	109.00	8.33	11.62	15.16
OF	110.00	8.32	11.62	15.15
OF	111.00	8.30	11.62	15.14
OF	112.00	8.30	11.62	15.13
OF	113.00	8.30	11.62	15.13
OF	114.00	8.29	11.62	15.13
OF	115.00	8.29	11.62	15.13
OF	116.00	8.29	11.62	15.12
OF	117.00	8.28	11.62	15.12
OF	118.00	8.28	11.62	15.12
OF	119.00	8.27	11.62	15.12
OF	120.00	8.27	11.62	15.11
OF	121.00	8.26	11.62	15.11
OF	122.00	8.26	11.62	15.11
OF	123.00	8.26	11.62	15.10
OF	124.00	8.25	11.62	15.10
OF	125.00	8.25	11.62	15.10
OF	126.00	8.24	11.62	15.09
OF	127.00	8.24	11.62	15.09
OF	128.00	8.23	11.62	15.09
OF	129.00	8.23	11.62	15.08
OF	130.00	8.23	11.62	15.08
OF	131.00	8.22	11.62	15.08
OF	132.00	8.22	11.62	15.08
OF	133.00	8.21	11.62	15.07
OF	134.00	8.21	11.62	15.07
OF	135.00	8.20	11.62	15.07
OF	136.00	8.20	11.62	15.06
OF	137.00	8.19	11.62	15.06
OF	138.00	8.19	11.62	15.06
OF	139.00	8.18	11.62	15.05
OF	140.00	8.18	11.62	15.05
OF	141.00	8.18	11.62	15.05
OF	142.00	8.17	11.62	15.04
OF	143.00	8.17	11.62	15.04
OF	144.00	8.16	11.62	15.04
OF	145.00	8.16	11.62	15.03
OF	146.00	8.15	11.62	15.03
OF	147.00	8.15	11.62	15.02
OF	148.00	8.14	11.62	15.02
OF	149.00	8.14	11.62	15.02
OF	150.00	8.13	11.62	15.01
OF	151.00	8.12	11.62	15.01
OF	152.00	8.12	11.62	15.01
OF	153.00	8.11	11.62	15.00
OF	154.00	8.11	11.62	15.00
OF	155.00	8.10	11.62	15.00
OF	156.00	8.10	11.62	14.99

OF	157.00	8.09	11.62	14.99
OF	158.00	8.09	11.62	14.98
OF	159.00	8.08	11.62	14.98
OF	160.00	8.08	11.62	14.98
OF	161.00	8.07	11.62	14.97
OF	162.00	8.06	11.62	14.97
OF	163.00	8.06	11.62	14.96
OF	164.00	8.05	11.62	14.96
OF	165.00	8.05	11.62	14.96
OF	166.00	8.04	11.62	14.95
OF	167.00	8.03	11.62	14.95
OF	168.00	8.02	11.62	14.94
OF	169.00	8.02	11.62	14.94
OF	170.00	8.01	11.62	14.93
OF	171.00	8.00	11.62	14.93
OF	172.00	7.99	11.62	14.92
OF	173.00	7.99	11.62	14.91
OF	174.00	7.98	11.62	14.91
OF	175.00	7.97	11.62	14.90
OF	176.00	7.96	11.62	14.90
OF	177.00	7.93	11.62	14.87
OF	178.00	7.89	11.62	14.85
OF	179.00	7.86	11.62	14.83
OF	180.00	7.82	11.62	14.80
OF	181.00	7.79	11.62	14.77
OF	182.00	7.75	11.62	14.75
OF	183.00	7.71	11.62	14.72
OF	184.00	7.68	11.62	14.70
OF	185.00	7.64	11.62	14.67
OF	186.00	7.61	11.62	14.65
OF	187.00	7.57	11.62	14.62
OF	188.00	7.53	11.62	14.60
OF	189.00	7.50	11.62	14.57
OF	190.00	7.46	11.62	14.55
OF	191.00	7.43	11.62	14.53
OF	192.00	7.39	11.62	14.50
OF	193.00	7.36	11.62	14.48
OF	194.00	7.32	11.62	14.45
OF	195.00	7.28	11.62	14.42
OF	196.00	7.25	11.62	14.40
OF	197.00	7.21	11.62	14.37
OF	198.00	7.18	11.62	14.35
OF	199.00	7.14	11.62	14.32
OF	201.50	7.27	11.62	14.42
IF	205.00	7.07	11.62	14.27
IF	212.00	6.33	11.62	13.76
IF	220.50	6.37	11.62	13.79
IF	223.00	5.89	11.62	13.45
IF	230.50	5.46	11.62	13.15
IF	245.50	4.10	11.62	12.20
IF	252.60	1.96	11.62	10.89
IF	255.90	1.18	11.62	10.71
IF	259.20	0.42	11.62	10.56
IF	260.50	0.01	11.62	10.27

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

NO AREAS ABOVE 100-YEAR SURGE IN THIS TRANSECT

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
34.00	1.00	9.32
74.00	1.00	9.32
128.00	1.00	9.32
170.00	1.00	9.32
179.00	1.00	9.32
190.00	1.00	9.33
201.50	1.00	9.33
212.00	1.00	9.33
252.60	1.00	9.52
255.90	1.00	9.88
259.20	1.00	10.27

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
249.15	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	14.31		
		V23 EL=14	130
33.00	14.41		
		V23 EL=14	130
34.00	14.42		
		V23 EL=14	130
40.57	14.50		
		V23 EL=15	130
73.00	14.96		
		V23 EL=15	130
74.00	14.97		
		V23 EL=15	130
127.00	15.09		
		V23 EL=15	130
128.00	15.09		
		V23 EL=15	130
169.00	14.94		
		V23 EL=15	130
170.00	14.93		
		V23 EL=15	130
178.00	14.85		
		V23 EL=15	130
179.00	14.83		
		V23 EL=15	130
189.00	14.57		
		V23 EL=15	130
190.00	14.55		
		V23 EL=15	130

```
                    192.01          14.50
                                                V23  EL=14     130
                    199.00          14.32
                                                V23  EL=14     130
                    201.50          14.42
                                                V23  EL=14     130
                    205.00          14.27
                                                V23  EL=14     130
                    212.00          13.76
                                                V23  EL=14     130
                    222.62          13.50
                                                V23  EL=13     130
                    240.73          12.50
                                                V23  EL=12     130
                    245.50          12.20
                                                V23  EL=12     130
                    249.15          11.52
                                                A20  EL=12     100
                    249.29          11.50
                                                A20  EL=11     100
                    252.60          10.89
                                                A20  EL=11     100
                    255.90          10.71
                                                A20  EL=11     100
                    259.20          10.56
                                                A20  EL=11     100
                    259.46          10.50
                                                A20  EL=10     100
                    260.50          10.27
                         ZONE TERMINATED AT END OF TRANSECT
                         PART 7   POSTSCRIPT NOTES
                PS#  1   START(383992.3704,4802357.5308)
                PS#  2   END(384045.7135,4802549.4425)
-1.000000e+00
```

YK-99-2
100-year WHAFIS Output
Zero Station: -70.43156540, 43.36566478
Onshore Dir: 74.5 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-200
-150
-100
-50
0
50
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-99-2
Two Percent Run-up Elevation is 18.8 Feet-NAVD88
Run-up Height is 9.4 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
20
15
10
5
0
-5
1600
1650
1700
1750
1800
1850
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-99-2
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-99-2sta_ele_include.csv';   % file with station, elevation, include
                                        % third colunm is 0 for excluded points
imgname='logfiles/YK-99-2-runup';
SWEL=9.3261;  % 100-yr still water level including wave setup.
H0=5.0379;    % significant wave height at toe of structure
Tp=11.3516;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.94117;   % this may get changed automatically below
gamma_rough=1;
gamma_beta=1;
gamma_perm=1;

setupAtToe=-0.039442;
maxSetup=0.93903;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-99-2'

plotTitle =

Iterative TAW for YK-99-2



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                  9.286658

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                 10.225688



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          544.916423199444


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                  1.729808


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                 16.843508


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          1626.06965548772

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          1763.60050963102


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          1763.60050963102

toe_sta

toe_sta =

          1626.06965548772




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 40.4 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.06 feet


ans =

-!!-       SWEL is adjusted to 9.39 feet


k =

     1
     2
     3
     4
     5
     6




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta
```

```
% loop over profile segments to determine berm factor
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end


% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
```

```
        % do the foreshore calculation
        fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
        % get upper slope
        fore_toe_sta=-999;
        fore_toe_dep=-999;
        for kk=length(dep)-1:-1:1
           ddep=dep(kk+1)-dep(kk);
           dsta=sta(kk+1)-sta(kk);
           s=ddep/dsta;
           if s < 1/15
              break
           end
           fore_toe_sta=sta(kk);
           fore_toe_dep=dep(kk);
           upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
        end
        fore_Irb=upper_slope/(sqrt(fore_H0/L0));
        fore_gamma=gamma_perm*gamma_beta*gamma_rough;
        if (fore_Irb < 1.8)
           fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
        else
           fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
        end
        if berm_width >= L0
           R2_new=fore_R2
           disp ('berm is wider than one wavelength, use full shallow foreshore solution');
        else
           w2=(berm_width-0.25*L0)/(0.75*L0)
           w1=1-w2
           R2_new=w2*fore_R2 + w1*R2_new
        end
     end % end berm width check

     % convergence criterion
     R2del=abs(R2-R2_new)
     R2_all(iter)=R2_new;

     % get the new top station (for plot purposes)
     Z2=R2_new+SWEL
     top_sta=-999;
     for kk=1:length(sta)-1
        if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
           top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
           break;
        end
     end
     if top_sta==-999
        dy=Z2-dep(end);
        top_sta=sta(end)+dy/S(end);
     end
     topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                  1.729808
toe_sta =
          1626.06965548772
top_sta =
          1763.60050963102
Z2 =
                 16.843508
H0 =
                    5.0379
Tp =
                   11.3516
T0 =
          10.3196363636364
R2 =
                   15.1137
Z2 =
          24.4989728103088
top_sta =
          1891.93808670951
Lslope =
          265.868431221787
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
        0.0256219611509224
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
        0.0532395156699975
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
```

```
dh =
         -1.66608768969124
rdh_sum =
        0.0829252725026096
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.114751539044794
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.148790312450615
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.185113212627531
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
         0.223791526559033
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
         0.264896179100873
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.308497722076877
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
         0.354666345242235
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
         0.403471800648496
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    11
rB =
        0.0413738477691765
rdh_mean =
        0.0366792546044087
gamma_berm =
         0.960143714127113
slope =
        0.0893369363210579
Irb =
         0.929118766642681
gamma_berm =
         0.960143714127113
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.960143714127113
ans =
!!! - - Iribaren number:   0.89 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:11.2 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          7.95481866838369
R2del =
           7.1588813316163
Z2 =
          17.3400914786925
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                  1.729808
```

```
toe_sta =
          1626.06965548772
top_sta =
          1771.92532361054
Z2 =
          17.3400914786925
H0 =
                    5.0379
Tp =
                   11.3516
T0 =
          10.3196363636364
R2 =
          7.95481866838369
Z2 =
          17.3400914786925
top_sta =
          1771.92532361054
Lslope =
          145.855668122821
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
        0.0904254034272675
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.187720127674867
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
           0.2921076011301
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.403807372624405
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.523034996951388
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.650001725062773
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
         0.784914575223744
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
         0.927976155925547
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
          1.07938455344603
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
          1.23933329430215
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
          1.40801102230549
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    11
```

```
rB =
          0.07541702109744
rdh_mean =
         0.128001002027772
gamma_berm =
         0.934236433172982
slope =
         0.115755486558231
Irb =
          1.20387601514107
gamma_berm =
         0.934236433172982
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.934236433172982
ans =
!!! - - Iribaren number:   1.12 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.6 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          10.0290863585598
R2del =
           2.0742676901761
Z2 =
          19.4143591688686
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                 1.729808
toe_sta =
          1626.06965548772
top_sta =
          1806.69871701847
Z2 =
          19.4143591688686
H0 =
                   5.0379
Tp =
                  11.3516
T0 =
          10.3196363636364
R2 =
          10.0290863585598
Z2 =
          19.4143591688686
top_sta =
          1806.69871701847
Lslope =
          180.629061530746
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
        0.0575522845257002
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.119533397816781
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
         0.186096235692182
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.257392130759526
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.333570804650896
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.414780192346405
```

```
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
          0.50116651267763
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
         0.592874176973738
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.690045738640926
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
         0.792821890951963
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
         0.901341276410312
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    11
rB =
        0.0608982846214235
rdh_mean =
        0.0819401160373011
gamma_berm =
         0.944091727886929
slope =
         0.104254253423805
Irb =
          1.08426130721864
gamma_berm =
         0.944091727886929
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.944091727886929
ans =
!!! - - Iribaren number:   1.02 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.6 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          9.12790184453968
R2del =
         0.901184514020114
Z2 =
          18.5131746548484
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
                 1.729808
toe_sta =
          1626.06965548772
top_sta =
          1791.59109914081
Z2 =
          18.5131746548484
H0 =
                   5.0379
Tp =
                  11.3516
T0 =
          10.3196363636364
R2 =
          9.12790184453968
Z2 =
          18.5131746548484
top_sta =
          1791.59109914081
Lslope =
          165.521443653089
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 37
```

```
dh =
         -1.54678418969124
rdh_sum =
        0.0691950822850872
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.143690982738681
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
         0.223667002294197
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.309300175757282
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.400765203122065
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.498234228568711
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
         0.601876913821702
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
         0.711860318485847
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.828348829632762
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
         0.951504149064295
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
            1.081485056849
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    11
rB =
        0.0664566460829966
rdh_mean =
        0.0983168233499088
gamma_berm =
         0.940077160250373
slope =
         0.108615129771427
Irb =
          1.12961513532645
gamma_berm =
         0.940077160250373
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.940077160250373
ans =
!!! - - Iribaren number:   1.06 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
```

```
ans =
!!! - - slope: 1:9.2 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          9.46927682989579
R2del =
          0.34137498535611
Z2 =
          18.8545496402046
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
                 1.729808
toe_sta =
          1626.06965548772
top_sta =
          1797.31397026378
Z2 =
          18.8545496402046
H0 =
                   5.0379
Tp =
                  11.3516
T0 =
          10.3196363636364
R2 =
          9.46927682989579
Z2 =
          18.8545496402046
top_sta =
          1797.31397026378
Lslope =
          171.244314776056
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
         0.064404034091573
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.133751062296208
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
         0.208209707506491
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.287946631389085
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.373126474698892
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.463911655250388
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
         0.560462440484243
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
           0.6629368397638
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.771490542491301
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 46
dh =
         -2.08364918969124
```

```
rdh_sum =
         0.886276910010338
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
           1.0074467581845
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
    11
rB =
        0.0642357091643316
rdh_mean =
        0.0915860689258636
gamma_berm =
         0.941647386922695
slope =
         0.106866453665683
Irb =
          1.11142861748139
gamma_berm =
         0.941647386922695
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.941647386922695
ans =
!!! - - Iribaren number:   1.05 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.4 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          9.33238591641954
R2del =
         0.136890913476247
Z2 =
          18.7176587267283
ans =
!----------------- STARTING ITERATION 6 -----------------!
Ztoe =
                  1.729808
toe_sta =
          1626.06965548772
top_sta =
          1795.01910658209
Z2 =
          18.7176587267283
H0 =
                    5.0379
Tp =
                   11.3516
T0 =
          10.3196363636364
R2 =
          9.33238591641954
Z2 =
          18.7176587267283
top_sta =
          1795.01910658209
Lslope =
           168.94945109437
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
        0.0662641152074591
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.137610313555862
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
         0.214211394848707
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.296238081884604
```

```
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.383858957341145
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.477240254431518
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
          0.57654592984021
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
         0.681937551425475
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.793574233071974
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
         0.911612624840858
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
          1.03620668818343
ans =
!------- End Berm Factor Calculation, Iter: 6 ---------!
berm_width =
    11
rB =
        0.0651082316559627
rdh_mean =
        0.0942006080166755
gamma_berm =
          0.94102500335292
slope =
          0.10755245180674
Irb =
          1.11856311048043
gamma_berm =
          0.94102500335292
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
          0.94102500335292
ans =
!!! - - Iribaren number:   1.05 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          9.38608460262104
R2del =
        0.0536986862014981
Z2 =
          18.7713574129298
ans =
!----------------- STARTING ITERATION 7 -----------------!
Ztoe =
                 1.729808
toe_sta =
          1626.06965548772
top_sta =
          1795.91932093226
Z2 =
          18.7713574129298
H0 =
                   5.0379
Tp =
                  11.3516
```

```
T0 =
          10.3196363636364
R2 =
          9.38608460262104
Z2 =
          18.7713574129298
top_sta =
          1795.91932093226
Lslope =
          169.849665444532
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
         0.065525042965719
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.136076929715519
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
         0.211826805172205
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.292943783651279
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.379594887117465
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.471944838755677
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
          0.57015613576958
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 44
dh =
         -1.96434568969124
rdh_sum =
         0.674388938917062
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.784801008667059
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
          0.90154769605345
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
           1.0247817208195
ans =
!------- End Berm Factor Calculation, Iter: 7 ---------!
berm_width =
    11
rB =
        0.0647631537643051
rdh_mean =
        0.0931619746199547
gamma_berm =
         0.941270309522993
slope =
         0.107280990269888
Irb =
           1.1157398660454
```

```
gamma_berm =
         0.941270309522993
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.941270309522993
ans =
!!! - - Iribaren number:   1.05 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          9.36483478604849
R2del =
         0.021249816572551
Z2 =
          18.7501075963573
ans =
!----------------- STARTING ITERATION 8 -----------------!
Ztoe =
                  1.729808
toe_sta =
          1626.06965548772
top_sta =
          1795.56308521831
Z2 =
          18.7501075963573
H0 =
                    5.0379
Tp =
                   11.3516
T0 =
          10.3196363636364
R2 =
          9.36483478604849
Z2 =
          18.7501075963573
top_sta =
          1795.56308521831
Lslope =
          169.493429730587
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 37
dh =
         -1.54678418969124
rdh_sum =
        0.0658160375402676
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 38
dh =
         -1.60643618969124
rdh_sum =
         0.136680672223293
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 39
dh =
         -1.66608768969124
rdh_sum =
         0.212765701294397
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 40
dh =
         -1.72573918969124
rdh_sum =
         0.294240873185609
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 41
dh =
         -1.78539118969124
rdh_sum =
         0.381273825233258
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 42
dh =
         -1.84504268969124
rdh_sum =
         0.474029876102721
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 43
dh =
         -1.90469418969124
rdh_sum =
         0.572672098642466
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 44
dh =
         -1.96434568969124
```

```
rdh_sum =
         0.677361208699018
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 45
dh =
         -2.02399718969124
rdh_sum =
         0.788255500761444
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 46
dh =
         -2.08364918969124
rdh_sum =
         0.905510838539324
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 47
dh =
         -2.14330068969124
rdh_sum =
          1.02928043195394
ans =
!------- End Berm Factor Calculation, Iter: 8 ---------!
berm_width =
    11
rB =
        0.0648992708300535
rdh_mean =
        0.0935709483594489
gamma_berm =
         0.941173415489351
slope =
         0.107388045203445
Irb =
          1.11685325488461
gamma_berm =
         0.941173415489351
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
     1
gamma =
         0.941173415489351
ans =
!!! - - Iribaren number:   1.05 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          9.37321491298903
R2del =
       0.00838012694054058
Z2 =
          18.7584877232978
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          18.7584877232978
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-99-2

Station locations shifted by: 49.28 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-99-2

Incident significant wave height: 4.45 feet

Peak wave period: 11.62 seconds

Mean wave height: 2.79 feet

Local Depth below SWEL: 25.56 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 25.56
    Period, T = 9.87
    Waveheight, H = 2.79
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*9.87*9.87/6.28 = 499.12
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 499.12/9.87 = 50.56
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/9.87 = 0.64
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.64*0.64*25.56/32.17 = 0.32
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 27.15
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(50.56/27.15) = 1.36
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 2.79/1.36 = 2.04
```

Deepwater mean wave height: 2.04 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-99-2

RUNUP2 SWEL:
9.30
9.30
9.30
9.30

9.30
9.30
9.30
9.30
9.30

RUNUP2 deepwater mean wave heights:
1.94
1.94
1.94
2.04
2.04
2.04
2.15
2.15
2.15

RUNUP2 mean wave periods:
9.38
9.87
10.37
9.38
9.87
10.37
9.38
9.87
10.37

RUNUP2 runup above SWEL:
4.27
4.35
4.42
4.08
4.20
4.26
3.96
4.00
4.06

RUNUP2 Mean runup height above SWEL: 4.18 feet

RUNUP2 2-percent runup height above SWEL: 9.19 feet

RUNUP2 2-percent runup elevation: 18.49 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 4.45 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 3.26 feet

Peak wave period: 11.62 seconds

Average beach Slope: 1:9.82 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     3.26
Wave Period,                        T  =    11.62
Beach Slope,                        S  =    0.102

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [10.2,  8.0,   7.3,    5.9,    3.8]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 8.02 feet

ACES Beach 2-percent runup elevation: 17.32 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-99-2                                                   1
17.0
  -16.24 1352.7 1.0
  -16.02 1377.7 1.0
  -16.00 1378.7 1.0
  -10.17 1412.7 1.0
  -10.03 1413.7 1.0
  -6.52 1440.7 1.0
  -6.39 1441.7 1.0
  -3.92 1462.7 1.0
  -3.81 1463.7 1.0
  -1.66 1517.7 1.0
  -0.02 1551.7 1.0
  -0.02 1554.2 1.0
  0.08  1557.7 1.0
  1.06  1564.7 1.0
  1.06  1573.2 1.0
  1.65  1575.7 1.0
  2.21  1583.2 1.0
  4.01  1598.2 1.0
  10.90 1614.7 1.0
1 11.56 1625.7 1.0
 9.3   1.94  9.38
 9.3   1.94  9.87
 9.3   1.94  10.37
 9.3   2.04  9.38
 9.3   2.04  9.87
 9.3   2.04  10.37
 9.3   2.15  9.38
 9.3   2.15  9.87
 9.3   2.15  10.37
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	1352.0	-16.2		
			.00	1.00
2	1377.0	-16.0		
			FLAT	1.00
3	1378.0	-16.0		
			5.76	1.00
4	1412.0	-10.1		
			10.00	1.00
5	1413.0	-10.0		
			7.96	1.00
6	1440.7	-6.5		
			7.69	1.00
7	1441.7	-6.4		
			8.50	1.00
8	1462.7	-3.9		
			9.09	1.00
9	1463.7	-3.8		
			25.12	1.00
10	1517.7	-1.6		
			20.73	1.00
11	1551.7	.0		
			FLAT	1.00
12	1554.2	.0		
			35.00	1.00
13	1557.7	.1		
			7.14	1.00
14	1564.7	1.1		
			FLAT	1.00
15	1573.2	1.1		
			4.24	1.00
16	1575.7	1.7		
			13.39	1.00
17	1583.2	2.2		
			8.33	1.00
18	1598.2	4.0		
			2.39	1.00
19	1614.7	10.9		
			16.67	1.00
20	1625.7	11.6		

LAST SLOPE 17.00 LAST ROUGHNESS 1.00

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.30	1.94	9.38	11	20	4.27	4.03
9.30	1.94	9.87	11	20	4.35	4.13
9.30	1.94	10.37	11	20	4.42	4.23
9.30	2.04	9.38	11	20	4.08	4.19
9.30	2.04	9.87	11	20	4.20	4.29
9.30	2.04	10.37	11	20	4.26	4.39
9.30	2.15	9.38	11	20	3.96	4.36
9.30	2.15	9.87	11	20	4.00	4.47
9.30	2.15	10.37	11	20	4.06	4.57

Runup2 2% runup elevation for Transect: YK-99-2
Two Percent Run-up Elevation is 18.5 Feet-NAVD88
Run-up Height is 9.2 Feet
Ground
Swel
2% Runup
Elevation (ft)
Station (ft)
25
20
15
10
5
0
-5
-10
-15
-20
1350
1400
1450
1500
1550
1600
1650

Transect Number: YK-100
Latitude
43.39
43.385
43.38
43.375
43.37
43.365
43.36
43.355
-70.46
-70.45
-70.44
-70.43
-70.42
-70.41
Longitude
Crow Hill
19m
Trott Island

Elevation profile
Elevation (ft)
40
30
20
10
0
-10
-20
-30
-40
-6000
-4000
-2000
0
2000
4000
6000
8000
10000
12000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-100

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -414 ft
LON: -70.4311 deg E
LAT: 43.3643 deg N
Bottom ELEV: -15.2964 ft-NAVD88
TWL: 9.32 ft-NAVD88
HS: 4.0095 ft
TP: 11.251 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 91.62 deg CCW from East

TAW/RUNUP input

toe sta: -24 ft
toe elev: -1.803 ft-NAVD88
top sta: 62.5 ft
top elev: 15.6955 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-100: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-500
-400
-300
-200
-100
0
100
200
300
400
500
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-100zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-100.swn
swan output name:     2_swan/swanfiles/YK-100.dat

Boundary Conditions:
    TWL- 2.8408 meters
    HS-  1.2221 meters
    PER- 11.251 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.77566 feet
SWAN output at toe:
    SETUP- -0.033077 feet
    HS-    4.7158 feet
    PER-   11.1241 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.77566 feet
SWAN output at toe:
    SETUP- -0.033077 feet
    HS-    4.7158 feet
    PER-   11.1241 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-100
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-6000
-4000
-2000
0
2000
4000
6000
8000
10000
12000

```
                    Execution started at 20200401.174318


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      145       0.   145     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      145   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-100zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   1.2221     11.251     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      145  145    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-100.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             146 MYC              1
                     : MCGRD           147
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  75.70 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.70 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  61.12 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  66.67 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  98.62 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  99.31 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  99.31 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	1.22902	11.0934	11.1572	10.1187	0.031	32.0340	7.5000	0.000000
1.	0.	1.22924	11.0935	11.1572	10.1135	0.032	32.0366	7.5000	-0.000000
2.	0.	1.22936	11.0935	11.1572	10.1082	0.032	32.0259	7.5000	-0.000000
3.	0.	1.22971	11.0936	11.1572	10.1034	0.032	32.0105	7.4900	-0.000009
4.	0.	1.22979	11.0937	11.1572	10.0982	0.032	31.9939	7.4900	-0.000008
5.	0.	1.23012	11.0937	11.1572	10.0933	0.032	31.9767	7.4800	-0.000017
6.	0.	1.23029	11.0938	11.1572	10.0882	0.032	31.9727	7.4800	-0.000017
7.	0.	1.23039	11.0938	11.1572	10.0831	0.032	31.9599	7.4800	-0.000017
8.	0.	1.23074	11.0939	11.1572	10.0783	0.032	31.9439	7.4700	-0.000026
9.	0.	1.23091	11.0939	11.1572	10.0733	0.032	31.9404	7.4700	-0.000026
10.	0.	1.23101	11.0940	11.1572	10.0682	0.032	31.9279	7.4700	-0.000026
11.	0.	1.23135	11.0941	11.1572	10.0635	0.033	31.9121	7.4600	-0.000034
12.	0.	1.23143	11.0941	11.1572	10.0584	0.033	31.8956	7.4600	-0.000034
13.	0.	1.23158	11.0942	11.1572	10.0537	0.033	31.8529	7.4500	-0.000042
14.	0.	1.23167	11.0942	11.1572	10.0492	0.033	31.7637	7.4299	-0.000059
15.	0.	1.23202	11.0943	11.1572	10.0452	0.033	31.6377	7.3899	-0.000092
16.	0.	1.23230	11.0945	11.1572	10.0411	0.033	31.5261	7.3499	-0.000123
17.	0.	1.23258	11.0946	11.1572	10.0369	0.033	31.4137	7.3098	-0.000155
18.	0.	1.23288	11.0947	11.1572	10.0326	0.033	31.3004	7.2698	-0.000187
19.	0.	1.23321	11.0948	11.1572	10.0281	0.033	31.1879	7.2298	-0.000220
20.	0.	1.23349	11.0949	11.1572	10.0234	0.033	31.0667	7.1897	-0.000253
21.	0.	1.23405	11.0950	11.1572	10.0190	0.033	30.9421	7.1397	-0.000297
22.	0.	1.23444	11.0952	11.1572	10.0141	0.033	30.8262	7.0997	-0.000332
23.	0.	1.23488	11.0953	11.1572	10.0090	0.033	30.7134	7.0596	-0.000368
24.	0.	1.23536	11.0954	11.1572	10.0037	0.033	30.6015	7.0196	-0.000405
25.	0.	1.23588	11.0955	11.1572	9.9984	0.033	30.4901	6.9796	-0.000443
26.	0.	1.23635	11.0957	11.1572	9.9928	0.034	30.3695	6.9395	-0.000482
27.	0.	1.23706	11.0958	11.1572	9.9875	0.034	30.2362	6.8895	-0.000532
28.	0.	1.23777	11.0960	11.1572	9.9819	0.034	30.0990	6.8394	-0.000583
29.	0.	1.23852	11.0962	11.1572	9.9761	0.034	29.9605	6.7894	-0.000635
30.	0.	1.23931	11.0963	11.1572	9.9700	0.034	29.8217	6.7393	-0.000689
31.	0.	1.24014	11.0965	11.1572	9.9637	0.034	29.6830	6.6893	-0.000745
32.	0.	1.24102	11.0967	11.1572	9.9572	0.034	29.5445	6.6392	-0.000802
33.	0.	1.24194	11.0969	11.1572	9.9504	0.034	29.4062	6.5891	-0.000860
34.	0.	1.24285	11.0970	11.1572	9.9433	0.034	29.2591	6.5391	-0.000920
35.	0.	1.24410	11.0973	11.1572	9.9363	0.034	29.1087	6.4790	-0.000994
36.	0.	1.24514	11.0975	11.1572	9.9286	0.034	28.9726	6.4289	-0.001056
37.	0.	1.24624	11.0977	11.1572	9.9205	0.034	28.8502	6.3789	-0.001119
38.	0.	1.24739	11.0979	11.1572	9.9122	0.034	28.7302	6.3288	-0.001182
39.	0.	1.24857	11.0981	11.1572	9.9035	0.034	28.6110	6.2788	-0.001248
40.	0.	1.24980	11.0983	11.1572	9.8943	0.034	28.4922	6.2287	-0.001314
41.	0.	1.25110	11.0985	11.1572	9.8842	0.034	28.3722	6.1786	-0.001382
42.	0.	1.25240	11.0988	11.1572	9.8736	0.034	28.2438	6.1285	-0.001452
43.	0.	1.25409	11.0990	11.1572	9.8626	0.034	28.1110	6.0685	-0.001539
44.	0.	1.25554	11.0993	11.1572	9.8508	0.034	27.9854	6.0184	-0.001612
45.	0.	1.25704	11.0995	11.1572	9.8386	0.034	27.8628	5.9683	-0.001688
46.	0.	1.25862	11.0998	11.1572	9.8254	0.034	27.7401	5.9182	-0.001765
47.	0.	1.26025	11.1001	11.1572	9.8118	0.034	27.6179	5.8682	-0.001844
48.	0.	1.26204	11.1004	11.1572	9.7979	0.034	27.5120	5.8181	-0.001925
49.	0.	1.26322	11.1006	11.1572	9.7826	0.034	27.4204	5.7880	-0.001975
50.	0.	1.26482	11.1009	11.1572	9.7676	0.034	27.3323	5.7480	-0.002043
51.	0.	1.26609	11.1011	11.1572	9.7517	0.034	27.2462	5.7179	-0.002095
52.	0.	1.26780	11.1014	11.1572	9.7356	0.034	27.1604	5.6778	-0.002165
53.	0.	1.26912	11.1017	11.1572	9.7186	0.034	27.0673	5.6478	-0.002219
54.	0.	1.27107	11.1019	11.1572	9.7024	0.034	26.9456	5.5977	-0.002310
55.	0.	1.27340	11.1023	11.1572	9.6860	0.034	26.8138	5.5376	-0.002421
56.	0.	1.27545	11.1026	11.1572	9.6685	0.033	26.6875	5.4875	-0.002517
57.	0.	1.27756	11.1029	11.1572	9.6505	0.033	26.5629	5.4374	-0.002615
58.	0.	1.27970	11.1032	11.1572	9.6317	0.034	26.4307	5.3873	-0.002716
59.	0.	1.28238	11.1036	11.1572	9.6119	0.034	26.2971	5.3272	-0.002840

60.	0.	1.28478	11.1039	11.1572	9.5905	0.034	26.1718	5.2771	-0.002947
61.	0.	1.28732	11.1042	11.1572	9.5678	0.034	26.0491	5.2269	-0.003057
62.	0.	1.28996	11.1046	11.1572	9.5438	0.035	25.9191	5.1768	-0.003171
63.	0.	1.29316	11.1050	11.1572	9.5187	0.035	25.7865	5.1167	-0.003311
64.	0.	1.29614	11.1053	11.1572	9.4913	0.037	25.6636	5.0666	-0.003432
65.	0.	1.29928	11.1057	11.1572	9.4617	0.038	25.5380	5.0164	-0.003558
66.	0.	1.30310	11.1061	11.1572	9.4304	0.041	25.4215	4.9563	-0.003710
67.	0.	1.30675	11.1064	11.1572	9.3957	0.045	25.3241	4.9062	-0.003842
68.	0.	1.31051	11.1068	11.1572	9.3606	0.051	25.2389	4.8560	-0.003978
69.	0.	1.31397	11.1072	11.1572	9.3294	0.066	25.1619	4.8059	-0.004116
70.	0.	1.31802	11.1076	11.1572	9.2979	0.083	25.0965	4.7457	-0.004284
71.	0.	1.32177	11.1079	11.1572	9.2644	0.105	25.0532	4.6956	-0.004431
72.	0.	1.32540	11.1083	11.1572	9.2334	0.117	25.0210	4.6454	-0.004581
73.	0.	1.32924	11.1087	11.1572	9.1996	0.133	25.0014	4.5953	-0.004736
74.	0.	1.33374	11.1091	11.1572	9.1651	0.139	24.9874	4.5351	-0.004926
75.	0.	1.33766	11.1096	11.1572	9.1320	0.107	24.9545	4.4849	-0.005092
76.	0.	1.34153	11.1100	11.1572	9.1007	0.094	24.9113	4.4347	-0.005263
77.	0.	1.34489	11.1104	11.1572	9.0708	0.093	24.8774	4.3946	-0.005404
78.	0.	1.34731	11.1108	11.1572	9.0399	0.094	24.8659	4.3745	-0.005481
79.	0.	1.34955	11.1111	11.1572	9.0108	0.092	24.8382	4.3544	-0.005558
80.	0.	1.35264	11.1115	11.1572	8.9837	0.088	24.7732	4.3143	-0.005704
81.	0.	1.35668	11.1120	11.1572	8.9581	0.083	24.6765	4.2541	-0.005925
82.	0.	1.36074	11.1125	11.1572	8.9319	0.082	24.5657	4.1938	-0.006155
83.	0.	1.36490	11.1129	11.1572	8.9051	0.084	24.4566	4.1336	-0.006392
84.	0.	1.36883	11.1134	11.1572	8.8765	0.087	24.3867	4.0834	-0.006597
85.	0.	1.37083	11.1138	11.1572	8.8437	0.092	24.3738	4.0734	-0.006647
86.	0.	1.37238	11.1142	11.1572	8.8106	0.095	24.3839	4.0733	-0.006656
87.	0.	1.37393	11.1146	11.1572	8.7782	0.097	24.3922	4.0733	-0.006667
88.	0.	1.37602	11.1150	11.1572	8.7478	0.099	24.3954	4.0633	-0.006717
89.	0.	1.37752	11.1153	11.1572	8.7175	0.100	24.4047	4.0633	-0.006726
90.	0.	1.37891	11.1156	11.1572	8.6886	0.102	24.4078	4.0633	-0.006735
91.	0.	1.38078	11.1160	11.1572	8.6619	0.104	24.4047	4.0532	-0.006782
92.	0.	1.38209	11.1163	11.1572	8.6350	0.105	24.4094	4.0532	-0.006789
93.	0.	1.38334	11.1166	11.1572	8.6087	0.105	24.4082	4.0532	-0.006797
94.	0.	1.38510	11.1169	11.1572	8.5844	0.104	24.4007	4.0432	-0.006844
95.	0.	1.38629	11.1171	11.1572	8.5598	0.102	24.3992	4.0432	-0.006850
96.	0.	1.38745	11.1174	11.1572	8.5362	0.100	24.3955	4.0431	-0.006856
97.	0.	1.38852	11.1177	11.1572	8.5133	0.098	24.3841	4.0431	-0.006862
98.	0.	1.39008	11.1179	11.1572	8.4924	0.095	24.3664	4.0331	-0.006908
99.	0.	1.39110	11.1182	11.1572	8.4709	0.092	24.3562	4.0331	-0.006913
100.	0.	1.39204	11.1184	11.1572	8.4502	0.088	24.3393	4.0331	-0.006919
101.	0.	1.39346	11.1186	11.1572	8.4316	0.083	24.3137	4.0230	-0.006965
102.	0.	1.39430	11.1189	11.1572	8.4128	0.080	24.2896	4.0230	-0.006970
103.	0.	1.39496	11.1191	11.1572	8.3948	0.078	24.2413	4.0230	-0.006976
104.	0.	1.39701	11.1193	11.1572	8.3809	0.077	24.1524	3.9929	-0.007106
105.	0.	1.39956	11.1196	11.1572	8.3674	0.076	24.0449	3.9527	-0.007282
106.	0.	1.40210	11.1199	11.1572	8.3529	0.077	23.9224	3.9125	-0.007462
107.	0.	1.40523	11.1202	11.1572	8.3389	0.074	23.7945	3.8623	-0.007690
108.	0.	1.40784	11.1205	11.1572	8.3231	0.072	23.6706	3.8221	-0.007878
109.	0.	1.41041	11.1208	11.1572	8.3071	0.070	23.5368	3.7819	-0.008070
110.	0.	1.41354	11.1211	11.1572	8.2923	0.069	23.3954	3.7317	-0.008313
111.	0.	1.41612	11.1214	11.1572	8.2754	0.068	23.2580	3.6915	-0.008512
112.	0.	1.41876	11.1217	11.1572	8.2573	0.070	23.1117	3.6513	-0.008714
113.	0.	1.42206	11.1221	11.1572	8.2392	0.071	22.9586	3.6010	-0.008972
114.	0.	1.42482	11.1224	11.1572	8.2184	0.075	22.8167	3.5608	-0.009179
115.	0.	1.42755	11.1228	11.1572	8.1968	0.083	22.6725	3.5206	-0.009386
116.	0.	1.43098	11.1231	11.1572	8.1754	0.089	22.5289	3.4703	-0.009652
117.	0.	1.43316	11.1235	11.1572	8.1504	0.095	22.4065	3.4402	-0.009799
118.	0.	1.43528	11.1238	11.1572	8.1254	0.100	22.2905	3.4101	-0.009942
119.	0.	1.43738	11.1241	11.1572	8.0999	0.102	22.1776	3.3799	-0.010082
120.	0.	1.43937	11.1245	11.1572	8.0745	0.103	22.0655	3.3498	-0.010217
121.	0.	1.44115	11.1248	11.1572	8.0500	0.100	21.9507	3.3197	-0.010346
122.	0.	1.44242	11.1251	11.1572	8.0257	0.097	21.7738	3.2895	-0.010470
123.	0.	1.44827	11.1255	11.1572	8.0152	0.088	21.4774	3.1789	-0.011129
124.	0.	1.45425	11.1260	11.1572	8.0048	0.075	21.1134	3.0581	-0.011882
125.	0.	1.45967	11.1266	11.1572	7.9952	0.055	20.6106	2.9273	-0.012724
126.	0.	1.47292	11.1275	11.1572	8.0047	0.021	20.1207	2.6854	-0.014578

127.	0.	1.46484	11.1279	11.1572	7.9559	359.999	20.0772	2.7163	-0.013686
128.	0.	1.45312	11.1282	11.1572	7.8928	359.987	20.2030	2.8178	-0.012230
129.	0.	1.44671	11.1285	11.1572	7.8492	359.980	20.0852	2.8484	-0.011568
130.	0.	1.45366	11.1291	11.1572	7.8469	359.962	19.7861	2.6874	-0.012637
131.	0.	1.45024	11.1295	11.1572	7.8136	359.947	19.6615	2.6576	-0.012375
132.	0.	1.44114	11.1298	11.1572	7.7654	359.936	19.5199	2.6986	-0.011422
133.	0.	1.44325	11.1304	11.1572	7.7543	359.921	19.1144	2.5779	-0.012074
134.	0.	1.44787	11.1311	11.1572	7.7544	359.903	18.5480	2.3967	-0.013313
135.	0.	1.44853	11.1318	11.1572	7.7465	359.882	17.9663	2.2258	-0.014249
136.	0.	1.44306	11.1327	11.1572	7.7209	359.871	17.4080	2.0856	-0.014442
137.	0.	1.43128	11.1337	11.1572	7.6818	359.864	16.7534	1.9661	-0.013877
138.	0.	1.42495	11.1350	11.1572	7.6560	359.861	15.9221	1.7353	-0.014656
139.	0.	1.40718	11.1366	11.1572	7.6096	359.863	14.9659	1.5060	-0.014016
140.	0.	1.38571	11.1387	11.1572	7.5362	359.860	13.6939	1.2368	-0.013184
141.	0.	1.33975	11.1414	11.1572	7.5467	359.709	12.4350	0.9122	-0.007845
142.	0.	1.00101	11.2212	11.1572	8.1847	358.091	13.0019	0.6744	0.074437
143.	0.	0.38037	14.7994	15.4936	10.4005	358.732	17.0476	0.2364	0.236423
144.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
145.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

WHAFIS input: YK-100.dat
WHAFIS output: YK-100.out

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-100
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
2000
4000
6000
8000
10000
12000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-100.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-100.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-15.296	1.000	1.000	9.320	6.415	11.251	56.140	0.004	0.000
OF	1.000	-15.292	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	2.000	-15.288	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	13.000	-15.247	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	14.000	-15.243	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	25.000	-15.201	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	26.000	-15.197	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	37.000	-15.155	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
OF	38.000	-15.152	0.000	9.320	0.000	0.000	0.000	0.000	0.018	0.000
OF	49.000	-14.942	0.000	9.320	0.000	0.000	0.000	0.000	0.021	0.000
OF	50.000	-14.900	0.000	9.320	0.000	0.000	0.000	0.000	0.041	0.000
OF	61.000	-14.444	0.000	9.320	0.000	0.000	0.000	0.000	0.041	0.000
OF	62.000	-14.402	0.000	9.320	0.000	0.000	0.000	0.000	0.041	0.000
OF	73.000	-13.946	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
OF	74.000	-13.905	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
OF	85.000	-13.448	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
OF	86.000	-13.407	0.000	9.321	0.000	0.000	0.000	0.000	0.048	0.000
OF	97.000	-12.867	0.000	9.321	0.000	0.000	0.000	0.000	0.049	0.000
OF	98.000	-12.815	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
OF	109.000	-12.251	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
OF	110.000	-12.200	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
OF	133.000	-11.021	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
OF	134.000	-10.970	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
OF	157.000	-9.806	0.000	9.321	0.000	0.000	0.000	0.000	0.050	0.000
OF	158.000	-9.771	0.000	9.321	0.000	0.000	0.000	0.000	0.040	0.000
OF	181.000	-8.837	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
OF	182.000	-8.785	0.000	9.321	0.000	0.000	0.000	0.000	0.053	0.000
OF	205.000	-7.576	0.000	9.322	0.000	0.000	0.000	0.000	0.053	0.000
OF	206.000	-7.523	0.000	9.322	0.000	0.000	0.000	0.000	0.057	0.000
IF	465.900	7.361	0.000	9.564	0.000	0.000	0.000	0.000	0.064	0.000
IF	469.200	9.327	0.000	10.096	0.000	0.000	0.000	0.000	0.667	0.000
IF	470.000	10.096	0.000	10.096	0.000	0.000	0.000	0.000	0.961	0.000
AS	1144.200	9.549	0.000	9.549	0.000	0.000	0.000	0.000	-0.134	0.000
IF	1149.500	8.839	0.000	9.549	0.000	0.000	0.000	0.000	-0.032	0.000
IF	1161.500	8.999	0.000	9.549	0.000	0.000	0.000	0.000	-0.024	0.000
IF	1171.500	8.310	0.000	9.549	0.000	0.000	0.000	0.000	-0.027	0.000
IF	1183.000	8.409	0.000	9.549	0.000	0.000	0.000	0.000	0.000	0.000
IF	1189.500	8.310	0.000	9.549	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1205.500	8.150	0.000	9.549	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1209.500	8.015	0.000	9.549	0.000	0.000	0.000	0.000	-0.021	0.000
IF	1422.000	3.684	0.000	9.533	0.000	0.000	0.000	0.000	0.006	0.000
IF	1462.900	9.533	0.000	9.533	0.000	0.000	0.000	0.000	0.143	0.000
AS	1547.500	9.569	0.000	9.569	0.000	0.000	0.000	0.000	-0.421	0.000
IF	1555.000	6.407	0.000	9.569	0.000	0.000	0.000	0.000	-0.126	0.000
IF	1585.500	4.767	0.000	9.569	0.000	0.000	0.000	0.000	-0.041	0.000
IF	1593.000	4.865	0.000	9.569	0.000	0.000	0.000	0.000	0.001	0.000
IF	1634.500	4.833	0.000	9.567	0.000	0.000	0.000	0.000	0.002	0.000
IF	1651.000	4.997	0.000	9.564	0.000	0.000	0.000	0.000	-0.006	0.000
IF	1678.500	4.570	0.000	9.555	0.000	0.000	0.000	0.000	-0.011	0.000
IF	1697.500	4.505	0.000	9.549	0.000	0.000	0.000	0.000	0.007	0.000
IF	1724.000	4.898	0.000	9.543	0.000	0.000	0.000	0.000	0.019	0.000
IF	1784.000	6.112	0.000	9.544	0.000	0.000	0.000	0.000	0.020	0.000
IF	1794.000	6.276	0.000	9.546	0.000	0.000	0.000	0.000	-0.008	0.000
IF	1813.500	5.883	0.000	9.547	0.000	0.000	0.000	0.000	0.067	0.000
IF	1842.900	9.544	0.000	9.544	0.000	0.000	0.000	0.000	0.124	0.000
AS	1895.100	9.530	0.000	9.530	0.000	0.000	0.000	0.000	-0.191	0.000
IF	1915.000	5.719	0.000	9.530	0.000	0.000	0.000	0.000	-0.089	0.000
IF	1947.000	4.931	0.000	9.525	0.000	0.000	0.000	0.000	-0.010	0.000
IF	1956.500	5.292	0.000	9.524	0.000	0.000	0.000	0.000	0.015	0.000
IF	1986.000	5.522	0.000	9.519	0.000	0.000	0.000	0.000	0.001	0.000
IF	2002.500	5.358	0.000	9.518	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2021.500	5.194	0.000	9.518	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2030.500	5.161	0.000	9.518	0.000	0.000	0.000	0.000	-0.004	0.000
IF	2072.500	4.964	0.000	9.517	0.000	0.000	0.000	0.000	0.007	0.000
IF	2083.500	5.522	0.000	9.516	0.000	0.000	0.000	0.000	0.011	0.000
IF	2112.000	5.390	0.000	9.515	0.000	0.000	0.000	0.000	-0.005	0.000
IF	2131.000	5.259	0.000	9.515	0.000	0.000	0.000	0.000	0.004	0.000
IF	2149.500	5.528	0.000	9.514	0.000	0.000	0.000	0.000	0.025	0.000
IF	2200.000	6.975	0.000	9.514	0.000	0.000	0.000	0.000	0.042	0.000
IF	2229.000	8.839	0.000	9.514	0.000	0.000	0.000	0.000	0.071	0.000
IF	2236.000	9.514	0.000	9.514	0.000	0.000	0.000	0.000	0.097	0.000
AS	3671.200	9.547	0.000	9.547	0.000	0.000	0.000	0.000	-0.129	0.000
IF	3681.000	8.281	0.000	9.547	0.000	0.000	0.000	0.000	-0.025	0.000
IF	3706.000	8.675	0.000	9.547	0.000	0.000	0.000	0.000	0.007	0.000
IF	3725.500	8.612	0.000	9.546	0.000	0.000	0.000	0.000	-0.014	0.000
IF	3741.500	8.186	0.000	9.544	0.000	0.000	0.000	0.000	-0.023	0.000
IF	3758.000	7.854	0.000	9.543	0.000	0.000	0.000	0.000	-0.047	0.000
IF	3768.500	6.906	0.000	9.542	0.000	0.000	0.000	0.000	-0.103	0.000
IF	3777.500	5.850	0.000	9.541	0.000	0.000	0.000	0.000	-0.049	0.000
IF	3792.500	5.719	0.000	9.540	0.000	0.000	0.000	0.000	-0.022	0.000
IF	3806.000	5.226	0.000	9.538	0.000	0.000	0.000	0.000	-0.017	0.000
IF	3819.000	5.259	0.000	9.536	0.000	0.000	0.000	0.000	0.051	0.000
IF	3833.500	6.637	0.000	9.534	0.000	0.000	0.000	0.000	0.032	0.000
IF	3846.500	6.145	0.000	9.533	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3871.500	6.309	0.000	9.528	0.000	0.000	0.000	0.000	0.012	0.000
IF	3883.000	6.571	0.000	9.525	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3901.000	6.178	0.000	9.521	0.000	0.000	0.000	0.000	-0.026	0.000
IF	3919.000	5.620	0.000	9.517	0.000	0.000	0.000	0.000	-0.028	0.000
IF	3957.000	4.603	0.000	9.513	0.000	0.000	0.000	0.000	-0.016	0.000
IF	3964.000	4.898	0.000	9.513	0.000	0.000	0.000	0.000	-0.030	0.000
OF	4145.000	-1.017	0.000	9.509	0.000	0.000	0.000	0.000	-0.032	0.000
OF	4146.000	-1.015	0.000	9.509	0.000	0.000	0.000	0.000	-0.010	0.000
OF	4336.000	-2.984	0.000	9.512	0.000	0.000	0.000	0.000	-0.009	0.000

OF	4363.000	-2.980	0.000	9.513	0.000	0.000	0.000	0.000	0.005	0.000
OF	4410.000	-2.599	0.000	9.513	0.000	0.000	0.000	0.000	0.007	0.000
OF	4476.000	-2.136	0.000	9.514	0.000	0.000	0.000	0.000	0.007	0.000
OF	4477.000	-2.134	0.000	9.514	0.000	0.000	0.000	0.000	0.041	0.000
IF	4636.000	4.337	0.000	9.516	0.000	0.000	0.000	0.000	0.038	0.000
IF	4652.000	4.567	0.000	9.516	0.000	0.000	0.000	0.000	0.012	0.000
IF	4701.000	5.125	0.000	9.517	0.000	0.000	0.000	0.000	0.008	0.000
IF	4709.000	5.026	0.000	9.517	0.000	0.000	0.000	0.000	0.008	0.000
IF	4736.500	5.420	0.000	9.517	0.000	0.000	0.000	0.000	0.004	0.000
IF	4752.500	5.190	0.000	9.518	0.000	0.000	0.000	0.000	0.001	0.000
IF	4796.500	5.486	0.000	9.518	0.000	0.000	0.000	0.000	0.002	0.000
IF	4811.000	5.321	0.000	9.518	0.000	0.000	0.000	0.000	0.004	0.000
IF	4837.500	5.650	0.000	9.518	0.000	0.000	0.000	0.000	-0.005	0.000
IF	4844.500	5.157	0.000	9.519	0.000	0.000	0.000	0.000	-0.025	0.000
IF	4866.000	4.928	0.000	9.521	0.000	0.000	0.000	0.000	-0.006	0.000
IF	4873.000	4.993	0.000	9.521	0.000	0.000	0.000	0.000	0.005	0.000
IF	4897.000	5.092	0.000	9.523	0.000	0.000	0.000	0.000	-0.006	0.000
IF	4904.500	4.797	0.000	9.524	0.000	0.000	0.000	0.000	0.006	0.000
IF	4929.500	5.289	0.000	9.524	0.000	0.000	0.000	0.000	0.012	0.000
IF	4941.000	5.223	0.000	9.524	0.000	0.000	0.000	0.000	-0.009	0.000
IF	4975.500	4.862	0.000	9.524	0.000	0.000	0.000	0.000	0.007	0.000
IF	4989.500	5.584	0.000	9.524	0.000	0.000	0.000	0.000	0.004	0.000
IF	5020.000	5.059	0.000	9.525	0.000	0.000	0.000	0.000	-0.007	0.000
IF	5050.500	5.190	0.000	9.526	0.000	0.000	0.000	0.000	0.007	0.000
IF	5066.000	5.387	0.000	9.527	0.000	0.000	0.000	0.000	0.014	0.000
IF	5079.000	5.584	0.000	9.528	0.000	0.000	0.000	0.000	-0.001	0.000
IF	5107.500	5.354	0.000	9.530	0.000	0.000	0.000	0.000	-0.011	0.000
IF	5122.500	5.125	0.000	9.531	0.000	0.000	0.000	0.000	-0.004	0.000
IF	5139.000	5.223	0.000	9.533	0.000	0.000	0.000	0.000	0.009	0.000
IF	5157.000	5.420	0.000	9.534	0.000	0.000	0.000	0.000	-0.011	0.000
IF	5175.000	4.829	0.000	9.535	0.000	0.000	0.000	0.000	-0.019	0.000
IF	5190.500	4.797	0.000	9.536	0.000	0.000	0.000	0.000	0.001	0.000
IF	5226.000	4.895	0.000	9.536	0.000	0.000	0.000	0.000	0.017	0.000
IF	5246.000	5.748	0.000	9.536	0.000	0.000	0.000	0.000	0.100	0.000
IF	5272.200	9.536	0.000	9.536	0.000	0.000	0.000	0.000	0.145	0.000
AS	5329.900	9.535	0.000	9.535	0.000	0.000	0.000	0.000	-0.108	0.000
IF	5342.500	8.179	0.000	9.535	0.000	0.000	0.000	0.000	-0.048	0.000
IF	5361.500	8.012	0.000	9.531	0.000	0.000	0.000	0.000	-0.024	0.000
IF	5383.000	7.192	0.000	9.531	0.000	0.000	0.000	0.000	-0.029	0.000
IF	5422.500	6.276	0.000	9.531	0.000	0.000	0.000	0.000	0.037	0.000
IF	5446.200	9.531	0.000	9.531	0.000	0.000	0.000	0.000	0.137	0.000
AS	6497.100	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.161	0.000
IF	6526.500	4.895	0.000	9.626	0.000	0.000	0.000	0.000	-0.106	0.000
IF	6539.000	5.190	0.000	9.626	0.000	0.000	0.000	0.000	0.017	0.000
IF	6568.500	5.617	0.000	9.625	0.000	0.000	0.000	0.000	0.019	0.000
IF	6573.000	5.850	0.000	9.625	0.000	0.000	0.000	0.000	-0.003	0.000
IF	6610.500	5.486	0.000	9.624	0.000	0.000	0.000	0.000	0.011	0.000
IF	6640.000	6.568	0.000	9.623	0.000	0.000	0.000	0.000	0.003	0.000
IF	6664.000	5.650	0.000	9.622	0.000	0.000	0.000	0.000	-0.016	0.000
IF	6676.000	5.978	0.000	9.621	0.000	0.000	0.000	0.000	0.006	0.000
IF	6698.500	5.846	0.000	9.620	0.000	0.000	0.000	0.000	-0.014	0.000
IF	6711.500	5.486	0.000	9.620	0.000	0.000	0.000	0.000	0.043	0.000
IF	6731.500	7.257	0.000	9.620	0.000	0.000	0.000	0.000	0.074	0.000
IF	6749.500	8.307	0.000	9.619	0.000	0.000	0.000	0.000	0.081	0.000
IF	6760.600	9.619	0.000	9.619	0.000	0.000	0.000	0.000	0.118	0.000
AS	6905.800	9.617	0.000	9.617	0.000	0.000	0.000	0.000	-0.105	0.000
IF	6926.000	7.490	0.000	9.617	0.000	0.000	0.000	0.000	-0.073	0.000
IF	6946.000	6.700	0.000	9.617	0.000	0.000	0.000	0.000	-0.029	0.000
IF	6972.000	6.142	0.000	9.617	0.000	0.000	0.000	0.000	-0.009	0.000
IF	6978.000	6.404	0.000	9.617	0.000	0.000	0.000	0.000	-0.028	0.000
IF	6997.500	5.420	0.000	9.617	0.000	0.000	0.000	0.000	-0.024	0.000
IF	7009.000	5.650	0.000	9.617	0.000	0.000	0.000	0.000	0.008	0.000
IF	7026.500	5.650	0.000	9.617	0.000	0.000	0.000	0.000	0.026	0.000
IF	7053.500	6.798	0.000	9.617	0.000	0.000	0.000	0.000	0.079	0.000
IF	7064.500	8.668	0.000	9.617	0.000	0.000	0.000	0.000	0.152	0.000
IF	7072.100	9.617	0.000	9.617	0.000	0.000	0.000	0.000	0.125	0.000
AS	7459.500	9.613	0.000	9.613	0.000	0.000	0.000	0.000	-0.075	0.000
IF	7468.500	8.934	0.000	9.613	0.000	0.000	0.000	0.000	0.000	0.000
IF	7477.200	9.613	0.000	9.613	0.000	0.000	0.000	0.000	0.078	0.000
AS	7482.400	9.613	0.000	9.613	0.000	0.000	0.000	0.000	-0.224	0.000
IF	7488.500	8.245	0.000	9.613	0.000	0.000	0.000	0.000	-0.195	0.000
IF	7499.000	6.371	0.000	9.613	0.000	0.000	0.000	0.000	-0.068	0.000
IF	7515.000	6.437	0.000	9.613	0.000	0.000	0.000	0.000	-0.022	0.000
IF	7540.000	5.453	0.000	9.613	0.000	0.000	0.000	0.000	-0.028	0.000
IF	7546.500	5.551	0.000	9.613	0.000	0.000	0.000	0.000	0.011	0.000
IF	7589.500	6.007	0.000	9.612	0.000	0.000	0.000	0.000	0.010	0.000
IF	7599.500	6.106	0.000	9.612	0.000	0.000	0.000	0.000	-0.013	0.000
IF	7619.000	5.614	0.000	9.612	0.000	0.000	0.000	0.000	-0.027	0.000
IF	7626.500	5.384	0.000	9.612	0.000	0.000	0.000	0.000	-0.010	0.000
IF	7689.000	4.892	0.000	9.610	0.000	0.000	0.000	0.000	-0.009	0.000
IF	7699.500	4.760	0.000	9.610	0.000	0.000	0.000	0.000	-0.007	0.000
IF	7728.000	4.629	0.000	9.610	0.000	0.000	0.000	0.000	0.002	0.000
IF	7741.000	4.859	0.000	9.610	0.000	0.000	0.000	0.000	0.004	0.000
IF	7762.000	4.760	0.000	9.610	0.000	0.000	0.000	0.000	-0.009	0.000
IF	7776.000	4.531	0.000	9.610	0.000	0.000	0.000	0.000	-0.016	0.000
IF	7820.000	3.809	0.000	9.610	0.000	0.000	0.000	0.000	0.004	0.000
IF	7832.000	4.760	0.000	9.610	0.000	0.000	0.000	0.000	0.014	0.000
IF	7875.000	4.564	0.000	9.610	0.000	0.000	0.000	0.000	0.002	0.000
IF	7884.500	4.892	0.000	9.610	0.000	0.000	0.000	0.000	-0.022	0.000
OF	8106.000	-0.591	0.000	9.609	0.000	0.000	0.000	0.000	0.003	0.000
IF	8170.500	5.712	0.000	9.609	0.000	0.000	0.000	0.000	0.086	0.000
IF	8177.000	5.515	0.000	9.609	0.000	0.000	0.000	0.000	-0.047	0.000
OF	8292.000	-0.033	0.000	9.608	0.000	0.000	0.000	0.000	-0.013	0.000
IF	8295.500	3.973	0.000	9.608	0.000	0.000	0.000	0.000	0.076	0.000
IF	8353.500	4.629	0.000	9.607	0.000	0.000	0.000	0.000	0.002	0.000
IF	8440.000	4.236	0.000	9.609	0.000	0.000	0.000	0.000	-0.032	0.000
OF	8685.000	-5.977	0.000	9.610	0.000	0.000	0.000	0.000	-0.041	0.000
OF	8686.000	-5.977	0.000	9.610	0.000	0.000	0.000	0.000	0.000	0.000
OF	8709.000	-5.974	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	8710.000	-5.974	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	8733.000	-5.972	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	8734.000	-5.972	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000

OF	8757.000	-5.969	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	8758.000	-5.969	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	8781.000	-5.965	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	8782.000	-5.965	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	8806.000	-5.964	0.000	9.613	0.000	0.000	0.000	0.000	0.013	0.000
OF	8818.000	-5.515	0.000	9.613	0.000	0.000	0.000	0.000	0.041	0.000
OF	8842.000	-4.486	0.000	9.613	0.000	0.000	0.000	0.000	0.043	0.000
OF	8854.000	-3.972	0.000	9.614	0.000	0.000	0.000	0.000	0.032	0.000
OF	8947.000	-1.105	0.000	9.614	0.000	0.000	0.000	0.000	0.031	0.000
OF	8949.000	-1.066	0.000	9.614	0.000	0.000	0.000	0.000	0.032	0.000
IF	9124.500	4.495	0.000	9.617	0.000	0.000	0.000	0.000	0.026	0.000
IF	9154.500	4.265	0.000	9.617	0.000	0.000	0.000	0.000	-0.004	0.000
IF	9173.500	4.298	0.000	9.618	0.000	0.000	0.000	0.000	-0.008	0.000
IF	9205.500	3.871	0.000	9.618	0.000	0.000	0.000	0.000	-0.016	0.000
IF	9233.500	3.314	0.000	9.618	0.000	0.000	0.000	0.000	0.007	0.000
IF	9249.500	4.200	0.000	9.618	0.000	0.000	0.000	0.000	0.009	0.000
IF	9316.000	4.068	0.000	9.619	0.000	0.000	0.000	0.000	-0.002	0.000
IF	9324.500	4.035	0.000	9.619	0.000	0.000	0.000	0.000	0.001	0.000
IF	9357.500	4.101	0.000	9.619	0.000	0.000	0.000	0.000	0.000	0.000
IF	9365.500	4.035	0.000	9.619	0.000	0.000	0.000	0.000	-0.006	0.000
IF	9395.500	3.871	0.000	9.618	0.000	0.000	0.000	0.000	0.002	0.000
IF	9407.000	4.134	0.000	9.618	0.000	0.000	0.000	0.000	0.004	0.000
IF	9432.000	4.003	0.000	9.617	0.000	0.000	0.000	0.000	0.002	0.000
IF	9443.000	4.200	0.000	9.618	0.000	0.000	0.000	0.000	0.022	0.000
IF	9483.500	5.151	0.000	9.618	0.000	0.000	0.000	0.000	0.002	0.000
IF	9489.500	4.298	0.000	9.618	0.000	0.000	0.000	0.000	-0.036	0.000
IF	9521.500	3.773	0.000	9.619	0.000	0.000	0.000	0.000	-0.014	0.000
IF	9528.000	3.740	0.000	9.619	0.000	0.000	0.000	0.000	-0.023	0.000
OF	9689.000	0.000	0.000	9.620	0.000	0.000	0.000	0.000	-0.006	0.000
IF	9747.500	2.395	0.000	9.620	0.000	0.000	0.000	0.000	-0.025	0.000
OF	9913.000	-5.594	0.000	9.622	0.000	0.000	0.000	0.000	-0.042	0.000
OF	9938.000	-5.672	0.000	9.621	0.000	0.000	0.000	0.000	-0.003	0.000
OF	9939.000	-5.672	0.000	9.621	0.000	0.000	0.000	0.000	0.000	0.000
OF	9986.000	-5.668	0.000	9.621	0.000	0.000	0.000	0.000	0.000	0.000
OF	9987.000	-5.668	0.000	9.621	0.000	0.000	0.000	0.000	0.046	0.000
OF	10071.000	-1.786	0.000	9.621	0.000	0.000	0.000	0.000	0.060	0.000
IF	10153.000	4.298	0.000	9.621	0.000	0.000	0.000	0.000	0.052	0.000
IF	10188.000	4.331	0.000	9.622	0.000	0.000	0.000	0.000	0.004	0.000
IF	10198.000	4.462	0.000	9.622	0.000	0.000	0.000	0.000	0.011	0.000
IF	10223.000	4.724	0.000	9.623	0.000	0.000	0.000	0.000	-0.001	0.000
IF	10234.000	4.429	0.000	9.623	0.000	0.000	0.000	0.000	-0.002	0.000
IF	10266.000	4.659	0.000	9.623	0.000	0.000	0.000	0.000	0.009	0.000
IF	10281.000	4.856	0.000	9.623	0.000	0.000	0.000	0.000	0.006	0.000
IF	10314.000	4.954	0.000	9.624	0.000	0.000	0.000	0.000	0.005	0.000
IF	10324.000	5.085	0.000	9.624	0.000	0.000	0.000	0.000	0.027	0.000
IF	10343.000	5.741	0.000	9.624	0.000	0.000	0.000	0.000	0.011	0.000
IF	10361.000	5.479	0.000	9.625	0.000	0.000	0.000	0.000	-0.006	0.000
IF	10383.000	5.512	0.000	9.625	0.000	0.000	0.000	0.000	0.008	0.000
IF	10390.000	5.709	0.000	9.625	0.000	0.000	0.000	0.000	0.006	0.000
IF	10415.000	5.709	0.000	9.626	0.000	0.000	0.000	0.000	0.004	0.000
IF	10433.000	5.873	0.000	9.626	0.000	0.000	0.000	0.000	0.045	0.000
IF	10444.000	7.021	0.000	9.626	0.000	0.000	0.000	0.000	0.040	0.000
IF	10459.000	6.923	0.000	9.626	0.000	0.000	0.000	0.000	-0.009	0.000
IF	10474.000	6.759	0.000	9.626	0.000	0.000	0.000	0.000	-0.011	0.000
IF	10490.000	6.595	0.000	9.626	0.000	0.000	0.000	0.000	0.024	0.000
IF	10505.000	7.513	0.000	9.626	0.000	0.000	0.000	0.000	0.064	0.000
IF	10516.000	8.268	0.000	9.626	0.000	0.000	0.000	0.000	0.036	0.000
IF	10525.000	8.235	0.000	9.626	0.000	0.000	0.000	0.000	0.009	0.000
IF	10535.000	8.432	0.000	9.626	0.000	0.000	0.000	0.000	0.024	0.000
IF	10549.000	8.822	0.000	9.626	0.000	0.000	0.000	0.000	-0.045	0.000
IF	10582.000	6.296	0.000	9.626	0.000	0.000	0.000	0.000	-0.046	0.000
IF	10591.000	6.886	0.000	9.626	0.000	0.000	0.000	0.000	0.131	0.000
IF	10605.000	9.314	0.000	9.626	0.000	0.000	0.000	0.000	0.098	0.000
IF	10619.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.022	0.000
AS	10632.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.209	0.000
IF	10639.000	8.166	0.000	9.626	0.000	0.000	0.000	0.000	0.000	0.000
IF	10645.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.243	0.000
AS	10656.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.115	0.000
IF	10667.000	8.363	0.000	9.626	0.000	0.000	0.000	0.000	-0.003	0.000
IF	10674.000	9.577	0.000	9.626	0.000	0.000	0.000	0.000	0.105	0.000
IF	10679.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.010	0.000
AS	10683.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.187	0.000
IF	10691.000	8.133	0.000	9.626	0.000	0.000	0.000	0.000	-0.100	0.000
IF	10697.000	8.232	0.000	9.626	0.000	0.000	0.000	0.000	0.075	0.000
IF	10711.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.100	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-15.296	1.000	1.000	9.320	6.415	11.251	56.140	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1.000	-15.292	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2.000	-15.288	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.000	-15.247	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	14.000	-15.243	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	25.000	-15.201	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.000	-15.197	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	37.000	-15.155	0.000	9.320	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	38.000	-15.152	0.000	9.320	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.000	-14.942	0.000	9.320	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	50.000	-14.900	0.000	9.320	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	61.000	-14.444	0.000	9.320	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.000	-14.402	0.000	9.320	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	73.000	-13.946	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	74.000	-13.905	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.000	-13.448	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	86.000	-13.407	0.000	9.321	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	97.000	-12.867	0.000	9.321	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.000	-12.815	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	109.000	-12.251	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	110.000	-12.200	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	133.000	-11.021	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.000	-10.970	0.000	9.321	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.000	-9.806	0.000	9.321	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	158.000	-9.771	0.000	9.321	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	181.000	-8.837	0.000	9.321	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	182.000	-8.785	0.000	9.321	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	205.000	-7.576	0.000	9.322	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.000	-7.523	0.000	9.322	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	465.900	7.361	0.000	9.564	0.000	0.000	0.000	0.000	0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	469.200	9.327	0.000	10.096	0.000	0.000	0.000	0.000	0.667	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	470.000	10.096	0.000	10.096	0.000	0.000	0.000	0.000	0.961	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1144.200	9.549	0.000	9.549	0.000	0.000	0.000	0.000	-0.134	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1149.500	8.839	0.000	9.549	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1161.500	8.999	0.000	9.549	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1171.500	8.310	0.000	9.549	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1183.000	8.409	0.000	9.549	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1189.500	8.310	0.000	9.549	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1205.500	8.150	0.000	9.549	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1209.500	8.015	0.000	9.549	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1422.000	3.684	0.000	9.533	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1462.900	9.533	0.000	9.533	0.000	0.000	0.000	0.000	0.143	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1547.500	9.569	0.000	9.569	0.000	0.000	0.000	0.000	-0.421	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1555.000	6.407	0.000	9.569	0.000	0.000	0.000	0.000	-0.126	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1585.500	4.767	0.000	9.569	0.000	0.000	0.000	0.000	-0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1593.000	4.865	0.000	9.569	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1634.500	4.833	0.000	9.567	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1651.000	4.997	0.000	9.564	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1678.500	4.570	0.000	9.555	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1697.500	4.505	0.000	9.549	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1724.000	4.898	0.000	9.543	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1784.000	6.112	0.000	9.544	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1794.000	6.276	0.000	9.546	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1813.500	5.883	0.000	9.547	0.000	0.000	0.000	0.000	0.067	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1842.900	9.544	0.000	9.544	0.000	0.000	0.000	0.000	0.124	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1895.100	9.530	0.000	9.530	0.000	0.000	0.000	0.000	-0.191	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1915.000	5.719	0.000	9.530	0.000	0.000	0.000	0.000	-0.089	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1947.000	4.931	0.000	9.525	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1956.500	5.292	0.000	9.524	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1986.000	5.522	0.000	9.519	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2002.500	5.358	0.000	9.518	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2021.500	5.194	0.000	9.518	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2030.500	5.161	0.000	9.518	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2072.500	4.964	0.000	9.517	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2083.500	5.522	0.000	9.516	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2112.000	5.390	0.000	9.515	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2131.000	5.259	0.000	9.515	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2149.500	5.528	0.000	9.514	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2200.000	6.975	0.000	9.514	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2229.000	8.839	0.000	9.514	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2236.000	9.514	0.000	9.514	0.000	0.000	0.000	0.000	0.097	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	3671.200	9.547	0.000	9.547	0.000	0.000	0.000	0.000	-0.129	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3681.000	8.281	0.000	9.547	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3706.000	8.675	0.000	9.547	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3725.500	8.612	0.000	9.546	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3741.500	8.186	0.000	9.544	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3758.000	7.854	0.000	9.543	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3768.500	6.906	0.000	9.542	0.000	0.000	0.000	0.000	-0.103	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3777.500	5.850	0.000	9.541	0.000	0.000	0.000	0.000	-0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3792.500	5.719	0.000	9.540	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3806.000	5.226	0.000	9.538	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3819.000	5.259	0.000	9.536	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3833.500	6.637	0.000	9.534	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3846.500	6.145	0.000	9.533	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3871.500	6.309	0.000	9.528	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3883.000	6.571	0.000	9.525	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3901.000	6.178	0.000	9.521	0.000	0.000	0.000	0.000	-0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3919.000	5.620	0.000	9.517	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3957.000	4.603	0.000	9.513	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3964.000	4.898	0.000	9.513	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4145.000	-1.017	0.000	9.509	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4146.000	-1.015	0.000	9.509	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4336.000	-2.984	0.000	9.512	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4363.000	-2.980	0.000	9.513	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4410.000	-2.599	0.000	9.513	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4476.000	-2.136	0.000	9.514	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	4477.000	-2.134	0.000	9.514	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4636.000	4.337	0.000	9.516	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4652.000	4.567	0.000	9.516	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4701.000	5.125	0.000	9.517	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4709.000	5.026	0.000	9.517	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4736.500	5.420	0.000	9.517	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4752.500	5.190	0.000	9.518	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4796.500	5.486	0.000	9.518	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4811.000	5.321	0.000	9.518	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4837.500	5.650	0.000	9.518	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4844.500	5.157	0.000	9.519	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4866.000	4.928	0.000	9.521	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4873.000	4.993	0.000	9.521	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4897.000	5.092	0.000	9.523	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4904.500	4.797	0.000	9.524	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4929.500	5.289	0.000	9.524	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4941.000	5.223	0.000	9.524	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4975.500	4.862	0.000	9.524	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4989.500	5.584	0.000	9.524	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5020.000	5.059	0.000	9.525	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5050.500	5.190	0.000	9.526	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5066.000	5.387	0.000	9.527	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5079.000	5.584	0.000	9.528	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5107.500	5.354	0.000	9.530	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5122.500	5.125	0.000	9.531	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5139.000	5.223	0.000	9.533	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5157.000	5.420	0.000	9.534	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5175.000	4.829	0.000	9.535	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5190.500	4.797	0.000	9.536	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5226.000	4.895	0.000	9.536	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5246.000	5.748	0.000	9.536	0.000	0.000	0.000	0.000	0.100	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5272.200	9.536	0.000	9.536	0.000	0.000	0.000	0.000	0.145	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	5329.900	9.535	0.000	9.535	0.000	0.000	0.000	0.000	-0.108	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5342.500	8.179	0.000	9.535	0.000	0.000	0.000	0.000	-0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5361.500	8.012	0.000	9.531	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5383.000	7.192	0.000	9.531	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5422.500	6.276	0.000	9.531	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5446.200	9.531	0.000	9.531	0.000	0.000	0.000	0.000	0.137	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	6497.100	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.161	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6526.500	4.895	0.000	9.626	0.000	0.000	0.000	0.000	-0.106	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6539.000	5.190	0.000	9.626	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6568.500	5.617	0.000	9.625	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6573.000	5.850	0.000	9.625	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6610.500	5.486	0.000	9.624	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6640.000	6.568	0.000	9.623	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6664.000	5.650	0.000	9.622	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6676.000	5.978	0.000	9.621	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6698.500	5.846	0.000	9.620	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6711.500	5.486	0.000	9.620	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6731.500	7.257	0.000	9.620	0.000	0.000	0.000	0.000	0.074	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6749.500	8.307	0.000	9.619	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6760.600	9.619	0.000	9.619	0.000	0.000	0.000	0.000	0.118	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	6905.800	9.617	0.000	9.617	0.000	0.000	0.000	0.000	-0.105	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6926.000	7.490	0.000	9.617	0.000	0.000	0.000	0.000	-0.073	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6946.000	6.700	0.000	9.617	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6972.000	6.142	0.000	9.617	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6978.000	6.404	0.000	9.617	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	6997.500	5.420	0.000	9.617	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7009.000	5.650	0.000	9.617	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7026.500	5.650	0.000	9.617	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7053.500	6.798	0.000	9.617	0.000	0.000	0.000	0.000	0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7064.500	8.668	0.000	9.617	0.000	0.000	0.000	0.000	0.152	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7072.100	9.617	0.000	9.617	0.000	0.000	0.000	0.000	0.125	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	7459.500	9.613	0.000	9.613	0.000	0.000	0.000	0.000	-0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7468.500	8.934	0.000	9.613	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7477.200	9.613	0.000	9.613	0.000	0.000	0.000	0.000	0.078	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	7482.400	9.613	0.000	9.613	0.000	0.000	0.000	0.000	-0.224	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7488.500	8.245	0.000	9.613	0.000	0.000	0.000	0.000	-0.195	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7499.000	6.371	0.000	9.613	0.000	0.000	0.000	0.000	-0.068	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7515.000	6.437	0.000	9.613	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7540.000	5.453	0.000	9.613	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7546.500	5.551	0.000	9.613	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7589.500	6.007	0.000	9.612	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7599.500	6.106	0.000	9.612	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7619.000	5.614	0.000	9.612	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7626.500	5.384	0.000	9.612	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7689.000	4.892	0.000	9.610	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7699.500	4.760	0.000	9.610	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7728.000	4.629	0.000	9.610	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7741.000	4.859	0.000	9.610	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7762.000	4.760	0.000	9.610	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7776.000	4.531	0.000	9.610	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7820.000	3.809	0.000	9.610	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7832.000	4.760	0.000	9.610	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7875.000	4.564	0.000	9.610	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	7884.500	4.892	0.000	9.610	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8106.000	-0.591	0.000	9.609	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	8170.500	5.712	0.000	9.609	0.000	0.000	0.000	0.000	0.086	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	8177.000	5.515	0.000	9.609	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8292.000	-0.033	0.000	9.608	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	8295.500	3.973	0.000	9.608	0.000	0.000	0.000	0.000	0.076	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	8353.500	4.629	0.000	9.607	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	8440.000	4.236	0.000	9.609	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8685.000	-5.977	0.000	9.610	0.000	0.000	0.000	0.000	-0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8686.000	-5.977	0.000	9.610	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8709.000	-5.974	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8710.000	-5.974	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8733.000	-5.972	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8734.000	-5.972	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8757.000	-5.969	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8758.000	-5.969	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8781.000	-5.965	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8782.000	-5.965	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8806.000	-5.964	0.000	9.613	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8818.000	-5.515	0.000	9.613	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8842.000	-4.486	0.000	9.613	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8854.000	-3.972	0.000	9.614	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8947.000	-1.105	0.000	9.614	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	8949.000	-1.066	0.000	9.614	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9124.500	4.495	0.000	9.617	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9154.500	4.265	0.000	9.617	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9173.500	4.298	0.000	9.618	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9205.500	3.871	0.000	9.618	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9233.500	3.314	0.000	9.618	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9249.500	4.200	0.000	9.618	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9316.000	4.068	0.000	9.619	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9324.500	4.035	0.000	9.619	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9357.500	4.101	0.000	9.619	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9365.500	4.035	0.000	9.619	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9395.500	3.871	0.000	9.618	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9407.000	4.134	0.000	9.618	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9432.000	4.003	0.000	9.617	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9443.000	4.200	0.000	9.618	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9483.500	5.151	0.000	9.618	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9489.500	4.298	0.000	9.618	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9521.500	3.773	0.000	9.619	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9528.000	3.740	0.000	9.619	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9689.000	0.000	0.000	9.620	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	9747.500	2.395	0.000	9.620	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9913.000	-5.594	0.000	9.622	0.000	0.000	0.000	0.000	-0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9938.000	-5.672	0.000	9.621	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9939.000	-5.672	0.000	9.621	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9986.000	-5.668	0.000	9.621	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9987.000	-5.668	0.000	9.621	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	10071.000	-1.786	0.000	9.621	0.000	0.000	0.000	0.000	0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10153.000	4.298	0.000	9.621	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10188.000	4.331	0.000	9.622	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10198.000	4.462	0.000	9.622	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10223.000	4.724	0.000	9.623	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10234.000	4.429	0.000	9.623	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10266.000	4.659	0.000	9.623	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10281.000	4.856	0.000	9.623	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10314.000	4.954	0.000	9.624	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10324.000	5.085	0.000	9.624	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10343.000	5.741	0.000	9.624	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10361.000	5.479	0.000	9.625	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10383.000	5.512	0.000	9.625	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10390.000	5.709	0.000	9.625	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10415.000	5.709	0.000	9.626	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10433.000	5.873	0.000	9.626	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE

	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10444.000	7.021	0.000	9.626	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10459.000	6.923	0.000	9.626	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10474.000	6.759	0.000	9.626	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10490.000	6.595	0.000	9.626	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10505.000	7.513	0.000	9.626	0.000	0.000	0.000	0.000	0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10516.000	8.268	0.000	9.626	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10525.000	8.235	0.000	9.626	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10535.000	8.432	0.000	9.626	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10549.000	8.822	0.000	9.626	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10582.000	6.296	0.000	9.626	0.000	0.000	0.000	0.000	-0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10591.000	6.886	0.000	9.626	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10605.000	9.314	0.000	9.626	0.000	0.000	0.000	0.000	0.098	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10619.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	10632.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.209	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10639.000	8.166	0.000	9.626	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10645.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.243	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	10656.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.115	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10667.000	8.363	0.000	9.626	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10674.000	9.577	0.000	9.626	0.000	0.000	0.000	0.000	0.105	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10679.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	10683.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	-0.187	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10691.000	8.133	0.000	9.626	0.000	0.000	0.000	0.000	-0.100	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10697.000	8.232	0.000	9.626	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	10711.000	9.626	0.000	9.626	0.000	0.000	0.000	0.000	0.100	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	6.41	11.25	13.81
OF	1.00	6.42	11.25	13.81
OF	2.00	6.42	11.25	13.81
OF	13.00	6.42	11.25	13.82
OF	14.00	6.42	11.25	13.82
OF	25.00	6.43	11.25	13.82
OF	26.00	6.43	11.25	13.82
OF	37.00	6.44	11.25	13.82
OF	38.00	6.44	11.25	13.82
OF	49.00	6.46	11.25	13.84
OF	50.00	6.46	11.25	13.84
OF	61.00	6.50	11.25	13.87
OF	62.00	6.50	11.25	13.87
OF	73.00	6.55	11.25	13.90
OF	74.00	6.55	11.25	13.91
OF	85.00	6.59	11.25	13.94
OF	86.00	6.60	11.25	13.94
OF	97.00	6.65	11.25	13.98
OF	98.00	6.65	11.25	13.98
OF	109.00	6.71	11.25	14.02
OF	110.00	6.72	11.25	14.02
OF	133.00	6.85	11.25	14.11
OF	134.00	6.85	11.25	14.12

OF	157.00	6.99	11.25	14.22
OF	158.00	7.00	11.25	14.22
OF	181.00	7.12	11.25	14.31
OF	182.00	7.13	11.25	14.31
OF	205.00	7.31	11.25	14.44
OF	206.00	7.32	11.25	14.44
	309.96	7.45	11.25	14.63
	413.92	3.95	11.25	12.28
IF	465.90	1.71	11.25	10.76
IF	469.20	0.60	11.25	10.52
IF	470.00	0.01	11.25	10.10
AS	1144.20	0.00	0.00	9.55
IF	1149.50	0.05	0.25	9.58
IF	1161.50	0.10	0.37	9.62
IF	1171.50	0.13	0.42	9.64
IF	1183.00	0.17	0.48	9.67
IF	1189.50	0.18	0.50	9.68
IF	1205.50	0.22	0.55	9.71
IF	1209.50	0.23	0.57	9.71
	1315.75	0.44	0.78	9.85
IF	1422.00	0.61	0.91	9.96
IF	1462.90	0.01	0.96	9.54
AS	1547.50	0.00	0.00	9.57
IF	1555.00	0.06	0.28	9.61
IF	1585.50	0.16	0.47	9.68
IF	1593.00	0.18	0.50	9.70
IF	1634.50	0.28	0.62	9.77
IF	1651.00	0.32	0.66	9.79
IF	1678.50	0.37	0.71	9.82
IF	1697.50	0.41	0.75	9.83
IF	1724.00	0.45	0.79	9.86
IF	1784.00	0.55	0.87	9.93
IF	1794.00	0.57	0.88	9.94
IF	1813.50	0.59	0.90	9.96
IF	1842.90	0.01	0.93	9.55
AS	1895.10	0.00	0.00	9.53
IF	1915.00	0.11	0.38	9.60
IF	1947.00	0.20	0.52	9.67
IF	1956.50	0.22	0.55	9.68
IF	1986.00	0.29	0.63	9.72
IF	2002.50	0.33	0.67	9.75
IF	2021.50	0.36	0.70	9.77
IF	2030.50	0.38	0.72	9.78
IF	2072.50	0.45	0.79	9.84
IF	2083.50	0.47	0.80	9.85
IF	2112.00	0.52	0.84	9.88
IF	2131.00	0.55	0.87	9.90
IF	2149.50	0.58	0.89	9.92
IF	2200.00	0.65	0.94	9.97
IF	2229.00	0.42	0.97	9.81
IF	2236.00	0.01	0.98	9.52
AS	3671.20	0.00	0.00	9.55
IF	3681.00	0.07	0.30	9.59
IF	3706.00	0.15	0.46	9.66
IF	3725.50	0.21	0.53	9.69
IF	3741.50	0.25	0.58	9.72
IF	3758.00	0.28	0.62	9.74
IF	3768.50	0.30	0.65	9.76
IF	3777.50	0.32	0.66	9.77
IF	3792.50	0.35	0.69	9.79
IF	3806.00	0.38	0.72	9.80
IF	3819.00	0.40	0.74	9.82
IF	3833.50	0.43	0.76	9.83
IF	3846.50	0.45	0.78	9.85
IF	3871.50	0.49	0.82	9.87
IF	3883.00	0.51	0.84	9.88
IF	3901.00	0.54	0.86	9.90
IF	3919.00	0.57	0.88	9.91
IF	3957.00	0.62	0.92	9.95
IF	3964.00	0.63	0.93	9.96
	4090.70	0.81	1.05	10.07
OF	4145.00	0.87	1.09	10.12
OF	4146.00	0.87	1.09	10.12
	4279.00	1.03	1.19	10.23
OF	4336.00	1.09	1.22	10.28
OF	4363.00	1.12	1.24	10.30
OF	4410.00	1.17	1.27	10.33
OF	4476.00	1.24	1.30	10.38
OF	4477.00	1.24	1.30	10.38
	4588.30	1.35	1.36	10.46
IF	4636.00	1.39	1.38	10.49
IF	4652.00	1.40	1.39	10.50
IF	4701.00	1.43	1.41	10.52
IF	4709.00	1.44	1.42	10.52
IF	4736.50	1.44	1.43	10.53
IF	4752.50	1.47	1.44	10.54
IF	4796.50	1.48	1.45	10.56
IF	4811.00	1.50	1.46	10.57
IF	4837.50	1.50	1.47	10.57
IF	4844.50	1.52	1.47	10.59
IF	4866.00	1.55	1.48	10.61
IF	4873.00	1.55	1.49	10.61
IF	4897.00	1.57	1.50	10.62
IF	4904.50	1.59	1.50	10.63
IF	4929.50	1.59	1.51	10.64
IF	4941.00	1.60	1.51	10.64
IF	4975.50	1.64	1.53	10.67
IF	4989.50	1.60	1.53	10.65
IF	5020.00	1.65	1.54	10.68
IF	5050.50	1.67	1.55	10.70
IF	5066.00	1.67	1.56	10.69
IF	5079.00	1.65	1.56	10.68

IF	5107.50	1.70	1.57	10.72
IF	5122.50	1.72	1.58	10.74
IF	5139.00	1.73	1.59	10.74
IF	5157.00	1.71	1.59	10.73
IF	5175.00	1.77	1.60	10.78
IF	5190.50	1.79	1.60	10.79
IF	5226.00	1.81	1.62	10.80
IF	5246.00	1.72	1.62	10.74
IF	5272.20	0.01	1.63	9.54
AS	5329.90	0.00	0.00	9.53
IF	5342.50	0.08	0.33	9.59
IF	5361.50	0.14	0.44	9.63
IF	5383.00	0.20	0.53	9.67
IF	5422.50	0.30	0.63	9.74
IF	5446.20	0.01	0.68	9.54
AS	6497.10	0.00	0.00	9.63
IF	6526.50	0.14	0.43	9.72
IF	6539.00	0.17	0.49	9.75
IF	6568.50	0.25	0.58	9.80
IF	6573.00	0.26	0.59	9.81
IF	6610.50	0.34	0.68	9.86
IF	6640.00	0.39	0.73	9.90
IF	6664.00	0.44	0.77	9.93
IF	6676.00	0.46	0.79	9.94
IF	6698.50	0.49	0.82	9.97
IF	6711.50	0.52	0.84	9.98
IF	6731.50	0.55	0.86	10.00
IF	6749.50	0.54	0.89	9.99
IF	6760.60	0.01	0.90	9.62
AS	6905.80	0.00	0.00	9.62
IF	6926.00	0.11	0.38	9.69
IF	6946.00	0.17	0.48	9.74
IF	6972.00	0.24	0.57	9.78
IF	6978.00	0.25	0.58	9.79
IF	6997.50	0.29	0.63	9.82
IF	7009.00	0.32	0.66	9.84
IF	7026.50	0.35	0.69	9.86
IF	7053.50	0.40	0.74	9.90
IF	7064.50	0.39	0.76	9.89
IF	7072.10	0.01	0.77	9.62
AS	7459.50	0.00	0.00	9.61
IF	7468.50	0.06	0.30	9.66
IF	7477.20	0.01	0.37	9.62
AS	7482.40	0.00	0.00	9.61
IF	7488.50	0.05	0.26	9.65
IF	7499.00	0.10	0.36	9.68
IF	7515.00	0.15	0.45	9.72
IF	7540.00	0.22	0.54	9.76
IF	7546.50	0.23	0.56	9.77
IF	7589.50	0.33	0.67	9.84
IF	7599.50	0.35	0.69	9.85
IF	7619.00	0.38	0.72	9.88
IF	7626.50	0.40	0.74	9.89
IF	7689.00	0.50	0.83	9.96
IF	7699.50	0.52	0.84	9.97
IF	7728.00	0.56	0.88	10.01
IF	7741.00	0.58	0.89	10.02
IF	7762.00	0.62	0.92	10.04
IF	7776.00	0.64	0.93	10.05
IF	7820.00	0.70	0.98	10.10
IF	7832.00	0.71	0.99	10.11
IF	7875.00	0.77	1.03	10.15
IF	7884.50	0.78	1.03	10.16
	8039.55	0.97	1.15	10.29
OF	8106.00	1.05	1.20	10.34
IF	8170.50	1.11	1.24	10.38
IF	8177.00	1.12	1.24	10.39
OF	8292.00	1.25	1.30	10.48
IF	8295.50	1.25	1.31	10.48
IF	8353.50	1.30	1.34	10.52
IF	8440.00	1.38	1.38	10.58
	8611.50	1.55	1.46	10.70
OF	8685.00	1.62	1.49	10.74
OF	8686.00	1.62	1.49	10.74
OF	8709.00	1.64	1.50	10.76
OF	8710.00	1.64	1.50	10.76
OF	8733.00	1.66	1.51	10.77
OF	8734.00	1.66	1.51	10.77
OF	8757.00	1.68	1.52	10.79
OF	8758.00	1.68	1.52	10.79
OF	8781.00	1.70	1.53	10.80
OF	8782.00	1.70	1.53	10.81
OF	8806.00	1.73	1.54	10.82
OF	8818.00	1.74	1.54	10.83
OF	8842.00	1.76	1.55	10.84
OF	8854.00	1.77	1.55	10.85
OF	8947.00	1.85	1.59	10.91
OF	8949.00	1.85	1.59	10.91
	9071.85	1.93	1.63	10.97
IF	9124.50	1.90	1.65	10.95
IF	9154.50	1.93	1.66	10.97
IF	9173.50	1.94	1.66	10.98
IF	9205.50	1.98	1.67	11.00
IF	9233.50	2.01	1.68	11.02
IF	9249.50	1.99	1.69	11.01
IF	9316.00	2.04	1.71	11.05
IF	9324.50	2.04	1.71	11.05
IF	9357.50	2.06	1.72	11.06
IF	9365.50	2.07	1.72	11.07
IF	9395.50	2.09	1.73	11.08
IF	9407.00	2.09	1.74	11.08
IF	9432.00	2.11	1.74	11.09

IF	9443.00	2.11	1.75	11.09
IF	9483.50	2.02	1.76	11.03
IF	9489.50	2.11	1.76	11.10
IF	9521.50	2.15	1.77	11.13
IF	9528.00	2.16	1.77	11.13
	9640.70	2.28	1.80	11.22
OF	9689.00	2.32	1.81	11.24
IF	9747.50	2.32	1.83	11.24
	9863.35	2.42	1.86	11.32
OF	9913.00	2.45	1.87	11.34
OF	9938.00	2.46	1.88	11.35
OF	9939.00	2.46	1.88	11.35
OF	9986.00	2.49	1.89	11.37
OF	9987.00	2.49	1.89	11.37
OF	10071.00	2.54	1.91	11.40
IF	10153.00	2.38	1.93	11.29
IF	10188.00	2.39	1.94	11.30
IF	10198.00	2.39	1.94	11.29
IF	10223.00	2.38	1.95	11.29
IF	10234.00	2.40	1.95	11.30
IF	10266.00	2.40	1.96	11.30
IF	10281.00	2.37	1.96	11.28
IF	10314.00	2.35	1.97	11.27
IF	10324.00	2.33	1.97	11.25
IF	10343.00	2.15	1.97	11.13
IF	10361.00	2.16	1.98	11.14
IF	10383.00	2.17	1.98	11.14
IF	10390.00	2.16	1.98	11.14
IF	10415.00	2.17	1.99	11.15
IF	10433.00	2.12	1.99	11.11
IF	10444.00	1.65	2.00	10.78
IF	10459.00	1.65	2.00	10.78
IF	10474.00	1.66	2.00	10.79
IF	10490.00	1.70	2.01	10.81
IF	10505.00	1.40	2.01	10.61
IF	10516.00	0.96	2.01	10.30
IF	10525.00	0.96	2.01	10.30
IF	10535.00	0.85	2.01	10.22
IF	10549.00	0.59	2.02	10.04
IF	10582.00	0.60	2.03	10.04
IF	10591.00	0.63	2.03	10.06
IF	10605.00	0.24	2.03	9.79
IF	10619.00	0.01	2.03	9.63
AS	10632.00	0.00	0.00	9.63
IF	10639.00	0.05	0.27	9.66
IF	10645.00	0.01	0.33	9.63
AS	10656.00	0.00	0.00	9.63
IF	10667.00	0.07	0.32	9.68
IF	10674.00	0.03	0.37	9.65
IF	10679.00	0.01	0.40	9.63
AS	10683.00	0.00	0.00	9.63
IF	10691.00	0.06	0.28	9.67
IF	10697.00	0.09	0.34	9.69
IF	10711.00	0.01	0.43	9.63

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN	470.00	AND	1144.20
BETWEEN	1462.90	AND	1547.50
BETWEEN	1842.90	AND	1895.10
BETWEEN	2236.00	AND	3671.20
BETWEEN	5272.20	AND	5329.90
BETWEEN	5446.20	AND	6497.10
BETWEEN	6760.60	AND	6905.80
BETWEEN	7072.10	AND	7459.50
BETWEEN	7477.20	AND	7482.40
BETWEEN	10619.00	AND	10632.00
BETWEEN	10645.00	AND	10656.00
BETWEEN	10679.00	AND	10683.00

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
73.00	1.00	9.32
205.00	1.00	9.32
465.90	1.00	9.56
469.20	1.00	10.10
1144.20	1.00	9.55
1422.00	1.00	9.53
1547.50	1.00	9.57
1634.50	1.00	9.57
1651.00	1.00	9.56
1678.50	1.00	9.56
1697.50	1.00	9.55
1724.00	1.00	9.54
1784.00	1.00	9.54
1794.00	1.00	9.55
1813.50	1.00	9.55
1842.90	1.00	9.54
1895.10	1.00	9.53
1947.00	1.00	9.52
1956.50	1.00	9.52
1986.00	1.00	9.52
2002.50	1.00	9.52
2072.50	1.00	9.52
2083.50	1.00	9.52
2112.00	1.00	9.52
2149.50	1.00	9.51
3671.20	1.00	9.55
3725.50	1.00	9.55
3741.50	1.00	9.54
3758.00	1.00	9.54
3768.50	1.00	9.54
3777.50	1.00	9.54
3792.50	1.00	9.54
3806.00	1.00	9.54

3819.00	1.00	9.54
3833.50	1.00	9.53
3846.50	1.00	9.53
3871.50	1.00	9.53
3883.00	1.00	9.52
3901.00	1.00	9.52
3919.00	1.00	9.52
3957.00	1.00	9.51
4145.00	1.00	9.51
4336.00	1.00	9.51
4363.00	1.00	9.51
4476.00	1.00	9.51
4636.00	1.00	9.52
4701.00	1.00	9.52
4752.50	1.00	9.52
4844.50	1.00	9.52
4866.00	1.00	9.52
4897.00	1.00	9.52
4904.50	1.00	9.52
5020.00	1.00	9.52
5050.50	1.00	9.53
5066.00	1.00	9.53
5079.00	1.00	9.53
5107.50	1.00	9.53
5122.50	1.00	9.53
5139.00	1.00	9.53
5157.00	1.00	9.53
5175.00	1.00	9.53
5190.50	1.00	9.54
5329.90	1.00	9.53
5361.50	1.00	9.53
6497.10	1.00	9.63
6568.50	1.00	9.62
6610.50	1.00	9.62
6640.00	1.00	9.62
6664.00	1.00	9.62
6676.00	1.00	9.62
6698.50	1.00	9.62
6749.50	1.00	9.62
6905.80	1.00	9.62
7459.50	1.00	9.61
7589.50	1.00	9.61
7689.00	1.00	9.61
8106.00	1.00	9.61
8292.00	1.00	9.61
8295.50	1.00	9.61
8353.50	1.00	9.61
8440.00	1.00	9.61
8685.00	1.00	9.61
8709.00	1.00	9.61
8757.00	1.00	9.61
8806.00	1.00	9.61
8854.00	1.00	9.61
9124.50	1.00	9.62
9173.50	1.00	9.62
9316.00	1.00	9.62
9395.50	1.00	9.62
9432.00	1.00	9.62
9443.00	1.00	9.62
9521.50	1.00	9.62
9689.00	1.00	9.62
9913.00	1.00	9.62
9938.00	1.00	9.62
10188.00	1.00	9.62
10223.00	1.00	9.62
10314.00	1.00	9.62
10361.00	1.00	9.62
10415.00	1.00	9.63

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
436.00	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	13.81			
		V23	EL=14	130
62.00	13.87			
		V23	EL=14	130
73.00	13.90			
		V23	EL=14	130
182.00	14.31			
		V23	EL=14	130
205.00	14.44			
		V23	EL=14	130
206.00	14.44			
		V23	EL=14	130
237.59	14.50			
		V23	EL=15	130
315.74	14.50			
		V23	EL=14	130
360.02	13.50			
		V23	EL=13	130
404.30	12.50			
		V23	EL=12	130
436.00	11.64			
		A19	EL=12	95
440.65	11.50			
		A19	EL=11	95
465.90	10.76			
		A19	EL=11	95
469.20	10.52			
		A19	EL=11	95
469.23	10.50			

		A19	EL=10	95
470.00	10.10			
1144.20	9.55			
		A19	EL=10	95
1209.50	9.71			
		A19	EL=10	95
1422.00	9.96			
		A19	EL=10	95
1462.90	9.54			
1547.50	9.57			
		A19	EL=10	95
1593.00	9.70			
		A19	EL=10	95
1634.50	9.77			
		A19	EL=10	95
1651.00	9.79			
		A19	EL=10	95
1678.50	9.82			
		A19	EL=10	95
1697.50	9.83			
		A19	EL=10	95
1724.00	9.86			
		A19	EL=10	95
1784.00	9.93			
		A19	EL=10	95
1794.00	9.94			
		A19	EL=10	95
1813.50	9.96			
		A19	EL=10	95
1842.90	9.55			
1895.10	9.53			
		A19	EL=10	95
1915.00	9.60			
		A19	EL=10	95
1947.00	9.67			
		A19	EL=10	95
1956.50	9.68			
		A19	EL=10	95
1986.00	9.72			
		A19	EL=10	95
2002.50	9.75			
		A19	EL=10	95
2030.50	9.78			
		A19	EL=10	95
2072.50	9.84			
		A19	EL=10	95
2083.50	9.85			
		A19	EL=10	95
2112.00	9.88			
		A19	EL=10	95
2131.00	9.90			
		A19	EL=10	95
2149.50	9.92			
		A19	EL=10	95
2236.00	9.52			
3671.20	9.55			
		A19	EL=10	95
3706.00	9.66			
		A19	EL=10	95
3725.50	9.69			
		A19	EL=10	95
3741.50	9.72			
		A19	EL=10	95
3758.00	9.74			
		A19	EL=10	95
3768.50	9.76			
		A19	EL=10	95
3777.50	9.77			
		A19	EL=10	95
3792.50	9.79			
		A19	EL=10	95
3806.00	9.80			
		A19	EL=10	95
3819.00	9.82			
		A19	EL=10	95
3833.50	9.83			
		A19	EL=10	95
3846.50	9.85			
		A19	EL=10	95
3871.50	9.87			
		A19	EL=10	95
3883.00	9.88			
		A19	EL=10	95
3901.00	9.90			
		A19	EL=10	95
3919.00	9.91			
		A19	EL=10	95
3957.00	9.95			
		A19	EL=10	95
3964.00	9.96			
		A19	EL=10	95
4145.00	10.12			
		A19	EL=10	95
4146.00	10.12			
		A19	EL=10	95
4336.00	10.28			
		A19	EL=10	95
4363.00	10.30			
		A19	EL=10	95
4410.00	10.33			
		A19	EL=10	95
4476.00	10.38			

		A19	EL=10	95
4477.00	10.38			
		A19	EL=10	95
4636.00	10.49			
		A19	EL=10	95
4652.00	10.50			
		A19	EL=10	95
4659.14	10.50			
		A19	EL=11	95
4701.00	10.52			
		A19	EL=11	95
4736.50	10.53			
		A19	EL=11	95
4752.50	10.54			
		A19	EL=11	95
4837.50	10.57			
		A19	EL=11	95
4844.50	10.59			
		A19	EL=11	95
4866.00	10.61			
		A19	EL=11	95
4873.00	10.61			
		A19	EL=11	95
4897.00	10.62			
		A19	EL=11	95
4904.50	10.63			
		A19	EL=11	95
4989.50	10.65			
		A19	EL=11	95
5020.00	10.68			
		A19	EL=11	95
5050.50	10.70			
		A19	EL=11	95
5066.00	10.69			
		A19	EL=11	95
5079.00	10.68			
		A19	EL=11	95
5107.50	10.72			
		A19	EL=11	95
5122.50	10.74			
		A19	EL=11	95
5139.00	10.74			
		A19	EL=11	95
5157.00	10.73			
		A19	EL=11	95
5175.00	10.78			
		A19	EL=11	95
5190.50	10.79			
		A19	EL=11	95
5251.23	10.50			
		A19	EL=10	95
5272.20	9.54			
5329.90	9.53			
		A19	EL=10	95
5342.50	9.59			
		A19	EL=10	95
5361.50	9.63			
		A19	EL=10	95
5446.20	9.54			
6497.10	9.63			
		A19	EL=10	95
6539.00	9.75			
		A19	EL=10	95
6568.50	9.80			
		A19	EL=10	95
6573.00	9.81			
		A19	EL=10	95
6610.50	9.86			
		A19	EL=10	95
6640.00	9.90			
		A19	EL=10	95
6664.00	9.93			
		A19	EL=10	95
6676.00	9.94			
		A19	EL=10	95
6698.50	9.97			
		A19	EL=10	95
6731.50	10.00			
		A19	EL=10	95
6749.50	9.99			
		A19	EL=10	95
6760.60	9.62			
6905.80	9.62			
		A19	EL=10	95
7072.10	9.62			
7459.50	9.61			
		A19	EL=10	95
7477.20	9.62			
7482.40	9.61			
		A19	EL=10	95
7546.50	9.77			
		A19	EL=10	95
7589.50	9.84			
		A19	EL=10	95
7626.50	9.89			
		A19	EL=10	95
7689.00	9.96			
		A19	EL=10	95
7884.50	10.16			
		A19	EL=10	95
8106.00	10.34			
		A19	EL=10	95

8177.00	10.39	A19	EL=10	95
8292.00	10.48	A19	EL=10	95
8295.50	10.48	A19	EL=10	95
8326.53	10.50	A19	EL=11	95
8353.50	10.52	A19	EL=11	95
8440.00	10.58	A19	EL=11	95
8685.00	10.74	A19	EL=11	95
8686.00	10.74	A19	EL=11	95
8709.00	10.76	A19	EL=11	95
8734.00	10.77	A19	EL=11	95
8757.00	10.79	A19	EL=11	95
8782.00	10.81	A19	EL=11	95
8806.00	10.82	A19	EL=11	95
8842.00	10.84	A19	EL=11	95
8854.00	10.85	A19	EL=11	95
8949.00	10.91	A19	EL=11	95
9124.50	10.95	A19	EL=11	95
9154.50	10.97	A19	EL=11	95
9173.50	10.98	A19	EL=11	95
9249.50	11.01	A19	EL=11	95
9316.00	11.05	A19	EL=11	95
9365.50	11.07	A19	EL=11	95
9395.50	11.08	A19	EL=11	95
9407.00	11.08	A19	EL=11	95
9432.00	11.09	A19	EL=11	95
9443.00	11.09	A19	EL=11	95
9489.50	11.10	A19	EL=11	95
9521.50	11.13	A19	EL=11	95
9528.00	11.13	A19	EL=11	95
9689.00	11.24	A19	EL=11	95
9747.50	11.24	A19	EL=11	95
9913.00	11.34	A19	EL=11	95
9938.00	11.35	A19	EL=11	95
10153.00	11.29	A19	EL=11	95
10188.00	11.30	A19	EL=11	95
10198.00	11.29	A19	EL=11	95
10223.00	11.29	A19	EL=11	95
10281.00	11.28	A19	EL=11	95
10314.00	11.27	A19	EL=11	95
10343.00	11.13	A19	EL=11	95
10361.00	11.14	A19	EL=11	95
10390.00	11.14	A19	EL=11	95
10415.00	11.15	A19	EL=11	95
10508.76	10.50	A19	EL=10	95
10619.00	9.63			
10632.00	9.63	A19	EL=10	95
10645.00	9.63			
10656.00	9.63	A19	EL=10	95
10679.00	9.63			
10683.00	9.63	A19	EL=10	95
10711.00	9.63			

ZONE TERMINATED AT END OF TRANSECT
PART 7 POSTSCRIPT NOTES

PS# 1 START(384044.0247,4802269.5454)
PS# 2 END(384031.5958,4805855.5198)

-1.000000e+00

YK-100
100-year WHAFIS Output
Zero Station: -70.43112901, 43.36526270
Onshore Dir: 90.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-100
Two Percent Run-up Elevation is 22.4 Feet-NAVD88
Run-up Height is 12.5 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
25
20
15
10
5
0
-5
0
20
40
60
80
100
120
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-100
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-100sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-100-runup';
SWEL=9.32;  % 100-yr still water level including wave setup.
H0=4.7158;    % significant wave height at toe of structure
Tp=11.1241;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=1;   % this may get changed automatically below
gamma_rough=0.75;
gamma_beta=1;
gamma_perm=1;

setupAtToe=-0.033077;
maxSetup=0.77566;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-100'

plotTitle =

Iterative TAW for YK-100



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                  9.286923

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                 10.062583



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          523.293701125151


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                  2.213223


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                 16.360623


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          30.5588791883339

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          64.4137981025852


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          64.4137981025852

toe_sta

toe_sta =

          30.5588791883339




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 80.0 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.52 feet


ans =

-!!-       SWEL is adjusted to 9.84 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
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    52
    53
    54
    55
```

```
% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta

    % loop over profile segments to determine berm factor
    % re-calculate influence of depth of berm based on this run-up elevation
    % check for berm, berm width, berm height
    berm_width=0;
    rdh_sum=0;
    Berm_Segs=[];
    Berm_Heights=[];
    for kk=1:length(sta)-1
       ddep=dep(kk+1)-dep(kk);
       dsta=sta(kk+1)-sta(kk);
       s=ddep/dsta;
       if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
          sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
          berm_width=berm_width+dsta;   % tally the width of all berm segments
          % compute the rdh for this segment and weight it by the segment length
          dh=SWEL-(dep(kk)+dep(kk+1))/2
          if  dh < 0
              chi=R2;
          else
              chi=2* H0;
          end
          if (dh <= R2 & dh >=-2*H0)
             rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
          else
             rdh=1;
          end
          rdh_sum=rdh_sum + rdh * dsta
          Berm_Segs=[Berm_Segs, kk];
          Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
       end
       if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
          break
       end
    end
    sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
    berm_width
```

```
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end
% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
   % do the foreshore calculation
   fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
   % get upper slope
   fore_toe_sta=-999;
   fore_toe_dep=-999;
   for kk=length(dep)-1:-1:1
      ddep=dep(kk+1)-dep(kk);
      dsta=sta(kk+1)-sta(kk);
      s=ddep/dsta;
      if s < 1/15
         break
      end
      fore_toe_sta=sta(kk);
      fore_toe_dep=dep(kk);
      upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
   end
   fore_Irb=upper_slope/(sqrt(fore_H0/L0));
   fore_gamma=gamma_perm*gamma_beta*gamma_rough;
   if (fore_Irb < 1.8)
      fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
   else
      fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
   end
   if berm_width >= L0
      R2_new=fore_R2
      disp ('berm is wider than one wavelength, use full shallow foreshore solution');
   else
      w2=(berm_width-0.25*L0)/(0.75*L0)
      w1=1-w2
      R2_new=w2*fore_R2 + w1*R2_new
   end
end % end berm width check
% convergence criterion
R2del=abs(R2-R2_new)
R2_all(iter)=R2_new;
% get the new top station (for plot purposes)
Z2=R2_new+SWEL
top_sta=-999;
for kk=1:length(sta)-1
```

```
        if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
           top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
           break;
        end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                   2.213223
toe_sta =
          30.5588791883339
top_sta =
          64.4137981025852
Z2 =
                 16.360623
H0 =
                    4.7158
Tp =
                   11.1241
T0 =
          10.1128181818182
R2 =
                   14.1474
Z2 =
          23.9858191012972
top_sta =
          81.1632310556093
Lslope =
          50.6043518672754
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
     0
rB =
     0
rdh_mean =
     1
gamma_berm =
     1
slope =
         0.430251456602035
Irb =
          4.53228711208791
gamma_berm =
     1
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
                      0.75
ans =
!!! - - Iribaren number:   4.53 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:2.3 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          12.5503145933231
R2del =
          1.59708540667685
Z2 =
          22.3887336946203
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                   2.213223
toe_sta =
          30.5588791883339
top_sta =
          77.6550884997954
Z2 =
          22.3887336946203
H0 =
                    4.7158
Tp =
                   11.1241
T0 =
          10.1128181818182
R2 =
          12.5503145933231
Z2 =
          22.3887336946203
top_sta =
```

```
          77.6550884997954
Lslope =
          47.0962093114615
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
     0
rB =
     0
rdh_mean =
     1
gamma_berm =
     1
slope =
         0.428389269318759
Irb =
          4.51267075217842
gamma_berm =
     1
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
                      0.75
ans =
!!! - - Iribaren number:   4.51 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:2.3 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           12.544543454813
R2del =
       0.00577113851014843
Z2 =
          22.3829625561102
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          22.3829625561102
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-100

Station locations shifted by: -1.80 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-100

Incident significant wave height: 4.01 feet

Peak wave period: 11.25 seconds

Mean wave height: 2.51 feet

Local Depth below SWEL: 24.62 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 24.62
    Period, T = 9.56
    Waveheight, H = 2.51
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*9.56*9.56/6.28 = 468.32
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 468.32/9.56 = 48.97
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/9.56 = 0.66
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.66*0.66*24.62/32.17 = 0.33
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 26.60
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(48.97/26.60) = 1.36
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 2.51/1.36 = 1.85
```

Deepwater mean wave height: 1.85 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-100

RUNUP2 SWEL:
9.32

RUNUP2 deepwater mean wave heights:
-9999.00

```
RUNUP2 mean wave periods:
-9999.00

RUNUP2 runup above SWEL:
-9999.00

RUNUP2 Mean runup height above SWEL: -9999.00 feet

RUNUP2 2-percent runup height above SWEL: -9999.00 feet

RUNUP2 2-percent runup elevation: -9999.00 feet-NAVD88

RUNUP2 Messages:
RUNUP2 Failed

_______________END RUNUP2 RESULTS_________________________


_________________ACES BEACH RUNUP_________________________

Incident significant wave height: 4.01 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 2.95 feet

Peak wave period: 11.25 seconds

Average beach Slope: 1:15.37 (H:V)


ACES IRREGULAR WAVE RUNUP ON BEACHES

# Reference:
# Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
# "Automated Coastal Engineering System Technical Reference",
# Coastal Engineering Research Center, Department of the Army
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     2.95
Wave Period,                        T  =    11.25
Beach Slope,                        S  =    0.065

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 6.7,  5.4,   4.9,    4.0,    2.5]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 5.35 feet
```

```
ACES Beach 2-percent runup elevation: 14.67 feet-NAVD88

ACES BEACH RUNUP is valid

_______________END ACES BEACH RESULTS_____________________

PART 5 COMPLETE_____________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-100                                                    1
1.00
  -15.30 -412.2 0.8
  -15.11 -367.2 0.8
  -13.28 -323.2 0.8
  -9.84 -256.2 0.8
  -9.15 -237.2 0.8
  -5.16 -161.2 0.8
  -4.94 -151.2 0.8
  -4.09 -136.2 0.8
  -3.89 -73.2  0.8
  -3.87 -72.2  0.8
  -2.01 -29.2  0.8
  -1.48 -11.2  0.8
  -0.08 -0.2   0.8
  0.70  1.8    0.8
  0.70  21.8   0.8
  2.08  31.3   0.8
  2.83  37.3   0.8
  4.80  45.8   0.8
  7.89  55.3   0.8
1 15.70 64.3   0.8
 9.3   1.76  9.09
 9.3   1.76  9.56
 9.3   1.76  10.04
 9.3   1.85  9.09
 9.3   1.85  9.56
 9.3   1.85  10.04
 9.3   1.94  9.09
 9.3   1.94  9.56
 9.3   1.94  10.04
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-412.0	-15.3		
			.00	.80
2	-367.0	-15.1		
			23.16	.80
3	-323.0	-13.2		
			19.88	.80
4	-256.2	-9.8		
			27.54	.80
5	-237.2	-9.1		
			19.05	.80
6	-161.2	-5.2		
			45.45	.80
7	-151.2	-4.9		
			17.65	.80
8	-136.2	-4.1		
			315.00	.80
9	-73.2	-3.9		
			50.00	.80
10	-72.2	-3.9		
			23.12	.80
11	-29.2	-2.0		
			33.96	.80
12	-11.2	-1.5		
			7.86	.80
13	-.2	-.1		
			2.56	.80
14	1.8	.7		
			FLAT	.80
15	21.8	.7		
			6.88	.80
16	31.3	2.1		
			8.00	.80
17	37.3	2.8		
			4.31	.80
18	45.8	4.8		
			3.07	.80
19	55.3	7.9		
			1.15	.80
20	64.3	15.7		

LAST SLOPE 1.00 LAST ROUGHNESS .80

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)

Runup2 error, see log sheet
Ground
Elevation (ft)
Station (ft)
25
20
15
10
5
0
-5
-10
-15
-20
-500
-400
-300
-200
-100
0
100

Transect Number: YK-103
Latitude
Longitude
43.4
43.395
43.39
43.385
43.38
43.375
43.37
43.365
-70.46
-70.45
-70.44
-70.43
-70.42
-70.41
ME 9
Timl
Crow Hill
19m
Trott Island

Elevation profile
Elevation (ft)
Station (ft)
50
40
30
20
10
0
-10
-20
-30
-40
-4000
-2000
0
2000
4000
6000
8000

DATA LOG FOR TRANSECT ID: YK-103

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -1072 ft
LON: -70.4207 deg E
LAT: 43.3813 deg N
Bottom ELEV: -23.7732 ft-NAVD88
TWL: 9.0423 ft-NAVD88
HS: 18.5094 ft
TP: 13.8399 sec
Wave Direction bin: 180 deg CCW from East (90 deg sector)
Transect Direction: 183.7844 deg CCW from East

TAW/RUNUP input

toe sta: -40 ft
toe elev: -1.4589 ft-NAVD88
top sta: 166 ft
top elev: 12.5722 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-103: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-1000
-800
-600
-400
-200
0
200
400
600

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-103zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-103.swn
swan output name:     2_swan/swanfiles/YK-103.dat

Boundary Conditions:
    TWL- 2.7561 meters
    HS-  5.6417 meters
    PER- 13.8399 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 1.5373 feet
SWAN output at toe:
    SETUP- 0.96939 feet
    HS-    6.6846 feet
    PER-   13.8007 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 1.5373 feet
SWAN output at toe:
    SETUP- 0.96939 feet
    HS-    6.6846 feet
    PER-   13.8007 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-103
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-4000
-2000
0
2000
4000
6000
8000

```
                    Execution started at 20200401.174318


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      370       0.   370     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      370   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-103zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   5.6417     13.8399     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      370  370    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-103.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             371 MYC              1
                     : MCGRD           372
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  30.46 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.27 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  39.36 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  76.02 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  97.31 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  96.50 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  96.50 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in  98.93 % of wet grid points ( 99.50 % required)

iteration   10; sweep 1
iteration   10; sweep 2
iteration   10; sweep 3
iteration   10; sweep 4
accuracy OK in  99.20 % of wet grid points ( 99.50 % required)

iteration   11; sweep 1
iteration   11; sweep 2
iteration   11; sweep 3
iteration   11; sweep 4
accuracy OK in  99.74 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	5.66891	13.7410	13.8874	12.5116	0.000	31.5057	10.0000	0.000000
1.	0.	5.68101	13.7437	13.8874	12.3402	0.000	31.4978	9.9907	0.000676
2.	0.	5.69103	13.7463	13.8874	12.1834	0.000	31.4820	9.9814	0.001368
3.	0.	5.69862	13.7487	13.8874	12.0434	0.000	31.4580	9.9721	0.002079
4.	0.	5.70394	13.7508	13.8874	11.9188	0.000	31.4270	9.9628	0.002809
5.	0.	5.70723	13.7528	13.8874	11.8074	0.000	31.3908	9.9536	0.003557
6.	0.	5.70877	13.7546	13.8874	11.7075	0.000	31.3507	9.9443	0.004321
7.	0.	5.70905	13.7563	13.8874	11.6163	0.000	31.3083	9.9351	0.005099
8.	0.	5.70808	13.7578	13.8874	11.5332	0.000	31.2639	9.9259	0.005890
9.	0.	5.70597	13.7591	13.8874	11.4574	0.000	31.2179	9.9167	0.006692
10.	0.	5.70285	13.7604	13.8874	11.3881	0.000	31.1707	9.9075	0.007503
11.	0.	5.69883	13.7616	13.8874	11.3244	0.000	31.1227	9.8983	0.008321
12.	0.	5.69401	13.7627	13.8874	11.2657	0.000	31.0746	9.8891	0.009148
13.	0.	5.68849	13.7637	13.8874	11.2115	0.000	31.0278	9.8800	0.009982
14.	0.	5.68234	13.7647	13.8874	11.1613	0.000	30.9814	9.8708	0.010821
15.	0.	5.67564	13.7655	13.8874	11.1147	0.000	30.9349	9.8617	0.011664
16.	0.	5.66844	13.7664	13.8874	11.0713	0.000	30.8881	9.8525	0.012509
17.	0.	5.66054	13.7671	13.8874	11.0308	0.000	30.8339	9.8434	0.013358
18.	0.	5.65262	13.7679	13.8874	10.9935	0.000	30.7705	9.8241	0.014112
19.	0.	5.64421	13.7686	13.8874	10.9584	0.000	30.7058	9.8049	0.014874
20.	0.	5.63540	13.7692	13.8874	10.9254	0.000	30.6403	9.7856	0.015643
21.	0.	5.62599	13.7698	13.8874	10.8943	0.000	30.5679	9.7664	0.016418
22.	0.	5.61692	13.7704	13.8874	10.8655	0.000	30.4929	9.7371	0.017098
23.	0.	5.60702	13.7710	13.8874	10.8377	0.000	30.4242	9.7179	0.017884
24.	0.	5.59695	13.7715	13.8874	10.8114	0.000	30.3577	9.6987	0.018673
25.	0.	5.58645	13.7721	13.8874	10.7865	0.000	30.2854	9.6795	0.019467
26.	0.	5.57636	13.7725	13.8874	10.7634	0.000	30.2111	9.6502	0.020162
27.	0.	5.56649	13.7730	13.8874	10.7374	0.000	30.1455	9.6310	0.020964
28.	0.	5.55680	13.7734	13.8874	10.7114	0.000	30.0827	9.6118	0.021769
29.	0.	5.54681	13.7738	13.8874	10.6861	0.000	30.0143	9.5926	0.022579
30.	0.	5.53727	13.7742	13.8874	10.6622	0.000	29.9440	9.5633	0.023292
31.	0.	5.52701	13.7746	13.8874	10.6387	0.000	29.8798	9.5441	0.024114
32.	0.	5.51663	13.7749	13.8874	10.6161	0.000	29.8178	9.5249	0.024938
33.	0.	5.50591	13.7752	13.8874	10.5943	0.000	29.7501	9.5058	0.025766
34.	0.	5.49564	13.7755	13.8874	10.5739	0.000	29.6804	9.4765	0.026497
35.	0.	5.48449	13.7758	13.8874	10.5536	0.000	29.6105	9.4573	0.027336
36.	0.	5.47386	13.7761	13.8874	10.5347	0.000	29.5403	9.4281	0.028076
37.	0.	5.46239	13.7763	13.8874	10.5157	0.000	29.4705	9.4089	0.028925
38.	0.	5.45127	13.7765	13.8874	10.4980	0.000	29.3945	9.3797	0.029676
39.	0.	5.43994	13.7768	13.8874	10.4813	360.000	29.3237	9.3504	0.030440
40.	0.	5.42754	13.7770	13.8874	10.4653	359.997	29.2558	9.3313	0.031323
41.	0.	5.41546	13.7771	13.8874	10.4506	359.993	29.1823	9.3021	0.032108
42.	0.	5.40325	13.7773	13.8874	10.4368	359.988	29.1130	9.2729	0.032902
43.	0.	5.39030	13.7775	13.8874	10.4227	359.982	29.0457	9.2538	0.033803
44.	0.	5.37778	13.7776	13.8874	10.4098	359.976	28.9726	9.2246	0.034603
45.	0.	5.36520	13.7778	13.8874	10.3974	359.969	28.9034	9.1954	0.035410
46.	0.	5.35188	13.7779	13.8874	10.3848	359.961	28.8361	9.1763	0.036323
47.	0.	5.33949	13.7780	13.8874	10.3721	359.958	28.7627	9.1471	0.037119
48.	0.	5.32730	13.7781	13.8874	10.3593	359.956	28.6936	9.1179	0.037913
49.	0.	5.31446	13.7782	13.8874	10.3460	359.955	28.6264	9.0988	0.038814
50.	0.	5.30213	13.7783	13.8874	10.3336	359.955	28.5534	9.0696	0.039610
51.	0.	5.28984	13.7784	13.8874	10.3215	359.954	28.4849	9.0404	0.040410
52.	0.	5.27684	13.7784	13.8874	10.3089	359.954	28.4183	9.0213	0.041318
53.	0.	5.26434	13.7785	13.8874	10.2973	359.954	28.3461	8.9921	0.042123
54.	0.	5.25186	13.7786	13.8874	10.2860	359.953	28.2784	8.9629	0.042932
55.	0.	5.23867	13.7786	13.8874	10.2742	359.953	28.2127	8.9439	0.043851
56.	0.	5.22597	13.7786	13.8874	10.2634	359.953	28.1415	8.9147	0.044665
57.	0.	5.21284	13.7787	13.8874	10.2528	359.952	28.0567	8.8855	0.045482
58.	0.	5.20063	13.7787	13.8874	10.2440	359.952	27.9615	8.8361	0.046100
59.	0.	5.18764	13.7788	13.8874	10.2345	359.952	27.8721	8.7968	0.046845

60.	0.	5.17439	13.7788	13.8874	10.2250	359.952	27.7801	8.7576	0.047606
61.	0.	5.16162	13.7788	13.8874	10.2164	359.951	27.6866	8.7083	0.048274
62.	0.	5.14795	13.7788	13.8874	10.2071	359.951	27.5931	8.6691	0.049069
63.	0.	5.13480	13.7789	13.8874	10.1987	359.951	27.4995	8.6198	0.049771
64.	0.	5.12089	13.7789	13.8874	10.1896	359.951	27.4116	8.5806	0.050600
65.	0.	5.10675	13.7789	13.8874	10.1806	359.951	27.3212	8.5414	0.051445
66.	0.	5.09310	13.7789	13.8874	10.1725	359.951	27.2296	8.4922	0.052194
67.	0.	5.07854	13.7788	13.8874	10.1636	359.951	27.1378	8.4531	0.053073
68.	0.	5.06451	13.7788	13.8874	10.1557	359.951	27.0466	8.4039	0.053858
69.	0.	5.04971	13.7788	13.8874	10.1470	359.952	26.9608	8.3648	0.054774
70.	0.	5.03467	13.7788	13.8874	10.1385	359.952	26.8714	8.3257	0.055702
71.	0.	5.02010	13.7787	13.8874	10.1310	359.953	26.7806	8.2765	0.056535
72.	0.	5.00455	13.7787	13.8874	10.1229	359.955	26.6898	8.2375	0.057501
73.	0.	4.98955	13.7787	13.8874	10.1158	359.957	26.5983	8.1884	0.058369
74.	0.	4.97376	13.7786	13.8874	10.1080	359.959	26.5122	8.1494	0.059371
75.	0.	4.95772	13.7785	13.8874	10.1003	359.962	26.4222	8.1104	0.060386
76.	0.	4.94221	13.7785	13.8874	10.0936	359.965	26.3307	8.0613	0.061300
77.	0.	4.92578	13.7784	13.8874	10.0862	359.968	26.2389	8.0223	0.062348
78.	0.	4.90993	13.7783	13.8874	10.0798	359.971	26.1463	7.9733	0.063293
79.	0.	4.89587	13.7782	13.8874	10.0644	359.982	26.0595	7.9343	0.064313
80.	0.	4.88220	13.7780	13.8874	10.0467	359.995	25.9692	7.8953	0.065341
81.	0.	4.86971	13.7779	13.8874	10.0285	0.009	25.8748	7.8462	0.066227
82.	0.	4.85439	13.7777	13.8874	10.0149	0.026	25.7892	7.8073	0.067322
83.	0.	4.83867	13.7775	13.8874	10.0050	0.042	25.7018	7.7583	0.068340
84.	0.	4.82275	13.7773	13.8874	9.9935	0.071	25.6165	7.7194	0.069450
85.	0.	4.80602	13.7771	13.8874	9.9840	0.096	25.5280	7.6806	0.070587
86.	0.	4.78972	13.7770	13.8874	9.9764	0.123	25.4325	7.6316	0.071604
87.	0.	4.77274	13.7767	13.8874	9.9678	0.150	25.3404	7.5927	0.072748
88.	0.	4.75570	13.7765	13.8874	9.9594	0.176	25.2496	7.5539	0.073902
89.	0.	4.73855	13.7763	13.8874	9.9512	0.204	25.1592	7.5151	0.075068
90.	0.	4.72184	13.7761	13.8874	9.9419	0.236	25.0679	7.4762	0.076218
91.	0.	4.70769	13.7759	13.8874	9.9253	0.268	24.9763	7.4373	0.077279
92.	0.	4.69323	13.7757	13.8874	9.9093	0.290	24.8847	7.3984	0.078361
93.	0.	4.67892	13.7754	13.8874	9.8926	0.315	24.7955	7.3594	0.079449
94.	0.	4.66435	13.7752	13.8874	9.8759	0.341	24.7016	7.3206	0.080551
95.	0.	4.65022	13.7750	13.8874	9.8600	0.368	24.5950	7.2715	0.081533
96.	0.	4.63648	13.7748	13.8874	9.8450	0.398	24.4786	7.2124	0.082404
97.	0.	4.62234	13.7746	13.8874	9.8300	0.428	24.3641	7.1533	0.083319
98.	0.	4.60780	13.7744	13.8874	9.8098	0.465	24.2499	7.1044	0.084434
99.	0.	4.59402	13.7743	13.8874	9.7890	0.507	24.1361	7.0455	0.085454
100.	0.	4.57860	13.7741	13.8874	9.7680	0.545	24.0259	6.9967	0.086686
101.	0.	4.56382	13.7740	13.8874	9.7472	0.588	23.9181	6.9378	0.087815
102.	0.	4.54770	13.7738	13.8874	9.7257	0.630	23.8167	6.8891	0.089143
103.	0.	4.53120	13.7737	13.8874	9.7044	0.674	23.7229	6.8405	0.090517
104.	0.	4.51329	13.7736	13.8874	9.6832	0.718	23.6374	6.8021	0.092085
105.	0.	4.49491	13.7735	13.8874	9.6627	0.763	23.5505	6.7637	0.093680
106.	0.	4.47727	13.7734	13.8874	9.6433	0.812	23.4620	6.7151	0.095136
107.	0.	4.45826	13.7733	13.8874	9.6238	0.859	23.3797	6.6768	0.096780
108.	0.	4.43877	13.7733	13.8874	9.6054	0.904	23.2983	6.6385	0.098451
109.	0.	4.41882	13.7732	13.8874	9.5880	0.947	23.2124	6.6001	0.100141
110.	0.	4.40043	13.7732	13.8874	9.5693	0.995	23.1188	6.5517	0.101651
111.	0.	4.38102	13.7731	13.8874	9.5495	1.041	23.0296	6.5133	0.103339
112.	0.	4.36187	13.7731	13.8874	9.5282	1.096	22.9448	6.4750	0.105042
113.	0.	4.34245	13.7731	13.8874	9.5070	1.156	22.8578	6.4368	0.106765
114.	0.	4.32380	13.7731	13.8874	9.4868	1.218	22.7691	6.3883	0.108344
115.	0.	4.30389	13.7731	13.8874	9.4660	1.278	22.6858	6.3501	0.110114
116.	0.	4.28369	13.7731	13.8874	9.4455	1.337	22.5992	6.3119	0.111901
117.	0.	4.26423	13.7732	13.8874	9.4263	1.396	22.5111	6.2635	0.113545
118.	0.	4.24355	13.7732	13.8874	9.4062	1.454	22.4287	6.2254	0.115381
119.	0.	4.22273	13.7733	13.8874	9.3864	1.511	22.3484	6.1872	0.117232
120.	0.	4.20170	13.7734	13.8874	9.3667	1.567	22.2643	6.1491	0.119092
121.	0.	4.18146	13.7734	13.8874	9.3481	1.623	22.1786	6.1008	0.120804
122.	0.	4.16002	13.7735	13.8874	9.3287	1.677	22.0984	6.0627	0.122709
123.	0.	4.13904	13.7736	13.8874	9.3075	1.724	22.0146	6.0246	0.124597
124.	0.	4.11905	13.7737	13.8874	9.2868	1.769	21.9296	5.9763	0.126328
125.	0.	4.09791	13.7738	13.8874	9.2650	1.812	21.8509	5.9383	0.128254
126.	0.	4.07660	13.7739	13.8874	9.2434	1.854	21.7747	5.9002	0.130196

127.	0.	4.05561	13.7740	13.8874	9.2194	1.908	21.6983	5.8622	0.132160
128.	0.	4.03546	13.7742	13.8874	9.1958	1.969	21.6209	5.8140	0.133987
129.	0.	4.01419	13.7743	13.8874	9.1708	2.031	21.5511	5.7760	0.136014
130.	0.	3.99208	13.7745	13.8874	9.1479	2.087	21.4862	5.7381	0.138089
131.	0.	3.97019	13.7746	13.8874	9.1245	2.147	21.4319	5.7002	0.140170
132.	0.	3.94624	13.7748	13.8874	9.0998	2.205	21.3889	5.6826	0.142595
133.	0.	3.92339	13.7749	13.8874	9.0768	2.267	21.3508	5.6548	0.144829
134.	0.	3.89970	13.7751	13.8874	9.0533	2.329	21.3175	5.6372	0.147205
135.	0.	3.87692	13.7753	13.8874	9.0321	2.393	21.2853	5.6094	0.149395
136.	0.	3.85322	13.7754	13.8874	9.0108	2.456	21.2607	5.5917	0.151733
137.	0.	3.82954	13.7756	13.8874	8.9906	2.517	21.2344	5.5740	0.154037
138.	0.	3.80674	13.7758	13.8874	8.9729	2.580	21.2072	5.5462	0.156157
139.	0.	3.78321	13.7760	13.8874	8.9543	2.642	21.1825	5.5284	0.158410
140.	0.	3.76058	13.7761	13.8874	8.9380	2.704	21.1579	5.5005	0.160483
141.	0.	3.73752	13.7763	13.8874	8.9199	2.765	21.1397	5.4827	0.162683
142.	0.	3.71466	13.7765	13.8874	8.9023	2.826	21.1194	5.4648	0.164846
143.	0.	3.69277	13.7767	13.8874	8.8869	2.886	21.0969	5.4368	0.166825
144.	0.	3.67015	13.7769	13.8874	8.8703	2.944	21.0752	5.4189	0.168938
145.	0.	3.64836	13.7771	13.8874	8.8562	2.997	21.0493	5.3909	0.170878
146.	0.	3.62567	13.7773	13.8874	8.8414	3.043	21.0266	5.3730	0.172966
147.	0.	3.60287	13.7775	13.8874	8.8280	3.080	20.9964	5.3550	0.175033
148.	0.	3.58106	13.7777	13.8874	8.8166	3.115	20.9633	5.3269	0.176920
149.	0.	3.55871	13.7779	13.8874	8.8034	3.150	20.9312	5.3089	0.178932
150.	0.	3.53738	13.7781	13.8874	8.7922	3.184	20.8964	5.2808	0.180767
151.	0.	3.51531	13.7783	13.8874	8.7799	3.215	20.8674	5.2627	0.182742
152.	0.	3.49343	13.7785	13.8874	8.7681	3.245	20.8345	5.2447	0.184684
153.	0.	3.47248	13.7787	13.8874	8.7583	3.274	20.7983	5.2165	0.186454
154.	0.	3.45094	13.7789	13.8874	8.7470	3.302	20.7637	5.1984	0.188351
155.	0.	3.43029	13.7791	13.8874	8.7379	3.329	20.7266	5.1701	0.190081
156.	0.	3.40915	13.7794	13.8874	8.7270	3.355	20.6967	5.1519	0.191938
157.	0.	3.38822	13.7796	13.8874	8.7164	3.379	20.6632	5.1338	0.193762
158.	0.	3.36817	13.7798	13.8874	8.7080	3.403	20.6258	5.1054	0.195423
159.	0.	3.34760	13.7800	13.8874	8.6977	3.425	20.5901	5.0872	0.197206
160.	0.	3.32792	13.7802	13.8874	8.6894	3.448	20.5515	5.0588	0.198828
161.	0.	3.30768	13.7805	13.8874	8.6793	3.469	20.5155	5.0406	0.200576
162.	0.	3.28824	13.7807	13.8874	8.6714	3.489	20.4716	5.0122	0.202163
163.	0.	3.26888	13.7809	13.8874	8.6637	3.509	20.4309	4.9837	0.203746
164.	0.	3.24895	13.7812	13.8874	8.6542	3.528	20.3941	4.9655	0.205457
165.	0.	3.22986	13.7814	13.8874	8.6469	3.545	20.3543	4.9370	0.207012
166.	0.	3.21033	13.7816	13.8874	8.6377	3.565	20.3330	4.9187	0.208699
167.	0.	3.18970	13.7818	13.8874	8.6257	3.591	20.3324	4.9206	0.210637
168.	0.	3.16958	13.7820	13.8874	8.6142	3.617	20.3315	4.9225	0.212510
169.	0.	3.15062	13.7823	13.8874	8.6052	3.641	20.3285	4.9142	0.214191
170.	0.	3.13159	13.7825	13.8874	8.5944	3.667	20.3342	4.9159	0.215944
171.	0.	3.11317	13.7827	13.8874	8.5839	3.693	20.3424	4.9176	0.217632
172.	0.	3.09527	13.7829	13.8874	8.5739	3.721	20.3506	4.9193	0.219259
173.	0.	3.07794	13.7830	13.8874	8.5641	3.748	20.3588	4.9208	0.220823
174.	0.	3.06115	13.7832	13.8874	8.5545	3.774	20.3675	4.9223	0.222329
175.	0.	3.04488	13.7834	13.8874	8.5452	3.800	20.3763	4.9238	0.223778
176.	0.	3.02910	13.7836	13.8874	8.5361	3.826	20.3854	4.9252	0.225175
177.	0.	3.01379	13.7838	13.8874	8.5270	3.849	20.3881	4.9265	0.226518
178.	0.	2.99939	13.7839	13.8874	8.5201	3.869	20.3862	4.9177	0.227709
179.	0.	2.98480	13.7841	13.8874	8.5111	3.889	20.3857	4.9190	0.228975
180.	0.	2.97104	13.7843	13.8874	8.5045	3.907	20.3773	4.9101	0.230094
181.	0.	2.95757	13.7844	13.8874	8.4979	3.924	20.3723	4.9012	0.231188
182.	0.	2.94390	13.7846	13.8874	8.4892	3.943	20.3712	4.9024	0.232362
183.	0.	2.93106	13.7847	13.8874	8.4829	3.960	20.3682	4.8934	0.233396
184.	0.	2.91825	13.7849	13.8874	8.4733	3.981	20.3678	4.8945	0.234501
185.	0.	2.90633	13.7851	13.8874	8.4657	4.001	20.3653	4.8855	0.235469
186.	0.	2.89419	13.7852	13.8874	8.4558	4.023	20.3658	4.8865	0.236516
187.	0.	2.88284	13.7853	13.8874	8.4482	4.044	20.3640	4.8774	0.237433
188.	0.	2.87122	13.7855	13.8874	8.4383	4.065	20.3653	4.8784	0.238431
189.	0.	2.86035	13.7856	13.8874	8.4307	4.086	20.3641	4.8693	0.239302
190.	0.	2.84920	13.7858	13.8874	8.4210	4.107	20.3659	4.8703	0.240255
191.	0.	2.83870	13.7859	13.8874	8.4136	4.126	20.3599	4.8611	0.241085
192.	0.	2.82836	13.7861	13.8874	8.4064	4.145	20.3574	4.8519	0.241902
193.	0.	2.81769	13.7862	13.8874	8.3972	4.165	20.3587	4.8528	0.242803

194.	0.	2.80770	13.7863	13.8874	8.3903	4.184	20.3575	4.8436	0.243585
195.	0.	2.79739	13.7865	13.8874	8.3814	4.204	20.3593	4.8444	0.244450
196.	0.	2.78776	13.7866	13.8874	8.3748	4.222	20.3584	4.8352	0.245197
197.	0.	2.77779	13.7867	13.8874	8.3662	4.241	20.3599	4.8360	0.246028
198.	0.	2.76848	13.7868	13.8874	8.3599	4.259	20.3587	4.8267	0.246743
199.	0.	2.75888	13.7870	13.8874	8.3515	4.278	20.3658	4.8275	0.247543
200.	0.	2.74950	13.7871	13.8874	8.3433	4.298	20.3751	4.8283	0.248322
201.	0.	2.74036	13.7872	13.8874	8.3354	4.319	20.3931	4.8291	0.249084
202.	0.	2.73104	13.7873	13.8874	8.3254	4.342	20.4170	4.8399	0.249916
203.	0.	2.72247	13.7874	13.8874	8.3177	4.364	20.4388	4.8406	0.250628
204.	0.	2.71364	13.7875	13.8874	8.3082	4.386	20.4641	4.8514	0.251411
205.	0.	2.70544	13.7876	13.8874	8.3010	4.404	20.4792	4.8521	0.252078
206.	0.	2.69749	13.7878	13.8874	8.2938	4.423	20.4995	4.8527	0.252728
207.	0.	2.68931	13.7878	13.8874	8.2845	4.444	20.5244	4.8634	0.253450
208.	0.	2.68182	13.7879	13.8874	8.2776	4.463	20.5471	4.8641	0.254059
209.	0.	2.67409	13.7880	13.8874	8.2685	4.485	20.5736	4.8747	0.254741
210.	0.	2.66692	13.7881	13.8874	8.2619	4.503	20.5894	4.8753	0.255314
211.	0.	2.65996	13.7882	13.8874	8.2553	4.522	20.6105	4.8759	0.255874
212.	0.	2.65273	13.7883	13.8874	8.2467	4.542	20.6357	4.8865	0.256506
213.	0.	2.64613	13.7884	13.8874	8.2404	4.561	20.6585	4.8870	0.257033
214.	0.	2.63914	13.7885	13.8874	8.2320	4.577	20.6701	4.8976	0.257630
215.	0.	2.63340	13.7886	13.8874	8.2303	4.584	20.6516	4.8780	0.257956
216.	0.	2.62755	13.7887	13.8874	8.2285	4.589	20.6249	4.8583	0.258285
217.	0.	2.62160	13.7888	13.8874	8.2268	4.594	20.5955	4.8386	0.258620
218.	0.	2.61556	13.7889	13.8874	8.2251	4.599	20.5654	4.8190	0.258962
219.	0.	2.60944	13.7890	13.8874	8.2235	4.604	20.5350	4.7993	0.259310
220.	0.	2.60318	13.7891	13.8874	8.2219	4.608	20.4985	4.7797	0.259664
221.	0.	2.59721	13.7893	13.8874	8.2226	4.610	20.4569	4.7499	0.259940
222.	0.	2.59073	13.7894	13.8874	8.2211	4.614	20.4223	4.7303	0.260315
223.	0.	2.58418	13.7895	13.8874	8.2195	4.618	20.3890	4.7107	0.260697
224.	0.	2.57756	13.7896	13.8874	8.2179	4.623	20.3560	4.6911	0.261085
225.	0.	2.57087	13.7897	13.8874	8.2164	4.626	20.3232	4.6715	0.261480
226.	0.	2.56405	13.7898	13.8874	8.2149	4.628	20.2845	4.6519	0.261881
227.	0.	2.55756	13.7900	13.8874	8.2157	4.629	20.2408	4.6222	0.262200
228.	0.	2.55054	13.7901	13.8874	8.2142	4.631	20.2045	4.6026	0.262622
229.	0.	2.54345	13.7902	13.8874	8.2126	4.634	20.1695	4.5830	0.263049
230.	0.	2.53630	13.7904	13.8874	8.2111	4.637	20.1347	4.5635	0.263483
231.	0.	2.52909	13.7905	13.8874	8.2096	4.640	20.0997	4.5439	0.263923
232.	0.	2.52202	13.7906	13.8874	8.2080	4.650	20.0871	4.5244	0.264371
233.	0.	2.51349	13.7907	13.8874	8.1969	4.674	20.1259	4.5452	0.265183
234.	0.	2.50544	13.7908	13.8874	8.1859	4.700	20.1716	4.5660	0.265956
235.	0.	2.49826	13.7909	13.8874	8.1771	4.724	20.2176	4.5766	0.266605
236.	0.	2.49100	13.7910	13.8874	8.1662	4.752	20.2757	4.5973	0.267316
237.	0.	2.48412	13.7911	13.8874	8.1554	4.780	20.3375	4.6180	0.267993
238.	0.	2.47751	13.7912	13.8874	8.1448	4.806	20.3927	4.6386	0.268639
239.	0.	2.47161	13.7913	13.8874	8.1366	4.830	20.4426	4.6492	0.269175
240.	0.	2.46561	13.7914	13.8874	8.1261	4.858	20.5036	4.6698	0.269771
241.	0.	2.45993	13.7914	13.8874	8.1157	4.886	20.5678	4.6903	0.270341
242.	0.	2.45448	13.7915	13.8874	8.1054	4.912	20.6247	4.7109	0.270885
243.	0.	2.44969	13.7916	13.8874	8.0975	4.936	20.6770	4.7213	0.271327
244.	0.	2.44475	13.7917	13.8874	8.0873	4.964	20.7391	4.7418	0.271831
245.	0.	2.44009	13.7917	13.8874	8.0772	4.992	20.8038	4.7623	0.272314
246.	0.	2.43558	13.7918	13.8874	8.0672	5.017	20.8610	4.7828	0.272776
247.	0.	2.43164	13.7918	13.8874	8.0596	5.042	20.9135	4.7931	0.273146
248.	0.	2.42756	13.7919	13.8874	8.0498	5.069	20.9761	4.8136	0.273578
249.	0.	2.42362	13.7920	13.8874	8.0400	5.094	21.0326	4.8340	0.273991
250.	0.	2.42005	13.7920	13.8874	8.0328	5.114	21.0683	4.8443	0.274319
251.	0.	2.41678	13.7921	13.8874	8.0280	5.127	21.0863	4.8446	0.274566
252.	0.	2.41346	13.7921	13.8874	8.0234	5.138	21.0935	4.8448	0.274810
253.	0.	2.41050	13.7922	13.8874	8.0211	5.146	21.0941	4.8350	0.274980
254.	0.	2.40719	13.7923	13.8874	8.0165	5.157	21.1018	4.8352	0.275222
255.	0.	2.40393	13.7923	13.8874	8.0121	5.170	21.1110	4.8355	0.275462
256.	0.	2.40070	13.7924	13.8874	8.0077	5.182	21.1207	4.8357	0.275698
257.	0.	2.39745	13.7924	13.8874	8.0034	5.192	21.1245	4.8359	0.275932
258.	0.	2.39455	13.7925	13.8874	8.0015	5.201	21.1230	4.8261	0.276093
259.	0.	2.39134	13.7926	13.8874	7.9973	5.212	21.1301	4.8263	0.276325
260.	0.	2.38818	13.7926	13.8874	7.9931	5.223	21.1389	4.8266	0.276554

261.	0.	2.38506	13.7927	13.8874	7.9890	5.235	21.1484	4.8268	0.276780
262.	0.	2.38193	13.7927	13.8874	7.9849	5.245	21.1518	4.8270	0.277003
263.	0.	2.37902	13.7928	13.8874	7.9833	5.249	21.1381	4.8172	0.277154
264.	0.	2.37638	13.7929	13.8874	7.9841	5.251	21.1161	4.7972	0.277238
265.	0.	2.37336	13.7929	13.8874	7.9826	5.255	21.1014	4.7874	0.277397
266.	0.	2.37027	13.7930	13.8874	7.9811	5.257	21.0818	4.7776	0.277556
267.	0.	2.36746	13.7931	13.8874	7.9820	5.258	21.0573	4.7576	0.277649
268.	0.	2.36424	13.7931	13.8874	7.9806	5.260	21.0351	4.7478	0.277816
269.	0.	2.36133	13.7932	13.8874	7.9815	5.260	21.0095	4.7279	0.277916
270.	0.	2.35801	13.7933	13.8874	7.9800	5.262	20.9866	4.7181	0.278090
271.	0.	2.35501	13.7933	13.8874	7.9809	5.262	20.9601	4.6982	0.278196
272.	0.	2.35163	13.7934	13.8874	7.9794	5.266	20.9423	4.6884	0.278379
273.	0.	2.34819	13.7935	13.8874	7.9779	5.267	20.9205	4.6786	0.278563
274.	0.	2.34490	13.7936	13.8874	7.9789	5.262	20.8761	4.6587	0.278677
275.	0.	2.34205	13.7937	13.8874	7.9849	5.249	20.8064	4.6187	0.278652
276.	0.	2.33892	13.7937	13.8874	7.9910	5.233	20.7291	4.5786	0.278639
277.	0.	2.33553	13.7938	13.8874	7.9972	5.216	20.6482	4.5386	0.278641
278.	0.	2.33189	13.7939	13.8874	8.0035	5.198	20.5649	4.4987	0.278658
279.	0.	2.32800	13.7941	13.8874	8.0099	5.180	20.4802	4.4587	0.278692
280.	0.	2.32385	13.7942	13.8874	8.0163	5.163	20.3953	4.4187	0.278744
281.	0.	2.31937	13.7943	13.8874	8.0229	5.143	20.3027	4.3788	0.278814
282.	0.	2.31501	13.7944	13.8874	8.0320	5.121	20.2028	4.3288	0.278822
283.	0.	2.30990	13.7945	13.8874	8.0387	5.101	20.1085	4.2889	0.278938
284.	0.	2.30452	13.7947	13.8874	8.0455	5.082	20.0154	4.2491	0.279077
285.	0.	2.29885	13.7948	13.8874	8.0523	5.063	19.9215	4.2092	0.279238
286.	0.	2.29289	13.7949	13.8874	8.0592	5.044	19.8264	4.1694	0.279422
287.	0.	2.28663	13.7951	13.8874	8.0661	5.024	19.7305	4.1296	0.279630
288.	0.	2.28008	13.7952	13.8874	8.0729	5.005	19.6332	4.0899	0.279862
289.	0.	2.27317	13.7954	13.8874	8.0798	4.983	19.5283	4.0501	0.280119
290.	0.	2.26638	13.7956	13.8874	8.0894	4.961	19.4177	4.0003	0.280312
291.	0.	2.25874	13.7958	13.8874	8.0964	4.941	19.3145	3.9606	0.280635
292.	0.	2.25080	13.7959	13.8874	8.1033	4.922	19.2120	3.9210	0.280986
293.	0.	2.24272	13.7961	13.8874	8.1101	4.909	19.1281	3.8814	0.281367
294.	0.	2.23294	13.7963	13.8874	8.1090	4.906	19.0726	3.8721	0.282077
295.	0.	2.22383	13.7965	13.8874	8.1102	4.902	19.0154	3.8527	0.282676
296.	0.	2.21468	13.7967	13.8874	8.1114	4.898	18.9586	3.8333	0.283281
297.	0.	2.20551	13.7969	13.8874	8.1127	4.894	18.9022	3.8139	0.283889
298.	0.	2.19630	13.7971	13.8874	8.1139	4.891	18.8460	3.7945	0.284501
299.	0.	2.18707	13.7973	13.8874	8.1152	4.887	18.7900	3.7751	0.285118
300.	0.	2.17781	13.7975	13.8874	8.1166	4.883	18.7339	3.7557	0.285739
301.	0.	2.16856	13.7977	13.8874	8.1179	4.882	18.6845	3.7364	0.286364
302.	0.	2.15876	13.7979	13.8874	8.1167	4.882	18.6405	3.7271	0.287095
303.	0.	2.14959	13.7981	13.8874	8.1182	4.879	18.5882	3.7077	0.287713
304.	0.	2.14038	13.7983	13.8874	8.1197	4.876	18.5340	3.6883	0.288335
305.	0.	2.13113	13.7985	13.8874	8.1212	4.873	18.4797	3.6690	0.288961
306.	0.	2.12186	13.7987	13.8874	8.1228	4.870	18.4251	3.6496	0.289591
307.	0.	2.11255	13.7990	13.8874	8.1244	4.867	18.3703	3.6302	0.290225
308.	0.	2.10323	13.7992	13.8874	8.1260	4.863	18.3158	3.6109	0.290863
309.	0.	2.09392	13.7994	13.8874	8.1276	4.862	18.2677	3.5915	0.291506
310.	0.	2.08400	13.7996	13.8874	8.1267	4.862	18.2244	3.5823	0.292257
311.	0.	2.07479	13.7998	13.8874	8.1284	4.859	18.1738	3.5629	0.292891
312.	0.	2.06552	13.8001	13.8874	8.1302	4.856	18.1210	3.5435	0.293530
313.	0.	2.05622	13.8003	13.8874	8.1320	4.853	18.0674	3.5242	0.294173
314.	0.	2.04687	13.8005	13.8874	8.1340	4.849	18.0132	3.5048	0.294820
315.	0.	2.03748	13.8007	13.8874	8.1360	4.846	17.9586	3.4855	0.295472
316.	0.	2.02801	13.8010	13.8874	8.1381	4.839	17.8973	3.4661	0.296129
317.	0.	2.01901	13.8012	13.8874	8.1430	4.828	17.8176	3.4367	0.296682
318.	0.	2.01029	13.8015	13.8874	8.1510	4.812	17.7217	3.3971	0.297150
319.	0.	2.00115	13.8017	13.8874	8.1592	4.794	17.6194	3.3577	0.297654
320.	0.	1.99161	13.8020	13.8874	8.1676	4.776	17.5140	3.3182	0.298196
321.	0.	1.98163	13.8023	13.8874	8.1763	4.757	17.4062	3.2788	0.298780
322.	0.	1.97124	13.8025	13.8874	8.1852	4.739	17.2953	3.2394	0.299406
323.	0.	1.96047	13.8028	13.8874	8.1942	4.720	17.1837	3.2001	0.300071
324.	0.	1.94931	13.8031	13.8874	8.2034	4.702	17.0708	3.1608	0.300779
325.	0.	1.93776	13.8034	13.8874	8.2127	4.683	16.9568	3.1215	0.301529
326.	0.	1.92589	13.8038	13.8874	8.2221	4.670	16.8548	3.0823	0.302325
327.	0.	1.91292	13.8041	13.8874	8.2261	4.698	16.8932	3.0634	0.303428

328.	0.	1.89038	13.8043	13.8874	8.1972	4.717	16.8951	3.1761	0.306061
329.	0.	1.88696	13.8046	13.8874	8.2319	4.605	16.5144	3.0354	0.305372
330.	0.	1.89341	13.8052	13.8874	8.3255	4.433	15.8436	2.7123	0.302306
331.	0.	1.89234	13.8060	13.8874	8.4070	4.288	15.1432	2.4299	0.299923
332.	0.	1.87461	13.8069	13.8874	8.4535	4.165	14.5255	2.2503	0.300290
333.	0.	1.85291	13.8081	13.8874	8.4944	4.146	14.1404	2.0614	0.301419
334.	0.	1.79218	13.8090	13.8874	8.4588	4.254	14.3114	2.1707	0.310714
335.	0.	1.73861	13.8096	13.8874	8.4169	4.415	14.7432	2.3186	0.318636
336.	0.	1.69587	13.8102	13.8874	8.3752	4.576	15.2116	2.4746	0.324614
337.	0.	1.66660	13.8106	13.8874	8.3476	4.702	15.5759	2.5784	0.328377
338.	0.	1.64475	13.8109	13.8874	8.3300	4.799	15.8484	2.6510	0.330992
339.	0.	1.62724	13.8112	13.8874	8.3134	4.884	16.0893	2.7130	0.333038
340.	0.	1.61119	13.8114	13.8874	8.2948	4.958	16.2941	2.7849	0.334897
341.	0.	1.59881	13.8116	13.8874	8.2844	4.978	16.3207	2.8262	0.336162
342.	0.	1.59388	13.8119	13.8874	8.3014	4.908	16.0755	2.7662	0.336203
343.	0.	1.59788	13.8122	13.8874	8.3517	4.842	15.8357	2.5849	0.334856
344.	0.	1.57996	13.8125	13.8874	8.3369	4.805	15.6685	2.6467	0.336729
345.	0.	1.58042	13.8128	13.8874	8.3779	4.735	15.4041	2.4958	0.335811
346.	0.	1.56854	13.8131	13.8874	8.3866	4.704	15.2376	2.4667	0.336734
347.	0.	1.55604	13.8134	13.8874	8.3955	4.657	15.0162	2.4377	0.337700
348.	0.	1.55071	13.8138	13.8874	8.4282	4.550	14.6132	2.3174	0.337409
349.	0.	1.54917	13.8143	13.8874	8.4787	4.387	14.0191	2.1262	0.336196
350.	0.	1.54753	13.8150	13.8874	8.5412	4.193	13.2787	1.8845	0.334476
351.	0.	1.53767	13.8160	13.8874	8.5944	3.952	12.3369	1.6436	0.333620
352.	0.	1.53626	13.8173	13.8874	8.6800	3.656	11.2309	1.2901	0.330124
353.	0.	1.34011	13.8238	13.8874	9.4161	2.325	11.3514	0.9583	0.368350
354.	0.	1.15222	13.8307	13.8874	9.7692	1.149	11.9653	0.9604	0.410351
355.	0.	1.14424	13.8326	13.8874	8.7764	1.923	11.6975	1.1645	0.414460
356.	0.	1.13884	13.8301	13.8874	8.4710	2.467	11.8433	1.2363	0.416282
357.	0.	1.09490	13.8294	13.8874	8.3423	2.808	12.6603	1.4038	0.423822
358.	0.	1.04681	13.8291	13.8874	8.2737	2.838	12.4739	1.6304	0.430365
359.	0.	1.07768	13.8292	13.8874	8.4550	2.641	11.4623	1.1538	0.423778
360.	0.	1.01119	13.8294	13.8874	8.9771	2.097	11.3813	0.9332	0.433157
361.	0.	0.94534	13.8294	13.8874	8.8762	2.076	11.5168	1.0251	0.445136
362.	0.	0.90252	13.8298	13.8874	8.7504	2.233	11.9999	1.1121	0.452104
363.	0.	0.86485	13.8301	13.8874	8.6688	2.407	12.7346	1.2376	0.457583
364.	0.	0.83666	13.8304	13.8874	8.6104	2.470	12.8915	1.3611	0.461112
365.	0.	0.83760	13.8308	13.8874	8.6510	2.434	12.5548	1.2406	0.460561
366.	0.	0.83285	13.8312	13.8874	8.6878	2.443	12.4157	1.1508	0.460776
367.	0.	0.80600	13.8315	13.8874	8.6627	2.438	12.2717	1.2441	0.464127
368.	0.	0.80692	13.8318	13.8874	8.7247	2.333	11.6161	1.1034	0.463418
369.	0.	0.80923	13.8322	13.8874	8.8488	2.209	10.8578	0.8820	0.462045
370.	0.	0.76639	13.8315	13.8874	9.1033	2.080	11.0827	0.7786	0.468559

PART 3: WHAFIS

WHAFIS input: YK-103.dat
WHAFIS output: YK-103.out

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-103
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
1000
2000
3000
4000
5000
6000
7000
8000
Transect Profile
SWAN 1-D points
TSWL

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-103.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-103.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-23.773	1.000	1.000	9.042	29.615	13.840	56.140	0.010	0.000
OF	3.300	-23.739	0.000	9.045	0.000	0.000	0.000	0.000	0.010	0.000
OF	6.600	-23.706	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
OF	9.800	-23.672	0.000	9.049	0.000	0.000	0.000	0.000	0.010	0.000
OF	13.100	-23.639	0.000	9.052	0.000	0.000	0.000	0.000	0.010	0.000
OF	16.400	-23.605	0.000	9.054	0.000	0.000	0.000	0.000	0.010	0.000
OF	19.700	-23.572	0.000	9.057	0.000	0.000	0.000	0.000	0.010	0.000
OF	23.000	-23.538	0.000	9.059	0.000	0.000	0.000	0.000	0.010	0.000
OF	26.200	-23.505	0.000	9.062	0.000	0.000	0.000	0.000	0.010	0.000
OF	29.500	-23.471	0.000	9.064	0.000	0.000	0.000	0.000	0.010	0.000
OF	32.800	-23.437	0.000	9.067	0.000	0.000	0.000	0.000	0.010	0.000
OF	36.100	-23.404	0.000	9.070	0.000	0.000	0.000	0.000	0.010	0.000
OF	39.400	-23.370	0.000	9.072	0.000	0.000	0.000	0.000	0.010	0.000
OF	42.700	-23.337	0.000	9.075	0.000	0.000	0.000	0.000	0.010	0.000
OF	45.900	-23.303	0.000	9.078	0.000	0.000	0.000	0.000	0.010	0.000
OF	49.200	-23.270	0.000	9.081	0.000	0.000	0.000	0.000	0.010	0.000
OF	52.500	-23.236	0.000	9.083	0.000	0.000	0.000	0.000	0.010	0.000
OF	55.800	-23.203	0.000	9.086	0.000	0.000	0.000	0.000	0.013	0.000
OF	59.100	-23.151	0.000	9.089	0.000	0.000	0.000	0.000	0.019	0.000
OF	62.300	-23.077	0.000	9.091	0.000	0.000	0.000	0.000	0.023	0.000
OF	65.600	-23.003	0.000	9.094	0.000	0.000	0.000	0.000	0.022	0.000
OF	68.900	-22.929	0.000	9.096	0.000	0.000	0.000	0.000	0.022	0.000
OF	72.200	-22.856	0.000	9.098	0.000	0.000	0.000	0.000	0.022	0.000
OF	75.500	-22.782	0.000	9.101	0.000	0.000	0.000	0.000	0.023	0.000
OF	78.700	-22.708	0.000	9.104	0.000	0.000	0.000	0.000	0.023	0.000
OF	82.000	-22.634	0.000	9.106	0.000	0.000	0.000	0.000	0.022	0.000
OF	85.300	-22.560	0.000	9.108	0.000	0.000	0.000	0.000	0.022	0.000
OF	88.600	-22.486	0.000	9.111	0.000	0.000	0.000	0.000	0.022	0.000
OF	91.900	-22.412	0.000	9.114	0.000	0.000	0.000	0.000	0.023	0.000
OF	95.100	-22.339	0.000	9.116	0.000	0.000	0.000	0.000	0.023	0.000
OF	98.400	-22.265	0.000	9.119	0.000	0.000	0.000	0.000	0.022	0.000
OF	101.700	-22.191	0.000	9.121	0.000	0.000	0.000	0.000	0.022	0.000
OF	105.000	-22.117	0.000	9.124	0.000	0.000	0.000	0.000	0.022	0.000
OF	108.300	-22.043	0.000	9.127	0.000	0.000	0.000	0.000	0.023	0.000
OF	111.500	-21.969	0.000	9.129	0.000	0.000	0.000	0.000	0.023	0.000
OF	114.800	-21.893	0.000	9.132	0.000	0.000	0.000	0.000	0.025	0.000
OF	118.100	-21.806	0.000	9.134	0.000	0.000	0.000	0.000	0.026	0.000
OF	121.400	-21.719	0.000	9.137	0.000	0.000	0.000	0.000	0.026	0.000
OF	124.700	-21.632	0.000	9.140	0.000	0.000	0.000	0.000	0.026	0.000
OF	128.000	-21.545	0.000	9.142	0.000	0.000	0.000	0.000	0.027	0.000
OF	131.200	-21.458	0.000	9.145	0.000	0.000	0.000	0.000	0.027	0.000
OF	134.500	-21.370	0.000	9.148	0.000	0.000	0.000	0.000	0.026	0.000
OF	137.800	-21.283	0.000	9.150	0.000	0.000	0.000	0.000	0.026	0.000
OF	141.100	-21.196	0.000	9.153	0.000	0.000	0.000	0.000	0.026	0.000
OF	144.400	-21.109	0.000	9.156	0.000	0.000	0.000	0.000	0.027	0.000
OF	147.600	-21.022	0.000	9.158	0.000	0.000	0.000	0.000	0.027	0.000
OF	150.900	-20.935	0.000	9.161	0.000	0.000	0.000	0.000	0.026	0.000
OF	154.200	-20.848	0.000	9.164	0.000	0.000	0.000	0.000	0.026	0.000
OF	157.500	-20.761	0.000	9.167	0.000	0.000	0.000	0.000	0.026	0.000
OF	160.800	-20.674	0.000	9.170	0.000	0.000	0.000	0.000	0.027	0.000
OF	164.000	-20.587	0.000	9.172	0.000	0.000	0.000	0.000	0.027	0.000
OF	167.300	-20.500	0.000	9.175	0.000	0.000	0.000	0.000	0.026	0.000
OF	170.600	-20.413	0.000	9.178	0.000	0.000	0.000	0.000	0.026	0.000
OF	173.900	-20.326	0.000	9.181	0.000	0.000	0.000	0.000	0.026	0.000
OF	177.200	-20.239	0.000	9.183	0.000	0.000	0.000	0.000	0.027	0.000
OF	180.400	-20.152	0.000	9.186	0.000	0.000	0.000	0.000	0.027	0.000
OF	183.700	-20.064	0.000	9.189	0.000	0.000	0.000	0.000	0.030	0.000
OF	187.000	-19.956	0.000	9.191	0.000	0.000	0.000	0.000	0.038	0.000
OF	190.300	-19.811	0.000	9.194	0.000	0.000	0.000	0.000	0.044	0.000
OF	193.600	-19.667	0.000	9.196	0.000	0.000	0.000	0.000	0.045	0.000
OF	196.800	-19.522	0.000	9.198	0.000	0.000	0.000	0.000	0.045	0.000
OF	200.100	-19.378	0.000	9.201	0.000	0.000	0.000	0.000	0.044	0.000
OF	203.400	-19.233	0.000	9.203	0.000	0.000	0.000	0.000	0.044	0.000
OF	206.700	-19.089	0.000	9.206	0.000	0.000	0.000	0.000	0.044	0.000
OF	210.000	-18.944	0.000	9.208	0.000	0.000	0.000	0.000	0.044	0.000
OF	213.300	-18.800	0.000	9.211	0.000	0.000	0.000	0.000	0.045	0.000
OF	216.500	-18.655	0.000	9.214	0.000	0.000	0.000	0.000	0.045	0.000
OF	219.800	-18.511	0.000	9.216	0.000	0.000	0.000	0.000	0.044	0.000
OF	223.100	-18.366	0.000	9.219	0.000	0.000	0.000	0.000	0.044	0.000
OF	226.400	-18.222	0.000	9.222	0.000	0.000	0.000	0.000	0.044	0.000
OF	229.700	-18.077	0.000	9.225	0.000	0.000	0.000	0.000	0.045	0.000
OF	232.900	-17.933	0.000	9.228	0.000	0.000	0.000	0.000	0.045	0.000
OF	236.200	-17.788	0.000	9.231	0.000	0.000	0.000	0.000	0.044	0.000
OF	239.500	-17.644	0.000	9.234	0.000	0.000	0.000	0.000	0.044	0.000
OF	242.800	-17.499	0.000	9.237	0.000	0.000	0.000	0.000	0.044	0.000
OF	246.100	-17.355	0.000	9.240	0.000	0.000	0.000	0.000	0.045	0.000
OF	249.300	-17.210	0.000	9.243	0.000	0.000	0.000	0.000	0.045	0.000
OF	252.600	-17.066	0.000	9.247	0.000	0.000	0.000	0.000	0.044	0.000
OF	255.900	-16.921	0.000	9.250	0.000	0.000	0.000	0.000	0.044	0.000
OF	259.200	-16.777	0.000	9.253	0.000	0.000	0.000	0.000	0.044	0.000
OF	262.500	-16.632	0.000	9.257	0.000	0.000	0.000	0.000	0.045	0.000
OF	265.700	-16.488	0.000	9.260	0.000	0.000	0.000	0.000	0.045	0.000
OF	269.000	-16.343	0.000	9.263	0.000	0.000	0.000	0.000	0.044	0.000
OF	272.300	-16.199	0.000	9.267	0.000	0.000	0.000	0.000	0.044	0.000
OF	275.600	-16.054	0.000	9.270	0.000	0.000	0.000	0.000	0.044	0.000
OF	278.900	-15.910	0.000	9.274	0.000	0.000	0.000	0.000	0.043	0.000
OF	282.200	-15.772	0.000	9.277	0.000	0.000	0.000	0.000	0.042	0.000
OF	285.400	-15.638	0.000	9.281	0.000	0.000	0.000	0.000	0.041	0.000
OF	288.700	-15.503	0.000	9.285	0.000	0.000	0.000	0.000	0.041	0.000
OF	292.000	-15.368	0.000	9.289	0.000	0.000	0.000	0.000	0.041	0.000
OF	295.300	-15.234	0.000	9.292	0.000	0.000	0.000	0.000	0.041	0.000
OF	298.600	-15.099	0.000	9.296	0.000	0.000	0.000	0.000	0.041	0.000
OF	301.800	-14.964	0.000	9.299	0.000	0.000	0.000	0.000	0.041	0.000

OF	305.100	-14.830	0.000	9.303	0.000	0.000	0.000	0.000	0.041	0.000
OF	308.400	-14.695	0.000	9.307	0.000	0.000	0.000	0.000	0.045	0.000
OF	311.700	-14.536	0.000	9.310	0.000	0.000	0.000	0.000	0.052	0.000
OF	315.000	-14.351	0.000	9.313	0.000	0.000	0.000	0.000	0.057	0.000
OF	318.200	-14.166	0.000	9.316	0.000	0.000	0.000	0.000	0.057	0.000
OF	321.500	-13.982	0.000	9.319	0.000	0.000	0.000	0.000	0.056	0.000
OF	324.800	-13.797	0.000	9.323	0.000	0.000	0.000	0.000	0.056	0.000
OF	328.100	-13.612	0.000	9.327	0.000	0.000	0.000	0.000	0.056	0.000
OF	331.400	-13.427	0.000	9.330	0.000	0.000	0.000	0.000	0.055	0.000
OF	334.600	-13.254	0.000	9.335	0.000	0.000	0.000	0.000	0.048	0.000
OF	337.900	-13.113	0.000	9.339	0.000	0.000	0.000	0.000	0.043	0.000
OF	341.200	-12.973	0.000	9.344	0.000	0.000	0.000	0.000	0.043	0.000
OF	344.500	-12.832	0.000	9.350	0.000	0.000	0.000	0.000	0.043	0.000
OF	347.800	-12.692	0.000	9.354	0.000	0.000	0.000	0.000	0.043	0.000
OF	351.000	-12.551	0.000	9.360	0.000	0.000	0.000	0.000	0.043	0.000
OF	354.300	-12.411	0.000	9.365	0.000	0.000	0.000	0.000	0.042	0.000
OF	357.600	-12.271	0.000	9.371	0.000	0.000	0.000	0.000	0.043	0.000
OF	360.900	-12.130	0.000	9.376	0.000	0.000	0.000	0.000	0.043	0.000
OF	364.200	-11.990	0.000	9.381	0.000	0.000	0.000	0.000	0.043	0.000
OF	367.500	-11.849	0.000	9.387	0.000	0.000	0.000	0.000	0.043	0.000
OF	370.700	-11.709	0.000	9.393	0.000	0.000	0.000	0.000	0.043	0.000
OF	374.000	-11.569	0.000	9.398	0.000	0.000	0.000	0.000	0.043	0.000
OF	377.300	-11.428	0.000	9.404	0.000	0.000	0.000	0.000	0.043	0.000
OF	380.600	-11.288	0.000	9.409	0.000	0.000	0.000	0.000	0.043	0.000
OF	383.900	-11.147	0.000	9.415	0.000	0.000	0.000	0.000	0.043	0.000
OF	387.100	-11.007	0.000	9.421	0.000	0.000	0.000	0.000	0.043	0.000
OF	390.400	-10.867	0.000	9.427	0.000	0.000	0.000	0.000	0.043	0.000
OF	393.700	-10.726	0.000	9.433	0.000	0.000	0.000	0.000	0.043	0.000
OF	397.000	-10.586	0.000	9.439	0.000	0.000	0.000	0.000	0.043	0.000
OF	400.300	-10.445	0.000	9.445	0.000	0.000	0.000	0.000	0.043	0.000
OF	403.500	-10.305	0.000	9.451	0.000	0.000	0.000	0.000	0.043	0.000
OF	406.800	-10.164	0.000	9.457	0.000	0.000	0.000	0.000	0.043	0.000
OF	410.100	-10.024	0.000	9.463	0.000	0.000	0.000	0.000	0.042	0.000
OF	413.400	-9.884	0.000	9.469	0.000	0.000	0.000	0.000	0.043	0.000
OF	416.700	-9.744	0.000	9.476	0.000	0.000	0.000	0.000	0.043	0.000
OF	419.900	-9.603	0.000	9.482	0.000	0.000	0.000	0.000	0.043	0.000
OF	423.200	-9.463	0.000	9.489	0.000	0.000	0.000	0.000	0.043	0.000
OF	426.500	-9.322	0.000	9.495	0.000	0.000	0.000	0.000	0.040	0.000
OF	429.800	-9.200	0.000	9.502	0.000	0.000	0.000	0.000	0.030	0.000
OF	433.100	-9.122	0.000	9.510	0.000	0.000	0.000	0.000	0.024	0.000
OF	436.400	-9.043	0.000	9.517	0.000	0.000	0.000	0.000	0.024	0.000
OF	439.600	-8.964	0.000	9.525	0.000	0.000	0.000	0.000	0.024	0.000
OF	442.900	-8.885	0.000	9.533	0.000	0.000	0.000	0.000	0.024	0.000
OF	446.200	-8.806	0.000	9.540	0.000	0.000	0.000	0.000	0.024	0.000
OF	449.500	-8.727	0.000	9.548	0.000	0.000	0.000	0.000	0.024	0.000
OF	452.800	-8.648	0.000	9.555	0.000	0.000	0.000	0.000	0.024	0.000
OF	456.000	-8.569	0.000	9.562	0.000	0.000	0.000	0.000	0.024	0.000
OF	459.300	-8.491	0.000	9.569	0.000	0.000	0.000	0.000	0.024	0.000
OF	462.600	-8.412	0.000	9.576	0.000	0.000	0.000	0.000	0.024	0.000
OF	465.900	-8.333	0.000	9.583	0.000	0.000	0.000	0.000	0.024	0.000
OF	469.200	-8.254	0.000	9.590	0.000	0.000	0.000	0.000	0.024	0.000
OF	472.400	-8.175	0.000	9.597	0.000	0.000	0.000	0.000	0.024	0.000
OF	475.700	-8.096	0.000	9.603	0.000	0.000	0.000	0.000	0.024	0.000
OF	479.000	-8.017	0.000	9.610	0.000	0.000	0.000	0.000	0.024	0.000
OF	482.300	-7.938	0.000	9.617	0.000	0.000	0.000	0.000	0.024	0.000
OF	485.600	-7.860	0.000	9.623	0.000	0.000	0.000	0.000	0.024	0.000
OF	488.800	-7.781	0.000	9.629	0.000	0.000	0.000	0.000	0.024	0.000
OF	492.100	-7.702	0.000	9.635	0.000	0.000	0.000	0.000	0.024	0.000
OF	495.400	-7.623	0.000	9.642	0.000	0.000	0.000	0.000	0.024	0.000
OF	498.700	-7.544	0.000	9.648	0.000	0.000	0.000	0.000	0.024	0.000
OF	502.000	-7.465	0.000	9.654	0.000	0.000	0.000	0.000	0.024	0.000
OF	505.200	-7.386	0.000	9.660	0.000	0.000	0.000	0.000	0.024	0.000
OF	508.500	-7.307	0.000	9.666	0.000	0.000	0.000	0.000	0.024	0.000
OF	511.800	-7.228	0.000	9.672	0.000	0.000	0.000	0.000	0.024	0.000
OF	515.100	-7.150	0.000	9.678	0.000	0.000	0.000	0.000	0.024	0.000
OF	518.400	-7.071	0.000	9.684	0.000	0.000	0.000	0.000	0.024	0.000
OF	521.700	-6.992	0.000	9.689	0.000	0.000	0.000	0.000	0.024	0.000
OF	524.900	-6.912	0.000	9.695	0.000	0.000	0.000	0.000	0.026	0.000
OF	528.200	-6.826	0.000	9.700	0.000	0.000	0.000	0.000	0.026	0.000
OF	531.500	-6.739	0.000	9.706	0.000	0.000	0.000	0.000	0.026	0.000
OF	534.800	-6.653	0.000	9.711	0.000	0.000	0.000	0.000	0.026	0.000
OF	538.100	-6.567	0.000	9.716	0.000	0.000	0.000	0.000	0.026	0.000
OF	541.300	-6.481	0.000	9.722	0.000	0.000	0.000	0.000	0.025	0.000
OF	544.600	-6.406	0.000	9.727	0.000	0.000	0.000	0.000	0.012	0.000
OF	547.900	-6.400	0.000	9.733	0.000	0.000	0.000	0.000	0.001	0.000
OF	551.200	-6.397	0.000	9.740	0.000	0.000	0.000	0.000	0.001	0.000
OF	554.500	-6.394	0.000	9.745	0.000	0.000	0.000	0.000	0.001	0.000
OF	557.700	-6.391	0.000	9.751	0.000	0.000	0.000	0.000	0.001	0.000
OF	561.000	-6.387	0.000	9.756	0.000	0.000	0.000	0.000	0.001	0.000
OF	564.300	-6.385	0.000	9.762	0.000	0.000	0.000	0.000	0.001	0.000
OF	567.600	-6.381	0.000	9.767	0.000	0.000	0.000	0.000	0.001	0.000
OF	570.900	-6.378	0.000	9.772	0.000	0.000	0.000	0.000	0.001	0.000
OF	574.100	-6.375	0.000	9.776	0.000	0.000	0.000	0.000	0.001	0.000
OF	577.400	-6.372	0.000	9.781	0.000	0.000	0.000	0.000	0.002	0.000
OF	580.700	-6.365	0.000	9.785	0.000	0.000	0.000	0.000	0.004	0.000
OF	584.000	-6.347	0.000	9.789	0.000	0.000	0.000	0.000	0.005	0.000
OF	587.300	-6.329	0.000	9.793	0.000	0.000	0.000	0.000	0.005	0.000
OF	590.500	-6.311	0.000	9.797	0.000	0.000	0.000	0.000	0.005	0.000
OF	593.800	-6.293	0.000	9.801	0.000	0.000	0.000	0.000	0.005	0.000
OF	597.100	-6.275	0.000	9.805	0.000	0.000	0.000	0.000	0.005	0.000
OF	600.400	-6.257	0.000	9.808	0.000	0.000	0.000	0.000	0.005	0.000
OF	603.700	-6.240	0.000	9.812	0.000	0.000	0.000	0.000	0.005	0.000
OF	607.000	-6.222	0.000	9.815	0.000	0.000	0.000	0.000	0.005	0.000
OF	610.200	-6.204	0.000	9.818	0.000	0.000	0.000	0.000	0.005	0.000
OF	613.500	-6.186	0.000	9.821	0.000	0.000	0.000	0.000	0.005	0.000
OF	616.800	-6.168	0.000	9.825	0.000	0.000	0.000	0.000	0.005	0.000
OF	620.100	-6.150	0.000	9.827	0.000	0.000	0.000	0.000	0.005	0.000
OF	623.400	-6.133	0.000	9.831	0.000	0.000	0.000	0.000	0.005	0.000
OF	626.600	-6.115	0.000	9.833	0.000	0.000	0.000	0.000	0.005	0.000
OF	629.900	-6.097	0.000	9.836	0.000	0.000	0.000	0.000	0.005	0.000
OF	633.200	-6.079	0.000	9.839	0.000	0.000	0.000	0.000	0.005	0.000
OF	636.500	-6.061	0.000	9.842	0.000	0.000	0.000	0.000	0.005	0.000

OF	639.800	-6.043	0.000	9.844	0.000	0.000	0.000	0.000	0.005	0.000
OF	643.000	-6.025	0.000	9.847	0.000	0.000	0.000	0.000	0.005	0.000
OF	646.300	-6.008	0.000	9.849	0.000	0.000	0.000	0.000	0.005	0.000
OF	649.600	-5.990	0.000	9.852	0.000	0.000	0.000	0.000	0.005	0.000
OF	652.900	-5.972	0.000	9.854	0.000	0.000	0.000	0.000	0.001	0.000
OF	656.200	-5.982	0.000	9.857	0.000	0.000	0.000	0.000	-0.004	0.000
OF	659.400	-5.996	0.000	9.859	0.000	0.000	0.000	0.000	-0.004	0.000
OF	662.700	-6.009	0.000	9.862	0.000	0.000	0.000	0.000	-0.004	0.000
OF	666.000	-6.023	0.000	9.865	0.000	0.000	0.000	0.000	-0.004	0.000
OF	669.300	-6.036	0.000	9.867	0.000	0.000	0.000	0.000	-0.004	0.000
OF	672.600	-6.049	0.000	9.869	0.000	0.000	0.000	0.000	-0.004	0.000
OF	675.900	-6.063	0.000	9.872	0.000	0.000	0.000	0.000	-0.004	0.000
OF	679.100	-6.076	0.000	9.874	0.000	0.000	0.000	0.000	-0.004	0.000
OF	682.400	-6.090	0.000	9.876	0.000	0.000	0.000	0.000	-0.004	0.000
OF	685.700	-6.103	0.000	9.878	0.000	0.000	0.000	0.000	-0.004	0.000
OF	689.000	-6.116	0.000	9.880	0.000	0.000	0.000	0.000	-0.004	0.000
OF	692.300	-6.130	0.000	9.882	0.000	0.000	0.000	0.000	-0.004	0.000
OF	695.500	-6.143	0.000	9.884	0.000	0.000	0.000	0.000	-0.004	0.000
OF	698.800	-6.157	0.000	9.886	0.000	0.000	0.000	0.000	-0.004	0.000
OF	702.100	-6.170	0.000	9.888	0.000	0.000	0.000	0.000	0.004	0.000
OF	705.400	-6.127	0.000	9.889	0.000	0.000	0.000	0.000	0.017	0.000
OF	708.700	-6.056	0.000	9.890	0.000	0.000	0.000	0.000	0.022	0.000
OF	711.900	-5.985	0.000	9.891	0.000	0.000	0.000	0.000	0.022	0.000
OF	715.200	-5.914	0.000	9.892	0.000	0.000	0.000	0.000	0.022	0.000
OF	718.500	-5.844	0.000	9.893	0.000	0.000	0.000	0.000	0.022	0.000
OF	721.800	-5.773	0.000	9.894	0.000	0.000	0.000	0.000	0.022	0.000
OF	725.100	-5.702	0.000	9.895	0.000	0.000	0.000	0.000	0.022	0.000
OF	728.300	-5.631	0.000	9.896	0.000	0.000	0.000	0.000	0.022	0.000
OF	731.600	-5.560	0.000	9.898	0.000	0.000	0.000	0.000	0.022	0.000
OF	734.900	-5.489	0.000	9.899	0.000	0.000	0.000	0.000	0.022	0.000
OF	738.200	-5.418	0.000	9.900	0.000	0.000	0.000	0.000	0.022	0.000
OF	741.500	-5.347	0.000	9.901	0.000	0.000	0.000	0.000	0.022	0.000
OF	744.700	-5.276	0.000	9.903	0.000	0.000	0.000	0.000	0.022	0.000
OF	748.000	-5.205	0.000	9.904	0.000	0.000	0.000	0.000	0.022	0.000
OF	751.300	-5.134	0.000	9.905	0.000	0.000	0.000	0.000	0.022	0.000
OF	754.600	-5.063	0.000	9.907	0.000	0.000	0.000	0.000	0.022	0.000
OF	757.900	-4.992	0.000	9.908	0.000	0.000	0.000	0.000	0.020	0.000
OF	761.200	-4.934	0.000	9.910	0.000	0.000	0.000	0.000	0.000	0.000
OF	764.400	-4.992	0.000	9.912	0.000	0.000	0.000	0.000	-0.018	0.000
OF	767.700	-5.049	0.000	9.915	0.000	0.000	0.000	0.000	-0.017	0.000
OF	771.000	-5.107	0.000	9.917	0.000	0.000	0.000	0.000	-0.017	0.000
OF	774.300	-5.164	0.000	9.919	0.000	0.000	0.000	0.000	-0.018	0.000
OF	777.600	-5.222	0.000	9.922	0.000	0.000	0.000	0.000	-0.018	0.000
OF	780.800	-5.280	0.000	9.924	0.000	0.000	0.000	0.000	-0.018	0.000
OF	784.100	-5.337	0.000	9.925	0.000	0.000	0.000	0.000	-0.017	0.000
OF	787.400	-5.395	0.000	9.927	0.000	0.000	0.000	0.000	-0.018	0.000
OF	790.700	-5.452	0.000	9.929	0.000	0.000	0.000	0.000	-0.018	0.000
OF	794.000	-5.510	0.000	9.931	0.000	0.000	0.000	0.000	-0.018	0.000
OF	797.200	-5.567	0.000	9.932	0.000	0.000	0.000	0.000	-0.018	0.000
OF	800.500	-5.625	0.000	9.934	0.000	0.000	0.000	0.000	-0.018	0.000
OF	803.800	-5.683	0.000	9.936	0.000	0.000	0.000	0.000	-0.018	0.000
OF	807.100	-5.740	0.000	9.937	0.000	0.000	0.000	0.000	-0.017	0.000
OF	810.400	-5.798	0.000	9.939	0.000	0.000	0.000	0.000	-0.018	0.000
OF	813.600	-5.855	0.000	9.940	0.000	0.000	0.000	0.000	-0.018	0.000
OF	816.900	-5.913	0.000	9.941	0.000	0.000	0.000	0.000	-0.014	0.000
OF	820.200	-5.951	0.000	9.942	0.000	0.000	0.000	0.000	-0.005	0.000
OF	823.500	-5.944	0.000	9.943	0.000	0.000	0.000	0.000	0.002	0.000
OF	826.800	-5.938	0.000	9.944	0.000	0.000	0.000	0.000	0.002	0.000
OF	830.100	-5.932	0.000	9.944	0.000	0.000	0.000	0.000	0.002	0.000
OF	833.300	-5.926	0.000	9.945	0.000	0.000	0.000	0.000	0.002	0.000
OF	836.600	-5.920	0.000	9.946	0.000	0.000	0.000	0.000	0.002	0.000
OF	839.900	-5.913	0.000	9.947	0.000	0.000	0.000	0.000	0.002	0.000
OF	843.200	-5.907	0.000	9.948	0.000	0.000	0.000	0.000	0.002	0.000
OF	846.500	-5.901	0.000	9.948	0.000	0.000	0.000	0.000	0.002	0.000
OF	849.700	-5.895	0.000	9.949	0.000	0.000	0.000	0.000	0.002	0.000
OF	853.000	-5.888	0.000	9.950	0.000	0.000	0.000	0.000	0.002	0.000
OF	856.300	-5.882	0.000	9.950	0.000	0.000	0.000	0.000	0.002	0.000
OF	859.600	-5.876	0.000	9.951	0.000	0.000	0.000	0.000	0.005	0.000
OF	862.900	-5.849	0.000	9.952	0.000	0.000	0.000	0.000	0.011	0.000
OF	866.100	-5.802	0.000	9.952	0.000	0.000	0.000	0.000	0.014	0.000
OF	869.400	-5.755	0.000	9.952	0.000	0.000	0.000	0.000	0.014	0.000
OF	872.700	-5.708	0.000	9.953	0.000	0.000	0.000	0.000	0.014	0.000
OF	876.000	-5.661	0.000	9.953	0.000	0.000	0.000	0.000	0.014	0.000
OF	879.300	-5.614	0.000	9.954	0.000	0.000	0.000	0.000	0.014	0.000
OF	882.500	-5.567	0.000	9.954	0.000	0.000	0.000	0.000	0.014	0.000
OF	885.800	-5.519	0.000	9.955	0.000	0.000	0.000	0.000	0.014	0.000
OF	889.100	-5.472	0.000	9.955	0.000	0.000	0.000	0.000	0.014	0.000
OF	892.400	-5.425	0.000	9.956	0.000	0.000	0.000	0.000	0.014	0.000
OF	895.700	-5.378	0.000	9.956	0.000	0.000	0.000	0.000	0.014	0.000
OF	898.900	-5.331	0.000	9.957	0.000	0.000	0.000	0.000	0.026	0.000
OF	902.200	-5.208	0.000	9.957	0.000	0.000	0.000	0.000	0.039	0.000
OF	905.500	-5.073	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
OF	908.800	-4.938	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
OF	912.100	-4.802	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
OF	915.400	-4.667	0.000	9.957	0.000	0.000	0.000	0.000	0.042	0.000
OF	918.600	-4.531	0.000	9.957	0.000	0.000	0.000	0.000	0.042	0.000
OF	921.900	-4.396	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
OF	925.200	-4.260	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
OF	928.500	-4.125	0.000	9.958	0.000	0.000	0.000	0.000	0.041	0.000
OF	931.800	-3.990	0.000	9.958	0.000	0.000	0.000	0.000	0.042	0.000
OF	935.000	-3.854	0.000	9.958	0.000	0.000	0.000	0.000	0.042	0.000
OF	938.300	-3.719	0.000	9.959	0.000	0.000	0.000	0.000	0.041	0.000
OF	941.600	-3.583	0.000	9.960	0.000	0.000	0.000	0.000	0.041	0.000
OF	944.900	-3.448	0.000	9.960	0.000	0.000	0.000	0.000	0.041	0.000
OF	948.200	-3.312	0.000	9.961	0.000	0.000	0.000	0.000	0.042	0.000
OF	951.400	-3.177	0.000	9.962	0.000	0.000	0.000	0.000	0.042	0.000
OF	954.700	-3.041	0.000	9.963	0.000	0.000	0.000	0.000	0.041	0.000
OF	958.000	-2.906	0.000	9.964	0.000	0.000	0.000	0.000	0.039	0.000
OF	961.300	-2.782	0.000	9.965	0.000	0.000	0.000	0.000	0.028	0.000
OF	964.600	-2.720	0.000	9.968	0.000	0.000	0.000	0.000	0.019	0.000
OF	967.800	-2.659	0.000	9.970	0.000	0.000	0.000	0.000	0.019	0.000
OF	971.100	-2.598	0.000	9.972	0.000	0.000	0.000	0.000	0.019	0.000

OF	974.400	-2.536	0.000	9.974	0.000	0.000	0.000	0.000	0.019	0.000
OF	977.700	-2.475	0.000	9.976	0.000	0.000	0.000	0.000	0.019	0.000
OF	981.000	-2.414	0.000	9.978	0.000	0.000	0.000	0.000	0.019	0.000
OF	984.200	-2.352	0.000	9.980	0.000	0.000	0.000	0.000	0.019	0.000
OF	987.500	-2.291	0.000	9.982	0.000	0.000	0.000	0.000	0.019	0.000
OF	990.800	-2.230	0.000	9.984	0.000	0.000	0.000	0.000	0.019	0.000
OF	994.100	-2.168	0.000	9.986	0.000	0.000	0.000	0.000	0.019	0.000
OF	997.400	-2.107	0.000	9.988	0.000	0.000	0.000	0.000	0.019	0.000
OF	1000.700	-2.045	0.000	9.990	0.000	0.000	0.000	0.000	0.019	0.000
OF	1003.900	-1.984	0.000	9.992	0.000	0.000	0.000	0.000	0.019	0.000
OF	1007.200	-1.923	0.000	9.995	0.000	0.000	0.000	0.000	0.019	0.000
OF	1010.500	-1.861	0.000	9.997	0.000	0.000	0.000	0.000	0.019	0.000
OF	1013.800	-1.800	0.000	9.999	0.000	0.000	0.000	0.000	0.019	0.000
OF	1017.100	-1.738	0.000	10.001	0.000	0.000	0.000	0.000	0.019	0.000
OF	1020.300	-1.677	0.000	10.003	0.000	0.000	0.000	0.000	0.019	0.000
OF	1023.600	-1.616	0.000	10.005	0.000	0.000	0.000	0.000	0.019	0.000
OF	1026.900	-1.554	0.000	10.007	0.000	0.000	0.000	0.000	0.019	0.000
OF	1030.200	-1.493	0.000	10.010	0.000	0.000	0.000	0.000	0.019	0.000
OF	1033.500	-1.432	0.000	10.012	0.000	0.000	0.000	0.000	0.021	0.000
OF	1036.700	-1.359	0.000	10.014	0.000	0.000	0.000	0.000	0.026	0.000
OF	1040.000	-1.261	0.000	10.016	0.000	0.000	0.000	0.000	0.034	0.000
OF	1043.300	-1.131	0.000	10.017	0.000	0.000	0.000	0.000	0.039	0.000
OF	1046.600	-1.001	0.000	10.019	0.000	0.000	0.000	0.000	0.039	0.000
OF	1049.900	-0.872	0.000	10.021	0.000	0.000	0.000	0.000	0.040	0.000
OF	1053.100	-0.742	0.000	10.023	0.000	0.000	0.000	0.000	0.040	0.000
OF	1056.400	-0.612	0.000	10.025	0.000	0.000	0.000	0.000	0.039	0.000
OF	1059.700	-0.482	0.000	10.027	0.000	0.000	0.000	0.000	0.039	0.000
OF	1063.000	-0.352	0.000	10.029	0.000	0.000	0.000	0.000	0.039	0.000
OF	1066.300	-0.223	0.000	10.032	0.000	0.000	0.000	0.000	0.039	0.000
OF	1069.600	-0.093	0.000	10.034	0.000	0.000	0.000	0.000	0.032	0.000
OF	1072.800	-0.017	0.000	10.038	0.000	0.000	0.000	0.000	-0.043	0.000
OF	1076.100	-0.369	0.000	10.047	0.000	0.000	0.000	0.000	0.016	0.000
IF	1079.400	0.086	0.000	10.044	0.000	0.000	0.000	0.000	0.228	0.000
IF	1082.700	1.134	0.000	10.034	0.000	0.000	0.000	0.000	0.298	0.000
IF	1086.000	2.053	0.000	10.026	0.000	0.000	0.000	0.000	0.235	0.000
IF	1089.200	2.658	0.000	10.028	0.000	0.000	0.000	0.000	0.186	0.000
IF	1092.500	3.264	0.000	10.031	0.000	0.000	0.000	0.000	0.043	0.000
IF	1095.800	2.944	0.000	10.062	0.000	0.000	0.000	0.000	-0.121	0.000
IF	1099.100	2.465	0.000	10.088	0.000	0.000	0.000	0.000	-0.145	0.000
IF	1102.400	1.985	0.000	10.107	0.000	0.000	0.000	0.000	-0.126	0.000
IF	1105.600	1.644	0.000	10.120	0.000	0.000	0.000	0.000	-0.084	0.000
IF	1108.900	1.441	0.000	10.128	0.000	0.000	0.000	0.000	-0.061	0.000
IF	1112.200	1.239	0.000	10.135	0.000	0.000	0.000	0.000	-0.066	0.000
IF	1115.500	1.007	0.000	10.141	0.000	0.000	0.000	0.000	-0.056	0.000
IF	1118.800	0.871	0.000	10.145	0.000	0.000	0.000	0.000	0.009	0.000
IF	1122.000	1.066	0.000	10.145	0.000	0.000	0.000	0.000	0.122	0.000
IF	1125.300	1.661	0.000	10.141	0.000	0.000	0.000	0.000	0.063	0.000
IF	1128.600	1.479	0.000	10.147	0.000	0.000	0.000	0.000	0.044	0.000
IF	1131.900	1.952	0.000	10.144	0.000	0.000	0.000	0.000	0.086	0.000
IF	1135.200	2.043	0.000	10.147	0.000	0.000	0.000	0.000	0.030	0.000
IF	1138.400	2.146	0.000	10.150	0.000	0.000	0.000	0.000	0.075	0.000
IF	1141.700	2.533	0.000	10.149	0.000	0.000	0.000	0.000	0.154	0.000
IF	1145.000	3.160	0.000	10.145	0.000	0.000	0.000	0.000	0.214	0.000
IF	1148.300	3.945	0.000	10.140	0.000	0.000	0.000	0.000	0.238	0.000
IF	1151.600	4.730	0.000	10.137	0.000	0.000	0.000	0.000	0.295	0.000
IF	1154.900	5.892	0.000	10.125	0.000	0.000	0.000	0.000	0.366	0.000
IF	1158.100	7.111	0.000	10.251	0.000	0.000	0.000	0.000	0.206	0.000
IF	1161.400	7.229	0.000	10.389	0.000	0.000	0.000	0.000	-0.079	0.000
IF	1164.700	6.587	0.000	10.402	0.000	0.000	0.000	0.000	-0.133	0.000
IF	1168.000	6.352	0.000	10.408	0.000	0.000	0.000	0.000	-0.117	0.000
IF	1171.300	5.815	0.000	10.433	0.000	0.000	0.000	0.000	-0.192	0.000
IF	1174.500	5.102	0.000	10.454	0.000	0.000	0.000	0.000	0.130	0.000
IF	1177.800	6.662	0.000	10.433	0.000	0.000	0.000	0.000	0.348	0.000
IF	1181.100	7.396	0.000	10.463	0.000	0.000	0.000	0.000	0.073	0.000
IF	1184.400	7.143	0.000	10.503	0.000	0.000	0.000	0.000	-0.077	0.000
IF	1187.700	6.890	0.000	10.526	0.000	0.000	0.000	0.000	-0.100	0.000
IF	1190.900	6.492	0.000	10.544	0.000	0.000	0.000	0.000	-0.125	0.000
IF	1194.200	6.078	0.000	10.555	0.000	0.000	0.000	0.000	0.000	0.000
IF	1197.500	6.491	0.000	10.553	0.000	0.000	0.000	0.000	0.108	0.000
IF	1200.800	6.791	0.000	10.554	0.000	0.000	0.000	0.000	0.000	0.000
IF	1204.100	6.490	0.000	10.565	0.000	0.000	0.000	0.000	0.026	0.000
IF	1207.300	6.958	0.000	10.563	0.000	0.000	0.000	0.000	0.180	0.000
IF	1210.600	7.657	0.000	10.558	0.000	0.000	0.000	0.000	0.163	0.000
IF	1213.900	8.034	0.000	10.580	0.000	0.000	0.000	0.000	0.206	0.000
IF	1224.800	10.580	0.000	10.580	0.000	0.000	0.000	0.000	0.234	0.000
AS	1368.600	9.616	0.000	9.616	0.000	0.000	0.000	0.000	-0.038	0.000
IF	1386.500	8.930	0.000	9.616	0.000	0.000	0.000	0.000	-0.049	0.000
IF	1394.500	8.340	0.000	9.616	0.000	0.000	0.000	0.000	-0.030	0.000
IF	1411.500	8.176	0.000	9.616	0.000	0.000	0.000	0.000	-0.011	0.000
IF	1423.500	8.012	0.000	9.616	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1438.000	8.117	0.000	9.616	0.000	0.000	0.000	0.000	0.012	0.000
IF	1456.000	8.386	0.000	9.616	0.000	0.000	0.000	0.000	0.030	0.000
IF	1487.400	9.616	0.000	9.616	0.000	0.000	0.000	0.000	0.039	0.000
AS	1488.800	9.617	0.000	9.617	0.000	0.000	0.000	0.000	-0.193	0.000
IF	1507.000	6.109	0.000	9.617	0.000	0.000	0.000	0.000	-0.130	0.000
IF	1515.000	6.207	0.000	9.618	0.000	0.000	0.000	0.000	0.005	0.000
IF	1535.500	6.243	0.000	9.619	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1562.000	6.109	0.000	9.621	0.000	0.000	0.000	0.000	0.018	0.000
IF	1571.000	6.896	0.000	9.622	0.000	0.000	0.000	0.000	0.033	0.000
IF	1588.500	6.995	0.000	9.623	0.000	0.000	0.000	0.000	0.029	0.000
IF	1621.500	8.340	0.000	9.625	0.000	0.000	0.000	0.000	0.019	0.000
IF	1644.000	8.054	0.000	9.626	0.000	0.000	0.000	0.000	0.014	0.000
IF	1663.000	8.911	0.000	9.627	0.000	0.000	0.000	0.000	0.039	0.000
IF	1669.000	9.039	0.000	9.628	0.000	0.000	0.000	0.000	0.044	0.000
IF	1679.200	9.628	0.000	9.628	0.000	0.000	0.000	0.000	0.058	0.000
AS	1693.700	9.629	0.000	9.629	0.000	0.000	0.000	0.000	-0.148	0.000
IF	1697.000	9.140	0.000	9.629	0.000	0.000	0.000	0.000	0.000	0.000
IF	1706.400	9.629	0.000	9.629	0.000	0.000	0.000	0.000	0.052	0.000
AS	1712.400	9.630	0.000	9.630	0.000	0.000	0.000	0.000	-0.039	0.000
IF	1718.000	9.409	0.000	9.630	0.000	0.000	0.000	0.000	-0.088	0.000
IF	1736.000	7.552	0.000	9.631	0.000	0.000	0.000	0.000	-0.072	0.000
IF	1765.000	6.043	0.000	9.632	0.000	0.000	0.000	0.000	-0.032	0.000

IF	1789.500	5.846	0.000	9.633	0.000	0.000	0.000	0.000	0.044	0.000
IF	1803.000	7.716	0.000	9.634	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1841.500	5.584	0.000	9.636	0.000	0.000	0.000	0.000	-0.032	0.000
IF	1864.500	5.748	0.000	9.636	0.000	0.000	0.000	0.000	0.058	0.000
IF	1875.500	7.569	0.000	9.636	0.000	0.000	0.000	0.000	-0.014	0.000
IF	1899.000	5.256	0.000	9.636	0.000	0.000	0.000	0.000	-0.056	0.000
IF	1907.500	5.781	0.000	9.636	0.000	0.000	0.000	0.000	0.010	0.000
IF	1931.000	5.584	0.000	9.636	0.000	0.000	0.000	0.000	0.003	0.000
IF	1940.500	5.879	0.000	9.636	0.000	0.000	0.000	0.000	-0.019	0.000
IF	1964.000	4.961	0.000	9.636	0.000	0.000	0.000	0.000	0.093	0.000
IF	1980.900	9.636	0.000	9.636	0.000	0.000	0.000	0.000	0.277	0.000
AS	2073.800	9.651	0.000	9.651	0.000	0.000	0.000	0.000	-0.066	0.000
IF	2086.500	8.816	0.000	9.651	0.000	0.000	0.000	0.000	-0.056	0.000
IF	2104.000	7.969	0.000	9.651	0.000	0.000	0.000	0.000	-0.034	0.000
IF	2116.500	7.805	0.000	9.651	0.000	0.000	0.000	0.000	0.011	0.000
IF	2135.000	8.300	0.000	9.651	0.000	0.000	0.000	0.000	-0.035	0.000
IF	2153.000	6.529	0.000	9.651	0.000	0.000	0.000	0.000	0.005	0.000
IF	2184.500	8.570	0.000	9.651	0.000	0.000	0.000	0.000	0.048	0.000
IF	2194.500	8.537	0.000	9.651	0.000	0.000	0.000	0.000	0.008	0.000
IF	2216.000	8.832	0.000	9.651	0.000	0.000	0.000	0.000	-0.011	0.000
IF	2225.000	8.209	0.000	9.651	0.000	0.000	0.000	0.000	-0.070	0.000
IF	2241.000	7.093	0.000	9.651	0.000	0.000	0.000	0.000	-0.035	0.000
IF	2250.000	7.323	0.000	9.651	0.000	0.000	0.000	0.000	0.013	0.000
IF	2277.500	7.552	0.000	9.651	0.000	0.000	0.000	0.000	0.013	0.000
IF	2287.500	7.815	0.000	9.651	0.000	0.000	0.000	0.000	0.053	0.000
IF	2300.000	8.737	0.000	9.651	0.000	0.000	0.000	0.000	0.067	0.000
IF	2315.100	9.651	0.000	9.651	0.000	0.000	0.000	0.000	0.060	0.000
AS	2317.800	9.651	0.000	9.651	0.000	0.000	0.000	0.000	-0.127	0.000
IF	2324.500	8.799	0.000	9.651	0.000	0.000	0.000	0.000	-0.114	0.000
IF	2337.000	7.454	0.000	9.652	0.000	0.000	0.000	0.000	-0.071	0.000
IF	2348.000	7.126	0.000	9.652	0.000	0.000	0.000	0.000	-0.022	0.000
IF	2365.500	6.831	0.000	9.652	0.000	0.000	0.000	0.000	0.000	0.000
IF	2386.000	7.126	0.000	9.652	0.000	0.000	0.000	0.000	0.003	0.000
IF	2391.000	6.896	0.000	9.652	0.000	0.000	0.000	0.000	-0.010	0.000
IF	2411.000	6.864	0.000	9.652	0.000	0.000	0.000	0.000	0.067	0.000
IF	2432.200	9.652	0.000	9.652	0.000	0.000	0.000	0.000	0.132	0.000
AS	2432.600	9.652	0.000	9.652	0.000	0.000	0.000	0.000	-0.434	0.000
IF	2438.500	7.093	0.000	9.652	0.000	0.000	0.000	0.000	-0.132	0.000
IF	2444.000	8.143	0.000	9.652	0.000	0.000	0.000	0.000	0.006	0.000
IF	2470.500	7.290	0.000	9.652	0.000	0.000	0.000	0.000	-0.030	0.000
IF	2479.500	7.087	0.000	9.652	0.000	0.000	0.000	0.000	0.082	0.000
IF	2499.300	9.652	0.000	9.652	0.000	0.000	0.000	0.000	0.130	0.000
AS	3164.000	9.637	0.000	9.637	0.000	0.000	0.000	0.000	-0.063	0.000
IF	3171.000	9.196	0.000	9.637	0.000	0.000	0.000	0.000	-0.061	0.000
IF	3183.000	8.474	0.000	9.637	0.000	0.000	0.000	0.000	-0.036	0.000
IF	3193.500	8.376	0.000	9.637	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3206.000	8.317	0.000	9.637	0.000	0.000	0.000	0.000	0.000	0.000
IF	3221.000	8.382	0.000	9.637	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3238.000	7.848	0.000	9.637	0.000	0.000	0.000	0.000	-0.023	0.000
IF	3263.500	7.389	0.000	9.637	0.000	0.000	0.000	0.000	-0.014	0.000
IF	3273.500	7.352	0.000	9.637	0.000	0.000	0.000	0.000	0.006	0.000
IF	3310.000	7.684	0.000	9.637	0.000	0.000	0.000	0.000	-0.018	0.000
IF	3318.000	6.568	0.000	9.637	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3358.000	7.060	0.000	9.637	0.000	0.000	0.000	0.000	0.017	0.000
IF	3369.500	7.454	0.000	9.637	0.000	0.000	0.000	0.000	0.005	0.000
IF	3402.000	7.290	0.000	9.637	0.000	0.000	0.000	0.000	0.011	0.000
IF	3426.500	8.091	0.000	9.637	0.000	0.000	0.000	0.000	0.052	0.000
IF	3431.000	8.809	0.000	9.637	0.000	0.000	0.000	0.000	0.052	0.000
IF	3456.400	9.637	0.000	9.637	0.000	0.000	0.000	0.000	0.033	0.000
AS	3562.600	9.646	0.000	9.646	0.000	0.000	0.000	0.000	-0.163	0.000
IF	3581.500	6.568	0.000	9.646	0.000	0.000	0.000	0.000	-0.144	0.000
IF	3592.500	5.354	0.000	9.646	0.000	0.000	0.000	0.000	-0.049	0.000
IF	3616.000	4.862	0.000	9.646	0.000	0.000	0.000	0.000	0.052	0.000
IF	3627.500	7.159	0.000	9.646	0.000	0.000	0.000	0.000	0.077	0.000
IF	3642.000	6.864	0.000	9.646	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3663.000	7.093	0.000	9.646	0.000	0.000	0.000	0.000	-0.003	0.000
IF	3684.500	6.729	0.000	9.646	0.000	0.000	0.000	0.000	-0.003	0.000
IF	3693.000	6.991	0.000	9.646	0.000	0.000	0.000	0.000	-0.003	0.000
IF	3721.000	6.634	0.000	9.646	0.000	0.000	0.000	0.000	0.011	0.000
IF	3729.000	7.375	0.000	9.646	0.000	0.000	0.000	0.000	0.049	0.000
IF	3745.500	7.848	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
IF	3761.000	7.405	0.000	9.648	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3771.500	7.507	0.000	9.648	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3801.000	7.339	0.000	9.649	0.000	0.000	0.000	0.000	0.013	0.000
IF	3810.500	8.025	0.000	9.649	0.000	0.000	0.000	0.000	0.016	0.000
IF	3826.000	7.730	0.000	9.650	0.000	0.000	0.000	0.000	-0.001	0.000
IF	3837.000	7.995	0.000	9.650	0.000	0.000	0.000	0.000	0.031	0.000
IF	3867.000	8.980	0.000	9.651	0.000	0.000	0.000	0.000	0.021	0.000
IF	3877.000	8.852	0.000	9.652	0.000	0.000	0.000	0.000	0.033	0.000
IF	3887.400	9.652	0.000	9.652	0.000	0.000	0.000	0.000	0.077	0.000
AS	3896.800	9.653	0.000	9.653	0.000	0.000	0.000	0.000	-0.250	0.000
IF	3911.000	6.099	0.000	9.653	0.000	0.000	0.000	0.000	-0.145	0.000
IF	3926.500	5.354	0.000	9.653	0.000	0.000	0.000	0.000	-0.016	0.000
IF	3952.000	5.453	0.000	9.653	0.000	0.000	0.000	0.000	0.006	0.000
IF	3960.500	5.551	0.000	9.653	0.000	0.000	0.000	0.000	0.030	0.000
IF	3997.500	6.831	0.000	9.653	0.000	0.000	0.000	0.000	0.048	0.000
IF	4012.000	8.045	0.000	9.653	0.000	0.000	0.000	0.000	-0.014	0.000
IF	4022.000	6.490	0.000	9.653	0.000	0.000	0.000	0.000	0.059	0.000
IF	4039.400	9.654	0.000	9.654	0.000	0.000	0.000	0.000	0.182	0.000
AS	4247.500	9.653	0.000	9.653	0.000	0.000	0.000	0.000	-0.096	0.000
IF	4255.500	8.888	0.000	9.653	0.000	0.000	0.000	0.000	-0.068	0.000
IF	4267.000	8.327	0.000	9.653	0.000	0.000	0.000	0.000	0.010	0.000
IF	4285.000	9.190	0.000	9.653	0.000	0.000	0.000	0.000	0.011	0.000
IF	4298.000	8.658	0.000	9.653	0.000	0.000	0.000	0.000	-0.009	0.000
IF	4307.000	8.986	0.000	9.653	0.000	0.000	0.000	0.000	0.006	0.000
IF	4320.500	8.793	0.000	9.653	0.000	0.000	0.000	0.000	0.024	0.000
IF	4335.300	9.653	0.000	9.653	0.000	0.000	0.000	0.000	0.058	0.000
AS	4377.200	9.653	0.000	9.653	0.000	0.000	0.000	0.000	-0.140	0.000
IF	4381.000	9.121	0.000	9.653	0.000	0.000	0.000	0.000	-0.024	0.000
IF	4394.000	9.255	0.000	9.653	0.000	0.000	0.000	0.000	-0.002	0.000
IF	4408.500	9.055	0.000	9.653	0.000	0.000	0.000	0.000	-0.050	0.000
IF	4419.000	8.005	0.000	9.653	0.000	0.000	0.000	0.000	-0.088	0.000

IF	4433.000	6.896	0.000	9.653	0.000	0.000	0.000	0.000	-0.064	0.000
IF	4446.500	6.240	0.000	9.653	0.000	0.000	0.000	0.000	-0.012	0.000
IF	4482.000	6.302	0.000	9.653	0.000	0.000	0.000	0.000	0.016	0.000
IF	4488.000	6.893	0.000	9.653	0.000	0.000	0.000	0.000	0.023	0.000
IF	4518.000	7.123	0.000	9.653	0.000	0.000	0.000	0.000	-0.010	0.000
IF	4529.000	6.466	0.000	9.653	0.000	0.000	0.000	0.000	-0.008	0.000
IF	4558.000	6.798	0.000	9.653	0.000	0.000	0.000	0.000	0.002	0.000
IF	4567.500	6.532	0.000	9.653	0.000	0.000	0.000	0.000	0.022	0.000
IF	4603.500	7.815	0.000	9.653	0.000	0.000	0.000	0.000	0.068	0.000
IF	4613.100	9.653	0.000	9.653	0.000	0.000	0.000	0.000	0.191	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-23.773	1.000	1.000	9.042	29.615	13.840	56.140	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.300	-23.739	0.000	9.045	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	6.600	-23.706	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.800	-23.672	0.000	9.049	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.100	-23.639	0.000	9.052	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.400	-23.605	0.000	9.054	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.700	-23.572	0.000	9.057	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-23.538	0.000	9.059	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.200	-23.505	0.000	9.062	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	29.500	-23.471	0.000	9.064	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	32.800	-23.437	0.000	9.067	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	36.100	-23.404	0.000	9.070	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	39.400	-23.370	0.000	9.072	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	42.700	-23.337	0.000	9.075	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	45.900	-23.303	0.000	9.078	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	49.200	-23.270	0.000	9.081	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	52.500	-23.236	0.000	9.083	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	55.800	-23.203	0.000	9.086	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	59.100	-23.151	0.000	9.089	0.000	0.000	0.000	0.000	0.019	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	62.300	-23.077	0.000	9.091	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	65.600	-23.003	0.000	9.094	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	68.900	-22.929	0.000	9.096	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	72.200	-22.856	0.000	9.098	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	75.500	-22.782	0.000	9.101	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	78.700	-22.708	0.000	9.104	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	82.000	-22.634	0.000	9.106	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	85.300	-22.560	0.000	9.108	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	88.600	-22.486	0.000	9.111	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	91.900	-22.412	0.000	9.114	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	95.100	-22.339	0.000	9.116	0.000	0.000	0.000	0.000	0.023	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.400	-22.265	0.000	9.119	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.700	-22.191	0.000	9.121	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-22.117	0.000	9.124	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.300	-22.043	0.000	9.127	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-21.969	0.000	9.129	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-21.893	0.000	9.132	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-21.806	0.000	9.134	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-21.719	0.000	9.137	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-21.632	0.000	9.140	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-21.545	0.000	9.142	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-21.458	0.000	9.145	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-21.370	0.000	9.148	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-21.283	0.000	9.150	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-21.196	0.000	9.153	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.400	-21.109	0.000	9.156	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.600	-21.022	0.000	9.158	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.900	-20.935	0.000	9.161	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.200	-20.848	0.000	9.164	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.500	-20.761	0.000	9.167	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.800	-20.674	0.000	9.170	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-20.587	0.000	9.172	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.300	-20.500	0.000	9.175	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.600	-20.413	0.000	9.178	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.900	-20.326	0.000	9.181	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.200	-20.239	0.000	9.183	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.400	-20.152	0.000	9.186	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.700	-20.064	0.000	9.189	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	187.000	-19.956	0.000	9.191	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	190.300	-19.811	0.000	9.194	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.600	-19.667	0.000	9.196	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.800	-19.522	0.000	9.198	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.100	-19.378	0.000	9.201	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	203.400	-19.233	0.000	9.203	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.700	-19.089	0.000	9.206	0.000	0.000	0.000	0.000	0.044	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	210.000	-18.944	0.000	9.208	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	213.300	-18.800	0.000	9.211	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.500	-18.655	0.000	9.214	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	219.800	-18.511	0.000	9.216	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	223.100	-18.366	0.000	9.219	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	226.400	-18.222	0.000	9.222	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.700	-18.077	0.000	9.225	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	232.900	-17.933	0.000	9.228	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	236.200	-17.788	0.000	9.231	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	239.500	-17.644	0.000	9.234	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	242.800	-17.499	0.000	9.237	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	246.100	-17.355	0.000	9.240	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.300	-17.210	0.000	9.243	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	252.600	-17.066	0.000	9.247	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.900	-16.921	0.000	9.250	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-16.777	0.000	9.253	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-16.632	0.000	9.257	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-16.488	0.000	9.260	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-16.343	0.000	9.263	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-16.199	0.000	9.267	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-16.054	0.000	9.270	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-15.910	0.000	9.274	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-15.772	0.000	9.277	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-15.638	0.000	9.281	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-15.503	0.000	9.285	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-15.368	0.000	9.289	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-15.234	0.000	9.292	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-15.099	0.000	9.296	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-14.964	0.000	9.299	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-14.830	0.000	9.303	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-14.695	0.000	9.307	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-14.536	0.000	9.310	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-14.351	0.000	9.313	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-14.166	0.000	9.316	0.000	0.000	0.000	0.000	0.057	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-13.982	0.000	9.319	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-13.797	0.000	9.323	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-13.612	0.000	9.327	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-13.427	0.000	9.330	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-13.254	0.000	9.335	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-13.113	0.000	9.339	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-12.973	0.000	9.344	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-12.832	0.000	9.350	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.800	-12.692	0.000	9.354	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-12.551	0.000	9.360	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-12.411	0.000	9.365	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	357.600	-12.271	0.000	9.371	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-12.130	0.000	9.376	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-11.990	0.000	9.381	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	367.500	-11.849	0.000	9.387	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.700	-11.709	0.000	9.393	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	374.000	-11.569	0.000	9.398	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.300	-11.428	0.000	9.404	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	380.600	-11.288	0.000	9.409	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.900	-11.147	0.000	9.415	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	387.100	-11.007	0.000	9.421	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	390.400	-10.867	0.000	9.427	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	393.700	-10.726	0.000	9.433	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	397.000	-10.586	0.000	9.439	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	400.300	-10.445	0.000	9.445	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	403.500	-10.305	0.000	9.451	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	406.800	-10.164	0.000	9.457	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	410.100	-10.024	0.000	9.463	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	413.400	-9.884	0.000	9.469	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	416.700	-9.744	0.000	9.476	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	419.900	-9.603	0.000	9.482	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	423.200	-9.463	0.000	9.489	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	426.500	-9.322	0.000	9.495	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	429.800	-9.200	0.000	9.502	0.000	0.000	0.000	0.000	0.030	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	433.100	-9.122	0.000	9.510	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	436.400	-9.043	0.000	9.517	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	439.600	-8.964	0.000	9.525	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	442.900	-8.885	0.000	9.533	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	446.200	-8.806	0.000	9.540	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	449.500	-8.727	0.000	9.548	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	452.800	-8.648	0.000	9.555	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	456.000	-8.569	0.000	9.562	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	459.300	-8.491	0.000	9.569	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	462.600	-8.412	0.000	9.576	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	465.900	-8.333	0.000	9.583	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	469.200	-8.254	0.000	9.590	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	472.400	-8.175	0.000	9.597	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	475.700	-8.096	0.000	9.603	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	479.000	-8.017	0.000	9.610	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	482.300	-7.938	0.000	9.617	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	485.600	-7.860	0.000	9.623	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	488.800	-7.781	0.000	9.629	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	492.100	-7.702	0.000	9.635	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	495.400	-7.623	0.000	9.642	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	498.700	-7.544	0.000	9.648	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	502.000	-7.465	0.000	9.654	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	505.200	-7.386	0.000	9.660	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	508.500	-7.307	0.000	9.666	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	511.800	-7.228	0.000	9.672	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	515.100	-7.150	0.000	9.678	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	518.400	-7.071	0.000	9.684	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	521.700	-6.992	0.000	9.689	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	524.900	-6.912	0.000	9.695	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	528.200	-6.826	0.000	9.700	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	531.500	-6.739	0.000	9.706	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	534.800	-6.653	0.000	9.711	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	538.100	-6.567	0.000	9.716	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	541.300	-6.481	0.000	9.722	0.000	0.000	0.000	0.000	0.025	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	544.600	-6.406	0.000	9.727	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	547.900	-6.400	0.000	9.733	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	551.200	-6.397	0.000	9.740	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	554.500	-6.394	0.000	9.745	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	557.700	-6.391	0.000	9.751	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	561.000	-6.387	0.000	9.756	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	564.300	-6.385	0.000	9.762	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	567.600	-6.381	0.000	9.767	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	570.900	-6.378	0.000	9.772	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	574.100	-6.375	0.000	9.776	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	577.400	-6.372	0.000	9.781	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	580.700	-6.365	0.000	9.785	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	584.000	-6.347	0.000	9.789	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	587.300	-6.329	0.000	9.793	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	590.500	-6.311	0.000	9.797	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	593.800	-6.293	0.000	9.801	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	597.100	-6.275	0.000	9.805	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	600.400	-6.257	0.000	9.808	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	603.700	-6.240	0.000	9.812	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	607.000	-6.222	0.000	9.815	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	610.200	-6.204	0.000	9.818	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	613.500	-6.186	0.000	9.821	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	616.800	-6.168	0.000	9.825	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	620.100	-6.150	0.000	9.827	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	623.400	-6.133	0.000	9.831	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	626.600	-6.115	0.000	9.833	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	629.900	-6.097	0.000	9.836	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	633.200	-6.079	0.000	9.839	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	636.500	-6.061	0.000	9.842	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	639.800	-6.043	0.000	9.844	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	643.000	-6.025	0.000	9.847	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	646.300	-6.008	0.000	9.849	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	649.600	-5.990	0.000	9.852	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	652.900	-5.972	0.000	9.854	0.000	0.000	0.000	0.000	0.001	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	656.200	-5.982	0.000	9.857	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	659.400	-5.996	0.000	9.859	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	662.700	-6.009	0.000	9.862	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	666.000	-6.023	0.000	9.865	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	669.300	-6.036	0.000	9.867	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	672.600	-6.049	0.000	9.869	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	675.900	-6.063	0.000	9.872	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	679.100	-6.076	0.000	9.874	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	682.400	-6.090	0.000	9.876	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	685.700	-6.103	0.000	9.878	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	689.000	-6.116	0.000	9.880	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	692.300	-6.130	0.000	9.882	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	695.500	-6.143	0.000	9.884	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	698.800	-6.157	0.000	9.886	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	702.100	-6.170	0.000	9.888	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	705.400	-6.127	0.000	9.889	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	708.700	-6.056	0.000	9.890	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	711.900	-5.985	0.000	9.891	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	715.200	-5.914	0.000	9.892	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	718.500	-5.844	0.000	9.893	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	721.800	-5.773	0.000	9.894	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	725.100	-5.702	0.000	9.895	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	728.300	-5.631	0.000	9.896	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	731.600	-5.560	0.000	9.898	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	734.900	-5.489	0.000	9.899	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	738.200	-5.418	0.000	9.900	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	741.500	-5.347	0.000	9.901	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	744.700	-5.276	0.000	9.903	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	748.000	-5.205	0.000	9.904	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	751.300	-5.134	0.000	9.905	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	754.600	-5.063	0.000	9.907	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	757.900	-4.992	0.000	9.908	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	761.200	-4.934	0.000	9.910	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	764.400	-4.992	0.000	9.912	0.000	0.000	0.000	0.000	-0.018	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	767.700	-5.049	0.000	9.915	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	771.000	-5.107	0.000	9.917	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	774.300	-5.164	0.000	9.919	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	777.600	-5.222	0.000	9.922	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	780.800	-5.280	0.000	9.924	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	784.100	-5.337	0.000	9.925	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	787.400	-5.395	0.000	9.927	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	790.700	-5.452	0.000	9.929	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	794.000	-5.510	0.000	9.931	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	797.200	-5.567	0.000	9.932	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	800.500	-5.625	0.000	9.934	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	803.800	-5.683	0.000	9.936	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	807.100	-5.740	0.000	9.937	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	810.400	-5.798	0.000	9.939	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	813.600	-5.855	0.000	9.940	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	816.900	-5.913	0.000	9.941	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	820.200	-5.951	0.000	9.942	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	823.500	-5.944	0.000	9.943	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	826.800	-5.938	0.000	9.944	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	830.100	-5.932	0.000	9.944	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	833.300	-5.926	0.000	9.945	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	836.600	-5.920	0.000	9.946	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	839.900	-5.913	0.000	9.947	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	843.200	-5.907	0.000	9.948	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	846.500	-5.901	0.000	9.948	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	849.700	-5.895	0.000	9.949	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	853.000	-5.888	0.000	9.950	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	856.300	-5.882	0.000	9.950	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	859.600	-5.876	0.000	9.951	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	862.900	-5.849	0.000	9.952	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	866.100	-5.802	0.000	9.952	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	869.400	-5.755	0.000	9.952	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	872.700	-5.708	0.000	9.953	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	876.000	-5.661	0.000	9.953	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	879.300	-5.614	0.000	9.954	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	882.500	-5.567	0.000	9.954	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	885.800	-5.519	0.000	9.955	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	889.100	-5.472	0.000	9.955	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	892.400	-5.425	0.000	9.956	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	895.700	-5.378	0.000	9.956	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	898.900	-5.331	0.000	9.957	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	902.200	-5.208	0.000	9.957	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	905.500	-5.073	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	908.800	-4.938	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	912.100	-4.802	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	915.400	-4.667	0.000	9.957	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	918.600	-4.531	0.000	9.957	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	921.900	-4.396	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	925.200	-4.260	0.000	9.957	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	928.500	-4.125	0.000	9.958	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	931.800	-3.990	0.000	9.958	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	935.000	-3.854	0.000	9.958	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	938.300	-3.719	0.000	9.959	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	941.600	-3.583	0.000	9.960	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	944.900	-3.448	0.000	9.960	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	948.200	-3.312	0.000	9.961	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	951.400	-3.177	0.000	9.962	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	954.700	-3.041	0.000	9.963	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	958.000	-2.906	0.000	9.964	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	961.300	-2.782	0.000	9.965	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	964.600	-2.720	0.000	9.968	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	967.800	-2.659	0.000	9.970	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	971.100	-2.598	0.000	9.972	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	974.400	-2.536	0.000	9.974	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	977.700	-2.475	0.000	9.976	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	981.000	-2.414	0.000	9.978	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	984.200	-2.352	0.000	9.980	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	987.500	-2.291	0.000	9.982	0.000	0.000	0.000	0.000	0.019	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	990.800	-2.230	0.000	9.984	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	994.100	-2.168	0.000	9.986	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	997.400	-2.107	0.000	9.988	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1000.700	-2.045	0.000	9.990	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1003.900	-1.984	0.000	9.992	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1007.200	-1.923	0.000	9.995	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1010.500	-1.861	0.000	9.997	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1013.800	-1.800	0.000	9.999	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1017.100	-1.738	0.000	10.001	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1020.300	-1.677	0.000	10.003	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1023.600	-1.616	0.000	10.005	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1026.900	-1.554	0.000	10.007	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1030.200	-1.493	0.000	10.010	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1033.500	-1.432	0.000	10.012	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1036.700	-1.359	0.000	10.014	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1040.000	-1.261	0.000	10.016	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1043.300	-1.131	0.000	10.017	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1046.600	-1.001	0.000	10.019	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1049.900	-0.872	0.000	10.021	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1053.100	-0.742	0.000	10.023	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1056.400	-0.612	0.000	10.025	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1059.700	-0.482	0.000	10.027	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1063.000	-0.352	0.000	10.029	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1066.300	-0.223	0.000	10.032	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1069.600	-0.093	0.000	10.034	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1072.800	-0.017	0.000	10.038	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1076.100	-0.369	0.000	10.047	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1079.400	0.086	0.000	10.044	0.000	0.000	0.000	0.000	0.228	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1082.700	1.134	0.000	10.034	0.000	0.000	0.000	0.000	0.298	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1086.000	2.053	0.000	10.026	0.000	0.000	0.000	0.000	0.235	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1089.200	2.658	0.000	10.028	0.000	0.000	0.000	0.000	0.186	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1092.500	3.264	0.000	10.031	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1095.800	2.944	0.000	10.062	0.000	0.000	0.000	0.000	-0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1099.100	2.465	0.000	10.088	0.000	0.000	0.000	0.000	-0.145	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1102.400	1.985	0.000	10.107	0.000	0.000	0.000	0.000	-0.126	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1105.600	1.644	0.000	10.120	0.000	0.000	0.000	0.000	-0.084	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1108.900	1.441	0.000	10.128	0.000	0.000	0.000	0.000	-0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1112.200	1.239	0.000	10.135	0.000	0.000	0.000	0.000	-0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1115.500	1.007	0.000	10.141	0.000	0.000	0.000	0.000	-0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1118.800	0.871	0.000	10.145	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1122.000	1.066	0.000	10.145	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1125.300	1.661	0.000	10.141	0.000	0.000	0.000	0.000	0.063	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1128.600	1.479	0.000	10.147	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1131.900	1.952	0.000	10.144	0.000	0.000	0.000	0.000	0.086	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1135.200	2.043	0.000	10.147	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1138.400	2.146	0.000	10.150	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1141.700	2.533	0.000	10.149	0.000	0.000	0.000	0.000	0.154	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1145.000	3.160	0.000	10.145	0.000	0.000	0.000	0.000	0.214	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1148.300	3.945	0.000	10.140	0.000	0.000	0.000	0.000	0.238	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1151.600	4.730	0.000	10.137	0.000	0.000	0.000	0.000	0.295	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1154.900	5.892	0.000	10.125	0.000	0.000	0.000	0.000	0.366	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1158.100	7.111	0.000	10.251	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1161.400	7.229	0.000	10.389	0.000	0.000	0.000	0.000	-0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1164.700	6.587	0.000	10.402	0.000	0.000	0.000	0.000	-0.133	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1168.000	6.352	0.000	10.408	0.000	0.000	0.000	0.000	-0.117	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1171.300	5.815	0.000	10.433	0.000	0.000	0.000	0.000	-0.192	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1174.500	5.102	0.000	10.454	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1177.800	6.662	0.000	10.433	0.000	0.000	0.000	0.000	0.348	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1181.100	7.396	0.000	10.463	0.000	0.000	0.000	0.000	0.073	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1184.400	7.143	0.000	10.503	0.000	0.000	0.000	0.000	-0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1187.700	6.890	0.000	10.526	0.000	0.000	0.000	0.000	-0.100	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1190.900	6.492	0.000	10.544	0.000	0.000	0.000	0.000	-0.125	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1194.200	6.078	0.000	10.555	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1197.500	6.491	0.000	10.553	0.000	0.000	0.000	0.000	0.108	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1200.800	6.791	0.000	10.554	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1204.100	6.490	0.000	10.565	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1207.300	6.958	0.000	10.563	0.000	0.000	0.000	0.000	0.180	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1210.600	7.657	0.000	10.558	0.000	0.000	0.000	0.000	0.163	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1213.900	8.034	0.000	10.580	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1224.800	10.580	0.000	10.580	0.000	0.000	0.000	0.000	0.234	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1368.600	9.616	0.000	9.616	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1386.500	8.930	0.000	9.616	0.000	0.000	0.000	0.000	-0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1394.500	8.340	0.000	9.616	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1411.500	8.176	0.000	9.616	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1423.500	8.012	0.000	9.616	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1438.000	8.117	0.000	9.616	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1456.000	8.386	0.000	9.616	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1487.400	9.616	0.000	9.616	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1488.800	9.617	0.000	9.617	0.000	0.000	0.000	0.000	-0.193	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1507.000	6.109	0.000	9.617	0.000	0.000	0.000	0.000	-0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1515.000	6.207	0.000	9.618	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1535.500	6.243	0.000	9.619	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1562.000	6.109	0.000	9.621	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1571.000	6.896	0.000	9.622	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1588.500	6.995	0.000	9.623	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1621.500	8.340	0.000	9.625	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1644.000	8.054	0.000	9.626	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1663.000	8.911	0.000	9.627	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1669.000	9.039	0.000	9.628	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1679.200	9.628	0.000	9.628	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1693.700	9.629	0.000	9.629	0.000	0.000	0.000	0.000	-0.148	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1697.000	9.140	0.000	9.629	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1706.400	9.629	0.000	9.629	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1712.400	9.630	0.000	9.630	0.000	0.000	0.000	0.000	-0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1718.000	9.409	0.000	9.630	0.000	0.000	0.000	0.000	-0.088	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1736.000	7.552	0.000	9.631	0.000	0.000	0.000	0.000	-0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1765.000	6.043	0.000	9.632	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1789.500	5.846	0.000	9.633	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1803.000	7.716	0.000	9.634	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1841.500	5.584	0.000	9.636	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1864.500	5.748	0.000	9.636	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1875.500	7.569	0.000	9.636	0.000	0.000	0.000	0.000	-0.014	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1899.000	5.256	0.000	9.636	0.000	0.000	0.000	0.000	-0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1907.500	5.781	0.000	9.636	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1931.000	5.584	0.000	9.636	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1940.500	5.879	0.000	9.636	0.000	0.000	0.000	0.000	-0.019	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1964.000	4.961	0.000	9.636	0.000	0.000	0.000	0.000	0.093	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1980.900	9.636	0.000	9.636	0.000	0.000	0.000	0.000	0.277	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	2073.800	9.651	0.000	9.651	0.000	0.000	0.000	0.000	-0.066	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2086.500	8.816	0.000	9.651	0.000	0.000	0.000	0.000	-0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2104.000	7.969	0.000	9.651	0.000	0.000	0.000	0.000	-0.034	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2116.500	7.805	0.000	9.651	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2135.000	8.300	0.000	9.651	0.000	0.000	0.000	0.000	-0.035	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2153.000	6.529	0.000	9.651	0.000	0.000	0.000	0.000	0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2184.500	8.570	0.000	9.651	0.000	0.000	0.000	0.000	0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2194.500	8.537	0.000	9.651	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2216.000	8.832	0.000	9.651	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2225.000	8.209	0.000	9.651	0.000	0.000	0.000	0.000	-0.070	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2241.000	7.093	0.000	9.651	0.000	0.000	0.000	0.000	-0.035	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2250.000	7.323	0.000	9.651	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2277.500	7.552	0.000	9.651	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2287.500	7.815	0.000	9.651	0.000	0.000	0.000	0.000	0.053	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2300.000	8.737	0.000	9.651	0.000	0.000	0.000	0.000	0.067	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2315.100	9.651	0.000	9.651	0.000	0.000	0.000	0.000	0.060	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	2317.800	9.651	0.000	9.651	0.000	0.000	0.000	0.000	-0.127	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2324.500	8.799	0.000	9.651	0.000	0.000	0.000	0.000	-0.114	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2337.000	7.454	0.000	9.652	0.000	0.000	0.000	0.000	-0.071	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2348.000	7.126	0.000	9.652	0.000	0.000	0.000	0.000	-0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2365.500	6.831	0.000	9.652	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2386.000	7.126	0.000	9.652	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2391.000	6.896	0.000	9.652	0.000	0.000	0.000	0.000	-0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2411.000	6.864	0.000	9.652	0.000	0.000	0.000	0.000	0.067	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2432.200	9.652	0.000	9.652	0.000	0.000	0.000	0.000	0.132	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	2432.600	9.652	0.000	9.652	0.000	0.000	0.000	0.000	-0.434	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2438.500	7.093	0.000	9.652	0.000	0.000	0.000	0.000	-0.132	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2444.000	8.143	0.000	9.652	0.000	0.000	0.000	0.000	0.006	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2470.500	7.290	0.000	9.652	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2479.500	7.087	0.000	9.652	0.000	0.000	0.000	0.000	0.082	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2499.300	9.652	0.000	9.652	0.000	0.000	0.000	0.000	0.130	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	3164.000	9.637	0.000	9.637	0.000	0.000	0.000	0.000	-0.063	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3171.000	9.196	0.000	9.637	0.000	0.000	0.000	0.000	-0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3183.000	8.474	0.000	9.637	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3193.500	8.376	0.000	9.637	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3206.000	8.317	0.000	9.637	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3221.000	8.382	0.000	9.637	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3238.000	7.848	0.000	9.637	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3263.500	7.389	0.000	9.637	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3273.500	7.352	0.000	9.637	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3310.000	7.684	0.000	9.637	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3318.000	6.568	0.000	9.637	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3358.000	7.060	0.000	9.637	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3369.500	7.454	0.000	9.637	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3402.000	7.290	0.000	9.637	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3426.500	8.091	0.000	9.637	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3431.000	8.809	0.000	9.637	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3456.400	9.637	0.000	9.637	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	3562.600	9.646	0.000	9.646	0.000	0.000	0.000	0.000	-0.163	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3581.500	6.568	0.000	9.646	0.000	0.000	0.000	0.000	-0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3592.500	5.354	0.000	9.646	0.000	0.000	0.000	0.000	-0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3616.000	4.862	0.000	9.646	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3627.500	7.159	0.000	9.646	0.000	0.000	0.000	0.000	0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3642.000	6.864	0.000	9.646	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3663.000	7.093	0.000	9.646	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3684.500	6.729	0.000	9.646	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3693.000	6.991	0.000	9.646	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3721.000	6.634	0.000	9.646	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3729.000	7.375	0.000	9.646	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3745.500	7.848	0.000	9.647	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3761.000	7.405	0.000	9.648	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3771.500	7.507	0.000	9.648	0.000	0.000	0.000	0.000	-0.002	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3801.000	7.339	0.000	9.649	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3810.500	8.025	0.000	9.649	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3826.000	7.730	0.000	9.650	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3837.000	7.995	0.000	9.650	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3867.000	8.980	0.000	9.651	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3877.000	8.852	0.000	9.652	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3887.400	9.652	0.000	9.652	0.000	0.000	0.000	0.000	0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	3896.800	9.653	0.000	9.653	0.000	0.000	0.000	0.000	-0.250	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3911.000	6.099	0.000	9.653	0.000	0.000	0.000	0.000	-0.145	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3926.500	5.354	0.000	9.653	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3952.000	5.453	0.000	9.653	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3960.500	5.551	0.000	9.653	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3997.500	6.831	0.000	9.653	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4012.000	8.045	0.000	9.653	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4022.000	6.490	0.000	9.653	0.000	0.000	0.000	0.000	0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4039.400	9.654	0.000	9.654	0.000	0.000	0.000	0.000	0.182	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	4247.500	9.653	0.000	9.653	0.000	0.000	0.000	0.000	-0.096	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4255.500	8.888	0.000	9.653	0.000	0.000	0.000	0.000	-0.068	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4267.000	8.327	0.000	9.653	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4285.000	9.190	0.000	9.653	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4298.000	8.658	0.000	9.653	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4307.000	8.986	0.000	9.653	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4320.500	8.793	0.000	9.653	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4335.300	9.653	0.000	9.653	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	4377.200	9.653	0.000	9.653	0.000	0.000	0.000	0.000	-0.140	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4381.000	9.121	0.000	9.653	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4394.000	9.255	0.000	9.653	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4408.500	9.055	0.000	9.653	0.000	0.000	0.000	0.000	-0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4419.000	8.005	0.000	9.653	0.000	0.000	0.000	0.000	-0.088	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4433.000	6.896	0.000	9.653	0.000	0.000	0.000	0.000	-0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4446.500	6.240	0.000	9.653	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4482.000	6.302	0.000	9.653	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4488.000	6.893	0.000	9.653	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4518.000	7.123	0.000	9.653	0.000	0.000	0.000	0.000	-0.010	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4529.000	6.466	0.000	9.653	0.000	0.000	0.000	0.000	-0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4558.000	6.798	0.000	9.653	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4567.500	6.532	0.000	9.653	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4603.500	7.815	0.000	9.653	0.000	0.000	0.000	0.000	0.068	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4613.100	9.653	0.000	9.653	0.000	0.000	0.000	0.000	0.191	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	24.31	13.84	26.06
OF	3.30	24.28	13.84	26.04
OF	6.60	24.26	13.84	26.03
OF	9.80	24.24	13.84	26.02
OF	13.10	24.22	13.84	26.00
OF	16.40	24.20	13.84	25.99
OF	19.70	24.17	13.84	25.98
OF	23.00	24.15	13.84	25.97
OF	26.20	24.13	13.84	25.95
OF	29.50	24.11	13.84	25.94
OF	32.80	24.09	13.84	25.93
OF	36.10	24.07	13.84	25.92
OF	39.40	24.04	13.84	25.90
OF	42.70	24.02	13.84	25.89
OF	45.90	24.00	13.84	25.88
OF	49.20	23.98	13.84	25.87
OF	52.50	23.96	13.84	25.85
OF	55.80	23.94	13.84	25.84
OF	59.10	23.90	13.84	25.82
OF	62.30	23.85	13.84	25.79
OF	65.60	23.80	13.84	25.75
OF	68.90	23.75	13.84	25.72
OF	72.20	23.70	13.84	25.69
OF	75.50	23.65	13.84	25.66
OF	78.70	23.60	13.84	25.62
OF	82.00	23.55	13.84	25.59
OF	85.30	23.50	13.84	25.56
OF	88.60	23.45	13.84	25.52
OF	91.90	23.40	13.84	25.49
OF	95.10	23.35	13.84	25.46
OF	98.40	23.30	13.84	25.43
OF	101.70	23.25	13.84	25.39
OF	105.00	23.20	13.84	25.36
OF	108.30	23.15	13.84	25.33
OF	111.50	23.10	13.84	25.30
OF	114.80	23.04	13.84	25.26
OF	118.10	22.98	13.84	25.22
OF	121.40	22.92	13.84	25.18
OF	124.70	22.87	13.84	25.15
OF	128.00	22.81	13.84	25.11
OF	131.20	22.75	13.84	25.07
OF	134.50	22.69	13.84	25.03
OF	137.80	22.63	13.84	24.99
OF	141.10	22.57	13.84	24.95
OF	144.40	22.51	13.84	24.91
OF	147.60	22.45	13.84	24.87
OF	150.90	22.39	13.84	24.83
OF	154.20	22.33	13.84	24.79
OF	157.50	22.27	13.84	24.75
OF	160.80	22.21	13.84	24.72
OF	164.00	22.15	13.84	24.68
OF	167.30	22.09	13.84	24.64
OF	170.60	22.03	13.84	24.60
OF	173.90	21.97	13.84	24.56
OF	177.20	21.91	13.84	24.52
OF	180.40	21.85	13.84	24.48
OF	183.70	21.79	13.84	24.44
OF	187.00	21.71	13.84	24.39
OF	190.30	21.61	13.84	24.32
OF	193.60	21.51	13.84	24.25
OF	196.80	21.41	13.84	24.18
OF	200.10	21.31	13.84	24.12
OF	203.40	21.21	13.84	24.05
OF	206.70	21.11	13.84	23.98
OF	210.00	21.00	13.84	23.91
OF	213.30	20.90	13.84	23.84
OF	216.50	20.80	13.84	23.78
OF	219.80	20.70	13.84	23.71
OF	223.10	20.60	13.84	23.64
OF	226.40	20.50	13.84	23.57
OF	229.70	20.40	13.84	23.50
OF	232.90	20.30	13.84	23.44
OF	236.20	20.19	13.84	23.37
OF	239.50	20.09	13.84	23.30
OF	242.80	19.99	13.84	23.23
OF	246.10	19.89	13.84	23.16
OF	249.30	19.79	13.84	23.10
OF	252.60	19.69	13.84	23.03
OF	255.90	19.59	13.84	22.96

OF	259.20	19.49	13.84	22.89
OF	262.50	19.38	13.84	22.83
OF	265.70	19.28	13.84	22.76
OF	269.00	19.18	13.84	22.69
OF	272.30	19.08	13.84	22.62
OF	275.60	18.98	13.84	22.55
OF	278.90	18.88	13.84	22.49
OF	282.20	18.78	13.84	22.42
OF	285.40	18.69	13.84	22.36
OF	288.70	18.59	13.84	22.30
OF	292.00	18.50	13.84	22.24
OF	295.30	18.40	13.84	22.17
OF	298.60	18.31	13.84	22.11
OF	301.80	18.21	13.84	22.05
OF	305.10	18.12	13.84	21.99
OF	308.40	18.02	13.84	21.92
OF	311.70	17.91	13.84	21.85
OF	315.00	17.78	13.84	21.76
OF	318.20	17.65	13.84	21.67
OF	321.50	17.52	13.84	21.58
OF	324.80	17.39	13.84	21.49
OF	328.10	17.25	13.84	21.41
OF	331.40	17.12	13.84	21.32
OF	334.60	17.00	13.84	21.24
OF	337.90	16.90	13.84	21.17
OF	341.20	16.80	13.84	21.11
OF	344.50	16.71	13.84	21.04
OF	347.80	16.61	13.84	20.98
OF	351.00	16.51	13.84	20.92
OF	354.30	16.41	13.84	20.85
OF	357.60	16.31	13.84	20.79
OF	360.90	16.21	13.84	20.73
OF	364.20	16.11	13.84	20.66
OF	367.50	16.02	13.84	20.60
OF	370.70	15.92	13.84	20.54
OF	374.00	15.82	13.84	20.47
OF	377.30	15.72	13.84	20.41
OF	380.60	15.62	13.84	20.35
OF	383.90	15.52	13.84	20.28
OF	387.10	15.43	13.84	20.22
OF	390.40	15.33	13.84	20.16
OF	393.70	15.23	13.84	20.09
OF	397.00	15.13	13.84	20.03
OF	400.30	15.03	13.84	19.97
OF	403.50	14.93	13.84	19.91
OF	406.80	14.84	13.84	19.84
OF	410.10	14.74	13.84	19.78
OF	413.40	14.64	13.84	19.72
OF	416.70	14.54	13.84	19.66
OF	419.90	14.44	13.84	19.59
OF	423.20	14.35	13.84	19.53
OF	426.50	14.25	13.84	19.47
OF	429.80	14.16	13.84	19.41
OF	433.10	14.11	13.84	19.39
OF	436.40	14.06	13.84	19.36
OF	439.60	14.00	13.84	19.33
OF	442.90	13.95	13.84	19.30
OF	446.20	13.90	13.84	19.27
OF	449.50	13.85	13.84	19.24
OF	452.80	13.79	13.84	19.21
OF	456.00	13.74	13.84	19.18
OF	459.30	13.69	13.84	19.15
OF	462.60	13.64	13.84	19.12
OF	465.90	13.58	13.84	19.09
OF	469.20	13.53	13.84	19.06
OF	472.40	13.48	13.84	19.03
OF	475.70	13.42	13.84	19.00
OF	479.00	13.37	13.84	18.97
OF	482.30	13.32	13.84	18.94
OF	485.60	13.26	13.84	18.91
OF	488.80	13.21	13.84	18.88
OF	492.10	13.16	13.84	18.84
OF	495.40	13.10	13.84	18.81
OF	498.70	13.05	13.84	18.78
OF	502.00	12.99	13.84	18.75
OF	505.20	12.94	13.84	18.72
OF	508.50	12.89	13.84	18.69
OF	511.80	12.83	13.84	18.66
OF	515.10	12.78	13.84	18.62
OF	518.40	12.73	13.84	18.59
OF	521.70	12.67	13.84	18.56
OF	524.90	12.62	13.84	18.53
OF	528.20	12.56	13.84	18.49
OF	531.50	12.50	13.84	18.45
OF	534.80	12.44	13.84	18.42
OF	538.10	12.38	13.84	18.38
OF	541.30	12.32	13.84	18.34
OF	544.60	12.27	13.84	18.31
OF	547.90	12.27	13.84	18.32
OF	551.20	12.27	13.84	18.33
OF	554.50	12.27	13.84	18.33
OF	557.70	12.27	13.84	18.34
OF	561.00	12.27	13.84	18.35
OF	564.30	12.28	13.84	18.36
OF	567.60	12.28	13.84	18.36
OF	570.90	12.28	13.84	18.37
OF	574.10	12.28	13.84	18.37
OF	577.40	12.28	13.84	18.38
OF	580.70	12.28	13.84	18.38
OF	584.00	12.27	13.84	18.38
OF	587.30	12.26	13.84	18.37
OF	590.50	12.25	13.84	18.37

OF	593.80	12.24	13.84	18.37
OF	597.10	12.23	13.84	18.36
OF	600.40	12.22	13.84	18.36
OF	603.70	12.21	13.84	18.36
OF	607.00	12.19	13.84	18.35
OF	610.20	12.18	13.84	18.35
OF	613.50	12.17	13.84	18.34
OF	616.80	12.16	13.84	18.34
OF	620.10	12.15	13.84	18.33
OF	623.40	12.14	13.84	18.33
OF	626.60	12.13	13.84	18.32
OF	629.90	12.12	13.84	18.32
OF	633.20	12.11	13.84	18.31
OF	636.50	12.09	13.84	18.31
OF	639.80	12.08	13.84	18.30
OF	643.00	12.07	13.84	18.30
OF	646.30	12.06	13.84	18.29
OF	649.60	12.05	13.84	18.29
OF	652.90	12.04	13.84	18.28
OF	656.20	12.05	13.84	18.29
OF	659.40	12.05	13.84	18.29
OF	662.70	12.06	13.84	18.30
OF	666.00	12.06	13.84	18.31
OF	669.30	12.07	13.84	18.31
OF	672.60	12.07	13.84	18.32
OF	675.90	12.08	13.84	18.33
OF	679.10	12.08	13.84	18.33
OF	682.40	12.09	13.84	18.34
OF	685.70	12.10	13.84	18.35
OF	689.00	12.10	13.84	18.35
OF	692.30	12.11	13.84	18.36
OF	695.50	12.11	13.84	18.36
OF	698.80	12.12	13.84	18.37
OF	702.10	12.12	13.84	18.37
OF	705.40	12.12	13.84	18.37
OF	708.70	12.11	13.84	18.36
OF	711.90	12.07	13.84	18.34
OF	715.20	12.02	13.84	18.31
OF	718.50	11.97	13.84	18.27
OF	721.80	11.92	13.84	18.24
OF	725.10	11.87	13.84	18.20
OF	728.30	11.82	13.84	18.17
OF	731.60	11.76	13.84	18.13
OF	734.90	11.71	13.84	18.10
OF	738.20	11.66	13.84	18.06
OF	741.50	11.61	13.84	18.03
OF	744.70	11.56	13.84	17.99
OF	748.00	11.51	13.84	17.96
OF	751.30	11.45	13.84	17.92
OF	754.60	11.40	13.84	17.89
OF	757.90	11.35	13.84	17.85
OF	761.20	11.31	13.84	17.83
OF	764.40	11.32	13.84	17.84
OF	767.70	11.34	13.84	17.85
OF	771.00	11.35	13.84	17.86
OF	774.30	11.37	13.84	17.88
OF	777.60	11.38	13.84	17.89
OF	780.80	11.39	13.84	17.90
OF	784.10	11.41	13.84	17.91
OF	787.40	11.42	13.84	17.92
OF	790.70	11.44	13.84	17.93
OF	794.00	11.45	13.84	17.95
OF	797.20	11.46	13.84	17.96
OF	800.50	11.48	13.84	17.97
OF	803.80	11.49	13.84	17.98
OF	807.10	11.50	13.84	17.99
OF	810.40	11.52	13.84	18.00
OF	813.60	11.53	13.84	18.01
OF	816.90	11.54	13.84	18.02
OF	820.20	11.55	13.84	18.03
OF	823.50	11.55	13.84	18.03
OF	826.80	11.56	13.84	18.03
OF	830.10	11.56	13.84	18.03
OF	833.30	11.56	13.84	18.04
OF	836.60	11.56	13.84	18.04
OF	839.90	11.56	13.84	18.04
OF	843.20	11.56	13.84	18.04
OF	846.50	11.56	13.84	18.04
OF	849.70	11.56	13.84	18.04
OF	853.00	11.57	13.84	18.05
OF	856.30	11.57	13.84	18.05
OF	859.60	11.57	13.84	18.05
OF	862.90	11.57	13.84	18.05
OF	866.10	11.56	13.84	18.04
OF	869.40	11.55	13.84	18.04
OF	872.70	11.55	13.84	18.04
OF	876.00	11.54	13.84	18.03
OF	879.30	11.53	13.84	18.03
OF	882.50	11.53	13.84	18.02
OF	885.80	11.52	13.84	18.02
OF	889.10	11.51	13.84	18.01
OF	892.40	11.51	13.84	18.01
OF	895.70	11.50	13.84	18.00
OF	898.90	11.49	13.84	18.00
OF	902.20	11.47	13.84	17.99
OF	905.50	11.44	13.84	17.97
OF	908.80	11.35	13.84	17.90
OF	912.10	11.25	13.84	17.83
OF	915.40	11.14	13.84	17.76
OF	918.60	11.04	13.84	17.69
OF	921.90	10.94	13.84	17.62
OF	925.20	10.84	13.84	17.55

OF	928.50	10.74	13.84	17.48
OF	931.80	10.64	13.84	17.41
OF	935.00	10.54	13.84	17.34
OF	938.30	10.44	13.84	17.27
OF	941.60	10.34	13.84	17.20
OF	944.90	10.24	13.84	17.13
OF	948.20	10.14	13.84	17.06
OF	951.40	10.04	13.84	16.99
OF	954.70	9.94	13.84	16.92
OF	958.00	9.84	13.84	16.85
OF	961.30	9.74	13.84	16.79
OF	964.60	9.70	13.84	16.76
OF	967.80	9.65	13.84	16.73
OF	971.10	9.61	13.84	16.70
OF	974.40	9.57	13.84	16.67
OF	977.70	9.52	13.84	16.64
OF	981.00	9.48	13.84	16.61
OF	984.20	9.43	13.84	16.58
OF	987.50	9.39	13.84	16.55
OF	990.80	9.34	13.84	16.52
OF	994.10	9.30	13.84	16.49
OF	997.40	9.25	13.84	16.47
OF	1000.70	9.21	13.84	16.44
OF	1003.90	9.16	13.84	16.41
OF	1007.20	9.12	13.84	16.38
OF	1010.50	9.08	13.84	16.35
OF	1013.80	9.03	13.84	16.32
OF	1017.10	8.99	13.84	16.29
OF	1020.30	8.94	13.84	16.26
OF	1023.60	8.90	13.84	16.23
OF	1026.90	8.85	13.84	16.20
OF	1030.20	8.81	13.84	16.18
OF	1033.50	8.77	13.84	16.15
OF	1036.70	8.71	13.84	16.11
OF	1040.00	8.64	13.84	16.06
OF	1043.30	8.54	13.84	16.00
OF	1046.60	8.45	13.84	15.93
OF	1049.90	8.35	13.84	15.87
OF	1053.10	8.25	13.84	15.80
OF	1056.40	8.16	13.84	15.74
OF	1059.70	8.06	13.84	15.67
OF	1063.00	7.96	13.84	15.60
OF	1066.30	7.87	13.84	15.54
OF	1069.60	7.77	13.84	15.47
OF	1072.80	7.72	13.84	15.44
OF	1076.10	7.79	13.84	15.50
IF	1079.40	7.64	13.84	15.40
IF	1082.70	6.84	13.84	14.82
IF	1086.00	6.14	13.84	14.32
IF	1089.20	5.68	13.84	14.00
IF	1092.50	5.22	13.84	13.69
IF	1095.80	5.32	13.84	13.78
IF	1099.10	5.44	13.84	13.89
IF	1102.40	5.55	13.84	13.99
IF	1105.60	5.62	13.84	14.05
IF	1108.90	5.66	13.84	14.09
IF	1112.20	5.70	13.84	14.12
IF	1115.50	5.74	13.84	14.16
IF	1118.80	5.76	13.84	14.18
IF	1122.00	5.73	13.84	14.16
IF	1125.30	5.63	13.84	14.08
IF	1128.60	5.66	13.84	14.11
IF	1131.90	5.57	13.84	14.05
IF	1135.20	5.56	13.84	14.04
IF	1138.40	5.54	13.84	14.03
IF	1141.70	5.45	13.84	13.97
IF	1145.00	5.30	13.84	13.86
IF	1148.30	4.78	13.84	13.49
IF	1151.60	4.18	13.84	13.06
IF	1154.90	3.28	13.84	12.42
IF	1158.10	2.44	13.84	11.96
IF	1161.40	2.44	13.84	12.10
IF	1164.70	2.56	13.84	12.19
IF	1168.00	2.59	13.84	12.22
IF	1171.30	2.66	13.84	12.30
IF	1174.50	2.73	13.84	12.37
IF	1177.80	2.56	13.84	12.22
IF	1181.10	2.38	13.84	12.13
IF	1184.40	2.44	13.84	12.21
IF	1187.70	2.48	13.84	12.26
IF	1190.90	2.54	13.84	12.32
IF	1194.20	2.60	13.84	12.37
IF	1197.50	2.55	13.84	12.34
IF	1200.80	2.51	13.84	12.31
IF	1204.10	2.56	13.84	12.35
IF	1207.30	2.49	13.84	12.31
IF	1210.60	2.25	13.84	12.13
IF	1213.90	1.98	13.84	11.96
IF	1224.80	0.01	13.84	10.59
AS	1368.60	0.00	0.00	9.62
IF	1386.50	0.10	0.37	9.69
IF	1394.50	0.13	0.42	9.70
IF	1411.50	0.18	0.49	9.74
IF	1423.50	0.21	0.53	9.76
IF	1438.00	0.24	0.58	9.79
IF	1456.00	0.28	0.62	9.81
IF	1487.40	0.01	0.69	9.62
AS	1488.80	0.00	0.00	9.62
IF	1507.00	0.10	0.37	9.69
IF	1515.00	0.13	0.42	9.71
IF	1535.50	0.19	0.51	9.75
IF	1562.00	0.25	0.59	9.80

IF	1571.00	0.27	0.61	9.81
IF	1588.50	0.31	0.65	9.84
IF	1621.50	0.37	0.72	9.88
IF	1644.00	0.41	0.75	9.92
IF	1663.00	0.37	0.78	9.88
IF	1669.00	0.33	0.79	9.86
IF	1679.20	0.01	0.81	9.63
AS	1693.70	0.00	0.00	9.63
IF	1697.00	0.03	0.22	9.65
IF	1706.40	0.01	0.33	9.63
AS	1712.40	0.00	0.00	9.63
IF	1718.00	0.05	0.25	9.66
IF	1736.00	0.12	0.40	9.71
IF	1765.00	0.20	0.53	9.77
IF	1789.50	0.26	0.60	9.82
IF	1803.00	0.29	0.63	9.84
IF	1841.50	0.37	0.71	9.89
IF	1864.50	0.41	0.75	9.92
IF	1875.50	0.43	0.77	9.94
IF	1899.00	0.47	0.80	9.97
IF	1907.50	0.48	0.81	9.97
IF	1931.00	0.52	0.84	10.00
IF	1940.50	0.54	0.86	10.01
IF	1964.00	0.57	0.88	10.04
IF	1980.90	0.01	0.90	9.64
AS	2073.80	0.00	0.00	9.65
IF	2086.50	0.08	0.33	9.71
IF	2104.00	0.14	0.44	9.75
IF	2116.50	0.18	0.49	9.77
IF	2135.00	0.22	0.55	9.81
IF	2153.00	0.27	0.60	9.84
IF	2184.50	0.33	0.67	9.88
IF	2194.50	0.35	0.69	9.89
IF	2216.00	0.36	0.73	9.90
IF	2225.00	0.40	0.75	9.93
IF	2241.00	0.44	0.77	9.96
IF	2250.00	0.45	0.79	9.97
IF	2277.50	0.50	0.82	10.00
IF	2287.50	0.51	0.84	10.01
IF	2300.00	0.45	0.85	9.97
IF	2315.10	0.01	0.87	9.66
AS	2317.80	0.00	0.00	9.65
IF	2324.50	0.05	0.27	9.69
IF	2337.00	0.10	0.38	9.73
IF	2348.00	0.14	0.44	9.75
IF	2365.50	0.19	0.51	9.79
IF	2386.00	0.24	0.57	9.82
IF	2391.00	0.25	0.59	9.83
IF	2411.00	0.30	0.64	9.86
IF	2432.20	0.01	0.68	9.66
AS	2432.60	0.00	0.00	9.65
IF	2438.50	0.05	0.26	9.69
IF	2444.00	0.07	0.32	9.70
IF	2470.50	0.16	0.47	9.77
IF	2479.50	0.19	0.51	9.78
IF	2499.30	0.01	0.57	9.66
AS	3164.00	0.00	0.00	9.64
IF	3171.00	0.05	0.27	9.68
IF	3183.00	0.10	0.38	9.71
IF	3193.50	0.14	0.43	9.73
IF	3206.00	0.17	0.49	9.76
IF	3221.00	0.21	0.54	9.79
IF	3238.00	0.25	0.59	9.82
IF	3263.50	0.31	0.65	9.85
IF	3273.50	0.33	0.67	9.87
IF	3310.00	0.40	0.74	9.92
IF	3318.00	0.41	0.75	9.93
IF	3358.00	0.48	0.81	9.97
IF	3369.50	0.50	0.83	9.99
IF	3402.00	0.55	0.87	10.02
IF	3426.50	0.57	0.90	10.03
IF	3431.00	0.45	0.90	9.95
IF	3456.40	0.01	0.93	9.64
AS	3562.60	0.00	0.00	9.65
IF	3581.50	0.10	0.38	9.72
IF	3592.50	0.14	0.44	9.74
IF	3616.00	0.20	0.53	9.79
IF	3627.50	0.23	0.56	9.81
IF	3642.00	0.27	0.60	9.83
IF	3663.00	0.31	0.65	9.86
IF	3684.50	0.35	0.70	9.89
IF	3693.00	0.37	0.71	9.91
IF	3721.00	0.42	0.76	9.94
IF	3729.00	0.44	0.77	9.95
IF	3745.50	0.46	0.80	9.97
IF	3761.00	0.49	0.82	9.99
IF	3771.50	0.50	0.83	10.00
IF	3801.00	0.55	0.87	10.03
IF	3810.50	0.55	0.88	10.04
IF	3826.00	0.58	0.90	10.06
IF	3837.00	0.59	0.91	10.06
IF	3867.00	0.41	0.94	9.94
IF	3877.00	0.44	0.95	9.96
IF	3887.40	0.01	0.96	9.66
AS	3896.80	0.00	0.00	9.65
IF	3911.00	0.09	0.34	9.71
IF	3926.50	0.14	0.44	9.75
IF	3952.00	0.21	0.53	9.80
IF	3960.50	0.23	0.56	9.81
IF	3997.50	0.31	0.65	9.87
IF	4012.00	0.34	0.68	9.89
IF	4022.00	0.36	0.70	9.91

IF	4039.40	0.01	0.73	9.66
AS	4247.50	0.00	0.00	9.65
IF	4255.50	0.06	0.28	9.69
IF	4267.00	0.11	0.38	9.73
IF	4285.00	0.16	0.47	9.76
IF	4298.00	0.20	0.52	9.79
IF	4307.00	0.22	0.55	9.80
IF	4320.50	0.25	0.59	9.83
IF	4335.30	0.01	0.62	9.66
AS	4377.20	0.00	0.00	9.65
IF	4381.00	0.04	0.23	9.68
IF	4394.00	0.10	0.36	9.72
IF	4408.50	0.14	0.44	9.75
IF	4419.00	0.17	0.49	9.77
IF	4433.00	0.21	0.54	9.80
IF	4446.50	0.24	0.58	9.82
IF	4482.00	0.32	0.66	9.88
IF	4488.00	0.33	0.67	9.89
IF	4518.00	0.39	0.73	9.93
IF	4529.00	0.41	0.75	9.94
IF	4558.00	0.46	0.79	9.98
IF	4567.50	0.48	0.81	9.99
IF	4603.50	0.53	0.85	10.02
IF	4613.10	0.01	0.87	9.66

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN	1224.80	AND	1368.60
BETWEEN	1487.40	AND	1488.80
BETWEEN	1679.20	AND	1693.70
BETWEEN	1706.40	AND	1712.40
BETWEEN	1980.90	AND	2073.80
BETWEEN	2315.10	AND	2317.80
BETWEEN	2432.20	AND	2432.60
BETWEEN	2499.30	AND	3164.00
BETWEEN	3456.40	AND	3562.60
BETWEEN	3887.40	AND	3896.80
BETWEEN	4039.40	AND	4247.50
BETWEEN	4335.30	AND	4377.20

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
3.30	1.00	9.05
6.60	1.00	9.05
9.80	1.00	9.05
13.10	1.00	9.05
16.40	1.00	9.05
19.70	1.00	9.06
23.00	1.00	9.06
26.20	1.00	9.06
29.50	1.00	9.06
32.80	1.00	9.07
36.10	1.00	9.07
39.40	1.00	9.07
42.70	1.00	9.07
45.90	1.00	9.08
49.20	1.00	9.08
52.50	1.00	9.08
55.80	1.00	9.09
59.10	1.00	9.09
62.30	1.00	9.09
65.60	1.00	9.09
68.90	1.00	9.10
72.20	1.00	9.10
75.50	1.00	9.10
78.70	1.00	9.10
82.00	1.00	9.11
85.30	1.00	9.11
88.60	1.00	9.11
91.90	1.00	9.11
95.10	1.00	9.12
98.40	1.00	9.12
101.70	1.00	9.12
105.00	1.00	9.12
108.30	1.00	9.13
111.50	1.00	9.13
114.80	1.00	9.13
118.10	1.00	9.13
121.40	1.00	9.14
124.70	1.00	9.14
128.00	1.00	9.14
131.20	1.00	9.15
134.50	1.00	9.15
137.80	1.00	9.15
141.10	1.00	9.15
144.40	1.00	9.16
147.60	1.00	9.16
150.90	1.00	9.16
154.20	1.00	9.16
157.50	1.00	9.17
160.80	1.00	9.17
164.00	1.00	9.17
167.30	1.00	9.18
170.60	1.00	9.18
173.90	1.00	9.18
177.20	1.00	9.18
180.40	1.00	9.19
183.70	1.00	9.19
187.00	1.00	9.19
190.30	1.00	9.19
193.60	1.00	9.20
196.80	1.00	9.20
200.10	1.00	9.20
203.40	1.00	9.20
206.70	1.00	9.21

210.00	1.00	9.21
213.30	1.00	9.21
216.50	1.00	9.21
219.80	1.00	9.22
223.10	1.00	9.22
226.40	1.00	9.22
229.70	1.00	9.23
232.90	1.00	9.23
236.20	1.00	9.23
239.50	1.00	9.23
242.80	1.00	9.24
246.10	1.00	9.24
249.30	1.00	9.24
252.60	1.00	9.25
255.90	1.00	9.25
259.20	1.00	9.25
262.50	1.00	9.26
265.70	1.00	9.26
269.00	1.00	9.26
272.30	1.00	9.27
275.60	1.00	9.27
278.90	1.00	9.27
282.20	1.00	9.28
285.40	1.00	9.28
288.70	1.00	9.28
292.00	1.00	9.29
295.30	1.00	9.29
298.60	1.00	9.30
301.80	1.00	9.30
305.10	1.00	9.30
308.40	1.00	9.31
311.70	1.00	9.31
315.00	1.00	9.31
318.20	1.00	9.32
321.50	1.00	9.32
324.80	1.00	9.32
328.10	1.00	9.33
331.40	1.00	9.33
334.60	1.00	9.34
337.90	1.00	9.34
341.20	1.00	9.34
344.50	1.00	9.35
347.80	1.00	9.35
351.00	1.00	9.36
354.30	1.00	9.36
357.60	1.00	9.37
360.90	1.00	9.38
364.20	1.00	9.38
367.50	1.00	9.39
370.70	1.00	9.39
374.00	1.00	9.40
377.30	1.00	9.40
380.60	1.00	9.41
383.90	1.00	9.41
387.10	1.00	9.42
390.40	1.00	9.43
393.70	1.00	9.43
397.00	1.00	9.44
400.30	1.00	9.44
403.50	1.00	9.45
406.80	1.00	9.46
410.10	1.00	9.46
413.40	1.00	9.47
416.70	1.00	9.48
419.90	1.00	9.48
423.20	1.00	9.49
426.50	1.00	9.49
429.80	1.00	9.50
433.10	1.00	9.51
436.40	1.00	9.52
439.60	1.00	9.52
442.90	1.00	9.53
446.20	1.00	9.54
449.50	1.00	9.55
452.80	1.00	9.56
456.00	1.00	9.56
459.30	1.00	9.57
462.60	1.00	9.58
465.90	1.00	9.58
469.20	1.00	9.59
472.40	1.00	9.60
475.70	1.00	9.60
479.00	1.00	9.61
482.30	1.00	9.62
485.60	1.00	9.62
488.80	1.00	9.63
492.10	1.00	9.64
495.40	1.00	9.64
498.70	1.00	9.65
502.00	1.00	9.65
505.20	1.00	9.66
508.50	1.00	9.67
511.80	1.00	9.67
515.10	1.00	9.68
518.40	1.00	9.68
521.70	1.00	9.69
524.90	1.00	9.69
528.20	1.00	9.70
531.50	1.00	9.71
534.80	1.00	9.71
538.10	1.00	9.72
541.30	1.00	9.72

544.60	1.00	9.73
547.90	1.00	9.73
551.20	1.00	9.74
554.50	1.00	9.74
557.70	1.00	9.75
561.00	1.00	9.76
564.30	1.00	9.76
567.60	1.00	9.77
570.90	1.00	9.77
574.10	1.00	9.78
577.40	1.00	9.78
580.70	1.00	9.78
584.00	1.00	9.79
587.30	1.00	9.79
590.50	1.00	9.80
593.80	1.00	9.80
597.10	1.00	9.81
600.40	1.00	9.81
603.70	1.00	9.81
607.00	1.00	9.81
610.20	1.00	9.82
613.50	1.00	9.82
616.80	1.00	9.82
620.10	1.00	9.83
623.40	1.00	9.83
626.60	1.00	9.83
629.90	1.00	9.84
633.20	1.00	9.84
636.50	1.00	9.84
639.80	1.00	9.84
643.00	1.00	9.85
646.30	1.00	9.85
649.60	1.00	9.85
652.90	1.00	9.85
656.20	1.00	9.86
659.40	1.00	9.86
662.70	1.00	9.86
666.00	1.00	9.86
669.30	1.00	9.87
672.60	1.00	9.87
675.90	1.00	9.87
679.10	1.00	9.87
682.40	1.00	9.88
685.70	1.00	9.88
689.00	1.00	9.88
692.30	1.00	9.88
695.50	1.00	9.88
698.80	1.00	9.89
702.10	1.00	9.89
705.40	1.00	9.89
708.70	1.00	9.89
711.90	1.00	9.89
715.20	1.00	9.89
718.50	1.00	9.89
721.80	1.00	9.89
725.10	1.00	9.90
728.30	1.00	9.90
731.60	1.00	9.90
734.90	1.00	9.90
738.20	1.00	9.90
741.50	1.00	9.90
744.70	1.00	9.90
748.00	1.00	9.90
751.30	1.00	9.90
754.60	1.00	9.91
757.90	1.00	9.91
761.20	1.00	9.91
764.40	1.00	9.91
767.70	1.00	9.91
771.00	1.00	9.92
774.30	1.00	9.92
777.60	1.00	9.92
780.80	1.00	9.92
784.10	1.00	9.93
787.40	1.00	9.93
790.70	1.00	9.93
794.00	1.00	9.93
797.20	1.00	9.93
800.50	1.00	9.93
803.80	1.00	9.94
807.10	1.00	9.94
810.40	1.00	9.94
813.60	1.00	9.94
816.90	1.00	9.94
820.20	1.00	9.94
823.50	1.00	9.94
826.80	1.00	9.94
833.30	1.00	9.94
836.60	1.00	9.95
839.90	1.00	9.95
843.20	1.00	9.95
849.70	1.00	9.95
853.00	1.00	9.95
859.60	1.00	9.95
862.90	1.00	9.95
872.70	1.00	9.95
879.30	1.00	9.95
885.80	1.00	9.95
892.40	1.00	9.96
898.90	1.00	9.96
928.50	1.00	9.96
938.30	1.00	9.96

941.60	1.00	9.96
948.20	1.00	9.96
951.40	1.00	9.96
954.70	1.00	9.96
958.00	1.00	9.96
961.30	1.00	9.97
964.60	1.00	9.97
967.80	1.00	9.97
971.10	1.00	9.97
974.40	1.00	9.97
977.70	1.00	9.98
981.00	1.00	9.98
984.20	1.00	9.98
987.50	1.00	9.98
990.80	1.00	9.98
994.10	1.00	9.99
997.40	1.00	9.99
1000.70	1.00	9.99
1003.90	1.00	9.99
1007.20	1.00	9.99
1010.50	1.00	10.00
1013.80	1.00	10.00
1017.10	1.00	10.00
1020.30	1.00	10.00
1023.60	1.00	10.01
1026.90	1.00	10.01
1030.20	1.00	10.01
1033.50	1.00	10.01
1036.70	1.00	10.01
1040.00	1.00	10.02
1043.30	1.00	10.02
1046.60	1.00	10.02
1049.90	1.00	10.02
1053.10	1.00	10.02
1056.40	1.00	10.02
1059.70	1.00	10.03
1063.00	1.00	10.03
1066.30	1.00	10.03
1069.60	1.00	10.03
1072.80	1.00	10.04
1076.10	1.00	10.05
1079.40	1.00	10.04
1082.70	1.00	10.03
1086.00	1.00	10.03
1089.20	1.00	10.03
1092.50	1.00	10.03
1095.80	1.00	10.06
1099.10	1.00	10.09
1102.40	1.00	10.11
1105.60	1.00	10.12
1108.90	1.00	10.13
1112.20	1.00	10.14
1115.50	1.00	10.14
1118.80	1.00	10.15
1125.30	1.00	10.14
1128.60	1.00	10.15
1131.90	1.00	10.14
1135.20	1.00	10.15
1138.40	1.00	10.15
1141.70	1.00	10.15
1145.00	1.00	10.15
1148.30	1.00	10.14
1151.60	1.00	10.14
1154.90	1.00	10.12
1158.10	1.00	10.25
1161.40	1.00	10.39
1164.70	1.00	10.40
1168.00	1.00	10.41
1171.30	1.00	10.43
1174.50	1.00	10.45
1177.80	1.00	10.43
1181.10	1.00	10.46
1184.40	1.00	10.50
1187.70	1.00	10.53
1190.90	1.00	10.54
1194.20	1.00	10.56
1197.50	1.00	10.55
1200.80	1.00	10.55
1204.10	1.00	10.56
1207.30	1.00	10.56
1210.60	1.00	10.56
1213.90	1.00	10.58
1368.60	1.00	9.62
1488.80	1.00	9.62
1515.00	1.00	9.62
1535.50	1.00	9.62
1562.00	1.00	9.62
1571.00	1.00	9.62
1588.50	1.00	9.62
1621.50	1.00	9.62
1644.00	1.00	9.63
1663.00	1.00	9.63
1669.00	1.00	9.63
1693.70	1.00	9.63
1712.40	1.00	9.63
1736.00	1.00	9.63
1765.00	1.00	9.63
1789.50	1.00	9.63
1803.00	1.00	9.63
1841.50	1.00	9.64
2073.80	1.00	9.65
2337.00	1.00	9.65

3164.00	1.00	9.64
3562.60	1.00	9.65
3745.50	1.00	9.65
3761.00	1.00	9.65
3801.00	1.00	9.65
3826.00	1.00	9.65
3867.00	1.00	9.65
3877.00	1.00	9.65
3896.80	1.00	9.65
4039.40	1.00	9.65
4247.50	1.00	9.65

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
1155.96	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	26.06	V22	EL=26	120
3.30	26.04	V22	EL=26	120
6.60	26.03	V22	EL=26	120
9.80	26.02	V22	EL=26	120
13.10	26.00	V22	EL=26	120
16.40	25.99	V22	EL=26	120
19.70	25.98	V22	EL=26	120
23.00	25.97	V22	EL=26	120
26.20	25.95	V22	EL=26	120
29.50	25.94	V23	EL=26	130
32.80	25.93	V23	EL=26	130
36.10	25.92	V23	EL=26	130
39.40	25.90	V23	EL=26	130
42.70	25.89	V23	EL=26	130
45.90	25.88	V23	EL=26	130
49.20	25.87	V23	EL=26	130
52.50	25.85	V23	EL=26	130
55.80	25.84	V23	EL=26	130
59.10	25.82	V23	EL=26	130
62.30	25.79	V23	EL=26	130
65.60	25.75	V23	EL=26	130
68.90	25.72	V23	EL=26	130
72.20	25.69	V23	EL=26	130
75.50	25.66	V23	EL=26	130
78.70	25.62	V23	EL=26	130
82.00	25.59	V23	EL=26	130
85.30	25.56	V23	EL=26	130
88.60	25.52	V23	EL=26	130
91.14	25.50	V23	EL=25	130
91.90	25.49	V23	EL=25	130
95.10	25.46	V23	EL=25	130
98.40	25.43	V23	EL=25	130
101.70	25.39	V23	EL=25	130
105.00	25.36	V23	EL=25	130
108.30	25.33	V23	EL=25	130
111.50	25.30	V23	EL=25	130
114.80	25.26	V23	EL=25	130
118.10	25.22	V23	EL=25	130
121.40	25.18	V23	EL=25	130
124.70	25.15	V23	EL=25	130
128.00	25.11	V23	EL=25	130
131.20	25.07	V23	EL=25	130
134.50	25.03	V23	EL=25	130

137.80	24.99	V23	EL=25	130
141.10	24.95	V23	EL=25	130
144.40	24.91	V23	EL=25	130
147.60	24.87	V23	EL=25	130
150.90	24.83	V23	EL=25	130
154.20	24.79	V23	EL=25	130
157.50	24.75	V23	EL=25	130
160.80	24.72	V23	EL=25	130
164.00	24.68	V23	EL=25	130
167.30	24.64	V23	EL=25	130
170.60	24.60	V23	EL=25	130
173.90	24.56	V23	EL=25	130
177.20	24.52	V23	EL=25	130
178.76	24.50	V23	EL=24	130
180.40	24.48	V23	EL=24	130
183.70	24.44	V23	EL=24	130
187.00	24.39	V23	EL=24	130
190.30	24.32	V23	EL=24	130
193.60	24.25	V23	EL=24	130
196.80	24.18	V23	EL=24	130
200.10	24.12	V23	EL=24	130
203.40	24.05	V23	EL=24	130
206.70	23.98	V23	EL=24	130
210.00	23.91	V23	EL=24	130
213.30	23.84	V23	EL=24	130
216.50	23.78	V23	EL=24	130
219.80	23.71	V23	EL=24	130
223.10	23.64	V23	EL=24	130
226.40	23.57	V23	EL=24	130
229.70	23.50	V23	EL=24	130
229.84	23.50	V23	EL=23	130
232.90	23.44	V23	EL=23	130
236.20	23.37	V23	EL=23	130
239.50	23.30	V23	EL=23	130
242.80	23.23	V23	EL=23	130
246.10	23.16	V23	EL=23	130
249.30	23.10	V23	EL=23	130
252.60	23.03	V23	EL=23	130
255.90	22.96	V23	EL=23	130
259.20	22.89	V23	EL=23	130
262.50	22.83	V23	EL=23	130
265.70	22.76	V23	EL=23	130
269.00	22.69	V23	EL=23	130
272.30	22.62	V23	EL=23	130
275.60	22.55	V23	EL=23	130
278.31	22.50	V23	EL=22	130
278.90	22.49	V23	EL=22	130
282.20	22.42	V23	EL=22	130
285.40	22.36	V23	EL=22	130
288.70	22.30	V23	EL=22	130
292.00	22.24	V23	EL=22	130

295.30	22.17	V23	EL=22	130
298.60	22.11	V23	EL=22	130
301.80	22.05	V23	EL=22	130
305.10	21.99	V23	EL=22	130
308.40	21.92	V23	EL=22	130
311.70	21.85	V23	EL=22	130
315.00	21.76	V23	EL=22	130
318.20	21.67	V23	EL=22	130
321.50	21.58	V23	EL=22	130
324.55	21.50	V23	EL=21	130
324.80	21.49	V23	EL=21	130
328.10	21.41	V23	EL=21	130
331.40	21.32	V23	EL=21	130
334.60	21.24	V23	EL=21	130
337.90	21.17	V23	EL=21	130
341.20	21.11	V23	EL=21	130
344.50	21.04	V23	EL=21	130
347.80	20.98	V23	EL=21	130
351.00	20.92	V23	EL=21	130
354.30	20.85	V23	EL=21	130
357.60	20.79	V23	EL=21	130
360.90	20.73	V23	EL=21	130
364.20	20.66	V23	EL=21	130
367.50	20.60	V23	EL=21	130
370.70	20.54	V23	EL=21	130
372.57	20.50	V23	EL=20	130
374.00	20.47	V23	EL=20	130
377.30	20.41	V23	EL=20	130
380.60	20.35	V23	EL=20	130
383.90	20.28	V23	EL=20	130
387.10	20.22	V23	EL=20	130
390.40	20.16	V23	EL=20	130
393.70	20.09	V23	EL=20	130
397.00	20.03	V23	EL=20	130
400.30	19.97	V23	EL=20	130
403.50	19.91	V23	EL=20	130
406.80	19.84	V23	EL=20	130
410.10	19.78	V23	EL=20	130
413.40	19.72	V23	EL=20	130
416.70	19.66	V23	EL=20	130
419.90	19.59	V23	EL=20	130
423.20	19.53	V23	EL=20	130
424.79	19.50	V23	EL=19	130
426.50	19.47	V23	EL=19	130
429.80	19.41	V23	EL=19	130
433.10	19.39	V23	EL=19	130
436.40	19.36	V23	EL=19	130
439.60	19.33	V23	EL=19	130
442.90	19.30	V23	EL=19	130
446.20	19.27	V23	EL=19	130
449.50	19.24	V23	EL=19	130

452.80	19.21	V23	EL=19	130
456.00	19.18	V23	EL=19	130
459.30	19.15	V23	EL=19	130
462.60	19.12	V23	EL=19	130
465.90	19.09	V23	EL=19	130
469.20	19.06	V23	EL=19	130
472.40	19.03	V23	EL=19	130
475.70	19.00	V23	EL=19	130
479.00	18.97	V23	EL=19	130
482.30	18.94	V23	EL=19	130
485.60	18.91	V23	EL=19	130
488.80	18.88	V23	EL=19	130
492.10	18.84	V23	EL=19	130
495.40	18.81	V23	EL=19	130
498.70	18.78	V23	EL=19	130
502.00	18.75	V23	EL=19	130
505.20	18.72	V23	EL=19	130
508.50	18.69	V23	EL=19	130
511.80	18.66	V23	EL=19	130
515.10	18.62	V23	EL=19	130
518.40	18.59	V23	EL=19	130
521.70	18.56	V23	EL=19	130
524.90	18.53	V23	EL=19	130
527.27	18.50	V23	EL=18	130
528.20	18.49	V23	EL=18	130
531.50	18.45	V24	EL=18	140
534.80	18.42	V24	EL=18	140
538.10	18.38	V24	EL=18	140
541.30	18.34	V24	EL=18	140
544.60	18.31	V24	EL=18	140
547.90	18.32	V24	EL=18	140
551.20	18.33	V24	EL=18	140
554.50	18.33	V24	EL=18	140
557.70	18.34	V24	EL=18	140
561.00	18.35	V24	EL=18	140
564.30	18.36	V24	EL=18	140
567.60	18.36	V24	EL=18	140
570.90	18.37	V24	EL=18	140
574.10	18.37	V24	EL=18	140
577.40	18.38	V24	EL=18	140
580.70	18.38	V24	EL=18	140
584.00	18.38	V24	EL=18	140
587.30	18.37	V24	EL=18	140
590.50	18.37	V24	EL=18	140
593.80	18.37	V24	EL=18	140
597.10	18.36	V24	EL=18	140
600.40	18.36	V24	EL=18	140
603.70	18.36	V24	EL=18	140
607.00	18.35	V24	EL=18	140
610.20	18.35	V24	EL=18	140
613.50	18.34	V24	EL=18	140

616.80	18.34	V24	EL=18	140
620.10	18.33	V24	EL=18	140
623.40	18.33	V24	EL=18	140
626.60	18.32	V24	EL=18	140
629.90	18.32	V24	EL=18	140
633.20	18.31	V24	EL=18	140
636.50	18.31	V24	EL=18	140
639.80	18.30	V24	EL=18	140
643.00	18.30	V24	EL=18	140
646.30	18.29	V24	EL=18	140
649.60	18.29	V24	EL=18	140
652.90	18.28	V24	EL=18	140
656.20	18.29	V24	EL=18	140
659.40	18.29	V24	EL=18	140
662.70	18.30	V24	EL=18	140
666.00	18.31	V24	EL=18	140
669.30	18.31	V24	EL=18	140
672.60	18.32	V24	EL=18	140
675.90	18.33	V24	EL=18	140
679.10	18.33	V24	EL=18	140
682.40	18.34	V24	EL=18	140
685.70	18.35	V24	EL=18	140
689.00	18.35	V24	EL=18	140
692.30	18.36	V24	EL=18	140
695.50	18.36	V24	EL=18	140
698.80	18.37	V24	EL=18	140
702.10	18.37	V24	EL=18	140
705.40	18.37	V24	EL=18	140
708.70	18.36	V24	EL=18	140
711.90	18.34	V24	EL=18	140
715.20	18.31	V24	EL=18	140
718.50	18.27	V24	EL=18	140
721.80	18.24	V24	EL=18	140
725.10	18.20	V24	EL=18	140
728.30	18.17	V24	EL=18	140
731.60	18.13	V24	EL=18	140
734.90	18.10	V24	EL=18	140
738.20	18.06	V24	EL=18	140
741.50	18.03	V24	EL=18	140
744.70	17.99	V24	EL=18	140
748.00	17.96	V24	EL=18	140
751.30	17.92	V24	EL=18	140
754.60	17.89	V24	EL=18	140
757.90	17.85	V24	EL=18	140
761.20	17.83	V24	EL=18	140
764.40	17.84	V24	EL=18	140
767.70	17.85	V24	EL=18	140
771.00	17.86	V24	EL=18	140
774.30	17.88	V24	EL=18	140
777.60	17.89	V24	EL=18	140
780.80	17.90	V24	EL=18	140

784.10	17.91	V24	EL=18	140
787.40	17.92	V24	EL=18	140
790.70	17.93	V24	EL=18	140
794.00	17.95	V24	EL=18	140
797.20	17.96	V24	EL=18	140
800.50	17.97	V24	EL=18	140
803.80	17.98	V24	EL=18	140
807.10	17.99	V24	EL=18	140
810.40	18.00	V24	EL=18	140
813.60	18.01	V24	EL=18	140
816.90	18.02	V24	EL=18	140
820.20	18.03	V24	EL=18	140
823.50	18.03	V24	EL=18	140
826.80	18.03	V24	EL=18	140
830.10	18.03	V24	EL=18	140
833.30	18.04	V24	EL=18	140
836.60	18.04	V24	EL=18	140
839.90	18.04	V24	EL=18	140
843.20	18.04	V24	EL=18	140
846.50	18.04	V24	EL=18	140
849.70	18.04	V24	EL=18	140
853.00	18.05	V24	EL=18	140
856.30	18.05	V24	EL=18	140
859.60	18.05	V24	EL=18	140
862.90	18.05	V24	EL=18	140
869.40	18.04	V24	EL=18	140
872.70	18.04	V24	EL=18	140
876.00	18.03	V24	EL=18	140
879.30	18.03	V24	EL=18	140
882.50	18.02	V24	EL=18	140
885.80	18.02	V24	EL=18	140
889.10	18.01	V24	EL=18	140
892.40	18.01	V24	EL=18	140
895.70	18.00	V24	EL=18	140
898.90	18.00	V24	EL=18	140
925.20	17.55	V24	EL=18	140
927.40	17.50	V24	EL=17	140
928.50	17.48	V24	EL=17	140
935.00	17.34	V24	EL=17	140
938.30	17.27	V24	EL=17	140
941.60	17.20	V24	EL=17	140
944.90	17.13	V24	EL=17	140
948.20	17.06	V24	EL=17	140
951.40	16.99	V24	EL=17	140
954.70	16.92	V24	EL=17	140
958.00	16.85	V24	EL=17	140
961.30	16.79	V24	EL=17	140
964.60	16.76	V24	EL=17	140
967.80	16.73	V24	EL=17	140
971.10	16.70	V24	EL=17	140
974.40	16.67	V24	EL=17	140

977.70	16.64	V24	EL=17	140
981.00	16.61	V24	EL=17	140
984.20	16.58	V24	EL=17	140
987.50	16.55	V24	EL=17	140
990.80	16.52	V24	EL=17	140
993.53	16.50	V24	EL=16	140
994.10	16.49	V24	EL=16	140
997.40	16.47	V24	EL=16	140
1000.70	16.44	V24	EL=16	140
1003.90	16.41	V24	EL=16	140
1007.20	16.38	V24	EL=16	140
1010.50	16.35	V24	EL=16	140
1013.80	16.32	V24	EL=16	140
1017.10	16.29	V24	EL=16	140
1020.30	16.26	V24	EL=16	140
1023.60	16.23	V24	EL=16	140
1026.90	16.20	V24	EL=16	140
1030.20	16.18	V24	EL=16	140
1033.50	16.15	V24	EL=16	140
1036.70	16.11	V24	EL=16	140
1040.00	16.06	V24	EL=16	140
1043.30	16.00	V24	EL=16	140
1046.60	15.93	V24	EL=16	140
1049.90	15.87	V24	EL=16	140
1053.10	15.80	V24	EL=16	140
1056.40	15.74	V24	EL=16	140
1059.70	15.67	V24	EL=16	140
1063.00	15.60	V24	EL=16	140
1066.30	15.54	V24	EL=16	140
1068.33	15.50	V24	EL=15	140
1069.60	15.47	V24	EL=15	140
1072.80	15.44	V24	EL=15	140
1076.10	15.50	V24	EL=15	140
1079.40	15.40	V24	EL=15	140
1082.70	14.82	V24	EL=15	140
1084.84	14.50	V24	EL=14	140
1086.00	14.32	V24	EL=14	140
1089.20	14.00	V24	EL=14	140
1092.50	13.69	V24	EL=14	140
1095.80	13.78	V24	EL=14	140
1099.10	13.89	V24	EL=14	140
1102.40	13.99	V24	EL=14	140
1105.60	14.05	V24	EL=14	140
1108.90	14.09	V24	EL=14	140
1112.20	14.12	V24	EL=14	140
1115.50	14.16	V24	EL=14	140
1118.80	14.18	V24	EL=14	140
1122.00	14.16	V24	EL=14	140
1125.30	14.08	V24	EL=14	140
1128.60	14.11	V24	EL=14	140
1131.90	14.05	V24	EL=14	140

1135.20	14.04	V24	EL=14	140
1138.40	14.03	V24	EL=14	140
1141.70	13.97	V24	EL=14	140
1145.00	13.86	V24	EL=14	140
1148.20	13.50	V24	EL=13	140
1148.30	13.49	V24	EL=13	140
1151.60	13.06	V24	EL=13	140
1154.49	12.50	V24	EL=12	140
1154.90	12.42	V24	EL=12	140
1155.96	12.29	A18	EL=12	90
1158.10	11.96	A18	EL=12	90
1161.40	12.10	A18	EL=12	90
1164.70	12.19	A18	EL=12	90
1168.00	12.22	A18	EL=12	90
1171.30	12.30	A18	EL=12	90
1174.50	12.37	A18	EL=12	90
1177.80	12.22	A18	EL=12	90
1181.10	12.13	A18	EL=12	90
1184.40	12.21	A18	EL=12	90
1187.70	12.26	A18	EL=12	90
1190.90	12.32	A18	EL=12	90
1194.20	12.37	A18	EL=12	90
1197.50	12.34	A18	EL=12	90
1200.80	12.31	A18	EL=12	90
1204.10	12.35	A18	EL=12	90
1207.30	12.31	A18	EL=12	90
1210.60	12.13	A18	EL=12	90
1213.90	11.96	A18	EL=12	90
1217.57	11.50	A18	EL=11	90
1224.80	10.59			
1368.60	9.62	A18	EL=10	90
1487.40	9.62			
1488.80	9.62	A18	EL=10	90
1507.00	9.69	A18	EL=10	90
1515.00	9.71	A18	EL=10	90
1535.50	9.75	A18	EL=10	90
1562.00	9.80	A18	EL=10	90
1571.00	9.81	A18	EL=10	90
1588.50	9.84	A18	EL=10	90
1621.50	9.88	A18	EL=10	90
1644.00	9.92	A18	EL=10	90
1663.00	9.88	A18	EL=10	90
1669.00	9.86	A18	EL=10	90
1679.20	9.63			
1693.70	9.63	A18	EL=10	90
1706.40	9.63			
1712.40	9.63	A18	EL=10	90
1718.00	9.66	A18	EL=10	90
1736.00	9.71	A18	EL=10	90
1765.00	9.77	A18	EL=10	90
1789.50	9.82	A18	EL=10	90
1803.00	9.84	A18	EL=10	90
1841.50	9.89	A18	EL=10	90

```
                    1980.90          9.64
                    2073.80          9.65
                                                A18  EL=10      90
                    2315.10          9.66
                    2317.80          9.65
                                                A18  EL=10      90
                    2324.50          9.69
                                                A18  EL=10      90
                    2337.00          9.73
                                                A18  EL=10      90
                    2432.20          9.66
                    2432.60          9.65
                                                A18  EL=10      90
                    2499.30          9.66
                    3164.00          9.64
                                                A18  EL=10      90
                    3456.40          9.64
                    3562.60          9.65
                                                A18  EL=10      90
                    3729.00          9.95
                                                A18  EL=10      90
                    3745.50          9.97
                                                A18  EL=10      90
                    3761.00          9.99
                                                A18  EL=10      90
                    3771.50         10.00
                                                A18  EL=10      90
                    3801.00         10.03
                                                A18  EL=10      90
                    3810.50         10.04
                                                A18  EL=10      90
                    3826.00         10.06
                                                A18  EL=10      90
                    3837.00         10.06
                                                A18  EL=10      90
                    3867.00          9.94
                                                A18  EL=10      90
                    3877.00          9.96
                                                A18  EL=10      90
                    3887.40          9.66
                    3896.80          9.65
                                                A18  EL=10      90
                    4022.00          9.91
                                                A18  EL=10      90
                    4039.40          9.66
                    4247.50          9.65
                                                A18  EL=10      90
                    4335.30          9.66
                    4377.20          9.65
                                                A18  EL=10      90
                    4613.10          9.66
                          ZONE TERMINATED AT END OF TRANSECT
                          PART 7   POSTSCRIPT NOTES
            PS#  1   START(384918.4767,4804143.5743)
            PS#  2   END(382742.4097,4803983.8199)
-1.000000e+00
```

YK-103
100-year WHAFIS Output
Zero Station: -70.42474970, 43.38107408
Onshore Dir: -175.8 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-1000
-500
0
500
1000
1500
2000
2500
3000
3500
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-103
Two Percent Run-up Elevation is 18.3 Feet-NAVD88
Run-up Height is 8.1 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
20
15
10
5
0
-5
0
50
100
150
200
250
300
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-103
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-103sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-103-runup';
SWEL=9.0423;  % 100-yr still water level including wave setup.
H0=6.6846;    % significant wave height at toe of structure
Tp=13.8007;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.85269;   % this may get changed automatically below
gamma_rough=0.75;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.96939;
maxSetup=1.5373;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-103'

plotTitle =

Iterative TAW for YK-103



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                  10.01169

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                  11.54899



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          805.411764786868


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

       -0.0152099999999997


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                  20.03859


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

        -0.810514014357526


toe_sta =

          7.07565722517106

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          305.072978560918


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          305.072978560918

toe_sta

toe_sta =

          7.07565722517106




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
```

```
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 198.3 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 1.10 feet


ans =

-!!-       SWEL is adjusted to 10.15 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
    21
    22
    23
    24
    25
    26
    27
    28
    29
    30
    31
    32
    33
    34
    35
    36
    37
    38
    39
    40
    41
    42
    43
    44
    45
    46
    47
    48
```

```
% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta

    % loop over profile segments to determine berm factor
    % re-calculate influence of depth of berm based on this run-up elevation
    % check for berm, berm width, berm height
    berm_width=0;
    rdh_sum=0;
    Berm_Segs=[];
    Berm_Heights=[];
    for kk=1:length(sta)-1
       ddep=dep(kk+1)-dep(kk);
       dsta=sta(kk+1)-sta(kk);
       s=ddep/dsta;
       if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
          sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
          berm_width=berm_width+dsta;   % tally the width of all berm segments
          % compute the rdh for this segment and weight it by the segment length
          dh=SWEL-(dep(kk)+dep(kk+1))/2
          if  dh < 0
              chi=R2;
          else
              chi=2* H0;
          end
          if (dh <= R2 & dh >=-2*H0)
             rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
          else
             rdh=1;
          end
          rdh_sum=rdh_sum + rdh * dsta
          Berm_Segs=[Berm_Segs, kk];
          Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
       end
       if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
          break
       end
    end
    sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
    berm_width
    rB=berm_width/Lslope
    if (berm_width > 0)
       rdh_mean=rdh_sum/berm_width
    else
       rdh_mean=1
    end
```

```
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end
% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
   % do the foreshore calculation
   fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
   % get upper slope
   fore_toe_sta=-999;
   fore_toe_dep=-999;
   for kk=length(dep)-1:-1:1
      ddep=dep(kk+1)-dep(kk);
      dsta=sta(kk+1)-sta(kk);
      s=ddep/dsta;
      if s < 1/15
         break
      end
      fore_toe_sta=sta(kk);
      fore_toe_dep=dep(kk);
      upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
   end
   fore_Irb=upper_slope/(sqrt(fore_H0/L0));
   fore_gamma=gamma_perm*gamma_beta*gamma_rough;
   if (fore_Irb < 1.8)
      fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
   else
      fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
   end
   if berm_width >= L0
      R2_new=fore_R2
      disp ('berm is wider than one wavelength, use full shallow foreshore solution');
   else
      w2=(berm_width-0.25*L0)/(0.75*L0)
      w1=1-w2
      R2_new=w2*fore_R2 + w1*R2_new
   end
end % end berm width check
% convergence criterion
R2del=abs(R2-R2_new)
R2_all(iter)=R2_new;
% get the new top station (for plot purposes)
Z2=R2_new+SWEL
top_sta=-999;
for kk=1:length(sta)-1
   if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
      top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
      break;
   end
end
if top_sta==-999
```

```
        dy=Z2-dep(end);
        top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
        -0.0152099999999997
toe_sta =
           7.07565722517106
top_sta =
           305.072978560918
Z2 =
                   20.03859
H0 =
                     6.6846
Tp =
                    13.8007
T0 =
           12.5460909090909
R2 =
                    20.0538
Z2 =
           30.2003223499491
top_sta =
           494.350314786617
Lslope =
           487.274657561446
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 14
dh =
           6.86657734994911
rdh_sum =
           0.52137398948955
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 15
dh =
           7.01272384994911
rdh_sum =
           1.05988758097302
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 16
dh =
           7.15887034994911
rdh_sum =
           1.61549535557839
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 17
dh =
           7.30501684994911
rdh_sum =
           2.18813173535515
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 18
dh =
           7.45116334994911
rdh_sum =
           2.77771106060995
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 19
dh =
           7.59730984994911
rdh_sum =
           3.38412769092466
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 20
dh =
           7.74345634994911
rdh_sum =
           4.00725612973755
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 21
dh =
           7.88960284994911
rdh_sum =
           4.64695117234071
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 22
dh =
           8.03574934994911
rdh_sum =
           5.30304807711916
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 23
dh =
           8.18189584994911
rdh_sum =
           5.97536275982977
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          6.66369201069084
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          7.36327807722119
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          8.06949579243737
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          8.78230172743214
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          9.50165106583653
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          10.2274976132581
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          10.9597938070091
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          11.6984907261237
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          12.4435381016598
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          13.1951337899271
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          13.9537146358556
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          14.7194568909352
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          15.4922854178496
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          16.2721230240528
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          17.0588905338898
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          17.8463394704828
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          18.6282428019156
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          19.4045491665145
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          20.1752083188606
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          20.8834483989456
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          21.6083638749372
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          22.3418439264898
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          23.0056388129801
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
            23.66932962336
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          24.3329164051988
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
           24.994628543774
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          25.6526883041245
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          25.7522215297308
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          25.8665166697112
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          25.9964548007975
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          26.1428812659861
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          26.3037481766994
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          26.4737420432197
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
           26.650100668802
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          26.8329156226893
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          27.0222766474083
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          27.2182716333774
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          27.4324443979863
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          27.6774033642637
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          27.9545160108855
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          28.2649774693291
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
           28.362564161054
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          28.4655999207198
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          28.5742154071602
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          28.6885394082926
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          28.8086987954031
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          28.9348185561857
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          29.0670217170552
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          29.2054293432393
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          29.3521914274872
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          29.5096001962242
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          29.6779568494316
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          29.8575529619094
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          30.0486702269297
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          30.2515802558285
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          30.4599376101971
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          30.6052755135891
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          30.7583035136458
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          30.9191832886589
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          31.0880728582343
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          31.2651265096597
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          31.2941090777345
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          31.3245191861876
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          31.3563900645176
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          31.3897548257553
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          31.4246464772624
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    76
rB =
         0.155969531393937
rdh_mean =
         0.413482190490294
gamma_berm =
         0.908521092096573
slope =
        0.0734680141224963
Irb =
          0.80643538025949
gamma_berm =
         0.908521092096573
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.681390819072429
ans =
!!! - - Iribaren number:   0.73 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:13.6 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           6.5015145934109
R2del =
          13.5522854065891
Z2 =
            16.64803694336
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          241.918899237432
Z2 =
            16.64803694336
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
           6.5015145934109
Z2 =
            16.64803694336
top_sta =
```

```
          241.918899237432
Lslope =
          234.843242012261
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 28
dh =
```

```
          8.61726484994911
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
    19
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
    20
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
    21
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
    22
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
    23
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
    24
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
    25
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
    26
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
    27
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
    28
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
    29
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
```

```
          8.51266434994911
rdh_sum =
    30
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
    31
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
    32
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
    33
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
    34
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
    35
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
    36
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
    37
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          37.0995332256064
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          37.2138283655867
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          37.3437664966731
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          37.4901929618617
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          37.6510598725749
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          37.8210537390953
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          37.9974123646775
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 88
dh =
```

```
          3.76021834994911
rdh_sum =
          38.1802273185649
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          38.3695883432838
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          38.5655833292529
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          38.7797560938618
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          39.0247150601392
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
           39.301827706761
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          39.6122891652046
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          39.7098758569295
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          39.8129116165953
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          39.9215271030358
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          40.0358511041681
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          40.1560104912787
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          40.2821302520612
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          40.4143334129307
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          40.5527410391149
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 109
dh =
```

```
          3.34609834994911
rdh_sum =
          40.6995031233627
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          40.8569118920998
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          41.0252685453071
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          41.2048646577849
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          41.3959819228052
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          41.5988919517041
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          41.8072493060726
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          41.9525872094646
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          42.1056152095213
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          42.2664949845345
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          42.4353845541099
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          42.6124382055352
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          42.8659813832505
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          43.1308918102581
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          43.4073277926284
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 157
dh =
```

```
         -2.34512665005089
rdh_sum =
          43.6954397753278
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          43.9953703460856
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    76
rB =
         0.323620127829917
rdh_mean =
         0.578886451922179
gamma_berm =
         0.863719179740146
slope =
         0.104903719744487
Irb =
          1.15149527496043
gamma_berm =
         0.863719179740146
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.647789384805109
ans =
!!! - - Iribaren number:   0.99 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:9.5 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.82560890240623
R2del =
          2.32409430899533
Z2 =
          18.9721312523553
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          285.208602685107
Z2 =
          18.9721312523553
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.82560890240623
Z2 =
          18.9721312523553
top_sta =
          285.208602685107
Lslope =
          278.132945459936
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
```

```
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          5.97536275982977
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          6.66369201069084
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          7.36327807722119
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          8.06949579243737
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          8.78230172743214
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          9.50165106583653
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          10.2274976132581
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          10.9597938070091
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          11.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
```

```
          12.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          13.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          14.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          15.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          16.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          17.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          18.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          19.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          20.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          21.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          22.6984907261237
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          23.4067308062087
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          24.1316462822004
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          24.8651263337529
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          25.5289212202432
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
```

```
          26.1926120306231
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
           26.856198812462
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          27.5179109510372
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          28.1759707113876
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           28.275503936994
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          28.3897990769744
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          28.5197372080607
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          28.6661636732493
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          28.8270305839625
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          28.9970244504829
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          29.1733830760652
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          29.3561980299525
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          29.5455590546714
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          29.7415540406406
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          29.9557268052494
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
```

```
          30.2006857715269
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          30.4777984181487
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          30.7882598765922
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          30.8858465683171
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          30.9888823279829
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          31.0974978144234
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          31.2118218155558
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          31.3319812026663
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          31.4581009634488
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          31.5903041243183
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          31.7287117505025
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          31.8754738347504
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          32.0328826034874
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          32.2012392566947
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          32.3808353691726
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
```

```
          32.5719526341929
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          32.7748626630917
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          32.9832200174602
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          33.1285579208523
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           33.281585920909
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          33.4424656959221
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          33.6113552654975
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          33.7884089169228
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          33.9320556475873
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          34.0824695911214
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          34.2397784775575
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          34.4041074564951
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          34.5755791138205
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    76
rB =
         0.273250620757358
rdh_mean =
         0.454941830445006
gamma_berm =
         0.851062516820228
slope =
        0.0939349159987319
Irb =
          1.03109415175937
gamma_berm =
         0.851062516820228
gamma_perm =
```

```
     1
gamma_beta =
     1
gamma_rough =
                       0.75
gamma =
         0.638296887615171
ans =
!!! - - Iribaren number:   0.88 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.6 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          7.7869922301058
R2del =
          1.03861667230043
Z2 =
          17.9335145800549
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          265.862826756103
Z2 =
          17.9335145800549
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          7.7869922301058
Z2 =
          17.9335145800549
top_sta =
          265.862826756103
Lslope =
          258.787169530932
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          5.00725612973755
ans =
```

```
Berm Factor Calculation: Iteration 4, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          6.00725612973755
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          7.00725612973755
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          8.00725612973756
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          9.00725612973756
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          10.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          11.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          12.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          13.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          14.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          15.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          16.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          17.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          18.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          19.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          20.0072561297376
ans =
```

```
Berm Factor Calculation: Iteration 4, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          21.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          22.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          23.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          24.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          25.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          26.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          27.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          28.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          29.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          30.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          31.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          32.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          33.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          34.0072561297376
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          34.1067893553439
ans =
```

```
Berm Factor Calculation: Iteration 4, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          34.2210844953243
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          34.3510226264106
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          34.4974490915992
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          34.6583160023124
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          34.8283098688328
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          35.0046684944151
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          35.1874834483024
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          35.3768444730214
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          35.5728394589905
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          35.7870122235993
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          36.0319711898768
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          36.3090838364986
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          36.6195452949422
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
           36.717131986667
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          36.8201677463329
ans =
```

```
Berm Factor Calculation: Iteration 4, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          36.9287832327733
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          37.0431072339057
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          37.1632666210162
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          37.2893863817988
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          37.4215895426683
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          37.5599971688524
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          37.7067592531003
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          37.8641680218373
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          38.0325246750446
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          38.2121207875225
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          38.4032380525428
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          38.6061480814416
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          38.8145054358102
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          38.9598433392022
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          39.1128713392589
ans =
```

```
Berm Factor Calculation: Iteration 4, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
           39.273751114272
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          39.4426406838474
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          39.6196943352728
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          39.8015590221505
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          39.9918523110472
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          40.1907195656338
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          40.3983020496559
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          40.6147369384765
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    76
rB =
         0.293677619867147
rdh_mean =
         0.534404433401007
gamma_berm =
         0.863265002180512
slope =
        0.0981946633678659
Irb =
          1.07785206444378
gamma_berm =
         0.863265002180512
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.647448751635384
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.2 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.25682816897574
R2del =
         0.469835938869943
Z2 =
          18.4033505189249
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          274.614217947079
Z2 =
```

```
          18.4033505189249
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.25682816897574
Z2 =
          18.4033505189249
top_sta =
          274.614217947079
Lslope =
          267.538560721908
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          5.97536275982977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          6.97536275982977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          7.97536275982977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 26
dh =
```

```
          8.49375084994911
rdh_sum =
          8.97536275982977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          9.97536275982977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          10.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          11.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          12.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          13.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          14.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          15.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          16.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          17.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          18.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          19.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          20.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          21.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          22.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
```

```
          9.17621384994911
rdh_sum =
          23.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          24.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          25.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          26.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          27.9753627598298
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.6391576463201
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.3028484566999
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          29.9664352385388
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
           30.628147377114
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.2862071374645
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.3857403630708
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.5000355030512
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.6299736341375
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          31.7764000993261
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          31.9372670100394
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 86
dh =
```

```
          3.61705434994911
rdh_sum =
          32.1072608765597
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
           32.283619502142
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.4664344560293
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.6557954807483
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          32.8517904667174
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.0659632313263
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.3109221976037
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.5880348442255
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          33.8984963026691
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
           33.996082994394
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.0991187540598
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.2077342405002
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          34.3220582416326
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.4422176287431
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.5683373895257
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 107
dh =
```

```
          3.16721034994911
rdh_sum =
          34.7005405503952
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          34.8389481765793
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          34.9857102608272
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.1431190295642
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          35.3114756827716
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.4910717952494
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          35.6821890602697
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          35.8850990891685
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.0934564435371
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.2387943469291
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.3918223469858
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.5527021219989
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          36.7215916915743
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          36.8986453429997
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.0615775312209
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 155
dh =
```

```
         -2.23775365005089
rdh_sum =
           37.232123154949
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.4104197465115
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
           37.596601533953
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          37.7907994552863
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
    76
rB =
         0.284071200035339
rdh_mean =
         0.497247361253767
gamma_berm =
         0.857182454590424
slope =
        0.0961611095411042
Irb =
          1.05553038101256
gamma_berm =
         0.857182454590424
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642886840942818
ans =
!!! - - Iribaren number:   0.90 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.4 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.02886148319496
R2del =
          0.22796668578078
Z2 =
          18.1753838331441
ans =
!----------------- STARTING ITERATION 6 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          270.368000319334
Z2 =
          18.1753838331441
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.02886148319496
Z2 =
          18.1753838331441
top_sta =
          270.368000319334
Lslope =
          263.292343094163
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
```

```
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.64695117234071
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.64695117234071
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.64695117234071
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.64695117234071
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.64695117234071
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
```

```
          13.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
```

```
          28.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          33.6469511723407
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          33.7464843979471
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.8607795379274
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.9907176690138
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          34.1371441342024
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          34.2980110449156
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
           34.468004911436
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          34.6443635370182
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.8271784909056
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          35.0165395156245
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
```

```
          35.2125345015936
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          35.4267072662025
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          35.6716662324799
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.9487788791017
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          36.2592403375453
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          36.3568270292702
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
           36.459862788936
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          36.5684782753765
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          36.6828022765089
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.8029616636194
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.9290814244019
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          37.0612845852714
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          37.1996922114556
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          37.3464542957034
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          37.5038630644405
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
```

```
          37.6722197176478
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.8518158301256
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          38.0429330951459
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          38.2458431240448
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          38.4542004784133
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          38.5995383818054
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          38.7525663818621
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.9134461568752
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          39.0823357264506
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          39.2593893778759
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          39.4311282986431
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          39.6108617863717
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.7987312391432
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.9948743910867
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          40.1994253253889
ans =
!------- End Berm Factor Calculation, Iter: 6 ---------!
berm_width =
    76
rB =
```

```
         0.288652526339589
rdh_mean =
         0.528939806913012
gamma_berm =
         0.864027285207426
slope =
        0.0971240656859027
Irb =
          1.06610044900853
gamma_berm =
         0.864027285207426
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
          0.64802046390557
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.17401702540508
R2del =
         0.145155542210119
Z2 =
          18.3205393753542
ans =
!----------------- STARTING ITERATION 7 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          273.071737578076
Z2 =
          18.3205393753542
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.17401702540508
Z2 =
          18.3205393753542
top_sta =
          273.071737578076
Lslope =
          265.996080352905
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
```

```
Berm Factor Calculation: Iteration 7, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 7, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
```

```
Berm Factor Calculation: Iteration 7, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
```

```
Berm Factor Calculation: Iteration 7, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
```

```
Berm Factor Calculation: Iteration 7, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3923838904462
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5661860103546
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7478759664534
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9375892755161
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1354580384678
ans =
!------- End Berm Factor Calculation, Iter: 7 ---------!
berm_width =
    76
rB =
         0.285718495923581
rdh_mean =
         0.501782342611419
gamma_berm =
         0.857650000288365
slope =
         0.096505934971378
Irb =
          1.05931542175863
gamma_berm =
         0.857650000288365
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.643237500216274
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.4 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.06204729116473
R2del =
```

```
         0.111969734240351
Z2 =
          18.2085696411138
ans =
!----------------- STARTING ITERATION 8 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          270.986135211761
Z2 =
          18.2085696411138
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.06204729116473
Z2 =
          18.2085696411138
top_sta =
          270.986135211761
Lslope =
           263.91047798659
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 24
dh =
```

```
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 39
dh =
```

```
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 84
dh =
```

```
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 105
dh =
```

```
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 125
dh =
```

```
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7439602549885
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9223119190847
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1087418765652
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3033873600131
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5063820065219
ans =
!------- End Berm Factor Calculation, Iter: 8 ---------!
berm_width =
    76
rB =
         0.287976440267982
rdh_mean =
         0.519820815875288
gamma_berm =
         0.861719707864981
slope =
        0.0969811786781487
Irb =
          1.06453202307776
gamma_berm =
         0.861719707864981
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.646289780898736
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.14019315622765
R2del =
        0.0781458650629201
Z2 =
          18.2867155061768
ans =
!----------------- STARTING ITERATION 9 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.441717849326
Z2 =
          18.2867155061768
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.14019315622765
Z2 =
          18.2867155061768
top_sta =
          272.441717849326
Lslope =
```

```
          265.366060624155
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
```

```
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
```

```
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
```

```
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
```

```
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
           37.393683879611
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
           37.568842284524
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7519453962116
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
```

```
          37.9431292532922
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1425264254531
ans =
!------- End Berm Factor Calculation, Iter: 9 ---------!
berm_width =
    76
rB =
          0.28639683545531
rdh_mean =
          0.50187534770333
gamma_berm =
         0.857338675919957
slope =
        0.0966483933068746
Irb =
          1.06087914228829
gamma_berm =
         0.857338675919957
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.643004006939968
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07101735524952
R2del =
        0.0691758009781296
Z2 =
          18.2175397051986
ans =
!----------------- STARTING ITERATION 10 -----------------!
Ztoe =
        -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.153215959145
Z2 =
          18.2175397051986
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07101735524952
Z2 =
          18.2175397051986
top_sta =
          271.153215959145
Lslope =
          264.077558733974
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
```

```
Berm Factor Calculation: Iteration 10, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 10, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 10, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
```

```
Berm Factor Calculation: Iteration 10, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
```

```
Berm Factor Calculation: Iteration 10, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7436047539064
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
           38.921585576485
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1076292010954
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3018727241643
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5044496614399
ans =
!------- End Berm Factor Calculation, Iter: 10 ---------!
berm_width =
    76
rB =
         0.287794238799976
rdh_mean =
         0.519795390282105
gamma_berm =
         0.861799879877999
slope =
        0.0969427178230652
Irb =
          1.06410985031775
gamma_berm =
         0.861799879877999
gamma_perm =
     1
gamma_beta =
```

```
     1
gamma_rough =
                      0.75
gamma =
         0.646349909908499
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           8.1377219541138
R2del =
         0.0667045988642805
Z2 =
          18.2842443040629
ans =
!----------------- STARTING ITERATION 11 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.395688044832
Z2 =
          18.2842443040629
H0 =
                     6.6846
Tp =
                    13.8007
T0 =
          12.5460909090909
R2 =
           8.1377219541138
Z2 =
          18.2842443040629
top_sta =
          272.395688044832
Lslope =
          265.320030819661
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 22
dh =
```

```
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 37
dh =
```

```
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 82
dh =
```

```
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 103
dh =
```

```
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 123
dh =
```

```
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937794411783
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690375430521
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522445290114
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
           37.943536475688
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430459868649
ans =
!------- End Berm Factor Calculation, Iter: 11 ---------!
berm_width =
    76
rB =
         0.286446521829546
rdh_mean =
         0.501882184037696
gamma_berm =
         0.857315884156268
slope =
        0.0966588386069631
Irb =
          1.06099379707582
gamma_berm =
         0.857315884156268
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642986913117201
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07167504685843
R2del =
        0.0660469072553731
Z2 =
          18.2181973968075
ans =
!----------------- STARTING ITERATION 12 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.165466440806
Z2 =
          18.2181973968075
H0 =
```

```
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07167504685843
Z2 =
          18.2181973968075
top_sta =
          271.165466440806
Lslope =
          264.089809215635
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
```

```
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
```

```
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
```

```
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
```

```
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435787309965
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
```

```
          38.9215324075195
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075477518566
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017618504418
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5043082101137
ans =
!------- End Berm Factor Calculation, Iter: 12 ---------!
berm_width =
    76
rB =
         0.287780888727685
rdh_mean =
         0.519793529080444
gamma_berm =
         0.861805755025985
slope =
        0.0969399005339196
Irb =
           1.0640789258172
gamma_berm =
         0.861805755025985
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.646354316269489
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13754093636152
R2del =
        0.0658658895030868
Z2 =
          18.2840632863106
ans =
!----------------- STARTING ITERATION 13 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.392316320722
Z2 =
          18.2840632863106
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.13754093636152
Z2 =
          18.2840632863106
top_sta =
          272.392316320722
Lslope =
          265.316659095551
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
```

```
Berm Factor Calculation: Iteration 13, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 13, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 13, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
```

```
Berm Factor Calculation: Iteration 13, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
```

```
Berm Factor Calculation: Iteration 13, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937864442864
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690518523098
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522664505303
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9435663183635
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430840620892
ans =
!------- End Berm Factor Calculation, Iter: 13 ---------!
berm_width =
    76
rB =
         0.286450162078324
rdh_mean =
```

```
          0.50188268502749
gamma_berm =
         0.857314214392105
slope =
        0.0966596039341402
Irb =
          1.06100219783253
gamma_berm =
         0.857314214392105
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642985660794079
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07172323587584
R2del =
        0.0658177004856793
Z2 =
          18.2182455858249
ans =
!----------------- STARTING ITERATION 14 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.166364032726
Z2 =
          18.2182455858249
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07172323587584
Z2 =
          18.2182455858249
top_sta =
          271.166364032726
Lslope =
          264.090706807555
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 20
dh =
```

```
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 35
dh =
```

```
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 58
dh =
```

```
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 101
dh =
```

```
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 121
dh =
```

```
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435768245287
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9215285122998
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075417847898
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017537277002
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042978472169
ans =
!------- End Berm Factor Calculation, Iter: 14 ---------!
berm_width =
    76
rB =
         0.287779910617536
rdh_mean =
         0.519793392726538
gamma_berm =
         0.861806185480893
slope =
        0.0969396941257738
Irb =
          1.06407666013963
gamma_berm =
         0.861806185480893
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
          0.64635463911067
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13752767412985
R2del =
        0.0658044382540073
Z2 =
```

```
           18.284050024079
ans =
!----------------- STARTING ITERATION 15 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
           7.07565722517106
top_sta =
           272.392069291988
Z2 =
           18.284050024079
H0 =
                     6.6846
Tp =
                    13.8007
T0 =
           12.5460909090909
R2 =
           8.13752767412985
Z2 =
           18.284050024079
top_sta =
           272.392069291988
Lslope =
           265.316412066817
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 14
dh =
           6.86657734994911
rdh_sum =
           0.52137398948955
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 15
dh =
           7.01272384994911
rdh_sum =
           1.05988758097302
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 16
dh =
           7.15887034994911
rdh_sum =
           1.61549535557839
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 17
dh =
           7.30501684994911
rdh_sum =
           2.18813173535515
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 18
dh =
           7.45116334994911
rdh_sum =
           2.77771106060995
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 19
dh =
           7.59730984994911
rdh_sum =
           3.38412769092466
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 20
dh =
           7.74345634994911
rdh_sum =
           4.00725612973755
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 21
dh =
           7.88960284994911
rdh_sum =
           4.64695117234071
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 22
dh =
           8.03574934994911
rdh_sum =
           5.30304807711916
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 23
dh =
           8.18189584994911
rdh_sum =
           6.30304807711916
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 24
dh =
           8.32804234994911
rdh_sum =
```

```
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
```

```
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
```

```
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
```

```
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
```

```
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937869573847
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690529007092
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522680566587
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9435685048528
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430868517541
ans =
!------- End Berm Factor Calculation, Iter: 15 ---------!
berm_width =
    76
rB =
         0.286450428784105
rdh_mean =
         0.501882721733606
gamma_berm =
          0.85731409205582
slope =
        0.0966596600067641
Irb =
          1.06100281332416
gamma_berm =
          0.85731409205582
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.75
gamma =
         0.642985569041865
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07172676650239
R2del =
        0.0658009076274606
Z2 =
          18.2182491164515
ans =
!----------------- STARTING ITERATION 16 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.166429795882
Z2 =
          18.2182491164515
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07172676650239
Z2 =
          18.2182491164515
top_sta =
          271.166429795882
Lslope =
           264.09077257071
ans =
```

```
Berm Factor Calculation: Iteration 16, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 16, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 16, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
```

```
Berm Factor Calculation: Iteration 16, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
```

```
Berm Factor Calculation: Iteration 16, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435766848503
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9215282269144
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075413476092
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017531325829
ans =
```

```
Berm Factor Calculation: Iteration 16, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042970879734
ans =
!------- End Berm Factor Calculation, Iter: 16 ---------!
berm_width =
    76
rB =
         0.287779838955376
rdh_mean =
         0.519793382736492
gamma_berm =
         0.861806217018601
slope =
        0.0969396790031093
Irb =
          1.06407649414288
gamma_berm =
         0.861806217018601
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.646354662763951
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           8.1375267024614
R2del =
        0.0657999359590136
Z2 =
          18.2840490524105
ans =
!----------------- STARTING ITERATION 17 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.392051193222
Z2 =
          18.2840490524105
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
           8.1375267024614
Z2 =
          18.2840490524105
top_sta =
          272.392051193222
Lslope =
          265.316393968051
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 18
dh =
```

```
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 33
dh =
```

```
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 56
dh =
```

```
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 93
dh =
```

```
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 114
dh =
```

```
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937869949773
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690529775213
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522681743333
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9435686650481
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430870561417
ans =
!------- End Berm Factor Calculation, Iter: 17 ---------!
berm_width =
    76
rB =
         0.286450448324546
rdh_mean =
         0.501882724422917
gamma_berm =
         0.857314083092743
slope =
        0.0966596641149773
Irb =
          1.06100285841873
gamma_berm =
         0.857314083092743
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
```

```
                      0.75
gamma =
         0.642985562319557
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07172702517704
R2del =
        0.0657996772843585
Z2 =
          18.2182493751261
ans =
!----------------- STARTING ITERATION 18 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.166434614081
Z2 =
          18.2182493751261
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07172702517704
Z2 =
          18.2182493751261
top_sta =
          271.166434614081
Lslope =
          264.090777388909
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
```

```
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
```

```
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
```

```
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
```

```
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
```

```
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435766746166
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9215282060054
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075413155788
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017530889811
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042970323467
ans =
!------- End Berm Factor Calculation, Iter: 18 ---------!
berm_width =
    76
rB =
         0.287779833704983
rdh_mean =
         0.519793382004562
gamma_berm =
         0.861806219329241
slope =
        0.0969396778951335
Irb =
          1.06407648198098
gamma_berm =
         0.861806219329241
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
          0.64635466449693
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13752663127123
R2del =
        0.0657996060941919
Z2 =
          18.2840489812203
ans =
!----------------- STARTING ITERATION 19 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.392049867199
Z2 =
          18.2840489812203
H0 =
                    6.6846
Tp =
```

```
                    13.8007
T0 =
          12.5460909090909
R2 =
          8.13752663127123
Z2 =
          18.2840489812203
top_sta =
          272.392049867199
Lslope =
          265.316392642028
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
```

```
Berm Factor Calculation: Iteration 19, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 19, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
```

```
Berm Factor Calculation: Iteration 19, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
```

```
Berm Factor Calculation: Iteration 19, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937869977316
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
           37.569052983149
ans =
```

```
Berm Factor Calculation: Iteration 19, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522681829549
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
           37.943568676785
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430870711163
ans =
!------- End Berm Factor Calculation, Iter: 19 ---------!
berm_width =
    76
rB =
         0.286450449756194
rdh_mean =
         0.501882724619951
gamma_berm =
         0.857314082436055
slope =
        0.0966596644159693
Irb =
          1.06100286172263
gamma_berm =
         0.857314082436055
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642985561827041
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07172704412907
R2del =
        0.0657995871421573
Z2 =
          18.2182493940782
ans =
!----------------- STARTING ITERATION 20 -----------------!
Ztoe =
        -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
           271.16643496709
Z2 =
          18.2182493940782
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07172704412907
Z2 =
          18.2182493940782
top_sta =
           271.16643496709
Lslope =
          264.090777741919
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 16
dh =
```

```
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 31
dh =
```

```
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 54
dh =
```

```
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 91
dh =
```

```
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 112
dh =
```

```
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435766738668
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9215282044734
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075413132321
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017530857866
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042970282712
ans =
!------- End Berm Factor Calculation, Iter: 20 ---------!
berm_width =
    76
rB =
         0.287779833320308
rdh_mean =
         0.519793381950936
gamma_berm =
```

```
         0.861806219498532
slope =
        0.0969396778139567
Irb =
          1.06407648108992
gamma_berm =
         0.861806219498532
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.646354664623899
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13752662605542
R2del =
        0.0657995819263419
Z2 =
          18.2840489760045
ans =
!----------------- STARTING ITERATION 21 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.392049770047
Z2 =
          18.2840489760045
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.13752662605542
Z2 =
          18.2840489760045
top_sta =
          272.392049770047
Lslope =
          265.316392544876
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
```

```
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
```

```
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
```

```
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
```

```
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
```

```
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937869979334
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690529835613
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522681835865
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9435686776449
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430870722134
ans =
!------- End Berm Factor Calculation, Iter: 21 ---------!
berm_width =
    76
rB =
         0.286450449861085
rdh_mean =
         0.501882724634387
gamma_berm =
         0.857314082387942
slope =
        0.0966596644380218
Irb =
          1.06100286196469
gamma_berm =
         0.857314082387942
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642985561790957
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07172704551761
R2del =
        0.0657995805378064
Z2 =
          18.2182493954667
ans =
```

```
!----------------- STARTING ITERATION 22 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.166434992954
Z2 =
          18.2182493954667
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07172704551761
Z2 =
          18.2182493954667
top_sta =
          271.166434992954
Lslope =
          264.090777767783
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
```

```
Berm Factor Calculation: Iteration 22, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 22, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
```

```
Berm Factor Calculation: Iteration 22, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
```

```
Berm Factor Calculation: Iteration 22, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
```

```
Berm Factor Calculation: Iteration 22, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435766738119
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9215282043612
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075413130601
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017530855525
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042970279726
ans =
!------- End Berm Factor Calculation, Iter: 22 ---------!
berm_width =
    76
rB =
         0.287779833292124
rdh_mean =
         0.519793381947008
gamma_berm =
         0.861806219510935
slope =
        0.0969396778080092
Irb =
          1.06407648102464
gamma_berm =
         0.861806219510935
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.646354664633201
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13752662567328
R2del =
        0.0657995801556677
Z2 =
          18.2840489756224
ans =
!----------------- STARTING ITERATION 23 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.392049762929
Z2 =
          18.2840489756224
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.13752662567328
Z2 =
          18.2840489756224
top_sta =
          272.392049762929
Lslope =
          265.316392537758
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 14
dh =
```

```
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 29
dh =
```

```
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 47
dh =
```

```
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 89
dh =
```

```
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 110
dh =
```

```
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937869979482
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690529835915
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522681836328
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9435686777079
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 158
dh =
```

```
         -2.39881315005089
rdh_sum =
          38.1430870722938
ans =
!------- End Berm Factor Calculation, Iter: 23 ---------!
berm_width =
    76
rB =
          0.28645044986877
rdh_mean =
         0.501882724635445
gamma_berm =
         0.857314082384417
slope =
        0.0966596644396375
Irb =
          1.06100286198242
gamma_berm =
         0.857314082384417
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642985561788313
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.07172704561934
R2del =
        0.0657995800539339
Z2 =
          18.2182493955685
ans =
!----------------- STARTING ITERATION 24 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.166434994849
Z2 =
          18.2182493955685
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.07172704561934
Z2 =
          18.2182493955685
top_sta =
          271.166434994849
Lslope =
          264.090777769678
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
```

```
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
```

```
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
```

```
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
```

```
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
```

```
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435766738079
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
           38.921528204353
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          39.1075413130475
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017530855354
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042970279507
ans =
!------- End Berm Factor Calculation, Iter: 24 ---------!
berm_width =
    76
rB =
         0.287779833290059
rdh_mean =
          0.51979338194672
gamma_berm =
         0.861806219511844
slope =
        0.0969396778075734
Irb =
          1.06407648101986
gamma_berm =
         0.861806219511844
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
```

```
         0.646354664633883
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13752662564528
R2del =
        0.0657995800259314
Z2 =
          18.2840489755944
ans =
!----------------- STARTING ITERATION 25 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          272.392049762408
Z2 =
          18.2840489755944
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
          12.5460909090909
R2 =
          8.13752662564528
Z2 =
          18.2840489755944
top_sta =
          272.392049762408
Lslope =
          265.316392537237
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
```

```
Berm Factor Calculation: Iteration 25, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 27
dh =
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
```

```
Berm Factor Calculation: Iteration 25, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 42
dh =
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          28.9668429636094
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          29.6305337739893
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          30.2941205558282
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          30.9558326944034
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          31.6138924547539
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
          31.7134256803602
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          31.8277208203406
ans =
```

```
Berm Factor Calculation: Iteration 25, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          31.9576589514269
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          32.1040854166155
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          32.2649523273288
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          32.4349461938491
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 87
dh =
          3.68863634994911
rdh_sum =
          32.6113048194314
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          32.7941197733187
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          32.9834807980377
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          33.1794757840068
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          33.3936485486156
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          33.6386075148931
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          33.9157201615149
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          34.2261816199585
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          34.3237683116834
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          34.4268040713492
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          34.5354195577896
ans =
```

```
Berm Factor Calculation: Iteration 25, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
           34.649743558922
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          34.7699029460325
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          34.8960227068151
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          35.0282258676846
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 108
dh =
          3.24440684994911
rdh_sum =
          35.1666334938687
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          35.3133955781166
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          35.4708043468536
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
           35.639161000061
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          35.8187571125388
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          36.0098743775591
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          36.2127844064579
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          36.4211417608265
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          36.5664796642185
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
          36.7195076642752
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          36.8803874392883
ans =
```

```
Berm Factor Calculation: Iteration 25, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          37.0492770088637
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          37.2263306602891
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          37.3937869979493
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          37.5690529835937
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 156
dh =
         -2.29144015005089
rdh_sum =
          37.7522681836362
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          37.9435686777125
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          38.1430870722997
ans =
!------- End Berm Factor Calculation, Iter: 25 ---------!
berm_width =
    76
rB =
         0.286450449869333
rdh_mean =
         0.501882724635522
gamma_berm =
         0.857314082384159
slope =
        0.0966596644397559
Irb =
          1.06100286198372
gamma_berm =
         0.857314082384159
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.642985561788119
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           8.0717270456268
R2del =
        0.0657995800184725
Z2 =
          18.2182493955759
ans =
!----------------- STARTING ITERATION 26 -----------------!
Ztoe =
       -0.0152099999999997
toe_sta =
          7.07565722517106
top_sta =
          271.166434994988
Z2 =
          18.2182493955759
H0 =
                    6.6846
Tp =
                   13.8007
T0 =
```

```
          12.5460909090909
R2 =
           8.0717270456268
Z2 =
          18.2182493955759
top_sta =
          271.166434994988
Lslope =
          264.090777769817
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 14
dh =
          6.86657734994911
rdh_sum =
          0.52137398948955
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 15
dh =
          7.01272384994911
rdh_sum =
          1.05988758097302
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 16
dh =
          7.15887034994911
rdh_sum =
          1.61549535557839
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 17
dh =
          7.30501684994911
rdh_sum =
          2.18813173535515
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 18
dh =
          7.45116334994911
rdh_sum =
          2.77771106060995
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 19
dh =
          7.59730984994911
rdh_sum =
          3.38412769092466
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 20
dh =
          7.74345634994911
rdh_sum =
          4.00725612973755
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 21
dh =
          7.88960284994911
rdh_sum =
          4.64695117234071
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 22
dh =
          8.03574934994911
rdh_sum =
          5.30304807711916
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 23
dh =
          8.18189584994911
rdh_sum =
          6.30304807711916
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 24
dh =
          8.32804234994911
rdh_sum =
          7.30304807711916
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 25
dh =
          8.43199384994911
rdh_sum =
          8.30304807711916
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 26
dh =
          8.49375084994911
rdh_sum =
          9.30304807711916
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 27
dh =
```

```
          8.55550784994911
rdh_sum =
          10.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 28
dh =
          8.61726484994911
rdh_sum =
          11.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 29
dh =
          8.67902184994911
rdh_sum =
          12.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 30
dh =
          8.74077884994911
rdh_sum =
          13.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 31
dh =
          8.80253584994911
rdh_sum =
          14.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 32
dh =
          8.86429284994911
rdh_sum =
          15.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 33
dh =
          8.92850634994911
rdh_sum =
          16.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 34
dh =
          8.99763184994911
rdh_sum =
          17.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 35
dh =
          9.06921334994911
rdh_sum =
          18.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 36
dh =
          9.14079534994911
rdh_sum =
          19.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 37
dh =
          9.21237734994911
rdh_sum =
          20.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 38
dh =
          9.28395934994911
rdh_sum =
          21.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 39
dh =
          9.29104334994911
rdh_sum =
          22.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 40
dh =
          9.23362884994911
rdh_sum =
          23.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 41
dh =
          9.17621384994911
rdh_sum =
          24.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 42
dh =
```

```
          9.11879934994911
rdh_sum =
          25.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 46
dh =
          8.51266434994911
rdh_sum =
          26.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 47
dh =
          8.67014434994911
rdh_sum =
          27.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 48
dh =
          8.75216534994911
rdh_sum =
          28.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 54
dh =
          8.10490234994911
rdh_sum =
          29.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 55
dh =
          8.10396484994911
rdh_sum =
          30.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 56
dh =
          8.10302784994911
rdh_sum =
          31.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 57
dh =
          8.08615484994911
rdh_sum =
          32.3030480771192
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 58
dh =
          8.05334634994911
rdh_sum =
          32.9611078374696
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 81
dh =
          2.73182434994911
rdh_sum =
           33.060641063076
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 82
dh =
          2.93523634994911
rdh_sum =
          33.1749362030563
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 83
dh =
          3.13864834994911
rdh_sum =
          33.3048743341427
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 84
dh =
          3.34206034994911
rdh_sum =
          33.4513007993313
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 85
dh =
          3.51251484994911
rdh_sum =
          33.6121677100445
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 86
dh =
          3.61705434994911
rdh_sum =
          33.7821615765649
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 87
dh =
```

```
          3.68863634994911
rdh_sum =
          33.9585202021471
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 88
dh =
          3.76021834994911
rdh_sum =
          34.1413351560345
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 89
dh =
          3.83180034994911
rdh_sum =
          34.3306961807534
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 90
dh =
          3.90338234994911
rdh_sum =
          34.5266911667225
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 91
dh =
          4.09501334994911
rdh_sum =
          34.7408639313314
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 92
dh =
          4.40669284994911
rdh_sum =
          34.9858228976088
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 93
dh =
          4.71837234994911
rdh_sum =
          35.2629355442306
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 94
dh =
          5.03005234994911
rdh_sum =
          35.5733970026742
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 101
dh =
          2.70403334994911
rdh_sum =
          35.6709836943991
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 102
dh =
          2.78122934994911
rdh_sum =
          35.7740194540649
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 103
dh =
          2.85842584994911
rdh_sum =
          35.8826349405054
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 104
dh =
          2.93562234994911
rdh_sum =
          35.9969589416378
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 105
dh =
          3.01281834994911
rdh_sum =
          36.1171183287483
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 106
dh =
          3.09001434994911
rdh_sum =
          36.2432380895308
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 107
dh =
          3.16721034994911
rdh_sum =
          36.3754412504003
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 108
dh =
```

```
          3.24440684994911
rdh_sum =
          36.5138488765845
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 109
dh =
          3.34609834994911
rdh_sum =
          36.6606109608323
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 110
dh =
          3.47228434994911
rdh_sum =
          36.8180197295694
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 111
dh =
          3.59847034994911
rdh_sum =
          36.9863763827767
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 112
dh =
          3.72465634994911
rdh_sum =
          37.1659724952545
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 113
dh =
          3.85084234994911
rdh_sum =
          37.3570897602748
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 114
dh =
          3.97702884994911
rdh_sum =
          37.5599997891737
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 115
dh =
          4.03438634994911
rdh_sum =
          37.7683571435422
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 121
dh =
          3.32893684994911
rdh_sum =
          37.9136950469343
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 122
dh =
          3.42080034994911
rdh_sum =
           38.066723046991
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 123
dh =
          3.51266384994911
rdh_sum =
          38.2276028220041
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 124
dh =
          3.60452734994911
rdh_sum =
          38.3964923915795
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 125
dh =
          3.69639084994911
rdh_sum =
          38.5735460430048
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 154
dh =
         -2.18406765005089
rdh_sum =
          38.7435766738076
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 155
dh =
         -2.23775365005089
rdh_sum =
          38.9215282043524
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 156
dh =
```

```
         -2.29144015005089
rdh_sum =
          39.1075413130466
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 157
dh =
         -2.34512665005089
rdh_sum =
          39.3017530855341
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 158
dh =
         -2.39881315005089
rdh_sum =
          39.5042970279491
ans =
!------- End Berm Factor Calculation, Iter: 26 ---------!
berm_width =
    76
rB =
         0.287779833289908
rdh_mean =
         0.519793381946699
gamma_berm =
          0.86180621951191
slope =
        0.0969396778075415
Irb =
          1.06407648101951
gamma_berm =
          0.86180621951191
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.75
gamma =
         0.646354664633933
ans =
!!! - - Iribaren number:   0.92 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:10.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          8.13752662564323
R2del =
        0.0657995800164244
Z2 =
          18.2840489755923
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          18.2840489755923
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-103

Station locations shifted by: -0.67 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-103

Incident significant wave height: 18.51 feet

Peak wave period: 13.84 seconds

Mean wave height: 11.59 feet

Local Depth below SWEL: 32.82 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 32.82
    Period, T = 11.76
    Waveheight, H = 11.59
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*11.76*11.76/6.28 = 708.65
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 708.65/11.76 = 60.24
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/11.76 = 0.53
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.53*0.53*32.82/32.17 = 0.29
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 30.92
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(60.24/30.92) = 1.40
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 11.59/1.40 = 8.30
```

Deepwater mean wave height: 8.30 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-103

RUNUP2 SWEL:
9.00
9.00
9.00
9.00

9.00
9.00
9.00
9.00
9.00

RUNUP2 deepwater mean wave heights:
7.89
7.89
7.89
8.30
8.30
8.30
8.72
8.72
8.72

RUNUP2 mean wave periods:
11.18
11.76
12.35
11.18
11.76
12.35
11.18
11.76
12.35

RUNUP2 runup above SWEL:
1.45
1.45
1.17
1.13
1.13
1.13
1.08
1.12
1.19

RUNUP2 Mean runup height above SWEL: 1.21 feet

RUNUP2 2-percent runup height above SWEL: 2.65 feet

RUNUP2 2-percent runup elevation: 11.65 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 18.51 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 13.26 feet

Peak wave period: 13.84 seconds

Average beach Slope: 1:34.06 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =    13.26
Wave Period,                        T  =    13.84
Beach Slope,                        S  =    0.029

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [10.7,  9.3,   8.5,    7.0,    4.5]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 9.28 feet

ACES Beach 2-percent runup elevation: 18.28 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-103                                                    1
7.00
  -23.77 -1071.3 0.8
  -23.18 -1013.3 0.8
  -20.00 -885.3 0.8
  -14.63 -761.3 0.8
  -13.28 -737.3 0.8
  -9.22 -642.3 0.8
  -6.41 -527.3 0.8
  -5.97 -418.3 0.8
  -5.96 -358.3 0.8
  -4.93 -310.3 0.8
  -4.93 -162.3 0.8
  -2.79 -110.3 0.8
  -1.40 -36.3  0.8
  0.07  6.2    0.8
  3.35  21.7   0.8
  3.35  72.2   0.8
  7.62  88.2   0.8
  7.62  138.7  0.8
  9.32  144.7  0.8
1 12.57 166.7  0.8
 9.0   7.89  11.18
 9.0   7.89  11.76
 9.0   7.89  12.35
 9.0   8.30  11.18
 9.0   8.30  11.76
 9.0   8.30  12.35
 9.0   8.72  11.18
 9.0   8.72  11.76
 9.0   8.72  12.35
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-107.1	-23.7		
			.00	30.80
2	-101.3	-23.1		
			-252.81	30.80
3	-885.0	-20.0		
			22.96	.80
4	-761.0	-14.6		
			17.14	.80
5	-737.0	-13.2		
			23.79	.80
6	-642.3	-9.2		
			40.93	.80
7	-527.3	-6.4		
			247.73	.80
8	-418.3	-6.0		
			FLAT	.80
9	-358.3	-5.9		
			46.60	.80
10	-310.3	-4.9		
			FLAT	.80
11	-162.3	-4.9		
			24.30	.80
12	-110.3	-2.8		
			53.24	.80
13	-36.3	-1.4		
			28.91	.80
14	6.2	.1		
			4.73	.80
15	21.7	3.4		
			FLAT	.80
16	72.2	3.4		
			3.75	.80
17	88.2	7.6		
			FLAT	.80
18	138.7	7.6		
			3.53	.80
19	144.7	9.3		
			6.77	.80
20	166.7	12.6		

LAST SLOPE 7.00 LAST ROUGHNESS .80

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.00	7.89	11.18	9	19	1.45	14.57
9.00	7.89	11.76	9	19	1.45	14.86
9.00	7.89	12.35	7	19	1.17	15.21
9.00	8.30	11.18	7	19	1.13	15.24
9.00	8.30	11.76	7	19	1.13	15.54
9.00	8.30	12.35	6	19	1.13	15.65
9.00	8.72	11.18	6	19	1.08	15.69
9.00	8.72	11.76	6	19	1.12	15.98
9.00	8.72	12.35	6	19	1.19	16.29

Runup2 2% runup elevation for Transect: YK-103
Two Percent Run-up Elevation is 11.7 Feet-NAVD88
Run-up Height is 2.7 Feet
Ground
Swel
2% Runup
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-20
-25
-1200
-1000
-800
-600
-400
-200
0
200

Transect Number: YK-105
Clock Farm Corner
ME 9
Timber Islan
Latitude
43.405
43.4
43.395
43.39
43.385
43.38
43.375
43.37
-70.45
-70.44
-70.43
-70.42
-70.41
-70.4
Longitude

Elevation profile
Elevation (ft)
50
40
30
20
10
0
-10
-20
-30
-40
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-105

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -1162 ft
LON: -70.4216 deg E
LAT: 43.3882 deg N
Bottom ELEV: -2.337 ft-NAVD88
TWL: 9.4073 ft-NAVD88
HS: 5.3093 ft
TP: 12.3923 sec
Wave Direction bin: 135 deg CCW from East (90 deg sector)
Transect Direction: 143.1095 deg CCW from East

TAW/RUNUP input

toe sta: 308 ft
toe elev: 2.628 ft-NAVD88
top sta: 392.5 ft
top elev: 15.0623 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-105: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-1200
-1000
-800
-600
-400
-200
0
200
400
600
800

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-105zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-105.swn
swan output name:     2_swan/swanfiles/YK-105.dat

Boundary Conditions:
    TWL- 2.8674 meters
    HS-  1.6183 meters
    PER- 12.3923 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.56123 feet
SWAN output at toe:
    SETUP- 0.10581 feet
    HS-    3.7367 feet
    PER-   12.3575 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.56123 feet
SWAN output at toe:
    SETUP- 0.10581 feet
    HS-    3.7367 feet
    PER-   12.3575 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-105
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000

```
                    Execution started at 20200401.174321


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      471       0.   471     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      471   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-105zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   1.6183     12.3923     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      471  471    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-105.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             472 MYC              1
                     : MCGRD           473
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in   3.41 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.22 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in   3.62 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  52.35 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	1.62624	12.3111	12.4477	11.2034	0.001	31.5074	3.5800	0.000000
1.	0.	1.62889	12.3156	12.4477	10.9981	0.001	31.4792	3.5801	0.000077
2.	0.	1.63206	12.3199	12.4477	10.8136	0.001	31.4455	3.5701	0.000081
3.	0.	1.63404	12.3237	12.4477	10.6520	0.001	31.4372	3.5702	0.000161
4.	0.	1.63537	12.3270	12.4477	10.5118	0.001	31.4036	3.5702	0.000244
5.	0.	1.63730	12.3299	12.4477	10.3874	0.002	31.3609	3.5603	0.000257
6.	0.	1.63797	12.3324	12.4477	10.2766	0.002	31.3142	3.5603	0.000347
7.	0.	1.63927	12.3346	12.4477	10.1784	0.002	31.2648	3.5504	0.000364
8.	0.	1.63967	12.3366	12.4477	10.0899	0.002	31.2437	3.5505	0.000457
9.	0.	1.63967	12.3383	12.4477	10.0107	0.002	31.2017	3.5506	0.000553
10.	0.	1.64032	12.3398	12.4477	9.9398	0.003	31.1526	3.5406	0.000577
11.	0.	1.63988	12.3412	12.4477	9.8748	0.003	31.1044	3.5407	0.000679
12.	0.	1.64017	12.3424	12.4477	9.8163	0.003	31.0561	3.5307	0.000709
13.	0.	1.63969	12.3434	12.4477	9.7621	0.003	31.0329	3.5308	0.000812
14.	0.	1.63918	12.3444	12.4477	9.7124	0.003	31.0177	3.5309	0.000915
15.	0.	1.63936	12.3452	12.4477	9.6557	0.003	31.0123	3.5310	0.001020
16.	0.	1.63967	12.3458	12.4477	9.5993	0.003	31.0091	3.5311	0.001126
17.	0.	1.63994	12.3463	12.4477	9.5453	0.003	31.0059	3.5312	0.001232
18.	0.	1.64011	12.3467	12.4477	9.4944	0.003	31.0018	3.5313	0.001340
19.	0.	1.64017	12.3469	12.4477	9.4465	0.002	30.9967	3.5314	0.001449
20.	0.	1.64011	12.3471	12.4477	9.4015	0.002	30.9907	3.5316	0.001558
21.	0.	1.63996	12.3471	12.4477	9.3591	0.002	30.9840	3.5317	0.001668
22.	0.	1.63970	12.3471	12.4477	9.3191	0.002	30.9768	3.5318	0.001778
23.	0.	1.63922	12.3469	12.4477	9.2824	0.001	30.9716	3.5319	0.001896
24.	0.	1.63830	12.3468	12.4477	9.2502	359.991	30.9705	3.5320	0.002030
25.	0.	1.63743	12.3465	12.4477	9.2191	359.981	30.9658	3.5322	0.002158
26.	0.	1.63659	12.3462	12.4477	9.1890	359.973	30.9596	3.5323	0.002281
27.	0.	1.63575	12.3459	12.4477	9.1601	359.967	30.9526	3.5324	0.002403
28.	0.	1.63488	12.3455	12.4477	9.1325	359.962	30.9451	3.5325	0.002523
29.	0.	1.63397	12.3451	12.4477	9.1062	359.957	30.9370	3.5326	0.002642
30.	0.	1.63304	12.3447	12.4477	9.0810	359.952	30.9286	3.5328	0.002760
31.	0.	1.63362	12.3442	12.4477	9.0382	359.945	30.9322	3.5329	0.002879
32.	0.	1.63455	12.3438	12.4477	8.9915	359.939	30.9374	3.5330	0.002999
33.	0.	1.63546	12.3435	12.4477	8.9454	359.933	30.9415	3.5331	0.003119
34.	0.	1.63503	12.3432	12.4477	8.9097	359.906	30.9590	3.5333	0.003288
35.	0.	1.63396	12.3429	12.4477	8.8796	359.919	30.9762	3.5335	0.003473
36.	0.	1.63274	12.3427	12.4477	8.8514	359.900	30.9856	3.5337	0.003656
37.	0.	1.63144	12.3425	12.4477	8.8245	359.861	30.9908	3.5338	0.003836
38.	0.	1.63007	12.3424	12.4477	8.7989	359.811	30.9885	3.5340	0.004012
39.	0.	1.62870	12.3423	12.4477	8.7741	359.762	30.9843	3.5342	0.004184
40.	0.	1.62730	12.3422	12.4477	8.7502	359.715	30.9790	3.5344	0.004353
41.	0.	1.62588	12.3422	12.4477	8.7271	359.670	30.9725	3.5345	0.004519
42.	0.	1.62440	12.3422	12.4477	8.7052	359.628	30.9644	3.5347	0.004685
43.	0.	1.62290	12.3421	12.4477	8.6840	359.589	30.9557	3.5348	0.004848
44.	0.	1.62136	12.3421	12.4477	8.6637	359.551	30.9464	3.5350	0.005010
45.	0.	1.62051	12.3422	12.4477	8.6392	359.540	30.9367	3.5351	0.005146
46.	0.	1.61985	12.3422	12.4477	8.6141	359.540	30.9263	3.5353	0.005274
47.	0.	1.61971	12.3422	12.4477	8.5841	359.543	30.9186	3.5354	0.005398
48.	0.	1.61967	12.3423	12.4477	8.5535	359.548	30.9105	3.5355	0.005522
49.	0.	1.61964	12.3423	12.4477	8.5232	359.552	30.9018	3.5356	0.005643
50.	0.	1.61963	12.3424	12.4477	8.4934	359.554	30.8915	3.5358	0.005761
51.	0.	1.61959	12.3425	12.4477	8.4643	359.554	30.8806	3.5359	0.005877
52.	0.	1.61929	12.3426	12.4477	8.4360	359.552	30.8456	3.5360	0.005993
53.	0.	1.61951	12.3427	12.4477	8.4104	359.551	30.8017	3.5260	0.006043
54.	0.	1.61895	12.3428	12.4477	8.3838	359.549	30.7573	3.5262	0.006164
55.	0.	1.61895	12.3430	12.4477	8.3600	359.548	30.7133	3.5162	0.006219
56.	0.	1.61810	12.3431	12.4477	8.3359	359.546	30.6731	3.5163	0.006348
57.	0.	1.61768	12.3432	12.4477	8.3155	359.541	30.6348	3.5064	0.006415
58.	0.	1.61649	12.3434	12.4477	8.2941	359.534	30.5982	3.5066	0.006553
59.	0.	1.61561	12.3435	12.4477	8.2758	359.526	30.5415	3.4966	0.006628

60.	0.	1.61477	12.3437	12.4477	8.2581	359.517	30.4975	3.4867	0.006705
61.	0.	1.61345	12.3438	12.4477	8.2378	359.513	30.4572	3.4868	0.006845
62.	0.	1.61259	12.3440	12.4477	8.2196	359.511	30.3981	3.4769	0.006918
63.	0.	1.61163	12.3441	12.4477	8.2016	359.511	30.3333	3.4670	0.006994
64.	0.	1.61076	12.3443	12.4477	8.1840	359.511	30.2846	3.4571	0.007070
65.	0.	1.60937	12.3445	12.4477	8.1637	359.512	30.2432	3.4572	0.007217
66.	0.	1.60860	12.3446	12.4477	8.1456	359.514	30.2028	3.4473	0.007295
67.	0.	1.60717	12.3448	12.4477	8.1258	359.516	30.1644	3.4474	0.007445
68.	0.	1.60632	12.3450	12.4477	8.1085	359.520	30.1252	3.4375	0.007527
69.	0.	1.60480	12.3452	12.4477	8.0893	359.523	30.0875	3.4377	0.007679
70.	0.	1.60387	12.3454	12.4477	8.0727	359.528	30.0490	3.4278	0.007764
71.	0.	1.60228	12.3455	12.4477	8.0540	359.533	30.0119	3.4279	0.007919
72.	0.	1.60127	12.3457	12.4477	8.0379	359.539	29.9741	3.4180	0.008007
73.	0.	1.59963	12.3459	12.4477	8.0197	359.546	29.9379	3.4182	0.008164
74.	0.	1.59858	12.3461	12.4477	8.0038	359.554	29.9009	3.4083	0.008254
75.	0.	1.59692	12.3462	12.4477	7.9856	359.562	29.8656	3.4084	0.008414
76.	0.	1.59585	12.3464	12.4477	7.9698	359.572	29.8293	3.3985	0.008505
77.	0.	1.59432	12.3466	12.4477	7.9520	359.580	29.8128	3.3987	0.008665
78.	0.	1.59266	12.3467	12.4477	7.9346	359.589	29.7847	3.3988	0.008825
79.	0.	1.59144	12.3469	12.4477	7.9206	359.596	29.7525	3.3889	0.008918
80.	0.	1.58954	12.3471	12.4477	7.9049	359.601	29.7203	3.3891	0.009080
81.	0.	1.58812	12.3472	12.4477	7.8925	359.606	29.6865	3.3792	0.009175
82.	0.	1.58603	12.3474	12.4477	7.8784	359.611	29.6539	3.3793	0.009339
83.	0.	1.58449	12.3475	12.4477	7.8671	359.616	29.6196	3.3694	0.009436
84.	0.	1.58232	12.3477	12.4477	7.8538	359.620	29.5860	3.3696	0.009602
85.	0.	1.58070	12.3478	12.4477	7.8433	359.623	29.5506	3.3597	0.009700
86.	0.	1.57847	12.3480	12.4477	7.8306	359.627	29.5162	3.3599	0.009866
87.	0.	1.57679	12.3481	12.4477	7.8206	359.630	29.4805	3.3500	0.009965
88.	0.	1.57452	12.3483	12.4477	7.8082	359.633	29.4462	3.3501	0.010132
89.	0.	1.57281	12.3484	12.4477	7.7986	359.636	29.4104	3.3402	0.010232
90.	0.	1.57052	12.3485	12.4477	7.7865	359.640	29.3760	3.3404	0.010400
91.	0.	1.56879	12.3487	12.4477	7.7771	359.644	29.3402	3.3305	0.010499
92.	0.	1.56648	12.3488	12.4477	7.7655	359.649	29.3056	3.3307	0.010667
93.	0.	1.56474	12.3489	12.4477	7.7564	359.655	29.2696	3.3208	0.010765
94.	0.	1.56257	12.3491	12.4477	7.7451	359.662	29.2521	3.3209	0.010931
95.	0.	1.56032	12.3492	12.4477	7.7338	359.669	29.2231	3.3211	0.011095
96.	0.	1.55860	12.3493	12.4477	7.7253	359.676	29.1891	3.3112	0.011191
97.	0.	1.55628	12.3494	12.4477	7.7144	359.684	29.1553	3.3114	0.011355
98.	0.	1.55452	12.3496	12.4477	7.7062	359.692	29.1198	3.3015	0.011451
99.	0.	1.55217	12.3497	12.4477	7.6958	359.701	29.0858	3.3016	0.011615
100.	0.	1.55037	12.3498	12.4477	7.6880	359.710	29.0505	3.2917	0.011711
101.	0.	1.54812	12.3499	12.4477	7.6780	359.719	29.0341	3.2919	0.011875
102.	0.	1.54580	12.3500	12.4477	7.6681	359.728	29.0068	3.2920	0.012038
103.	0.	1.54401	12.3501	12.4477	7.6609	359.738	28.9743	3.2821	0.012133
104.	0.	1.54161	12.3502	12.4477	7.6514	359.748	28.9423	3.2823	0.012295
105.	0.	1.53976	12.3504	12.4477	7.6447	359.759	28.9087	3.2724	0.012391
106.	0.	1.53731	12.3505	12.4477	7.6357	359.770	28.8766	3.2726	0.012554
107.	0.	1.53542	12.3506	12.4477	7.6294	359.781	28.8432	3.2627	0.012650
108.	0.	1.53293	12.3507	12.4477	7.6208	359.793	28.8116	3.2628	0.012814
109.	0.	1.53101	12.3508	12.4477	7.6150	359.805	28.7785	3.2529	0.012910
110.	0.	1.52861	12.3509	12.4477	7.6070	359.816	28.7641	3.2531	0.013074
111.	0.	1.52614	12.3510	12.4477	7.5992	359.829	28.7390	3.2532	0.013236
112.	0.	1.52419	12.3511	12.4477	7.5943	359.842	28.7087	3.2433	0.013330
113.	0.	1.52162	12.3512	12.4477	7.5871	359.856	28.6791	3.2435	0.013492
114.	0.	1.51961	12.3513	12.4477	7.5827	359.871	28.6482	3.2336	0.013586
115.	0.	1.51702	12.3513	12.4477	7.5759	359.887	28.6192	3.2337	0.013748
116.	0.	1.51501	12.3514	12.4477	7.5717	359.905	28.5891	3.2238	0.013842
117.	0.	1.51254	12.3515	12.4477	7.5652	359.924	28.5774	3.2240	0.014004
118.	0.	1.51002	12.3516	12.4477	7.5587	359.944	28.5556	3.2242	0.014163
119.	0.	1.50809	12.3517	12.4477	7.5547	359.965	28.5281	3.2143	0.014252
120.	0.	1.50561	12.3518	12.4477	7.5478	359.987	28.5002	3.2144	0.014407
121.	0.	1.50372	12.3519	12.4477	7.5435	0.010	28.4704	3.2045	0.014494
122.	0.	1.50127	12.3519	12.4477	7.5364	0.032	28.4412	3.2046	0.014648
123.	0.	1.49944	12.3520	12.4477	7.5318	0.056	28.4102	3.1947	0.014733
124.	0.	1.49714	12.3521	12.4477	7.5248	0.079	28.3973	3.1949	0.014886
125.	0.	1.49492	12.3522	12.4477	7.5178	0.103	28.3905	3.1950	0.015036
126.	0.	1.49275	12.3522	12.4477	7.5110	0.127	28.3862	3.1952	0.015185

127.	0.	1.49062	12.3523	12.4477	7.5042	0.152	28.3832	3.1953	0.015331
128.	0.	1.48852	12.3524	12.4477	7.4975	0.177	28.3809	3.1955	0.015475
129.	0.	1.48646	12.3524	12.4477	7.4908	0.202	28.3793	3.1956	0.015616
130.	0.	1.48443	12.3525	12.4477	7.4841	0.228	28.3784	3.1958	0.015755
131.	0.	1.48244	12.3526	12.4477	7.4775	0.254	28.3780	3.1959	0.015892
132.	0.	1.48048	12.3526	12.4477	7.4710	0.280	28.3783	3.1960	0.016027
133.	0.	1.47855	12.3527	12.4477	7.4645	0.307	28.3792	3.1962	0.016159
134.	0.	1.47667	12.3527	12.4477	7.4579	0.334	28.3804	3.1963	0.016290
135.	0.	1.47482	12.3528	12.4477	7.4514	0.363	28.3821	3.1964	0.016418
136.	0.	1.47302	12.3528	12.4477	7.4447	0.391	28.3840	3.1965	0.016543
137.	0.	1.47126	12.3529	12.4477	7.4381	0.420	28.3861	3.1967	0.016666
138.	0.	1.46954	12.3529	12.4477	7.4314	0.450	28.3887	3.1968	0.016787
139.	0.	1.46785	12.3530	12.4477	7.4248	0.479	28.3918	3.1969	0.016906
140.	0.	1.46618	12.3530	12.4477	7.4182	0.510	28.3953	3.1970	0.017023
141.	0.	1.46454	12.3531	12.4477	7.4117	0.540	28.3992	3.1971	0.017138
142.	0.	1.46293	12.3531	12.4477	7.4051	0.570	28.4033	3.1973	0.017252
143.	0.	1.46134	12.3531	12.4477	7.3987	0.600	28.4080	3.1974	0.017364
144.	0.	1.45976	12.3532	12.4477	7.3923	0.630	28.4130	3.1975	0.017475
145.	0.	1.45822	12.3532	12.4477	7.3859	0.660	28.4187	3.1976	0.017585
146.	0.	1.45670	12.3533	12.4477	7.3795	0.690	28.4249	3.1977	0.017693
147.	0.	1.45519	12.3533	12.4477	7.3732	0.721	28.4315	3.1978	0.017799
148.	0.	1.45371	12.3533	12.4477	7.3670	0.751	28.4385	3.1979	0.017905
149.	0.	1.45225	12.3534	12.4477	7.3608	0.781	28.4458	3.1980	0.018009
150.	0.	1.45080	12.3534	12.4477	7.3547	0.811	28.4533	3.1981	0.018111
151.	0.	1.44937	12.3534	12.4477	7.3486	0.841	28.4611	3.1982	0.018212
152.	0.	1.44795	12.3535	12.4477	7.3427	0.871	28.4692	3.1983	0.018312
153.	0.	1.44655	12.3535	12.4477	7.3367	0.900	28.4775	3.1984	0.018411
154.	0.	1.44517	12.3536	12.4477	7.3309	0.930	28.4862	3.1985	0.018509
155.	0.	1.44396	12.3536	12.4477	7.3252	0.961	28.5174	3.1986	0.018605
156.	0.	1.44247	12.3536	12.4477	7.3173	0.992	28.5809	3.2088	0.018760
157.	0.	1.44113	12.3536	12.4477	7.3095	1.024	28.6558	3.2189	0.018910
158.	0.	1.43988	12.3536	12.4477	7.3019	1.056	28.7345	3.2291	0.019055
159.	0.	1.43870	12.3537	12.4477	7.2944	1.087	28.8147	3.2392	0.019195
160.	0.	1.43759	12.3537	12.4477	7.2870	1.118	28.8954	3.2493	0.019332
161.	0.	1.43654	12.3537	12.4477	7.2797	1.149	28.9763	3.2595	0.019464
162.	0.	1.43554	12.3537	12.4477	7.2725	1.178	29.0571	3.2696	0.019592
163.	0.	1.43460	12.3537	12.4477	7.2654	1.208	29.1377	3.2797	0.019716
164.	0.	1.43371	12.3537	12.4477	7.2583	1.237	29.2180	3.2898	0.019837
165.	0.	1.43286	12.3537	12.4477	7.2513	1.265	29.2976	3.3000	0.019954
166.	0.	1.43222	12.3537	12.4477	7.2447	1.294	29.3988	3.3101	0.020068
167.	0.	1.43119	12.3537	12.4477	7.2356	1.322	29.5070	3.3302	0.020233
168.	0.	1.43057	12.3537	12.4477	7.2290	1.349	29.5921	3.3403	0.020339
169.	0.	1.43010	12.3537	12.4477	7.2226	1.376	29.6929	3.3504	0.020442
170.	0.	1.42922	12.3537	12.4477	7.2138	1.403	29.7965	3.3706	0.020594
171.	0.	1.42871	12.3537	12.4477	7.2073	1.427	29.8757	3.3807	0.020691
172.	0.	1.42835	12.3537	12.4477	7.2011	1.452	29.9707	3.3908	0.020784
173.	0.	1.42758	12.3537	12.4477	7.1925	1.477	30.0668	3.4109	0.020926
174.	0.	1.42714	12.3537	12.4477	7.1863	1.499	30.1386	3.4210	0.021014
175.	0.	1.42686	12.3537	12.4477	7.1803	1.522	30.2273	3.4311	0.021100
176.	0.	1.42616	12.3537	12.4477	7.1719	1.544	30.3151	3.4512	0.021234
177.	0.	1.42579	12.3537	12.4477	7.1657	1.564	30.3788	3.4613	0.021315
178.	0.	1.42558	12.3537	12.4477	7.1598	1.585	30.4609	3.4714	0.021394
179.	0.	1.42495	12.3537	12.4477	7.1515	1.604	30.5409	3.4915	0.021519
180.	0.	1.42451	12.3537	12.4477	7.1451	1.621	30.5780	3.5016	0.021594
181.	0.	1.42436	12.3537	12.4477	7.1409	1.639	30.5937	3.5016	0.021619
182.	0.	1.42434	12.3537	12.4477	7.1370	1.658	30.6253	3.5016	0.021642
183.	0.	1.42385	12.3537	12.4477	7.1307	1.675	30.6527	3.5117	0.021713
184.	0.	1.42365	12.3538	12.4477	7.1267	1.691	30.6592	3.5117	0.021736
185.	0.	1.42346	12.3538	12.4477	7.1228	1.709	30.6669	3.5118	0.021758
186.	0.	1.42324	12.3538	12.4477	7.1189	1.725	30.6707	3.5118	0.021780
187.	0.	1.42316	12.3538	12.4477	7.1153	1.742	30.6938	3.5118	0.021802
188.	0.	1.42266	12.3538	12.4477	7.1093	1.758	30.7166	3.5219	0.021871
189.	0.	1.42247	12.3538	12.4477	7.1054	1.774	30.7199	3.5219	0.021893
190.	0.	1.42230	12.3538	12.4477	7.1015	1.791	30.7255	3.5219	0.021913
191.	0.	1.42211	12.3538	12.4477	7.0977	1.808	30.7276	3.5219	0.021933
192.	0.	1.42206	12.3538	12.4477	7.0941	1.825	30.7491	3.5220	0.021954
193.	0.	1.42159	12.3538	12.4477	7.0880	1.841	30.7703	3.5320	0.022021

194.	0.	1.42141	12.3538	12.4477	7.0843	1.855	30.7723	3.5320	0.022041
195.	0.	1.42125	12.3538	12.4477	7.0807	1.871	30.7771	3.5321	0.022061
196.	0.	1.42089	12.3538	12.4477	7.0768	1.885	30.7565	3.5321	0.022081
197.	0.	1.42071	12.3538	12.4477	7.0750	1.895	30.7042	3.5221	0.022056
198.	0.	1.42063	12.3539	12.4477	7.0733	1.907	30.6632	3.5120	0.022031
199.	0.	1.42014	12.3539	12.4477	7.0693	1.920	30.6272	3.5121	0.022052
200.	0.	1.41990	12.3539	12.4477	7.0675	1.931	30.5694	3.5020	0.022028
201.	0.	1.41960	12.3539	12.4477	7.0657	1.941	30.5045	3.4920	0.022005
202.	0.	1.41926	12.3539	12.4477	7.0640	1.951	30.4374	3.4820	0.021982
203.	0.	1.41891	12.3539	12.4477	7.0623	1.961	30.3696	3.4720	0.021960
204.	0.	1.41836	12.3540	12.4477	7.0605	1.969	30.2815	3.4619	0.021939
205.	0.	1.41816	12.3540	12.4477	7.0612	1.976	30.1856	3.4419	0.021871
206.	0.	1.41749	12.3540	12.4477	7.0595	1.983	30.0894	3.4319	0.021853
207.	0.	1.41723	12.3540	12.4477	7.0604	1.991	29.9923	3.4118	0.021787
208.	0.	1.41663	12.3541	12.4477	7.0591	2.001	29.9165	3.4018	0.021771
209.	0.	1.41592	12.3541	12.4477	7.0578	2.010	29.8284	3.3918	0.021757
210.	0.	1.41561	12.3541	12.4477	7.0589	2.019	29.7350	3.3717	0.021693
211.	0.	1.41495	12.3541	12.4477	7.0577	2.030	29.6616	3.3617	0.021681
212.	0.	1.41419	12.3542	12.4477	7.0564	2.040	29.5772	3.3517	0.021670
213.	0.	1.41380	12.3542	12.4477	7.0578	2.047	29.4893	3.3316	0.021610
214.	0.	1.41302	12.3542	12.4477	7.0569	2.057	29.4191	3.3216	0.021603
215.	0.	1.41213	12.3542	12.4477	7.0560	2.066	29.3382	3.3116	0.021598
216.	0.	1.41164	12.3543	12.4477	7.0577	2.076	29.2542	3.2915	0.021542
217.	0.	1.41076	12.3543	12.4477	7.0570	2.088	29.1874	3.2815	0.021542
218.	0.	1.40977	12.3543	12.4477	7.0561	2.101	29.1106	3.2715	0.021543
219.	0.	1.40920	12.3544	12.4477	7.0577	2.114	29.0285	3.2515	0.021492
220.	0.	1.40823	12.3544	12.4477	7.0569	2.130	28.9627	3.2415	0.021498
221.	0.	1.40715	12.3544	12.4477	7.0559	2.144	28.8860	3.2315	0.021505
222.	0.	1.40650	12.3545	12.4477	7.0574	2.159	28.8039	3.2115	0.021457
223.	0.	1.40542	12.3545	12.4477	7.0564	2.177	28.7374	3.2015	0.021469
224.	0.	1.40435	12.3545	12.4477	7.0556	2.195	28.6756	3.1915	0.021481
225.	0.	1.40314	12.3546	12.4477	7.0546	2.213	28.5996	3.1815	0.021496
226.	0.	1.40234	12.3546	12.4477	7.0564	2.229	28.5165	3.1615	0.021454
227.	0.	1.40108	12.3546	12.4477	7.0557	2.248	28.4491	3.1515	0.021474
228.	0.	1.39982	12.3547	12.4477	7.0552	2.267	28.3862	3.1415	0.021496
229.	0.	1.39865	12.3547	12.4477	7.0547	2.289	28.3399	3.1315	0.021518
230.	0.	1.39702	12.3547	12.4477	7.0516	2.311	28.3017	3.1316	0.021602
231.	0.	1.39582	12.3547	12.4477	7.0509	2.332	28.2486	3.1216	0.021625
232.	0.	1.39467	12.3548	12.4477	7.0503	2.355	28.2064	3.1116	0.021650
233.	0.	1.39302	12.3548	12.4477	7.0470	2.378	28.1707	3.1117	0.021736
234.	0.	1.39190	12.3548	12.4477	7.0462	2.402	28.1345	3.1018	0.021762
235.	0.	1.39037	12.3548	12.4477	7.0430	2.429	28.1170	3.1018	0.021849
236.	0.	1.38880	12.3549	12.4477	7.0395	2.455	28.0898	3.1019	0.021936
237.	0.	1.38774	12.3549	12.4477	7.0385	2.479	28.0575	3.0920	0.021961
238.	0.	1.38625	12.3549	12.4477	7.0351	2.506	28.0421	3.0920	0.022048
239.	0.	1.38470	12.3549	12.4477	7.0315	2.531	28.0161	3.0921	0.022135
240.	0.	1.38365	12.3550	12.4477	7.0305	2.556	27.9847	3.0822	0.022160
241.	0.	1.38218	12.3550	12.4477	7.0268	2.582	27.9701	3.0822	0.022248
242.	0.	1.38065	12.3550	12.4477	7.0231	2.607	27.9450	3.0823	0.022334
243.	0.	1.37962	12.3550	12.4477	7.0219	2.631	27.9148	3.0724	0.022360
244.	0.	1.37816	12.3551	12.4477	7.0182	2.658	27.9013	3.0724	0.022447
245.	0.	1.37676	12.3551	12.4477	7.0145	2.685	27.8932	3.0725	0.022534
246.	0.	1.37529	12.3551	12.4477	7.0106	2.711	27.8713	3.0726	0.022619
247.	0.	1.37431	12.3551	12.4477	7.0093	2.735	27.8426	3.0626	0.022643
248.	0.	1.37289	12.3552	12.4477	7.0054	2.762	27.8302	3.0627	0.022729
249.	0.	1.37143	12.3552	12.4477	7.0014	2.788	27.8074	3.0628	0.022815
250.	0.	1.37045	12.3552	12.4477	7.0000	2.812	27.7791	3.0528	0.022839
251.	0.	1.36904	12.3552	12.4477	6.9961	2.839	27.7672	3.0529	0.022925
252.	0.	1.36756	12.3553	12.4477	6.9922	2.864	27.7446	3.0530	0.023011
253.	0.	1.36656	12.3553	12.4477	6.9910	2.887	27.7158	3.0430	0.023036
254.	0.	1.36512	12.3553	12.4477	6.9873	2.913	27.7033	3.0431	0.023123
255.	0.	1.36363	12.3553	12.4477	6.9835	2.938	27.6804	3.0432	0.023209
256.	0.	1.36265	12.3554	12.4477	6.9822	2.961	27.6521	3.0332	0.023234
257.	0.	1.36122	12.3554	12.4477	6.9784	2.986	27.6401	3.0333	0.023321
258.	0.	1.35984	12.3554	12.4477	6.9746	3.013	27.6330	3.0334	0.023408
259.	0.	1.35839	12.3554	12.4477	6.9707	3.037	27.6127	3.0335	0.023493
260.	0.	1.35743	12.3554	12.4477	6.9694	3.059	27.5858	3.0235	0.023517

261.	0.	1.35603	12.3555	12.4477	6.9656	3.085	27.5749	3.0236	0.023604
262.	0.	1.35457	12.3555	12.4477	6.9616	3.110	27.5537	3.0237	0.023690
263.	0.	1.35360	12.3555	12.4477	6.9603	3.132	27.5271	3.0137	0.023714
264.	0.	1.35220	12.3555	12.4477	6.9565	3.159	27.5170	3.0138	0.023801
265.	0.	1.35081	12.3555	12.4477	6.9529	3.186	27.5121	3.0139	0.023888
266.	0.	1.34936	12.3556	12.4477	6.9491	3.212	27.4943	3.0140	0.023974
267.	0.	1.34838	12.3556	12.4477	6.9481	3.236	27.4701	3.0040	0.023999
268.	0.	1.34699	12.3556	12.4477	6.9443	3.264	27.4614	3.0041	0.024086
269.	0.	1.34563	12.3556	12.4477	6.9406	3.293	27.4578	3.0042	0.024172
270.	0.	1.34430	12.3556	12.4477	6.9369	3.322	27.4561	3.0043	0.024257
271.	0.	1.34299	12.3557	12.4477	6.9332	3.352	27.4553	3.0043	0.024341
272.	0.	1.34170	12.3557	12.4477	6.9295	3.381	27.4550	3.0044	0.024424
273.	0.	1.34043	12.3557	12.4477	6.9258	3.411	27.4551	3.0045	0.024506
274.	0.	1.33917	12.3557	12.4477	6.9221	3.441	27.4553	3.0046	0.024588
275.	0.	1.33793	12.3557	12.4477	6.9185	3.470	27.4554	3.0047	0.024668
276.	0.	1.33660	12.3557	12.4477	6.9147	3.496	27.4403	3.0047	0.024747
277.	0.	1.33572	12.3558	12.4477	6.9139	3.519	27.4172	2.9948	0.024767
278.	0.	1.33440	12.3558	12.4477	6.9105	3.545	27.4095	2.9948	0.024848
279.	0.	1.33312	12.3558	12.4477	6.9071	3.572	27.4056	2.9949	0.024927
280.	0.	1.33186	12.3558	12.4477	6.9039	3.597	27.4031	2.9950	0.025006
281.	0.	1.33063	12.3558	12.4477	6.9006	3.623	27.4011	2.9951	0.025084
282.	0.	1.32941	12.3558	12.4477	6.8972	3.648	27.3994	2.9952	0.025161
283.	0.	1.32822	12.3558	12.4477	6.8938	3.673	27.3980	2.9952	0.025237
284.	0.	1.32703	12.3558	12.4477	6.8905	3.698	27.3971	2.9953	0.025313
285.	0.	1.32585	12.3559	12.4477	6.8872	3.724	27.3968	2.9954	0.025388
286.	0.	1.32467	12.3559	12.4477	6.8841	3.749	27.3968	2.9955	0.025462
287.	0.	1.32351	12.3559	12.4477	6.8809	3.773	27.3972	2.9955	0.025535
288.	0.	1.32237	12.3559	12.4477	6.8777	3.798	27.3980	2.9956	0.025607
289.	0.	1.32116	12.3559	12.4477	6.8744	3.821	27.3841	2.9957	0.025678
290.	0.	1.32041	12.3559	12.4477	6.8737	3.840	27.3634	2.9857	0.025691
291.	0.	1.31922	12.3559	12.4477	6.8705	3.864	27.3579	2.9858	0.025763
292.	0.	1.31807	12.3560	12.4477	6.8673	3.889	27.3568	2.9858	0.025836
293.	0.	1.31694	12.3560	12.4477	6.8641	3.913	27.3572	2.9859	0.025907
294.	0.	1.31582	12.3560	12.4477	6.8610	3.938	27.3578	2.9860	0.025978
295.	0.	1.31470	12.3560	12.4477	6.8580	3.962	27.3582	2.9860	0.026048
296.	0.	1.31360	12.3560	12.4477	6.8550	3.986	27.3588	2.9861	0.026118
297.	0.	1.31253	12.3560	12.4477	6.8518	4.012	27.3603	2.9862	0.026186
298.	0.	1.31147	12.3560	12.4477	6.8487	4.038	27.3618	2.9863	0.026254
299.	0.	1.31042	12.3560	12.4477	6.8456	4.062	27.3627	2.9863	0.026321
300.	0.	1.30937	12.3560	12.4477	6.8426	4.086	27.3634	2.9864	0.026388
301.	0.	1.30833	12.3560	12.4477	6.8395	4.111	27.3649	2.9865	0.026454
302.	0.	1.30731	12.3560	12.4477	6.8365	4.135	27.3666	2.9865	0.026519
303.	0.	1.30629	12.3560	12.4477	6.8335	4.160	27.3683	2.9866	0.026584
304.	0.	1.30529	12.3561	12.4477	6.8305	4.184	27.3701	2.9866	0.026648
305.	0.	1.30429	12.3561	12.4477	6.8275	4.207	27.3716	2.9867	0.026711
306.	0.	1.30330	12.3561	12.4477	6.8246	4.230	27.3728	2.9868	0.026774
307.	0.	1.30231	12.3561	12.4477	6.8218	4.252	27.3737	2.9868	0.026836
308.	0.	1.30125	12.3561	12.4477	6.8189	4.271	27.3598	2.9869	0.026898
309.	0.	1.30062	12.3561	12.4477	6.8187	4.287	27.3391	2.9769	0.026902
310.	0.	1.29956	12.3561	12.4477	6.8159	4.308	27.3335	2.9770	0.026965
311.	0.	1.29855	12.3561	12.4477	6.8132	4.329	27.3322	2.9770	0.027027
312.	0.	1.29755	12.3561	12.4477	6.8105	4.351	27.3324	2.9771	0.027089
313.	0.	1.29648	12.3561	12.4477	6.8078	4.369	27.3186	2.9771	0.027150
314.	0.	1.29583	12.3561	12.4477	6.8079	4.384	27.2974	2.9672	0.027154
315.	0.	1.29478	12.3561	12.4477	6.8053	4.405	27.2913	2.9672	0.027216
316.	0.	1.29376	12.3562	12.4477	6.8027	4.426	27.2896	2.9673	0.027278
317.	0.	1.29277	12.3562	12.4477	6.8001	4.448	27.2895	2.9673	0.027339
318.	0.	1.29170	12.3562	12.4477	6.7974	4.467	27.2759	2.9674	0.027399
319.	0.	1.29109	12.3562	12.4477	6.7974	4.483	27.2551	2.9574	0.027403
320.	0.	1.29006	12.3562	12.4477	6.7947	4.505	27.2495	2.9575	0.027465
321.	0.	1.28907	12.3562	12.4477	6.7919	4.528	27.2482	2.9575	0.027526
322.	0.	1.28810	12.3562	12.4477	6.7892	4.552	27.2486	2.9576	0.027587
323.	0.	1.28713	12.3562	12.4477	6.7865	4.576	27.2497	2.9576	0.027647
324.	0.	1.28609	12.3562	12.4477	6.7837	4.597	27.2371	2.9577	0.027707
325.	0.	1.28548	12.3562	12.4477	6.7838	4.614	27.2171	2.9477	0.027710
326.	0.	1.28443	12.3562	12.4477	6.7814	4.635	27.2114	2.9478	0.027772
327.	0.	1.28342	12.3562	12.4477	6.7790	4.658	27.2099	2.9478	0.027833

328.	0.	1.28245	12.3562	12.4477	6.7764	4.680	27.2098	2.9479	0.027893
329.	0.	1.28141	12.3562	12.4477	6.7737	4.700	27.1961	2.9480	0.027953
330.	0.	1.28081	12.3562	12.4477	6.7738	4.716	27.1752	2.9380	0.027955
331.	0.	1.27978	12.3563	12.4477	6.7712	4.737	27.1692	2.9380	0.028016
332.	0.	1.27880	12.3563	12.4477	6.7686	4.760	27.1674	2.9381	0.028077
333.	0.	1.27783	12.3563	12.4477	6.7661	4.783	27.1672	2.9381	0.028137
334.	0.	1.27678	12.3563	12.4477	6.7636	4.802	27.1535	2.9382	0.028196
335.	0.	1.27608	12.3563	12.4477	6.7637	4.816	27.1191	2.9282	0.028198
336.	0.	1.27540	12.3563	12.4477	6.7641	4.831	27.0916	2.9182	0.028202
337.	0.	1.27423	12.3563	12.4477	6.7616	4.849	27.0689	2.9183	0.028264
338.	0.	1.27345	12.3563	12.4477	6.7619	4.862	27.0307	2.9083	0.028270
339.	0.	1.27335	12.3563	12.4477	6.7633	4.905	27.1132	2.8983	0.028278
340.	0.	1.27098	12.3562	12.4477	6.7454	4.999	27.3600	2.9587	0.028676
341.	0.	1.26899	12.3562	12.4477	6.7320	5.052	27.4627	2.9989	0.028940
342.	0.	1.26933	12.3562	12.4477	6.7371	5.051	27.4013	2.9688	0.028823
343.	0.	1.26947	12.3563	12.4477	6.7423	5.047	27.3195	2.9387	0.028706
344.	0.	1.26871	12.3563	12.4477	6.7423	5.054	27.2625	2.9287	0.028704
345.	0.	1.26804	12.3563	12.4477	6.7427	5.065	27.2261	2.9187	0.028704
346.	0.	1.26689	12.3563	12.4477	6.7405	5.081	27.1992	2.9188	0.028762
347.	0.	1.26630	12.3563	12.4477	6.7414	5.099	27.1866	2.9088	0.028765
348.	0.	1.26506	12.3563	12.4477	6.7368	5.133	27.2260	2.9189	0.028880
349.	0.	1.26396	12.3563	12.4477	6.7323	5.169	27.2803	2.9290	0.028993
350.	0.	1.26296	12.3563	12.4477	6.7278	5.206	27.3404	2.9391	0.029101
351.	0.	1.26160	12.3563	12.4477	6.7227	5.224	27.3311	2.9492	0.029206
352.	0.	1.26142	12.3563	12.4477	6.7282	5.204	27.2026	2.9191	0.029089
353.	0.	1.26172	12.3564	12.4477	6.7394	5.168	27.0048	2.8689	0.028857
354.	0.	1.26197	12.3564	12.4477	6.7514	5.141	26.8268	2.8186	0.028627
355.	0.	1.26072	12.3564	12.4477	6.7554	5.130	26.6906	2.7986	0.028586
356.	0.	1.26042	12.3565	12.4477	6.7633	5.145	26.6510	2.7685	0.028494
357.	0.	1.25703	12.3564	12.4477	6.7508	5.195	26.7071	2.8088	0.028836
358.	0.	1.25598	12.3564	12.4477	6.7526	5.219	26.7024	2.7989	0.028866
359.	0.	1.25563	12.3564	12.4477	6.7527	5.297	26.9037	2.7990	0.028956
360.	0.	1.25126	12.3563	12.4477	6.7229	5.418	27.1996	2.8996	0.029609
361.	0.	1.25076	12.3563	12.4477	6.7213	5.458	27.2805	2.8997	0.029671
362.	0.	1.25008	12.3563	12.4477	6.7189	5.490	27.3172	2.8997	0.029726
363.	0.	1.24942	12.3563	12.4477	6.7165	5.522	27.3533	2.8998	0.029781
364.	0.	1.24831	12.3563	12.4477	6.7113	5.555	27.3898	2.9099	0.029888
365.	0.	1.24757	12.3563	12.4477	6.7088	5.579	27.4033	2.9099	0.029939
366.	0.	1.24681	12.3563	12.4477	6.7063	5.603	27.4118	2.9100	0.029989
367.	0.	1.24616	12.3563	12.4477	6.7041	5.630	27.4382	2.9100	0.030039
368.	0.	1.24511	12.3563	12.4477	6.6988	5.662	27.4714	2.9201	0.030141
369.	0.	1.24443	12.3563	12.4477	6.6964	5.684	27.4831	2.9202	0.030188
370.	0.	1.24372	12.3563	12.4477	6.6941	5.705	27.4901	2.9202	0.030233
371.	0.	1.24301	12.3563	12.4477	6.6917	5.726	27.4945	2.9203	0.030279
372.	0.	1.24241	12.3563	12.4477	6.6896	5.751	27.5186	2.9203	0.030324
373.	0.	1.24143	12.3563	12.4477	6.6845	5.779	27.5498	2.9304	0.030421
374.	0.	1.24081	12.3563	12.4477	6.6822	5.800	27.5603	2.9305	0.030464
375.	0.	1.24017	12.3563	12.4477	6.6799	5.819	27.5669	2.9305	0.030505
376.	0.	1.23952	12.3563	12.4477	6.6775	5.838	27.5711	2.9305	0.030547
377.	0.	1.23888	12.3563	12.4477	6.6752	5.857	27.5743	2.9306	0.030588
378.	0.	1.23823	12.3563	12.4477	6.6729	5.874	27.5769	2.9306	0.030629
379.	0.	1.23771	12.3563	12.4477	6.6707	5.897	27.5997	2.9307	0.030669
380.	0.	1.23681	12.3562	12.4477	6.6658	5.922	27.6297	2.9408	0.030761
381.	0.	1.23625	12.3562	12.4477	6.6635	5.940	27.6387	2.9408	0.030799
382.	0.	1.23568	12.3562	12.4477	6.6612	5.956	27.6439	2.9408	0.030836
383.	0.	1.23511	12.3562	12.4477	6.6589	5.972	27.6470	2.9409	0.030873
384.	0.	1.23453	12.3562	12.4477	6.6566	5.987	27.6491	2.9409	0.030910
385.	0.	1.23396	12.3562	12.4477	6.6543	6.003	27.6510	2.9409	0.030947
386.	0.	1.23329	12.3562	12.4477	6.6520	6.014	27.6375	2.9410	0.030983
387.	0.	1.23294	12.3562	12.4477	6.6524	6.017	27.6024	2.9310	0.030967
388.	0.	1.23262	12.3562	12.4477	6.6529	6.024	27.5769	2.9210	0.030952
389.	0.	1.23184	12.3562	12.4477	6.6507	6.034	27.5546	2.9210	0.030990
390.	0.	1.23141	12.3562	12.4477	6.6513	6.037	27.5147	2.9110	0.030977
391.	0.	1.23107	12.3563	12.4477	6.6522	6.047	27.4971	2.9010	0.030965
392.	0.	1.23122	12.3562	12.4477	6.6494	6.127	27.7149	2.9111	0.031059
393.	0.	1.22760	12.3561	12.4477	6.6198	6.214	27.9226	3.0116	0.031596
394.	0.	1.22808	12.3561	12.4477	6.6255	6.191	27.8573	2.9815	0.031481

395.	0.	1.22834	12.3562	12.4477	6.6307	6.163	27.7549	2.9514	0.031360
396.	0.	1.22800	12.3562	12.4477	6.6331	6.135	27.6370	2.9313	0.031291
397.	0.	1.22799	12.3562	12.4477	6.6388	6.105	27.5098	2.9012	0.031171
398.	0.	1.22745	12.3563	12.4477	6.6418	6.079	27.3826	2.8811	0.031106
399.	0.	1.22729	12.3563	12.4477	6.6480	6.053	27.2523	2.8510	0.030989
400.	0.	1.22675	12.3563	12.4477	6.6518	6.041	27.1558	2.8309	0.030930
401.	0.	1.22591	12.3563	12.4477	6.6533	6.045	27.1023	2.8209	0.030932
402.	0.	1.22486	12.3563	12.4477	6.6521	6.068	27.1019	2.8210	0.030992
403.	0.	1.22388	12.3563	12.4477	6.6487	6.118	27.1870	2.8311	0.031105
404.	0.	1.22250	12.3562	12.4477	6.6396	6.192	27.3463	2.8613	0.031321
405.	0.	1.22102	12.3562	12.4477	6.6298	6.248	27.4576	2.8915	0.031527
406.	0.	1.22012	12.3562	12.4477	6.6275	6.251	27.4200	2.8916	0.031569
407.	0.	1.22047	12.3563	12.4477	6.6362	6.219	27.2854	2.8514	0.031398
408.	0.	1.22064	12.3563	12.4477	6.6429	6.213	27.2175	2.8213	0.031283
409.	0.	1.21918	12.3562	12.4477	6.6360	6.257	27.2849	2.8414	0.031446
410.	0.	1.21750	12.3562	12.4477	6.6286	6.283	27.2991	2.8616	0.031604
411.	0.	1.21704	12.3562	12.4477	6.6320	6.263	27.1967	2.8415	0.031543
412.	0.	1.21790	12.3563	12.4477	6.6425	6.270	27.1729	2.8014	0.031374
413.	0.	1.21503	12.3562	12.4477	6.6265	6.319	27.2397	2.8517	0.031701
414.	0.	1.21472	12.3562	12.4477	6.6307	6.310	27.1761	2.8316	0.031643
415.	0.	1.21412	12.3563	12.4477	6.6348	6.288	27.0679	2.8116	0.031585
416.	0.	1.21405	12.3563	12.4477	6.6425	6.275	26.9847	2.7815	0.031474
417.	0.	1.21265	12.3563	12.4477	6.6393	6.306	27.0193	2.7916	0.031592
418.	0.	1.21134	12.3562	12.4477	6.6335	6.363	27.1329	2.8118	0.031761
419.	0.	1.20912	12.3562	12.4477	6.6234	6.387	27.1432	2.8420	0.031976
420.	0.	1.20888	12.3562	12.4477	6.6325	6.321	26.9256	2.8018	0.031808
421.	0.	1.21025	12.3563	12.4477	6.6545	6.244	26.6685	2.7214	0.031409
422.	0.	1.20865	12.3563	12.4477	6.6575	6.227	26.5525	2.7114	0.031429
423.	0.	1.20610	12.3564	12.4477	6.6574	6.189	26.3736	2.7115	0.031510
424.	0.	1.20717	12.3564	12.4477	6.6820	6.127	26.1331	2.6311	0.031108
425.	0.	1.20522	12.3564	12.4477	6.6865	6.132	26.0582	2.6212	0.031160
426.	0.	1.20205	12.3564	12.4477	6.6817	6.160	26.0443	2.6414	0.031402
427.	0.	1.20025	12.3564	12.4477	6.6854	6.165	25.9696	2.6314	0.031447
428.	0.	1.19875	12.3565	12.4477	6.6920	6.158	25.8588	2.6114	0.031431
429.	0.	1.19710	12.3565	12.4477	6.6987	6.151	25.7385	2.5914	0.031420
430.	0.	1.19531	12.3565	12.4477	6.7056	6.143	25.6132	2.5714	0.031415
431.	0.	1.19338	12.3565	12.4477	6.7128	6.136	25.4845	2.5514	0.031417
432.	0.	1.19132	12.3566	12.4477	6.7202	6.131	25.3545	2.5314	0.031426
433.	0.	1.18922	12.3566	12.4477	6.7278	6.132	25.2374	2.5114	0.031442
434.	0.	1.18653	12.3566	12.4477	6.7321	6.136	25.1288	2.5015	0.031534
435.	0.	1.18418	12.3566	12.4477	6.7394	6.129	24.9895	2.4816	0.031559
436.	0.	1.18217	12.3567	12.4477	6.7503	6.118	24.8362	2.4515	0.031524
437.	0.	1.17947	12.3567	12.4477	6.7581	6.115	24.6947	2.4316	0.031572
438.	0.	1.17668	12.3567	12.4477	6.7659	6.117	24.5552	2.4116	0.031629
439.	0.	1.17382	12.3568	12.4477	6.7739	6.126	24.4300	2.3917	0.031695
440.	0.	1.17016	12.3568	12.4477	6.7784	6.130	24.2845	2.3818	0.031844
441.	0.	1.16782	12.3569	12.4477	6.7926	6.109	24.0590	2.3418	0.031770
442.	0.	1.16542	12.3570	12.4477	6.8104	6.074	23.7706	2.2916	0.031636
443.	0.	1.16309	12.3571	12.4477	6.8327	6.046	23.4784	2.2315	0.031453
444.	0.	1.15869	12.3571	12.4477	6.8471	6.065	23.3137	2.2016	0.031575
445.	0.	1.15134	12.3572	12.4477	6.8447	6.117	23.2519	2.2221	0.032143
446.	0.	1.14592	12.3572	12.4477	6.8514	6.132	23.1005	2.2124	0.032423
447.	0.	1.14249	12.3573	12.4477	6.8715	6.110	22.8333	2.1624	0.032363
448.	0.	1.13896	12.3575	12.4477	6.8956	6.080	22.5177	2.1023	0.032251
449.	0.	1.13395	12.3576	12.4477	6.9175	6.063	22.2146	2.0523	0.032293
450.	0.	1.12728	12.3577	12.4477	6.9366	6.028	21.8554	2.0125	0.032486
451.	0.	1.12264	12.3579	12.4477	6.9742	5.941	21.3102	1.9222	0.032226
452.	0.	1.11921	12.3582	12.4477	7.0293	5.875	20.7428	1.7916	0.031638
453.	0.	1.10552	12.3585	12.4477	7.0499	5.854	20.3085	1.7625	0.032514
454.	0.	1.09415	12.3589	12.4477	7.0845	5.809	19.7958	1.6930	0.032970
455.	0.	1.08271	12.3593	12.4477	7.1264	5.762	19.2413	1.6033	0.033340
456.	0.	1.06707	12.3598	12.4477	7.1607	5.732	18.7015	1.5343	0.034293
457.	0.	1.05034	12.3604	12.4477	7.1974	5.706	18.1229	1.4554	0.035353
458.	0.	1.03198	12.3611	12.4477	7.2352	5.683	17.5057	1.3666	0.036608
459.	0.	1.01045	12.3619	12.4477	7.2699	5.676	16.8828	1.2784	0.038351
460.	0.	0.98420	12.3627	12.4477	7.2969	5.611	16.1042	1.2008	0.040818
461.	0.	0.96441	12.3640	12.4477	7.3522	5.465	15.0174	1.0219	0.041879

462.	0.	0.93376	12.3659	12.4477	7.4147	5.195	14.0776	0.8451	0.045095
463.	0.	0.87576	12.3679	12.4477	7.4203	4.983	13.4374	0.7950	0.054990
464.	0.	0.81907	12.3699	12.4477	7.4247	4.797	12.9221	0.7448	0.064821
465.	0.	0.76252	12.3720	12.4477	7.4248	4.653	12.5250	0.7048	0.074784
466.	0.	0.70404	12.3737	12.4477	7.4128	4.598	12.1685	0.6850	0.085015
467.	0.	0.65822	12.3748	12.4477	7.3715	4.696	11.8095	0.6527	0.092745
468.	0.	0.61778	12.3755	12.4477	7.2967	4.991	11.7086	0.6296	0.099610
469.	0.	0.23946	15.4875	15.4936	11.0074	1.242	16.5271	0.1411	0.171064
470.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
471.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

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WHAFIS input:  YK-105.dat
WHAFIS output: YK-105.out
```

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-105
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500
3000
3500
4000
Transect Profile
SWAN 1-D points
TSWL

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-105.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-105.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-2.337	1.000	1.000	9.407	8.495	12.392	56.140	0.003	0.000
OF	3.300	-2.327	0.000	9.408	0.000	0.000	0.000	0.000	0.003	0.000
OF	6.600	-2.317	0.000	9.408	0.000	0.000	0.000	0.000	0.003	0.000
OF	9.800	-2.307	0.000	9.408	0.000	0.000	0.000	0.000	0.003	0.000
OF	13.100	-2.296	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
OF	16.400	-2.282	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
OF	19.700	-2.268	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
OF	23.000	-2.254	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
OF	26.200	-2.240	0.000	9.409	0.000	0.000	0.000	0.000	0.004	0.000
OF	29.500	-2.227	0.000	9.409	0.000	0.000	0.000	0.000	0.004	0.000
OF	32.800	-2.213	0.000	9.409	0.000	0.000	0.000	0.000	0.004	0.000
OF	36.100	-2.198	0.000	9.410	0.000	0.000	0.000	0.000	0.004	0.000
OF	39.400	-2.184	0.000	9.410	0.000	0.000	0.000	0.000	0.003	0.000
OF	42.700	-2.180	0.000	9.410	0.000	0.000	0.000	0.000	0.001	0.000
OF	45.900	-2.179	0.000	9.410	0.000	0.000	0.000	0.000	0.000	0.000
OF	49.200	-2.179	0.000	9.411	0.000	0.000	0.000	0.000	0.000	0.000
OF	52.500	-2.178	0.000	9.411	0.000	0.000	0.000	0.000	0.000	0.000
OF	55.800	-2.178	0.000	9.411	0.000	0.000	0.000	0.000	0.000	0.000
OF	59.100	-2.178	0.000	9.412	0.000	0.000	0.000	0.000	0.000	0.000
OF	62.300	-2.177	0.000	9.412	0.000	0.000	0.000	0.000	0.000	0.000
OF	65.600	-2.177	0.000	9.412	0.000	0.000	0.000	0.000	0.000	0.000
OF	68.900	-2.177	0.000	9.413	0.000	0.000	0.000	0.000	0.000	0.000
OF	72.200	-2.176	0.000	9.413	0.000	0.000	0.000	0.000	0.000	0.000
OF	75.500	-2.176	0.000	9.413	0.000	0.000	0.000	0.000	0.000	0.000
OF	78.700	-2.175	0.000	9.414	0.000	0.000	0.000	0.000	0.000	0.000
OF	82.000	-2.175	0.000	9.414	0.000	0.000	0.000	0.000	0.000	0.000
OF	85.300	-2.175	0.000	9.415	0.000	0.000	0.000	0.000	0.000	0.000
OF	88.600	-2.174	0.000	9.415	0.000	0.000	0.000	0.000	0.000	0.000
OF	91.900	-2.174	0.000	9.416	0.000	0.000	0.000	0.000	0.000	0.000
OF	95.100	-2.174	0.000	9.416	0.000	0.000	0.000	0.000	0.000	0.000
OF	98.400	-2.173	0.000	9.416	0.000	0.000	0.000	0.000	0.000	0.000
OF	101.700	-2.173	0.000	9.417	0.000	0.000	0.000	0.000	0.000	0.000
OF	105.000	-2.172	0.000	9.417	0.000	0.000	0.000	0.000	0.000	0.000
OF	108.300	-2.172	0.000	9.418	0.000	0.000	0.000	0.000	0.000	0.000
OF	111.500	-2.172	0.000	9.418	0.000	0.000	0.000	0.000	0.000	0.000
OF	114.800	-2.171	0.000	9.419	0.000	0.000	0.000	0.000	0.000	0.000
OF	118.100	-2.171	0.000	9.419	0.000	0.000	0.000	0.000	0.000	0.000
OF	121.400	-2.171	0.000	9.420	0.000	0.000	0.000	0.000	0.000	0.000
OF	124.700	-2.170	0.000	9.420	0.000	0.000	0.000	0.000	0.000	0.000
OF	128.000	-2.170	0.000	9.421	0.000	0.000	0.000	0.000	0.000	0.000
OF	131.200	-2.170	0.000	9.422	0.000	0.000	0.000	0.000	0.000	0.000
OF	134.500	-2.169	0.000	9.422	0.000	0.000	0.000	0.000	0.000	0.000
OF	137.800	-2.169	0.000	9.423	0.000	0.000	0.000	0.000	0.000	0.000
OF	141.100	-2.168	0.000	9.423	0.000	0.000	0.000	0.000	0.000	0.000
OF	144.400	-2.168	0.000	9.424	0.000	0.000	0.000	0.000	0.000	0.000
OF	147.600	-2.168	0.000	9.424	0.000	0.000	0.000	0.000	0.000	0.000
OF	150.900	-2.168	0.000	9.425	0.000	0.000	0.000	0.000	0.000	0.000
OF	154.200	-2.167	0.000	9.425	0.000	0.000	0.000	0.000	0.000	0.000
OF	157.500	-2.167	0.000	9.425	0.000	0.000	0.000	0.000	0.000	0.000
OF	160.800	-2.166	0.000	9.426	0.000	0.000	0.000	0.000	0.000	0.000
OF	164.000	-2.166	0.000	9.426	0.000	0.000	0.000	0.000	0.000	0.000
OF	167.300	-2.166	0.000	9.427	0.000	0.000	0.000	0.000	0.001	0.000
OF	170.600	-2.158	0.000	9.427	0.000	0.000	0.000	0.000	0.003	0.000
OF	173.900	-2.145	0.000	9.427	0.000	0.000	0.000	0.000	0.004	0.000
OF	177.200	-2.133	0.000	9.427	0.000	0.000	0.000	0.000	0.004	0.000
OF	180.400	-2.121	0.000	9.428	0.000	0.000	0.000	0.000	0.004	0.000
OF	183.700	-2.109	0.000	9.428	0.000	0.000	0.000	0.000	0.005	0.000
OF	187.000	-2.090	0.000	9.428	0.000	0.000	0.000	0.000	0.006	0.000
OF	190.300	-2.067	0.000	9.429	0.000	0.000	0.000	0.000	0.007	0.000
OF	193.600	-2.044	0.000	9.429	0.000	0.000	0.000	0.000	0.007	0.000
OF	196.800	-2.020	0.000	9.429	0.000	0.000	0.000	0.000	0.007	0.000
OF	200.100	-1.997	0.000	9.430	0.000	0.000	0.000	0.000	0.007	0.000
OF	203.400	-1.974	0.000	9.430	0.000	0.000	0.000	0.000	0.007	0.000
OF	206.700	-1.951	0.000	9.430	0.000	0.000	0.000	0.000	0.007	0.000
OF	210.000	-1.928	0.000	9.431	0.000	0.000	0.000	0.000	0.007	0.000
OF	213.300	-1.905	0.000	9.431	0.000	0.000	0.000	0.000	0.007	0.000
OF	216.500	-1.885	0.000	9.431	0.000	0.000	0.000	0.000	0.005	0.000
OF	219.800	-1.869	0.000	9.432	0.000	0.000	0.000	0.000	0.005	0.000
OF	223.100	-1.854	0.000	9.432	0.000	0.000	0.000	0.000	0.005	0.000
OF	226.400	-1.838	0.000	9.432	0.000	0.000	0.000	0.000	0.005	0.000
OF	229.700	-1.823	0.000	9.433	0.000	0.000	0.000	0.000	0.005	0.000
OF	232.900	-1.807	0.000	9.433	0.000	0.000	0.000	0.000	0.005	0.000
OF	236.200	-1.792	0.000	9.434	0.000	0.000	0.000	0.000	0.005	0.000
OF	239.500	-1.776	0.000	9.434	0.000	0.000	0.000	0.000	0.005	0.000
OF	242.800	-1.761	0.000	9.434	0.000	0.000	0.000	0.000	0.005	0.000
OF	246.100	-1.745	0.000	9.435	0.000	0.000	0.000	0.000	0.005	0.000
OF	249.300	-1.730	0.000	9.435	0.000	0.000	0.000	0.000	0.005	0.000
OF	252.600	-1.715	0.000	9.436	0.000	0.000	0.000	0.000	0.005	0.000
OF	255.900	-1.699	0.000	9.436	0.000	0.000	0.000	0.000	0.005	0.000
OF	259.200	-1.684	0.000	9.437	0.000	0.000	0.000	0.000	0.005	0.000
OF	262.500	-1.668	0.000	9.437	0.000	0.000	0.000	0.000	0.005	0.000
OF	265.700	-1.653	0.000	9.437	0.000	0.000	0.000	0.000	0.005	0.000
OF	269.000	-1.637	0.000	9.438	0.000	0.000	0.000	0.000	0.005	0.000
OF	272.300	-1.622	0.000	9.438	0.000	0.000	0.000	0.000	0.005	0.000
OF	275.600	-1.606	0.000	9.439	0.000	0.000	0.000	0.000	0.005	0.000
OF	278.900	-1.591	0.000	9.439	0.000	0.000	0.000	0.000	0.005	0.000
OF	282.200	-1.575	0.000	9.440	0.000	0.000	0.000	0.000	0.005	0.000
OF	285.400	-1.560	0.000	9.440	0.000	0.000	0.000	0.000	0.005	0.000
OF	288.700	-1.544	0.000	9.441	0.000	0.000	0.000	0.000	0.005	0.000
OF	292.000	-1.529	0.000	9.441	0.000	0.000	0.000	0.000	0.005	0.000
OF	295.300	-1.514	0.000	9.441	0.000	0.000	0.000	0.000	0.005	0.000
OF	298.600	-1.498	0.000	9.442	0.000	0.000	0.000	0.000	0.005	0.000
OF	301.800	-1.483	0.000	9.442	0.000	0.000	0.000	0.000	0.005	0.000

OF	305.100	-1.467	0.000	9.443	0.000	0.000	0.000	0.000	0.004	0.000
OF	308.400	-1.453	0.000	9.443	0.000	0.000	0.000	0.000	0.004	0.000
OF	311.700	-1.439	0.000	9.444	0.000	0.000	0.000	0.000	0.004	0.000
OF	315.000	-1.424	0.000	9.444	0.000	0.000	0.000	0.000	0.004	0.000
OF	318.200	-1.410	0.000	9.445	0.000	0.000	0.000	0.000	0.004	0.000
OF	321.500	-1.395	0.000	9.445	0.000	0.000	0.000	0.000	0.004	0.000
OF	324.800	-1.381	0.000	9.445	0.000	0.000	0.000	0.000	0.004	0.000
OF	328.100	-1.367	0.000	9.446	0.000	0.000	0.000	0.000	0.004	0.000
OF	331.400	-1.352	0.000	9.446	0.000	0.000	0.000	0.000	0.004	0.000
OF	334.600	-1.338	0.000	9.447	0.000	0.000	0.000	0.000	0.004	0.000
OF	337.900	-1.324	0.000	9.447	0.000	0.000	0.000	0.000	0.004	0.000
OF	341.200	-1.309	0.000	9.448	0.000	0.000	0.000	0.000	0.004	0.000
OF	344.500	-1.295	0.000	9.448	0.000	0.000	0.000	0.000	0.004	0.000
OF	347.800	-1.281	0.000	9.448	0.000	0.000	0.000	0.000	0.004	0.000
OF	351.000	-1.266	0.000	9.449	0.000	0.000	0.000	0.000	0.004	0.000
OF	354.300	-1.252	0.000	9.449	0.000	0.000	0.000	0.000	0.004	0.000
OF	357.600	-1.237	0.000	9.450	0.000	0.000	0.000	0.000	0.004	0.000
OF	360.900	-1.223	0.000	9.450	0.000	0.000	0.000	0.000	0.004	0.000
OF	364.200	-1.209	0.000	9.451	0.000	0.000	0.000	0.000	0.004	0.000
OF	367.500	-1.194	0.000	9.451	0.000	0.000	0.000	0.000	0.004	0.000
OF	370.700	-1.180	0.000	9.452	0.000	0.000	0.000	0.000	0.004	0.000
OF	374.000	-1.165	0.000	9.452	0.000	0.000	0.000	0.000	0.004	0.000
OF	377.300	-1.151	0.000	9.452	0.000	0.000	0.000	0.000	0.004	0.000
OF	380.600	-1.137	0.000	9.453	0.000	0.000	0.000	0.000	0.004	0.000
OF	383.900	-1.122	0.000	9.453	0.000	0.000	0.000	0.000	0.004	0.000
OF	387.100	-1.108	0.000	9.454	0.000	0.000	0.000	0.000	0.004	0.000
OF	390.400	-1.094	0.000	9.454	0.000	0.000	0.000	0.000	0.004	0.000
OF	393.700	-1.079	0.000	9.455	0.000	0.000	0.000	0.000	0.004	0.000
OF	397.000	-1.065	0.000	9.455	0.000	0.000	0.000	0.000	0.004	0.000
OF	400.300	-1.050	0.000	9.455	0.000	0.000	0.000	0.000	0.004	0.000
OF	403.500	-1.036	0.000	9.456	0.000	0.000	0.000	0.000	0.004	0.000
OF	406.800	-1.024	0.000	9.456	0.000	0.000	0.000	0.000	0.004	0.000
OF	410.100	-1.012	0.000	9.457	0.000	0.000	0.000	0.000	0.002	0.000
OF	413.400	-1.012	0.000	9.457	0.000	0.000	0.000	0.000	0.000	0.000
OF	416.700	-1.012	0.000	9.458	0.000	0.000	0.000	0.000	0.000	0.000
OF	419.900	-1.012	0.000	9.458	0.000	0.000	0.000	0.000	0.000	0.000
OF	423.200	-1.012	0.000	9.459	0.000	0.000	0.000	0.000	0.000	0.000
OF	426.500	-1.012	0.000	9.459	0.000	0.000	0.000	0.000	0.000	0.000
OF	429.800	-1.013	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
OF	433.100	-1.013	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
OF	436.400	-1.013	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
OF	439.600	-1.013	0.000	9.461	0.000	0.000	0.000	0.000	0.000	0.000
OF	442.900	-1.013	0.000	9.461	0.000	0.000	0.000	0.000	0.000	0.000
OF	446.200	-1.014	0.000	9.462	0.000	0.000	0.000	0.000	0.000	0.000
OF	449.500	-1.014	0.000	9.462	0.000	0.000	0.000	0.000	0.000	0.000
OF	452.800	-1.014	0.000	9.462	0.000	0.000	0.000	0.000	0.000	0.000
OF	456.000	-1.014	0.000	9.463	0.000	0.000	0.000	0.000	0.000	0.000
OF	459.300	-1.015	0.000	9.463	0.000	0.000	0.000	0.000	0.000	0.000
OF	462.600	-1.015	0.000	9.464	0.000	0.000	0.000	0.000	0.000	0.000
OF	465.900	-1.015	0.000	9.464	0.000	0.000	0.000	0.000	0.000	0.000
OF	469.200	-1.015	0.000	9.464	0.000	0.000	0.000	0.000	0.000	0.000
OF	472.400	-1.015	0.000	9.465	0.000	0.000	0.000	0.000	0.000	0.000
OF	475.700	-1.015	0.000	9.465	0.000	0.000	0.000	0.000	0.000	0.000
OF	479.000	-1.016	0.000	9.465	0.000	0.000	0.000	0.000	0.000	0.000
OF	482.300	-1.016	0.000	9.466	0.000	0.000	0.000	0.000	0.000	0.000
OF	485.600	-1.016	0.000	9.466	0.000	0.000	0.000	0.000	0.000	0.000
OF	488.800	-1.016	0.000	9.466	0.000	0.000	0.000	0.000	0.000	0.000
OF	492.100	-1.016	0.000	9.467	0.000	0.000	0.000	0.000	0.000	0.000
OF	495.400	-1.017	0.000	9.467	0.000	0.000	0.000	0.000	0.000	0.000
OF	498.700	-1.017	0.000	9.467	0.000	0.000	0.000	0.000	0.000	0.000
OF	502.000	-1.017	0.000	9.468	0.000	0.000	0.000	0.000	0.000	0.000
OF	505.200	-1.017	0.000	9.468	0.000	0.000	0.000	0.000	-0.002	0.000
OF	508.500	-1.030	0.000	9.468	0.000	0.000	0.000	0.000	-0.007	0.000
OF	511.800	-1.061	0.000	9.469	0.000	0.000	0.000	0.000	-0.009	0.000
OF	515.100	-1.091	0.000	9.469	0.000	0.000	0.000	0.000	-0.009	0.000
OF	518.400	-1.121	0.000	9.470	0.000	0.000	0.000	0.000	-0.009	0.000
OF	521.700	-1.151	0.000	9.470	0.000	0.000	0.000	0.000	-0.009	0.000
OF	524.900	-1.181	0.000	9.471	0.000	0.000	0.000	0.000	-0.009	0.000
OF	528.200	-1.212	0.000	9.471	0.000	0.000	0.000	0.000	-0.009	0.000
OF	531.500	-1.242	0.000	9.472	0.000	0.000	0.000	0.000	-0.009	0.000
OF	534.800	-1.272	0.000	9.472	0.000	0.000	0.000	0.000	-0.010	0.000
OF	538.100	-1.308	0.000	9.472	0.000	0.000	0.000	0.000	-0.012	0.000
OF	541.300	-1.352	0.000	9.473	0.000	0.000	0.000	0.000	-0.014	0.000
OF	544.600	-1.395	0.000	9.473	0.000	0.000	0.000	0.000	-0.013	0.000
OF	547.900	-1.439	0.000	9.474	0.000	0.000	0.000	0.000	-0.013	0.000
OF	551.200	-1.483	0.000	9.474	0.000	0.000	0.000	0.000	-0.013	0.000
OF	554.500	-1.527	0.000	9.474	0.000	0.000	0.000	0.000	-0.014	0.000
OF	557.700	-1.571	0.000	9.475	0.000	0.000	0.000	0.000	-0.014	0.000
OF	561.000	-1.615	0.000	9.475	0.000	0.000	0.000	0.000	-0.013	0.000
OF	564.300	-1.659	0.000	9.476	0.000	0.000	0.000	0.000	-0.013	0.000
OF	567.600	-1.703	0.000	9.476	0.000	0.000	0.000	0.000	-0.013	0.000
OF	570.900	-1.747	0.000	9.476	0.000	0.000	0.000	0.000	-0.014	0.000
OF	574.100	-1.791	0.000	9.476	0.000	0.000	0.000	0.000	-0.014	0.000
OF	577.400	-1.834	0.000	9.477	0.000	0.000	0.000	0.000	-0.013	0.000
OF	580.700	-1.878	0.000	9.477	0.000	0.000	0.000	0.000	-0.013	0.000
OF	584.000	-1.922	0.000	9.477	0.000	0.000	0.000	0.000	-0.013	0.000
OF	587.300	-1.966	0.000	9.478	0.000	0.000	0.000	0.000	-0.013	0.000
OF	590.500	-2.004	0.000	9.478	0.000	0.000	0.000	0.000	-0.007	0.000
OF	593.800	-2.012	0.000	9.478	0.000	0.000	0.000	0.000	-0.002	0.000
OF	597.100	-2.020	0.000	9.478	0.000	0.000	0.000	0.000	-0.002	0.000
OF	600.400	-2.027	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	603.700	-2.034	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	607.000	-2.041	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	610.200	-2.048	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	613.500	-2.055	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	616.800	-2.062	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	620.100	-2.070	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	623.400	-2.077	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	626.600	-2.084	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	629.900	-2.091	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
OF	633.200	-2.098	0.000	9.480	0.000	0.000	0.000	0.000	-0.002	0.000
OF	636.500	-2.106	0.000	9.480	0.000	0.000	0.000	0.000	-0.002	0.000

OF	639.800	-2.113	0.000	9.480	0.000	0.000	0.000	0.000	0.002	0.000
OF	643.000	-2.096	0.000	9.480	0.000	0.000	0.000	0.000	0.006	0.000
OF	646.300	-2.074	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
OF	649.600	-2.052	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
OF	652.900	-2.030	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
OF	656.200	-2.008	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
OF	659.400	-1.986	0.000	9.479	0.000	0.000	0.000	0.000	0.008	0.000
OF	662.700	-1.954	0.000	9.479	0.000	0.000	0.000	0.000	0.012	0.000
OF	666.000	-1.909	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	669.300	-1.864	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	672.600	-1.819	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	675.900	-1.775	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	679.100	-1.730	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	682.400	-1.685	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	685.700	-1.640	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	689.000	-1.596	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	692.300	-1.551	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
OF	695.500	-1.506	0.000	9.478	0.000	0.000	0.000	0.000	0.014	0.000
OF	698.800	-1.462	0.000	9.478	0.000	0.000	0.000	0.000	0.014	0.000
OF	702.100	-1.417	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	705.400	-1.374	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	708.700	-1.332	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	711.900	-1.289	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	715.200	-1.246	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	718.500	-1.203	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	721.800	-1.160	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	725.100	-1.118	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	728.300	-1.075	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	731.600	-1.032	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	734.900	-0.989	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	738.200	-0.946	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	741.500	-0.904	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	744.700	-0.861	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
OF	748.000	-0.819	0.000	9.478	0.000	0.000	0.000	0.000	0.009	0.000
OF	751.300	-0.800	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
OF	754.600	-0.782	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
OF	757.900	-0.763	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
OF	761.200	-0.744	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
OF	764.400	-0.725	0.000	9.479	0.000	0.000	0.000	0.000	0.006	0.000
OF	767.700	-0.707	0.000	9.479	0.000	0.000	0.000	0.000	0.005	0.000
OF	771.000	-0.695	0.000	9.479	0.000	0.000	0.000	0.000	0.003	0.000
OF	774.300	-0.685	0.000	9.479	0.000	0.000	0.000	0.000	0.003	0.000
OF	777.600	-0.675	0.000	9.479	0.000	0.000	0.000	0.000	0.003	0.000
OF	780.800	-0.665	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
OF	784.100	-0.655	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
OF	787.400	-0.645	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
OF	790.700	-0.635	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
OF	794.000	-0.625	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
OF	797.200	-0.615	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
OF	800.500	-0.605	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
OF	803.800	-0.595	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
OF	807.100	-0.584	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
OF	810.400	-0.574	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
OF	813.600	-0.564	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
OF	816.900	-0.554	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
OF	820.200	-0.544	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
OF	823.500	-0.534	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
OF	826.800	-0.524	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
OF	830.100	-0.514	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
OF	833.300	-0.504	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
OF	836.600	-0.494	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
OF	839.900	-0.484	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
OF	843.200	-0.474	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
OF	846.500	-0.463	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
OF	849.700	-0.453	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
OF	853.000	-0.444	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
OF	856.300	-0.434	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
OF	859.600	-0.425	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
OF	862.900	-0.415	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
OF	866.100	-0.406	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
OF	869.400	-0.396	0.000	9.486	0.000	0.000	0.000	0.000	0.003	0.000
OF	872.700	-0.387	0.000	9.486	0.000	0.000	0.000	0.000	0.003	0.000
OF	876.000	-0.378	0.000	9.486	0.000	0.000	0.000	0.000	0.002	0.000
OF	879.300	-0.376	0.000	9.486	0.000	0.000	0.000	0.000	0.001	0.000
OF	882.500	-0.373	0.000	9.487	0.000	0.000	0.000	0.000	0.001	0.000
OF	885.800	-0.371	0.000	9.487	0.000	0.000	0.000	0.000	0.001	0.000
OF	889.100	-0.368	0.000	9.487	0.000	0.000	0.000	0.000	0.001	0.000
OF	892.400	-0.365	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
OF	895.700	-0.363	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
OF	898.900	-0.360	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
OF	902.200	-0.357	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
OF	905.500	-0.355	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
OF	908.800	-0.352	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
OF	912.100	-0.350	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
OF	915.400	-0.347	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
OF	918.600	-0.345	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
OF	921.900	-0.342	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
OF	925.200	-0.339	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
OF	928.500	-0.337	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
OF	931.800	-0.334	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
OF	935.000	-0.331	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
OF	938.300	-0.329	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
OF	941.600	-0.326	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
OF	944.900	-0.324	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
OF	948.200	-0.321	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
OF	951.400	-0.318	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
OF	954.700	-0.316	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
OF	958.000	-0.313	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
OF	961.300	-0.311	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
OF	964.600	-0.308	0.000	9.493	0.000	0.000	0.000	0.000	0.001	0.000
OF	967.800	-0.307	0.000	9.493	0.000	0.000	0.000	0.000	0.000	0.000
OF	971.100	-0.309	0.000	9.493	0.000	0.000	0.000	0.000	-0.001	0.000

OF	974.400	-0.311	0.000	9.493	0.000	0.000	0.000	0.000	-0.001	0.000
OF	977.700	-0.312	0.000	9.493	0.000	0.000	0.000	0.000	-0.001	0.000
OF	981.000	-0.314	0.000	9.494	0.000	0.000	0.000	0.000	-0.001	0.000
OF	984.200	-0.316	0.000	9.494	0.000	0.000	0.000	0.000	-0.001	0.000
OF	987.500	-0.318	0.000	9.494	0.000	0.000	0.000	0.000	-0.001	0.000
OF	990.800	-0.319	0.000	9.494	0.000	0.000	0.000	0.000	0.000	0.000
OF	994.100	-0.318	0.000	9.495	0.000	0.000	0.000	0.000	0.001	0.000
OF	997.400	-0.312	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
OF	1000.700	-0.306	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
OF	1003.900	-0.300	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
OF	1007.200	-0.294	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
OF	1010.500	-0.288	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1013.800	-0.282	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1017.100	-0.275	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1020.300	-0.269	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1023.600	-0.263	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1026.900	-0.257	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1030.200	-0.251	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
OF	1033.500	-0.245	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
OF	1036.700	-0.239	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
OF	1040.000	-0.233	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
OF	1043.300	-0.227	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
OF	1046.600	-0.221	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
OF	1049.900	-0.215	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
OF	1053.100	-0.209	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
OF	1056.400	-0.203	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
OF	1059.700	-0.197	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
OF	1063.000	-0.190	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
OF	1066.300	-0.184	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
OF	1069.600	-0.178	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
OF	1072.800	-0.172	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
OF	1076.100	-0.166	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
OF	1079.400	-0.160	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
OF	1082.700	-0.154	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
OF	1086.000	-0.148	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
OF	1089.200	-0.142	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
OF	1092.500	-0.136	0.000	9.500	0.000	0.000	0.000	0.000	0.002	0.000
OF	1095.800	-0.130	0.000	9.500	0.000	0.000	0.000	0.000	0.004	0.000
OF	1099.100	-0.109	0.000	9.500	0.000	0.000	0.000	0.000	0.006	0.000
OF	1102.400	-0.088	0.000	9.500	0.000	0.000	0.000	0.000	0.007	0.000
OF	1105.600	-0.066	0.000	9.500	0.000	0.000	0.000	0.000	0.007	0.000
OF	1108.900	-0.045	0.000	9.500	0.000	0.000	0.000	0.000	0.007	0.000
OF	1112.200	-0.023	0.000	9.500	0.000	0.000	0.000	0.000	-0.024	0.000
OF	1115.500	-0.206	0.000	9.501	0.000	0.000	0.000	0.000	-0.047	0.000
OF	1118.800	-0.335	0.000	9.502	0.000	0.000	0.000	0.000	-0.004	0.000
OF	1122.000	-0.233	0.000	9.502	0.000	0.000	0.000	0.000	0.028	0.000
OF	1125.300	-0.150	0.000	9.502	0.000	0.000	0.000	0.000	0.017	0.000
OF	1128.600	-0.120	0.000	9.502	0.000	0.000	0.000	0.000	0.009	0.000
OF	1131.900	-0.091	0.000	9.502	0.000	0.000	0.000	0.000	0.009	0.000
OF	1135.200	-0.061	0.000	9.502	0.000	0.000	0.000	0.000	0.009	0.000
OF	1138.400	-0.031	0.000	9.502	0.000	0.000	0.000	0.000	0.000	0.000
OF	1141.700	-0.061	0.000	9.502	0.000	0.000	0.000	0.000	-0.011	0.000
OF	1145.000	-0.102	0.000	9.502	0.000	0.000	0.000	0.000	-0.013	0.000
OF	1148.300	-0.143	0.000	9.503	0.000	0.000	0.000	0.000	-0.013	0.000
OF	1151.600	-0.185	0.000	9.503	0.000	0.000	0.000	0.000	0.013	0.000
OF	1154.900	-0.060	0.000	9.503	0.000	0.000	0.000	0.000	0.042	0.000
IF	1158.100	0.089	0.000	9.502	0.000	0.000	0.000	0.000	0.046	0.000
IF	1161.400	0.239	0.000	9.501	0.000	0.000	0.000	0.000	0.037	0.000
IF	1164.700	0.334	0.000	9.501	0.000	0.000	0.000	0.000	0.027	0.000
IF	1168.000	0.417	0.000	9.501	0.000	0.000	0.000	0.000	-0.007	0.000
IF	1171.300	0.289	0.000	9.502	0.000	0.000	0.000	0.000	-0.013	0.000
IF	1174.500	0.330	0.000	9.502	0.000	0.000	0.000	0.000	0.003	0.000
IF	1177.800	0.309	0.000	9.502	0.000	0.000	0.000	0.000	-0.050	0.000
OF	1181.100	-0.002	0.000	9.505	0.000	0.000	0.000	0.000	-0.048	0.000
OF	1184.400	-0.010	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1187.700	-0.017	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1190.900	-0.024	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1194.200	-0.032	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1197.500	-0.039	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1200.800	-0.046	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1204.100	-0.054	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1207.300	-0.061	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1210.600	-0.068	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1213.900	-0.076	0.000	9.507	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1217.200	-0.083	0.000	9.507	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1220.500	-0.090	0.000	9.507	0.000	0.000	0.000	0.000	-0.002	0.000
OF	1223.800	-0.094	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1227.000	-0.099	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1230.300	-0.103	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1233.600	-0.107	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1236.900	-0.111	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1240.200	-0.116	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1243.400	-0.120	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1246.700	-0.124	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1250.000	-0.128	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1253.300	-0.132	0.000	9.509	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1256.600	-0.137	0.000	9.509	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1259.800	-0.141	0.000	9.509	0.000	0.000	0.000	0.000	-0.001	0.000
OF	1263.100	-0.145	0.000	9.509	0.000	0.000	0.000	0.000	0.001	0.000
OF	1266.400	-0.134	0.000	9.509	0.000	0.000	0.000	0.000	0.005	0.000
OF	1269.700	-0.112	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
OF	1273.000	-0.090	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
OF	1276.200	-0.068	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
OF	1279.500	-0.046	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
OF	1282.800	-0.024	0.000	9.509	0.000	0.000	0.000	0.000	0.001	0.000
OF	1286.100	-0.041	0.000	9.509	0.000	0.000	0.000	0.000	-0.052	0.000
OF	1289.400	-0.366	0.000	9.511	0.000	0.000	0.000	0.000	-0.034	0.000
OF	1292.600	-0.260	0.000	9.511	0.000	0.000	0.000	0.000	0.029	0.000
OF	1295.900	-0.180	0.000	9.510	0.000	0.000	0.000	0.000	0.024	0.000
OF	1299.200	-0.099	0.000	9.510	0.000	0.000	0.000	0.000	0.024	0.000
OF	1302.500	-0.018	0.000	9.510	0.000	0.000	0.000	0.000	0.025	0.000
IF	1305.800	0.063	0.000	9.509	0.000	0.000	0.000	0.000	0.025	0.000

IF	1309.100	0.145	0.000	9.509	0.000	0.000	0.000	0.000	0.025	0.000
IF	1312.300	0.227	0.000	9.509	0.000	0.000	0.000	0.000	0.018	0.000
IF	1315.600	0.262	0.000	9.509	0.000	0.000	0.000	0.000	0.003	0.000
IF	1318.900	0.249	0.000	9.509	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1322.200	0.231	0.000	9.509	0.000	0.000	0.000	0.000	-0.018	0.000
IF	1325.500	0.129	0.000	9.510	0.000	0.000	0.000	0.000	-0.031	0.000
IF	1328.700	0.028	0.000	9.511	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1332.000	0.030	0.000	9.511	0.000	0.000	0.000	0.000	0.019	0.000
IF	1335.300	0.151	0.000	9.510	0.000	0.000	0.000	0.000	0.036	0.000
IF	1338.600	0.267	0.000	9.510	0.000	0.000	0.000	0.000	0.007	0.000
IF	1341.900	0.200	0.000	9.510	0.000	0.000	0.000	0.000	-0.021	0.000
IF	1345.100	0.133	0.000	9.511	0.000	0.000	0.000	0.000	0.001	0.000
IF	1348.400	0.203	0.000	9.511	0.000	0.000	0.000	0.000	0.026	0.000
IF	1351.700	0.304	0.000	9.510	0.000	0.000	0.000	0.000	-0.007	0.000
IF	1355.000	0.160	0.000	9.511	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1358.300	0.207	0.000	9.511	0.000	0.000	0.000	0.000	0.020	0.000
IF	1361.500	0.289	0.000	9.511	0.000	0.000	0.000	0.000	0.025	0.000
IF	1364.800	0.371	0.000	9.511	0.000	0.000	0.000	0.000	0.009	0.000
IF	1368.100	0.352	0.000	9.511	0.000	0.000	0.000	0.000	-0.014	0.000
IF	1371.400	0.277	0.000	9.512	0.000	0.000	0.000	0.000	-0.023	0.000
IF	1374.700	0.201	0.000	9.512	0.000	0.000	0.000	0.000	0.008	0.000
IF	1377.900	0.328	0.000	9.512	0.000	0.000	0.000	0.000	0.060	0.000
IF	1381.200	0.593	0.000	9.510	0.000	0.000	0.000	0.000	0.045	0.000
IF	1384.500	0.622	0.000	9.510	0.000	0.000	0.000	0.000	0.001	0.000
IF	1387.800	0.599	0.000	9.511	0.000	0.000	0.000	0.000	0.039	0.000
IF	1391.100	0.879	0.000	9.509	0.000	0.000	0.000	0.000	0.047	0.000
IF	1394.400	0.910	0.000	9.510	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1397.600	0.844	0.000	9.510	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1400.900	0.880	0.000	9.510	0.000	0.000	0.000	0.000	0.016	0.000
IF	1404.200	0.951	0.000	9.510	0.000	0.000	0.000	0.000	0.022	0.000
IF	1407.500	1.023	0.000	9.510	0.000	0.000	0.000	0.000	0.021	0.000
IF	1410.800	1.088	0.000	9.510	0.000	0.000	0.000	0.000	0.020	0.000
IF	1414.000	1.152	0.000	9.510	0.000	0.000	0.000	0.000	0.020	0.000
IF	1417.300	1.217	0.000	9.510	0.000	0.000	0.000	0.000	0.018	0.000
IF	1420.600	1.268	0.000	9.510	0.000	0.000	0.000	0.000	0.015	0.000
IF	1423.900	1.319	0.000	9.511	0.000	0.000	0.000	0.000	0.017	0.000
IF	1427.200	1.379	0.000	9.511	0.000	0.000	0.000	0.000	0.021	0.000
IF	1430.400	1.455	0.000	9.511	0.000	0.000	0.000	0.000	0.023	0.000
IF	1433.700	1.531	0.000	9.511	0.000	0.000	0.000	0.000	0.021	0.000
IF	1437.000	1.593	0.000	9.511	0.000	0.000	0.000	0.000	0.018	0.000
IF	1440.300	1.650	0.000	9.511	0.000	0.000	0.000	0.000	0.018	0.000
IF	1443.600	1.708	0.000	9.512	0.000	0.000	0.000	0.000	0.026	0.000
IF	1446.800	1.817	0.000	9.512	0.000	0.000	0.000	0.000	0.045	0.000
IF	1450.100	2.000	0.000	9.511	0.000	0.000	0.000	0.000	0.056	0.000
IF	1453.400	2.183	0.000	9.510	0.000	0.000	0.000	0.000	0.043	0.000
IF	1456.700	2.283	0.000	9.511	0.000	0.000	0.000	0.000	0.008	0.000
IF	1460.000	2.237	0.000	9.513	0.000	0.000	0.000	0.000	-0.006	0.000
IF	1463.300	2.244	0.000	9.514	0.000	0.000	0.000	0.000	0.030	0.000
IF	1466.500	2.431	0.000	9.514	0.000	0.000	0.000	0.000	0.057	0.000
IF	1469.800	2.617	0.000	9.513	0.000	0.000	0.000	0.000	0.051	0.000
IF	1473.100	2.767	0.000	9.513	0.000	0.000	0.000	0.000	0.045	0.000
IF	1476.400	2.915	0.000	9.514	0.000	0.000	0.000	0.000	0.067	0.000
IF	1479.700	3.206	0.000	9.513	0.000	0.000	0.000	0.000	0.111	0.000
IF	1482.900	3.637	0.000	9.511	0.000	0.000	0.000	0.000	0.082	0.000
IF	1486.200	3.736	0.000	9.514	0.000	0.000	0.000	0.000	0.051	0.000
IF	1489.500	3.973	0.000	9.516	0.000	0.000	0.000	0.000	0.079	0.000
IF	1492.800	4.260	0.000	9.517	0.000	0.000	0.000	0.000	0.080	0.000
IF	1496.100	4.503	0.000	9.520	0.000	0.000	0.000	0.000	0.075	0.000
IF	1499.300	4.745	0.000	9.523	0.000	0.000	0.000	0.000	0.081	0.000
IF	1502.600	5.029	0.000	9.527	0.000	0.000	0.000	0.000	0.088	0.000
IF	1505.900	5.323	0.000	9.533	0.000	0.000	0.000	0.000	0.089	0.000
IF	1509.200	5.618	0.000	9.541	0.000	0.000	0.000	0.000	0.132	0.000
IF	1512.500	6.197	0.000	9.545	0.000	0.000	0.000	0.000	0.178	0.000
IF	1515.700	6.777	0.000	9.555	0.000	0.000	0.000	0.000	0.120	0.000
IF	1519.000	6.979	0.000	9.588	0.000	0.000	0.000	0.000	0.061	0.000
IF	1522.300	7.181	0.000	9.620	0.000	0.000	0.000	0.000	0.053	0.000
IF	1525.600	7.328	0.000	9.653	0.000	0.000	0.000	0.000	0.040	0.000
IF	1528.900	7.445	0.000	9.686	0.000	0.000	0.000	0.000	0.036	0.000
IF	1532.100	7.561	0.000	9.712	0.000	0.000	0.000	0.000	0.036	0.000
IF	1535.400	7.678	0.000	9.734	0.000	0.000	0.000	0.000	0.294	0.000
IF	1538.700	9.500	0.000	9.969	0.000	0.000	0.000	0.000	0.559	0.000
IF	1539.500	9.969	0.000	9.969	0.000	0.000	0.000	0.000	0.586	0.000
AS	1688.000	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.108	0.000
IF	1690.000	9.423	0.000	9.638	0.000	0.000	0.000	0.000	-0.047	0.000
IF	1697.500	9.190	0.000	9.638	0.000	0.000	0.000	0.000	-0.010	0.000
IF	1707.000	9.255	0.000	9.638	0.000	0.000	0.000	0.000	0.016	0.000
IF	1711.500	9.419	0.000	9.638	0.000	0.000	0.000	0.000	0.008	0.000
IF	1715.500	9.321	0.000	9.638	0.000	0.000	0.000	0.000	-0.056	0.000
IF	1721.500	8.861	0.000	9.638	0.000	0.000	0.000	0.000	0.024	0.000
IF	1728.700	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.108	0.000
AS	1734.300	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.108	0.000
IF	1738.500	9.186	0.000	9.638	0.000	0.000	0.000	0.000	-0.021	0.000
IF	1751.000	9.285	0.000	9.638	0.000	0.000	0.000	0.000	-0.001	0.000
IF	1763.000	9.157	0.000	9.638	0.000	0.000	0.000	0.000	-0.017	0.000
IF	1774.000	8.891	0.000	9.638	0.000	0.000	0.000	0.000	0.014	0.000
IF	1788.000	9.514	0.000	9.638	0.000	0.000	0.000	0.000	0.021	0.000
IF	1796.000	9.350	0.000	9.638	0.000	0.000	0.000	0.000	0.012	0.000
IF	1798.700	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.106	0.000
AS	1816.800	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.071	0.000
IF	1819.000	9.482	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
IF	1821.700	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.058	0.000
AS	1882.200	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.065	0.000
IF	1885.000	9.455	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
IF	1887.100	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.087	0.000
AS	1911.900	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.042	0.000
IF	1912.500	9.613	0.000	9.638	0.000	0.000	0.000	0.000	-0.055	0.000
IF	1922.500	9.058	0.000	9.638	0.000	0.000	0.000	0.000	-0.009	0.000
IF	1933.000	9.419	0.000	9.638	0.000	0.000	0.000	0.000	0.042	0.000
IF	1936.200	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.068	0.000
AS	1956.900	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.061	0.000
IF	1961.000	9.387	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
IF	1968.000	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.036	0.000

AS	1983.900	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.047	0.000
IF	2004.500	8.675	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2027.000	9.360	0.000	9.638	0.000	0.000	0.000	0.000	0.009	0.000
IF	2042.000	8.999	0.000	9.638	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2058.000	8.990	0.000	9.638	0.000	0.000	0.000	0.000	0.027	0.000
IF	2065.200	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.090	0.000
AS	2085.600	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.088	0.000
IF	2088.000	9.426	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
IF	2092.000	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.053	0.000
AS	2106.600	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.020	0.000
IF	2109.000	9.590	0.000	9.638	0.000	0.000	0.000	0.000	-0.043	0.000
IF	2120.500	9.035	0.000	9.638	0.000	0.000	0.000	0.000	-0.069	0.000
IF	2128.000	8.281	0.000	9.638	0.000	0.000	0.000	0.000	-0.042	0.000
IF	2142.000	8.137	0.000	9.638	0.000	0.000	0.000	0.000	0.005	0.000
IF	2160.500	8.432	0.000	9.638	0.000	0.000	0.000	0.000	0.047	0.000
IF	2174.300	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.087	0.000
AS	2182.700	9.598	0.000	9.598	0.000	0.000	0.000	0.000	-0.097	0.000
IF	2198.000	8.113	0.000	9.598	0.000	0.000	0.000	0.000	-0.045	0.000
IF	2205.000	8.606	0.000	9.598	0.000	0.000	0.000	0.000	0.051	0.000
IF	2207.000	8.576	0.000	9.598	0.000	0.000	0.000	0.000	-0.024	0.000
IF	2217.500	8.300	0.000	9.598	0.000	0.000	0.000	0.000	0.006	0.000
IF	2232.500	8.727	0.000	9.598	0.000	0.000	0.000	0.000	-0.072	0.000
IF	2239.000	6.759	0.000	9.598	0.000	0.000	0.000	0.000	-0.145	0.000
IF	2242.000	7.349	0.000	9.599	0.000	0.000	0.000	0.000	0.093	0.000
IF	2250.000	7.776	0.000	9.599	0.000	0.000	0.000	0.000	-0.038	0.000
IF	2262.000	6.595	0.000	9.599	0.000	0.000	0.000	0.000	-0.081	0.000
IF	2269.500	6.204	0.000	9.600	0.000	0.000	0.000	0.000	-0.035	0.000
IF	2280.000	5.971	0.000	9.600	0.000	0.000	0.000	0.000	-0.029	0.000
IF	2288.000	5.676	0.000	9.600	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2290.500	5.807	0.000	9.600	0.000	0.000	0.000	0.000	-0.010	0.000
IF	2297.500	5.577	0.000	9.601	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2307.500	5.610	0.000	9.601	0.000	0.000	0.000	0.000	-0.011	0.000
IF	2315.500	5.381	0.000	9.601	0.000	0.000	0.000	0.000	-0.029	0.000
IF	2321.000	5.216	0.000	9.601	0.000	0.000	0.000	0.000	-0.019	0.000
IF	2327.500	5.151	0.000	9.601	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2337.000	4.954	0.000	9.601	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2345.500	4.856	0.000	9.601	0.000	0.000	0.000	0.000	-0.019	0.000
IF	2354.000	4.626	0.000	9.602	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2367.000	4.823	0.000	9.602	0.000	0.000	0.000	0.000	0.019	0.000
IF	2375.000	5.020	0.000	9.602	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2377.000	4.659	0.000	9.602	0.000	0.000	0.000	0.000	-0.044	0.000
IF	2382.500	4.692	0.000	9.602	0.000	0.000	0.000	0.000	0.005	0.000
IF	2390.500	4.724	0.000	9.602	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2396.500	4.659	0.000	9.602	0.000	0.000	0.000	0.000	-0.028	0.000
IF	2401.000	4.429	0.000	9.602	0.000	0.000	0.000	0.000	-0.021	0.000
IF	2406.000	4.462	0.000	9.602	0.000	0.000	0.000	0.000	-0.008	0.000
IF	2413.000	4.331	0.000	9.602	0.000	0.000	0.000	0.000	0.012	0.000
IF	2419.500	4.626	0.000	9.602	0.000	0.000	0.000	0.000	-0.010	0.000
IF	2426.500	4.200	0.000	9.602	0.000	0.000	0.000	0.000	-0.051	0.000
IF	2431.000	4.035	0.000	9.602	0.000	0.000	0.000	0.000	-0.014	0.000
IF	2436.000	4.068	0.000	9.602	0.000	0.000	0.000	0.000	0.014	0.000
IF	2443.000	4.200	0.000	9.602	0.000	0.000	0.000	0.000	-0.095	0.000
IF	2447.000	3.018	0.000	9.602	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2449.000	4.101	0.000	9.602	0.000	0.000	0.000	0.000	0.221	0.000
IF	2452.500	4.232	0.000	9.602	0.000	0.000	0.000	0.000	0.003	0.000
IF	2459.000	4.134	0.000	9.603	0.000	0.000	0.000	0.000	-0.019	0.000
IF	2464.500	4.003	0.000	9.603	0.000	0.000	0.000	0.000	-0.078	0.000
IF	2469.500	3.314	0.000	9.603	0.000	0.000	0.000	0.000	0.036	0.000
IF	2473.500	4.331	0.000	9.603	0.000	0.000	0.000	0.000	0.025	0.000
IF	2480.000	3.576	0.000	9.603	0.000	0.000	0.000	0.000	-0.064	0.000
IF	2491.500	3.182	0.000	9.604	0.000	0.000	0.000	0.000	0.043	0.000
IF	2499.000	4.396	0.000	9.604	0.000	0.000	0.000	0.000	-0.056	0.000
IF	2504.500	2.461	0.000	9.604	0.000	0.000	0.000	0.000	-0.126	0.000
IF	2511.000	2.887	0.000	9.605	0.000	0.000	0.000	0.000	0.006	0.000
IF	2515.500	2.526	0.000	9.605	0.000	0.000	0.000	0.000	-0.047	0.000
IF	2525.500	2.198	0.000	9.605	0.000	0.000	0.000	0.000	-0.078	0.000
OF	2554.000	-0.463	0.000	9.606	0.000	0.000	0.000	0.000	0.061	0.000
IF	2556.500	4.098	0.000	9.606	0.000	0.000	0.000	0.000	0.213	0.000
IF	2562.000	1.243	0.000	9.607	0.000	0.000	0.000	0.000	0.031	0.000
IF	2567.000	4.426	0.000	9.607	0.000	0.000	0.000	0.000	-0.023	0.000
OF	2677.000	-1.345	0.000	9.611	0.000	0.000	0.000	0.000	-0.061	0.000
OF	2721.000	-5.015	0.000	9.611	0.000	0.000	0.000	0.000	-0.084	0.000
OF	2722.000	-5.139	0.000	9.611	0.000	0.000	0.000	0.000	-0.123	0.000
OF	2723.000	-5.262	0.000	9.611	0.000	0.000	0.000	0.000	-0.012	0.000
OF	2746.000	-5.425	0.000	9.611	0.000	0.000	0.000	0.000	-0.007	0.000
OF	2747.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2748.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2749.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2750.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2751.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2752.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2753.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2754.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2755.000	-5.428	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2756.000	-5.428	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2757.000	-5.428	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2758.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2759.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2760.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2761.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2762.000	-5.430	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
OF	2763.000	-5.430	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2764.000	-5.430	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2765.000	-5.430	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2766.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2767.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2768.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2769.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2770.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2771.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2772.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2773.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000

OF	2774.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2775.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2776.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2777.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2778.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2779.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2780.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2781.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2782.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2783.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2784.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2785.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2786.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2787.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2788.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2789.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2790.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2791.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2792.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2793.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2794.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2795.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2796.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2797.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2798.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
OF	2800.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.026	0.000
OF	2801.000	-5.354	0.000	9.612	0.000	0.000	0.000	0.000	0.106	0.000
OF	2803.000	-5.112	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2804.000	-4.991	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2806.000	-4.749	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2807.000	-4.628	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2809.000	-4.385	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2810.000	-4.264	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2812.000	-4.022	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2813.000	-3.901	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2818.000	-3.295	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2819.000	-3.174	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2822.000	-2.810	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2824.000	-2.568	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2831.000	-1.720	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
OF	2845.000	-0.023	0.000	9.613	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2854.500	-1.808	0.000	9.613	0.000	0.000	0.000	0.000	0.096	0.000
IF	2885.000	3.803	0.000	9.614	0.000	0.000	0.000	0.000	0.144	0.000
IF	2897.500	4.393	0.000	9.614	0.000	0.000	0.000	0.000	0.025	0.000
IF	2903.500	4.262	0.000	9.614	0.000	0.000	0.000	0.000	0.009	0.000
IF	2911.500	4.524	0.000	9.614	0.000	0.000	0.000	0.000	0.012	0.000
IF	2920.500	4.462	0.000	9.615	0.000	0.000	0.000	0.000	-0.005	0.000
IF	2931.500	4.429	0.000	9.615	0.000	0.000	0.000	0.000	0.013	0.000
IF	2938.500	4.692	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2942.500	4.396	0.000	9.615	0.000	0.000	0.000	0.000	-0.018	0.000
IF	2951.500	4.462	0.000	9.616	0.000	0.000	0.000	0.000	0.022	0.000
IF	2961.500	4.823	0.000	9.616	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2969.000	4.331	0.000	9.616	0.000	0.000	0.000	0.000	-0.038	0.000
IF	2979.500	4.134	0.000	9.616	0.000	0.000	0.000	0.000	0.009	0.000
IF	2988.000	4.495	0.000	9.617	0.000	0.000	0.000	0.000	0.040	0.000
IF	2991.000	4.593	0.000	9.617	0.000	0.000	0.000	0.000	0.000	0.000
IF	3001.000	4.495	0.000	9.617	0.000	0.000	0.000	0.000	0.000	0.000
IF	3012.500	4.593	0.000	9.618	0.000	0.000	0.000	0.000	0.007	0.000
IF	3020.000	4.626	0.000	9.618	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3028.000	4.462	0.000	9.618	0.000	0.000	0.000	0.000	-0.011	0.000
IF	3037.500	4.429	0.000	9.618	0.000	0.000	0.000	0.000	0.004	0.000
IF	3045.000	4.528	0.000	9.619	0.000	0.000	0.000	0.000	-0.025	0.000
IF	3052.000	4.068	0.000	9.619	0.000	0.000	0.000	0.000	0.018	0.000
IF	3061.500	4.823	0.000	9.619	0.000	0.000	0.000	0.000	0.033	0.000
IF	3070.000	4.659	0.000	9.619	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3080.000	4.692	0.000	9.619	0.000	0.000	0.000	0.000	0.011	0.000
IF	3091.000	4.889	0.000	9.619	0.000	0.000	0.000	0.000	0.007	0.000
IF	3102.000	4.856	0.000	9.619	0.000	0.000	0.000	0.000	-0.003	0.000
IF	3111.500	4.820	0.000	9.619	0.000	0.000	0.000	0.000	-0.017	0.000
IF	3118.000	4.590	0.000	9.619	0.000	0.000	0.000	0.000	0.008	0.000
IF	3128.500	4.951	0.000	9.620	0.000	0.000	0.000	0.000	0.222	0.000
IF	3140.700	9.620	0.000	9.620	0.000	0.000	0.000	0.000	0.383	0.000
AS	3158.400	9.620	0.000	9.620	0.000	0.000	0.000	0.000	-0.089	0.000
IF	3164.500	9.075	0.000	9.620	0.000	0.000	0.000	0.000	-0.021	0.000
IF	3177.000	9.239	0.000	9.620	0.000	0.000	0.000	0.000	0.023	0.000
IF	3188.000	9.620	0.000	9.620	0.000	0.000	0.000	0.000	0.035	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-2.337	1.000	1.000	9.407	8.495	12.392	56.140	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.300	-2.327	0.000	9.408	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	6.600	-2.317	0.000	9.408	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.800	-2.307	0.000	9.408	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.100	-2.296	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.400	-2.282	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.700	-2.268	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-2.254	0.000	9.408	0.000	0.000	0.000	0.000	0.004	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	26.200	-2.240	0.000	9.409	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	29.500	-2.227	0.000	9.409	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	32.800	-2.213	0.000	9.409	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	36.100	-2.198	0.000	9.410	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.400	-2.184	0.000	9.410	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	42.700	-2.180	0.000	9.410	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.900	-2.179	0.000	9.410	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.200	-2.179	0.000	9.411	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.500	-2.178	0.000	9.411	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	55.800	-2.178	0.000	9.411	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	59.100	-2.178	0.000	9.412	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.300	-2.177	0.000	9.412	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	65.600	-2.177	0.000	9.412	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	68.900	-2.177	0.000	9.413	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	72.200	-2.176	0.000	9.413	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.500	-2.176	0.000	9.413	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	78.700	-2.175	0.000	9.414	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-2.175	0.000	9.414	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.300	-2.175	0.000	9.415	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.600	-2.174	0.000	9.415	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.900	-2.174	0.000	9.416	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.100	-2.174	0.000	9.416	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.400	-2.173	0.000	9.416	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.700	-2.173	0.000	9.417	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-2.172	0.000	9.417	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.300	-2.172	0.000	9.418	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-2.172	0.000	9.418	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-2.171	0.000	9.419	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-2.171	0.000	9.419	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-2.171	0.000	9.420	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-2.170	0.000	9.420	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-2.170	0.000	9.421	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-2.170	0.000	9.422	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-2.169	0.000	9.422	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-2.169	0.000	9.423	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-2.168	0.000	9.423	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.400	-2.168	0.000	9.424	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.600	-2.168	0.000	9.424	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.900	-2.168	0.000	9.425	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.200	-2.167	0.000	9.425	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.500	-2.167	0.000	9.425	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.800	-2.166	0.000	9.426	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-2.166	0.000	9.426	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.300	-2.166	0.000	9.427	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.600	-2.158	0.000	9.427	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.900	-2.145	0.000	9.427	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.200	-2.133	0.000	9.427	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.400	-2.121	0.000	9.428	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.700	-2.109	0.000	9.428	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	187.000	-2.090	0.000	9.428	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	190.300	-2.067	0.000	9.429	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.600	-2.044	0.000	9.429	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.800	-2.020	0.000	9.429	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.100	-1.997	0.000	9.430	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	203.400	-1.974	0.000	9.430	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.700	-1.951	0.000	9.430	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	210.000	-1.928	0.000	9.431	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	213.300	-1.905	0.000	9.431	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.500	-1.885	0.000	9.431	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	219.800	-1.869	0.000	9.432	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	223.100	-1.854	0.000	9.432	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	226.400	-1.838	0.000	9.432	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.700	-1.823	0.000	9.433	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	232.900	-1.807	0.000	9.433	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	236.200	-1.792	0.000	9.434	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	239.500	-1.776	0.000	9.434	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	242.800	-1.761	0.000	9.434	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	246.100	-1.745	0.000	9.435	0.000	0.000	0.000	0.000	0.005	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.300	-1.730	0.000	9.435	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	252.600	-1.715	0.000	9.436	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.900	-1.699	0.000	9.436	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-1.684	0.000	9.437	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-1.668	0.000	9.437	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-1.653	0.000	9.437	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-1.637	0.000	9.438	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-1.622	0.000	9.438	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-1.606	0.000	9.439	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-1.591	0.000	9.439	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-1.575	0.000	9.440	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-1.560	0.000	9.440	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-1.544	0.000	9.441	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-1.529	0.000	9.441	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-1.514	0.000	9.441	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-1.498	0.000	9.442	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-1.483	0.000	9.442	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-1.467	0.000	9.443	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-1.453	0.000	9.443	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-1.439	0.000	9.444	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-1.424	0.000	9.444	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-1.410	0.000	9.445	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-1.395	0.000	9.445	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-1.381	0.000	9.445	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-1.367	0.000	9.446	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-1.352	0.000	9.446	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-1.338	0.000	9.447	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-1.324	0.000	9.447	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-1.309	0.000	9.448	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-1.295	0.000	9.448	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.800	-1.281	0.000	9.448	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-1.266	0.000	9.449	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-1.252	0.000	9.449	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	357.600	-1.237	0.000	9.450	0.000	0.000	0.000	0.000	0.004	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-1.223	0.000	9.450	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-1.209	0.000	9.451	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	367.500	-1.194	0.000	9.451	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.700	-1.180	0.000	9.452	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	374.000	-1.165	0.000	9.452	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.300	-1.151	0.000	9.452	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	380.600	-1.137	0.000	9.453	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.900	-1.122	0.000	9.453	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	387.100	-1.108	0.000	9.454	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	390.400	-1.094	0.000	9.454	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	393.700	-1.079	0.000	9.455	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	397.000	-1.065	0.000	9.455	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	400.300	-1.050	0.000	9.455	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	403.500	-1.036	0.000	9.456	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	406.800	-1.024	0.000	9.456	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	410.100	-1.012	0.000	9.457	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	413.400	-1.012	0.000	9.457	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	416.700	-1.012	0.000	9.458	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	419.900	-1.012	0.000	9.458	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	423.200	-1.012	0.000	9.459	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	426.500	-1.012	0.000	9.459	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	429.800	-1.013	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	433.100	-1.013	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	436.400	-1.013	0.000	9.460	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	439.600	-1.013	0.000	9.461	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	442.900	-1.013	0.000	9.461	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	446.200	-1.014	0.000	9.462	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	449.500	-1.014	0.000	9.462	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	452.800	-1.014	0.000	9.462	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	456.000	-1.014	0.000	9.463	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	459.300	-1.015	0.000	9.463	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	462.600	-1.015	0.000	9.464	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	465.900	-1.015	0.000	9.464	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	469.200	-1.015	0.000	9.464	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	472.400	-1.015	0.000	9.465	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	475.700	-1.015	0.000	9.465	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	479.000	-1.016	0.000	9.465	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	482.300	-1.016	0.000	9.466	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	485.600	-1.016	0.000	9.466	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	488.800	-1.016	0.000	9.466	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	492.100	-1.016	0.000	9.467	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	495.400	-1.017	0.000	9.467	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	498.700	-1.017	0.000	9.467	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	502.000	-1.017	0.000	9.468	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	505.200	-1.017	0.000	9.468	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	508.500	-1.030	0.000	9.468	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	511.800	-1.061	0.000	9.469	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	515.100	-1.091	0.000	9.469	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	518.400	-1.121	0.000	9.470	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	521.700	-1.151	0.000	9.470	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	524.900	-1.181	0.000	9.471	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	528.200	-1.212	0.000	9.471	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	531.500	-1.242	0.000	9.472	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	534.800	-1.272	0.000	9.472	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	538.100	-1.308	0.000	9.472	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	541.300	-1.352	0.000	9.473	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	544.600	-1.395	0.000	9.473	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	547.900	-1.439	0.000	9.474	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	551.200	-1.483	0.000	9.474	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	554.500	-1.527	0.000	9.474	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	557.700	-1.571	0.000	9.475	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	561.000	-1.615	0.000	9.475	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	564.300	-1.659	0.000	9.476	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	567.600	-1.703	0.000	9.476	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	570.900	-1.747	0.000	9.476	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	574.100	-1.791	0.000	9.476	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	577.400	-1.834	0.000	9.477	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	580.700	-1.878	0.000	9.477	0.000	0.000	0.000	0.000	-0.013	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	584.000	-1.922	0.000	9.477	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	587.300	-1.966	0.000	9.478	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	590.500	-2.004	0.000	9.478	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	593.800	-2.012	0.000	9.478	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	597.100	-2.020	0.000	9.478	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	600.400	-2.027	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	603.700	-2.034	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	607.000	-2.041	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	610.200	-2.048	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	613.500	-2.055	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	616.800	-2.062	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	620.100	-2.070	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	623.400	-2.077	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	626.600	-2.084	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	629.900	-2.091	0.000	9.479	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	633.200	-2.098	0.000	9.480	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	636.500	-2.106	0.000	9.480	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	639.800	-2.113	0.000	9.480	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	643.000	-2.096	0.000	9.480	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	646.300	-2.074	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	649.600	-2.052	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	652.900	-2.030	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	656.200	-2.008	0.000	9.480	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	659.400	-1.986	0.000	9.479	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	662.700	-1.954	0.000	9.479	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	666.000	-1.909	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	669.300	-1.864	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	672.600	-1.819	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	675.900	-1.775	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	679.100	-1.730	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	682.400	-1.685	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	685.700	-1.640	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	689.000	-1.596	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	692.300	-1.551	0.000	9.479	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	695.500	-1.506	0.000	9.478	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	698.800	-1.462	0.000	9.478	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	702.100	-1.417	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	705.400	-1.374	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	708.700	-1.332	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	711.900	-1.289	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	715.200	-1.246	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	718.500	-1.203	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	721.800	-1.160	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	725.100	-1.118	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	728.300	-1.075	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	731.600	-1.032	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	734.900	-0.989	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	738.200	-0.946	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	741.500	-0.904	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	744.700	-0.861	0.000	9.478	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	748.000	-0.819	0.000	9.478	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	751.300	-0.800	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	754.600	-0.782	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	757.900	-0.763	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	761.200	-0.744	0.000	9.478	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	764.400	-0.725	0.000	9.479	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	767.700	-0.707	0.000	9.479	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	771.000	-0.695	0.000	9.479	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	774.300	-0.685	0.000	9.479	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	777.600	-0.675	0.000	9.479	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	780.800	-0.665	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	784.100	-0.655	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	787.400	-0.645	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	790.700	-0.635	0.000	9.480	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	794.000	-0.625	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	797.200	-0.615	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	800.500	-0.605	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	803.800	-0.595	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	807.100	-0.584	0.000	9.481	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	810.400	-0.574	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	813.600	-0.564	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	816.900	-0.554	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	820.200	-0.544	0.000	9.482	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	823.500	-0.534	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	826.800	-0.524	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	830.100	-0.514	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	833.300	-0.504	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	836.600	-0.494	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	839.900	-0.484	0.000	9.483	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	843.200	-0.474	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	846.500	-0.463	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	849.700	-0.453	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	853.000	-0.444	0.000	9.484	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	856.300	-0.434	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	859.600	-0.425	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	862.900	-0.415	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	866.100	-0.406	0.000	9.485	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	869.400	-0.396	0.000	9.486	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	872.700	-0.387	0.000	9.486	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	876.000	-0.378	0.000	9.486	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	879.300	-0.376	0.000	9.486	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	882.500	-0.373	0.000	9.487	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	885.800	-0.371	0.000	9.487	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	889.100	-0.368	0.000	9.487	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	892.400	-0.365	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	895.700	-0.363	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	898.900	-0.360	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	902.200	-0.357	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	905.500	-0.355	0.000	9.488	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	908.800	-0.352	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	912.100	-0.350	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	915.400	-0.347	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	918.600	-0.345	0.000	9.489	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	921.900	-0.342	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	925.200	-0.339	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	928.500	-0.337	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	931.800	-0.334	0.000	9.490	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	935.000	-0.331	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	938.300	-0.329	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	941.600	-0.326	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	944.900	-0.324	0.000	9.491	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	948.200	-0.321	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	951.400	-0.318	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	954.700	-0.316	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	958.000	-0.313	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	961.300	-0.311	0.000	9.492	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	964.600	-0.308	0.000	9.493	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	967.800	-0.307	0.000	9.493	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	971.100	-0.309	0.000	9.493	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	974.400	-0.311	0.000	9.493	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	977.700	-0.312	0.000	9.493	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	981.000	-0.314	0.000	9.494	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	984.200	-0.316	0.000	9.494	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	987.500	-0.318	0.000	9.494	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	990.800	-0.319	0.000	9.494	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	994.100	-0.318	0.000	9.495	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	997.400	-0.312	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1000.700	-0.306	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1003.900	-0.300	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1007.200	-0.294	0.000	9.495	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1010.500	-0.288	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1013.800	-0.282	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1017.100	-0.275	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1020.300	-0.269	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1023.600	-0.263	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1026.900	-0.257	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1030.200	-0.251	0.000	9.496	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1033.500	-0.245	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1036.700	-0.239	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1040.000	-0.233	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1043.300	-0.227	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1046.600	-0.221	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1049.900	-0.215	0.000	9.497	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1053.100	-0.209	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1056.400	-0.203	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1059.700	-0.197	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1063.000	-0.190	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1066.300	-0.184	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1069.600	-0.178	0.000	9.498	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1072.800	-0.172	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1076.100	-0.166	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1079.400	-0.160	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1082.700	-0.154	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1086.000	-0.148	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1089.200	-0.142	0.000	9.499	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1092.500	-0.136	0.000	9.500	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1095.800	-0.130	0.000	9.500	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1099.100	-0.109	0.000	9.500	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1102.400	-0.088	0.000	9.500	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1105.600	-0.066	0.000	9.500	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1108.900	-0.045	0.000	9.500	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1112.200	-0.023	0.000	9.500	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1115.500	-0.206	0.000	9.501	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1118.800	-0.335	0.000	9.502	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1122.000	-0.233	0.000	9.502	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1125.300	-0.150	0.000	9.502	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1128.600	-0.120	0.000	9.502	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1131.900	-0.091	0.000	9.502	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1135.200	-0.061	0.000	9.502	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1138.400	-0.031	0.000	9.502	0.000	0.000	0.000	0.000	0.000	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1141.700	-0.061	0.000	9.502	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1145.000	-0.102	0.000	9.502	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1148.300	-0.143	0.000	9.503	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1151.600	-0.185	0.000	9.503	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1154.900	-0.060	0.000	9.503	0.000	0.000	0.000	0.000	0.042	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1158.100	0.089	0.000	9.502	0.000	0.000	0.000	0.000	0.046	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1161.400	0.239	0.000	9.501	0.000	0.000	0.000	0.000	0.037	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1164.700	0.334	0.000	9.501	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1168.000	0.417	0.000	9.501	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1171.300	0.289	0.000	9.502	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1174.500	0.330	0.000	9.502	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1177.800	0.309	0.000	9.502	0.000	0.000	0.000	0.000	-0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1181.100	-0.002	0.000	9.505	0.000	0.000	0.000	0.000	-0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1184.400	-0.010	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1187.700	-0.017	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1190.900	-0.024	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1194.200	-0.032	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1197.500	-0.039	0.000	9.505	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1200.800	-0.046	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1204.100	-0.054	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1207.300	-0.061	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1210.600	-0.068	0.000	9.506	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1213.900	-0.076	0.000	9.507	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1217.200	-0.083	0.000	9.507	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1220.500	-0.090	0.000	9.507	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1223.800	-0.094	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1227.000	-0.099	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1230.300	-0.103	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1233.600	-0.107	0.000	9.507	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1236.900	-0.111	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1240.200	-0.116	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1243.400	-0.120	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1246.700	-0.124	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1250.000	-0.128	0.000	9.508	0.000	0.000	0.000	0.000	-0.001	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1253.300	-0.132	0.000	9.509	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1256.600	-0.137	0.000	9.509	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1259.800	-0.141	0.000	9.509	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1263.100	-0.145	0.000	9.509	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1266.400	-0.134	0.000	9.509	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1269.700	-0.112	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1273.000	-0.090	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1276.200	-0.068	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1279.500	-0.046	0.000	9.509	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1282.800	-0.024	0.000	9.509	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1286.100	-0.041	0.000	9.509	0.000	0.000	0.000	0.000	-0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1289.400	-0.366	0.000	9.511	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1292.600	-0.260	0.000	9.511	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1295.900	-0.180	0.000	9.510	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1299.200	-0.099	0.000	9.510	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1302.500	-0.018	0.000	9.510	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1305.800	0.063	0.000	9.509	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1309.100	0.145	0.000	9.509	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1312.300	0.227	0.000	9.509	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1315.600	0.262	0.000	9.509	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1318.900	0.249	0.000	9.509	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1322.200	0.231	0.000	9.509	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1325.500	0.129	0.000	9.510	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1328.700	0.028	0.000	9.511	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1332.000	0.030	0.000	9.511	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1335.300	0.151	0.000	9.510	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1338.600	0.267	0.000	9.510	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1341.900	0.200	0.000	9.510	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1345.100	0.133	0.000	9.511	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1348.400	0.203	0.000	9.511	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1351.700	0.304	0.000	9.510	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1355.000	0.160	0.000	9.511	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1358.300	0.207	0.000	9.511	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1361.500	0.289	0.000	9.511	0.000	0.000	0.000	0.000	0.025	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1364.800	0.371	0.000	9.511	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1368.100	0.352	0.000	9.511	0.000	0.000	0.000	0.000	-0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1371.400	0.277	0.000	9.512	0.000	0.000	0.000	0.000	-0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1374.700	0.201	0.000	9.512	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1377.900	0.328	0.000	9.512	0.000	0.000	0.000	0.000	0.060	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1381.200	0.593	0.000	9.510	0.000	0.000	0.000	0.000	0.045	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1384.500	0.622	0.000	9.510	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1387.800	0.599	0.000	9.511	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1391.100	0.879	0.000	9.509	0.000	0.000	0.000	0.000	0.047	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1394.400	0.910	0.000	9.510	0.000	0.000	0.000	0.000	-0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1397.600	0.844	0.000	9.510	0.000	0.000	0.000	0.000	-0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1400.900	0.880	0.000	9.510	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1404.200	0.951	0.000	9.510	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1407.500	1.023	0.000	9.510	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1410.800	1.088	0.000	9.510	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1414.000	1.152	0.000	9.510	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1417.300	1.217	0.000	9.510	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1420.600	1.268	0.000	9.510	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1423.900	1.319	0.000	9.511	0.000	0.000	0.000	0.000	0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1427.200	1.379	0.000	9.511	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1430.400	1.455	0.000	9.511	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1433.700	1.531	0.000	9.511	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1437.000	1.593	0.000	9.511	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1440.300	1.650	0.000	9.511	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1443.600	1.708	0.000	9.512	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1446.800	1.817	0.000	9.512	0.000	0.000	0.000	0.000	0.045	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1450.100	2.000	0.000	9.511	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1453.400	2.183	0.000	9.510	0.000	0.000	0.000	0.000	0.043	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1456.700	2.283	0.000	9.511	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1460.000	2.237	0.000	9.513	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1463.300	2.244	0.000	9.514	0.000	0.000	0.000	0.000	0.030	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1466.500	2.431	0.000	9.514	0.000	0.000	0.000	0.000	0.057	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1469.800	2.617	0.000	9.513	0.000	0.000	0.000	0.000	0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1473.100	2.767	0.000	9.513	0.000	0.000	0.000	0.000	0.045	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1476.400	2.915	0.000	9.514	0.000	0.000	0.000	0.000	0.067	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1479.700	3.206	0.000	9.513	0.000	0.000	0.000	0.000	0.111	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1482.900	3.637	0.000	9.511	0.000	0.000	0.000	0.000	0.082	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1486.200	3.736	0.000	9.514	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1489.500	3.973	0.000	9.516	0.000	0.000	0.000	0.000	0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1492.800	4.260	0.000	9.517	0.000	0.000	0.000	0.000	0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1496.100	4.503	0.000	9.520	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1499.300	4.745	0.000	9.523	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1502.600	5.029	0.000	9.527	0.000	0.000	0.000	0.000	0.088	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1505.900	5.323	0.000	9.533	0.000	0.000	0.000	0.000	0.089	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1509.200	5.618	0.000	9.541	0.000	0.000	0.000	0.000	0.132	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1512.500	6.197	0.000	9.545	0.000	0.000	0.000	0.000	0.178	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1515.700	6.777	0.000	9.555	0.000	0.000	0.000	0.000	0.120	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1519.000	6.979	0.000	9.588	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1522.300	7.181	0.000	9.620	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1525.600	7.328	0.000	9.653	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1528.900	7.445	0.000	9.686	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1532.100	7.561	0.000	9.712	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1535.400	7.678	0.000	9.734	0.000	0.000	0.000	0.000	0.294	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1538.700	9.500	0.000	9.969	0.000	0.000	0.000	0.000	0.559	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1539.500	9.969	0.000	9.969	0.000	0.000	0.000	0.000	0.586	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1688.000	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.108	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1690.000	9.423	0.000	9.638	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1697.500	9.190	0.000	9.638	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1707.000	9.255	0.000	9.638	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1711.500	9.419	0.000	9.638	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1715.500	9.321	0.000	9.638	0.000	0.000	0.000	0.000	-0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1721.500	8.861	0.000	9.638	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1728.700	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.108	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1734.300	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.108	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1738.500	9.186	0.000	9.638	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1751.000	9.285	0.000	9.638	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1763.000	9.157	0.000	9.638	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1774.000	8.891	0.000	9.638	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1788.000	9.514	0.000	9.638	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1796.000	9.350	0.000	9.638	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1798.700	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.106	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1816.800	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1819.000	9.482	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1821.700	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1882.200	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1885.000	9.455	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1887.100	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.087	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1911.900	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1912.500	9.613	0.000	9.638	0.000	0.000	0.000	0.000	-0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1922.500	9.058	0.000	9.638	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1933.000	9.419	0.000	9.638	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1936.200	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.068	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1956.900	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1961.000	9.387	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1968.000	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1983.900	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2004.500	8.675	0.000	9.638	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2027.000	9.360	0.000	9.638	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2042.000	8.999	0.000	9.638	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2058.000	8.990	0.000	9.638	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2065.200	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.090	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2085.600	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.088	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2088.000	9.426	0.000	9.638	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2092.000	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2106.600	9.638	0.000	9.638	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2109.000	9.590	0.000	9.638	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2120.500	9.035	0.000	9.638	0.000	0.000	0.000	0.000	-0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2128.000	8.281	0.000	9.638	0.000	0.000	0.000	0.000	-0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2142.000	8.137	0.000	9.638	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2160.500	8.432	0.000	9.638	0.000	0.000	0.000	0.000	0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2174.300	9.638	0.000	9.638	0.000	0.000	0.000	0.000	0.087	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2182.700	9.598	0.000	9.598	0.000	0.000	0.000	0.000	-0.097	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2198.000	8.113	0.000	9.598	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2205.000	8.606	0.000	9.598	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2207.000	8.576	0.000	9.598	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2217.500	8.300	0.000	9.598	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2232.500	8.727	0.000	9.598	0.000	0.000	0.000	0.000	-0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2239.000	6.759	0.000	9.598	0.000	0.000	0.000	0.000	-0.145	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2242.000	7.349	0.000	9.599	0.000	0.000	0.000	0.000	0.093	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2250.000	7.776	0.000	9.599	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2262.000	6.595	0.000	9.599	0.000	0.000	0.000	0.000	-0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2269.500	6.204	0.000	9.600	0.000	0.000	0.000	0.000	-0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2280.000	5.971	0.000	9.600	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2288.000	5.676	0.000	9.600	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2290.500	5.807	0.000	9.600	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2297.500	5.577	0.000	9.601	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2307.500	5.610	0.000	9.601	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2315.500	5.381	0.000	9.601	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2321.000	5.216	0.000	9.601	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2327.500	5.151	0.000	9.601	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2337.000	4.954	0.000	9.601	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2345.500	4.856	0.000	9.601	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2354.000	4.626	0.000	9.602	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2367.000	4.823	0.000	9.602	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2375.000	5.020	0.000	9.602	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2377.000	4.659	0.000	9.602	0.000	0.000	0.000	0.000	-0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2382.500	4.692	0.000	9.602	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2390.500	4.724	0.000	9.602	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2396.500	4.659	0.000	9.602	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2401.000	4.429	0.000	9.602	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2406.000	4.462	0.000	9.602	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2413.000	4.331	0.000	9.602	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2419.500	4.626	0.000	9.602	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2426.500	4.200	0.000	9.602	0.000	0.000	0.000	0.000	-0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2431.000	4.035	0.000	9.602	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2436.000	4.068	0.000	9.602	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2443.000	4.200	0.000	9.602	0.000	0.000	0.000	0.000	-0.095	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2447.000	3.018	0.000	9.602	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2449.000	4.101	0.000	9.602	0.000	0.000	0.000	0.000	0.221	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2452.500	4.232	0.000	9.602	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2459.000	4.134	0.000	9.603	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2464.500	4.003	0.000	9.603	0.000	0.000	0.000	0.000	-0.078	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2469.500	3.314	0.000	9.603	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2473.500	4.331	0.000	9.603	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2480.000	3.576	0.000	9.603	0.000	0.000	0.000	0.000	-0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2491.500	3.182	0.000	9.604	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2499.000	4.396	0.000	9.604	0.000	0.000	0.000	0.000	-0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2504.500	2.461	0.000	9.604	0.000	0.000	0.000	0.000	-0.126	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2511.000	2.887	0.000	9.605	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2515.500	2.526	0.000	9.605	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2525.500	2.198	0.000	9.605	0.000	0.000	0.000	0.000	-0.078	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2554.000	-0.463	0.000	9.606	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2556.500	4.098	0.000	9.606	0.000	0.000	0.000	0.000	0.213	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2562.000	1.243	0.000	9.607	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2567.000	4.426	0.000	9.607	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2677.000	-1.345	0.000	9.611	0.000	0.000	0.000	0.000	-0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2721.000	-5.015	0.000	9.611	0.000	0.000	0.000	0.000	-0.084	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2722.000	-5.139	0.000	9.611	0.000	0.000	0.000	0.000	-0.123	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2723.000	-5.262	0.000	9.611	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2746.000	-5.425	0.000	9.611	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2747.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2748.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2749.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2750.000	-5.426	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2751.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2752.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2753.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2754.000	-5.427	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2755.000	-5.428	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2756.000	-5.428	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2757.000	-5.428	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2758.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2759.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2760.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2761.000	-5.429	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2762.000	-5.430	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2763.000	-5.430	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2764.000	-5.430	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2765.000	-5.430	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2766.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2767.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2768.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2769.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2770.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2771.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2772.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2773.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2774.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2775.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2776.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2777.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2778.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2779.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2780.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2781.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2782.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2783.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2784.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2785.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2786.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2787.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2788.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2789.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2790.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2791.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2792.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2793.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2794.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2795.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2796.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2797.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2798.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2800.000	-5.431	0.000	9.612	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2801.000	-5.354	0.000	9.612	0.000	0.000	0.000	0.000	0.106	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2803.000	-5.112	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2804.000	-4.991	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2806.000	-4.749	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2807.000	-4.628	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2809.000	-4.385	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2810.000	-4.264	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2812.000	-4.022	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2813.000	-3.901	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2818.000	-3.295	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2819.000	-3.174	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2822.000	-2.810	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2824.000	-2.568	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2831.000	-1.720	0.000	9.612	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2845.000	-0.023	0.000	9.613	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2854.500	-1.808	0.000	9.613	0.000	0.000	0.000	0.000	0.096	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2885.000	3.803	0.000	9.614	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2897.500	4.393	0.000	9.614	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2903.500	4.262	0.000	9.614	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2911.500	4.524	0.000	9.614	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2920.500	4.462	0.000	9.615	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2931.500	4.429	0.000	9.615	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2938.500	4.692	0.000	9.615	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2942.500	4.396	0.000	9.615	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2951.500	4.462	0.000	9.616	0.000	0.000	0.000	0.000	0.022	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2961.500	4.823	0.000	9.616	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2969.000	4.331	0.000	9.616	0.000	0.000	0.000	0.000	-0.038	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2979.500	4.134	0.000	9.616	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2988.000	4.495	0.000	9.617	0.000	0.000	0.000	0.000	0.040	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2991.000	4.593	0.000	9.617	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3001.000	4.495	0.000	9.617	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3012.500	4.593	0.000	9.618	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3020.000	4.626	0.000	9.618	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3028.000	4.462	0.000	9.618	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3037.500	4.429	0.000	9.618	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3045.000	4.528	0.000	9.619	0.000	0.000	0.000	0.000	-0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3052.000	4.068	0.000	9.619	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3061.500	4.823	0.000	9.619	0.000	0.000	0.000	0.000	0.033	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3070.000	4.659	0.000	9.619	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3080.000	4.692	0.000	9.619	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3091.000	4.889	0.000	9.619	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3102.000	4.856	0.000	9.619	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3111.500	4.820	0.000	9.619	0.000	0.000	0.000	0.000	-0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3118.000	4.590	0.000	9.619	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3128.500	4.951	0.000	9.620	0.000	0.000	0.000	0.000	0.222	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3140.700	9.620	0.000	9.620	0.000	0.000	0.000	0.000	0.383	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	3158.400	9.620	0.000	9.620	0.000	0.000	0.000	0.000	-0.089	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3164.500	9.075	0.000	9.620	0.000	0.000	0.000	0.000	-0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3177.000	9.239	0.000	9.620	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3188.000	9.620	0.000	9.620	0.000	0.000	0.000	0.000	0.035	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

1

PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	8.49	12.39	15.35
OF	3.30	8.50	12.39	15.35
OF	6.60	8.49	12.39	15.35
OF	9.80	8.49	12.39	15.35
OF	13.10	8.49	12.39	15.35
OF	16.40	8.49	12.39	15.35
OF	19.70	8.49	12.39	15.35
OF	23.00	8.49	12.39	15.35
OF	26.20	8.49	12.39	15.35
OF	29.50	8.49	12.39	15.35
OF	32.80	8.49	12.39	15.35
OF	36.10	8.49	12.39	15.35
OF	39.40	8.49	12.39	15.35
OF	42.70	8.49	12.39	15.35
OF	45.90	8.49	12.39	15.35
OF	49.20	8.49	12.39	15.35
OF	52.50	8.49	12.39	15.36
OF	55.80	8.49	12.39	15.36
OF	59.10	8.50	12.39	15.36

OF	62.30	8.50	12.39	15.36
OF	65.60	8.50	12.39	15.36
OF	68.90	8.50	12.39	15.36
OF	72.20	8.50	12.39	15.36
OF	75.50	8.50	12.39	15.37
OF	78.70	8.51	12.39	15.37
OF	82.00	8.51	12.39	15.37
OF	85.30	8.51	12.39	15.37
OF	88.60	8.51	12.39	15.37
OF	91.90	8.51	12.39	15.37
OF	95.10	8.51	12.39	15.38
OF	98.40	8.52	12.39	15.38
OF	101.70	8.52	12.39	15.38
OF	105.00	8.52	12.39	15.38
OF	108.30	8.52	12.39	15.38
OF	111.50	8.52	12.39	15.38
OF	114.80	8.52	12.39	15.39
OF	118.10	8.53	12.39	15.39
OF	121.40	8.53	12.39	15.39
OF	124.70	8.53	12.39	15.39
OF	128.00	8.53	12.39	15.39
OF	131.20	8.53	12.39	15.40
OF	134.50	8.53	12.39	15.40
OF	137.80	8.54	12.39	15.40
OF	141.10	8.54	12.39	15.40
OF	144.40	8.54	12.39	15.40
OF	147.60	8.54	12.39	15.40
OF	150.90	8.54	12.39	15.41
OF	154.20	8.54	12.39	15.41
OF	157.50	8.55	12.39	15.41
OF	160.80	8.55	12.39	15.41
OF	164.00	8.55	12.39	15.41
OF	167.30	8.55	12.39	15.41
OF	170.60	8.55	12.39	15.41
OF	173.90	8.55	12.39	15.41
OF	177.20	8.55	12.39	15.41
OF	180.40	8.55	12.39	15.41
OF	183.70	8.55	12.39	15.41
OF	187.00	8.55	12.39	15.41
OF	190.30	8.54	12.39	15.41
OF	193.60	8.54	12.39	15.41
OF	196.80	8.54	12.39	15.41
OF	200.10	8.54	12.39	15.41
OF	203.40	8.53	12.39	15.40
OF	206.70	8.53	12.39	15.40
OF	210.00	8.53	12.39	15.40
OF	213.30	8.52	12.39	15.40
OF	216.50	8.52	12.39	15.40
OF	219.80	8.52	12.39	15.40
OF	223.10	8.52	12.39	15.40
OF	226.40	8.52	12.39	15.39
OF	229.70	8.52	12.39	15.39
OF	232.90	8.52	12.39	15.39
OF	236.20	8.51	12.39	15.39
OF	239.50	8.51	12.39	15.39
OF	242.80	8.51	12.39	15.39
OF	246.10	8.51	12.39	15.39
OF	249.30	8.51	12.39	15.39
OF	252.60	8.51	12.39	15.39
OF	255.90	8.50	12.39	15.38
OF	259.20	8.49	12.39	15.38
OF	262.50	8.47	12.39	15.37
OF	265.70	8.46	12.39	15.36
OF	269.00	8.45	12.39	15.35
OF	272.30	8.44	12.39	15.35
OF	275.60	8.43	12.39	15.34
OF	278.90	8.42	12.39	15.33
OF	282.20	8.41	12.39	15.32
OF	285.40	8.39	12.39	15.32
OF	288.70	8.38	12.39	15.31
OF	292.00	8.37	12.39	15.30
OF	295.30	8.36	12.39	15.29
OF	298.60	8.35	12.39	15.29
OF	301.80	8.34	12.39	15.28
OF	305.10	8.33	12.39	15.27
OF	308.40	8.32	12.39	15.26
OF	311.70	8.31	12.39	15.26
OF	315.00	8.30	12.39	15.25
OF	318.20	8.29	12.39	15.25
OF	321.50	8.28	12.39	15.24
OF	324.80	8.26	12.39	15.23
OF	328.10	8.26	12.39	15.22
OF	331.40	8.24	12.39	15.22
OF	334.60	8.23	12.39	15.21
OF	337.90	8.22	12.39	15.20
OF	341.20	8.21	12.39	15.20
OF	344.50	8.20	12.39	15.19
OF	347.80	8.19	12.39	15.18
OF	351.00	8.18	12.39	15.18
OF	354.30	8.17	12.39	15.17
OF	357.60	8.16	12.39	15.16
OF	360.90	8.15	12.39	15.16
OF	364.20	8.14	12.39	15.15
OF	367.50	8.13	12.39	15.14
OF	370.70	8.12	12.39	15.14
OF	374.00	8.11	12.39	15.13
OF	377.30	8.10	12.39	15.12
OF	380.60	8.09	12.39	15.11
OF	383.90	8.08	12.39	15.11
OF	387.10	8.07	12.39	15.10
OF	390.40	8.06	12.39	15.09
OF	393.70	8.05	12.39	15.09

OF	397.00	8.04	12.39	15.08
OF	400.30	8.02	12.39	15.07
OF	403.50	8.02	12.39	15.07
OF	406.80	8.01	12.39	15.06
OF	410.10	8.00	12.39	15.06
OF	413.40	8.00	12.39	15.06
OF	416.70	8.00	12.39	15.06
OF	419.90	8.00	12.39	15.06
OF	423.20	8.00	12.39	15.06
OF	426.50	8.00	12.39	15.06
OF	429.80	8.00	12.39	15.06
OF	433.10	8.00	12.39	15.06
OF	436.40	8.00	12.39	15.06
OF	439.60	8.00	12.39	15.06
OF	442.90	8.00	12.39	15.06
OF	446.20	8.00	12.39	15.06
OF	449.50	8.00	12.39	15.06
OF	452.80	8.00	12.39	15.06
OF	456.00	8.00	12.39	15.07
OF	459.30	8.00	12.39	15.07
OF	462.60	8.01	12.39	15.07
OF	465.90	8.01	12.39	15.07
OF	469.20	8.01	12.39	15.07
OF	472.40	8.01	12.39	15.07
OF	475.70	8.01	12.39	15.07
OF	479.00	8.01	12.39	15.07
OF	482.30	8.01	12.39	15.07
OF	485.60	8.01	12.39	15.07
OF	488.80	8.01	12.39	15.07
OF	492.10	8.01	12.39	15.07
OF	495.40	8.01	12.39	15.07
OF	498.70	8.01	12.39	15.07
OF	502.00	8.01	12.39	15.07
OF	505.20	8.01	12.39	15.07
OF	508.50	8.02	12.39	15.08
OF	511.80	8.02	12.39	15.09
OF	515.10	8.03	12.39	15.09
OF	518.40	8.04	12.39	15.10
OF	521.70	8.05	12.39	15.10
OF	524.90	8.05	12.39	15.11
OF	528.20	8.06	12.39	15.11
OF	531.50	8.07	12.39	15.12
OF	534.80	8.08	12.39	15.13
OF	538.10	8.09	12.39	15.13
OF	541.30	8.10	12.39	15.14
OF	544.60	8.11	12.39	15.15
OF	547.90	8.12	12.39	15.16
OF	551.20	8.13	12.39	15.16
OF	554.50	8.14	12.39	15.17
OF	557.70	8.15	12.39	15.18
OF	561.00	8.16	12.39	15.18
OF	564.30	8.17	12.39	15.19
OF	567.60	8.18	12.39	15.20
OF	570.90	8.19	12.39	15.21
OF	574.10	8.20	12.39	15.21
OF	577.40	8.20	12.39	15.22
OF	580.70	8.21	12.39	15.23
OF	584.00	8.22	12.39	15.23
OF	587.30	8.23	12.39	15.24
OF	590.50	8.24	12.39	15.25
OF	593.80	8.24	12.39	15.25
OF	597.10	8.25	12.39	15.25
OF	600.40	8.25	12.39	15.25
OF	603.70	8.25	12.39	15.26
OF	607.00	8.26	12.39	15.26
OF	610.20	8.26	12.39	15.26
OF	613.50	8.26	12.39	15.26
OF	616.80	8.26	12.39	15.26
OF	620.10	8.27	12.39	15.27
OF	623.40	8.27	12.39	15.27
OF	626.60	8.27	12.39	15.27
OF	629.90	8.28	12.39	15.27
OF	633.20	8.28	12.39	15.28
OF	636.50	8.28	12.39	15.28
OF	639.80	8.29	12.39	15.28
OF	643.00	8.28	12.39	15.28
OF	646.30	8.28	12.39	15.28
OF	649.60	8.28	12.39	15.28
OF	652.90	8.28	12.39	15.27
OF	656.20	8.27	12.39	15.27
OF	659.40	8.27	12.39	15.27
OF	662.70	8.27	12.39	15.27
OF	666.00	8.26	12.39	15.26
OF	669.30	8.25	12.39	15.26
OF	672.60	8.25	12.39	15.25
OF	675.90	8.24	12.39	15.25
OF	679.10	8.23	12.39	15.24
OF	682.40	8.23	12.39	15.24
OF	685.70	8.22	12.39	15.23
OF	689.00	8.21	12.39	15.23
OF	692.30	8.21	12.39	15.22
OF	695.50	8.20	12.39	15.22
OF	698.80	8.19	12.39	15.21
OF	702.10	8.19	12.39	15.21
OF	705.40	8.18	12.39	15.20
OF	708.70	8.17	12.39	15.20
OF	711.90	8.17	12.39	15.19
OF	715.20	8.16	12.39	15.19
OF	718.50	8.15	12.39	15.18
OF	721.80	8.12	12.39	15.17
OF	725.10	8.09	12.39	15.14
OF	728.30	8.06	12.39	15.12

OF	731.60	8.03	12.39	15.10
OF	734.90	8.00	12.39	15.08
OF	738.20	7.96	12.39	15.05
OF	741.50	7.93	12.39	15.03
OF	744.70	7.90	12.39	15.01
OF	748.00	7.87	12.39	14.99
OF	751.30	7.85	12.39	14.98
OF	754.60	7.84	12.39	14.97
OF	757.90	7.83	12.39	14.96
OF	761.20	7.81	12.39	14.95
OF	764.40	7.80	12.39	14.94
OF	767.70	7.79	12.39	14.93
OF	771.00	7.78	12.39	14.92
OF	774.30	7.77	12.39	14.92
OF	777.60	7.76	12.39	14.91
OF	780.80	7.76	12.39	14.91
OF	784.10	7.75	12.39	14.90
OF	787.40	7.74	12.39	14.90
OF	790.70	7.73	12.39	14.89
OF	794.00	7.73	12.39	14.89
OF	797.20	7.72	12.39	14.88
OF	800.50	7.71	12.39	14.88
OF	803.80	7.70	12.39	14.87
OF	807.10	7.70	12.39	14.87
OF	810.40	7.69	12.39	14.86
OF	813.60	7.68	12.39	14.86
OF	816.90	7.67	12.39	14.85
OF	820.20	7.67	12.39	14.85
OF	823.50	7.66	12.39	14.84
OF	826.80	7.65	12.39	14.84
OF	830.10	7.64	12.39	14.83
OF	833.30	7.64	12.39	14.83
OF	836.60	7.63	12.39	14.82
OF	839.90	7.62	12.39	14.82
OF	843.20	7.62	12.39	14.81
OF	846.50	7.61	12.39	14.81
OF	849.70	7.60	12.39	14.80
OF	853.00	7.59	12.39	14.80
OF	856.30	7.59	12.39	14.80
OF	859.60	7.58	12.39	14.79
OF	862.90	7.57	12.39	14.79
OF	866.10	7.56	12.39	14.78
OF	869.40	7.56	12.39	14.78
OF	872.70	7.55	12.39	14.77
OF	876.00	7.54	12.39	14.77
OF	879.30	7.54	12.39	14.77
OF	882.50	7.54	12.39	14.77
OF	885.80	7.54	12.39	14.77
OF	889.10	7.54	12.39	14.76
OF	892.40	7.54	12.39	14.76
OF	895.70	7.53	12.39	14.76
OF	898.90	7.53	12.39	14.76
OF	902.20	7.53	12.39	14.76
OF	905.50	7.53	12.39	14.76
OF	908.80	7.53	12.39	14.76
OF	912.10	7.53	12.39	14.76
OF	915.40	7.52	12.39	14.76
OF	918.60	7.52	12.39	14.75
OF	921.90	7.52	12.39	14.75
OF	925.20	7.52	12.39	14.75
OF	928.50	7.52	12.39	14.75
OF	931.80	7.51	12.39	14.75
OF	935.00	7.51	12.39	14.75
OF	938.30	7.51	12.39	14.75
OF	941.60	7.51	12.39	14.75
OF	944.90	7.51	12.39	14.75
OF	948.20	7.51	12.39	14.75
OF	951.40	7.50	12.39	14.74
OF	954.70	7.50	12.39	14.74
OF	958.00	7.50	12.39	14.74
OF	961.30	7.50	12.39	14.74
OF	964.60	7.50	12.39	14.74
OF	967.80	7.50	12.39	14.74
OF	971.10	7.50	12.39	14.74
OF	974.40	7.50	12.39	14.74
OF	977.70	7.50	12.39	14.74
OF	981.00	7.50	12.39	14.75
OF	984.20	7.50	12.39	14.75
OF	987.50	7.51	12.39	14.75
OF	990.80	7.51	12.39	14.75
OF	994.10	7.51	12.39	14.75
OF	997.40	7.50	12.39	14.75
OF	1000.70	7.50	12.39	14.74
OF	1003.90	7.49	12.39	14.74
OF	1007.20	7.49	12.39	14.74
OF	1010.50	7.48	12.39	14.74
OF	1013.80	7.48	12.39	14.73
OF	1017.10	7.47	12.39	14.73
OF	1020.30	7.47	12.39	14.73
OF	1023.60	7.47	12.39	14.72
OF	1026.90	7.46	12.39	14.72
OF	1030.20	7.46	12.39	14.72
OF	1033.50	7.45	12.39	14.71
OF	1036.70	7.45	12.39	14.71
OF	1040.00	7.44	12.39	14.71
OF	1043.30	7.44	12.39	14.70
OF	1046.60	7.44	12.39	14.70
OF	1049.90	7.43	12.39	14.70
OF	1053.10	7.43	12.39	14.70
OF	1056.40	7.42	12.39	14.69
OF	1059.70	7.42	12.39	14.69
OF	1063.00	7.41	12.39	14.69

OF	1066.30	7.41	12.39	14.68
OF	1069.60	7.40	12.39	14.68
OF	1072.80	7.40	12.39	14.68
OF	1076.10	7.40	12.39	14.68
OF	1079.40	7.39	12.39	14.67
OF	1082.70	7.39	12.39	14.67
OF	1086.00	7.38	12.39	14.67
OF	1089.20	7.38	12.39	14.66
OF	1092.50	7.37	12.39	14.66
OF	1095.80	7.37	12.39	14.66
OF	1099.10	7.35	12.39	14.65
OF	1102.40	7.34	12.39	14.64
OF	1105.60	7.32	12.39	14.62
OF	1108.90	7.31	12.39	14.61
OF	1112.20	7.29	12.39	14.60
OF	1115.50	7.33	12.39	14.63
OF	1118.80	7.35	12.39	14.65
OF	1122.00	7.33	12.39	14.64
OF	1125.30	7.32	12.39	14.63
OF	1128.60	7.32	12.39	14.62
OF	1131.90	7.31	12.39	14.62
OF	1135.20	7.31	12.39	14.62
OF	1138.40	7.30	12.39	14.61
OF	1141.70	7.30	12.39	14.61
OF	1145.00	7.31	12.39	14.62
OF	1148.30	7.32	12.39	14.63
OF	1151.60	7.33	12.39	14.64
OF	1154.90	7.31	12.39	14.62
IF	1158.10	7.21	12.39	14.55
IF	1161.40	7.09	12.39	14.47
IF	1164.70	7.02	12.39	14.42
IF	1168.00	6.96	12.39	14.37
IF	1171.30	6.99	12.39	14.39
IF	1174.50	6.98	12.39	14.39
IF	1177.80	6.98	12.39	14.39
OF	1181.10	7.05	12.39	14.44
OF	1184.40	7.05	12.39	14.44
OF	1187.70	7.05	12.39	14.44
OF	1190.90	7.05	12.39	14.44
OF	1194.20	7.06	12.39	14.44
OF	1197.50	7.06	12.39	14.45
OF	1200.80	7.06	12.39	14.45
OF	1204.10	7.06	12.39	14.45
OF	1207.30	7.07	12.39	14.45
OF	1210.60	7.07	12.39	14.46
OF	1213.90	7.07	12.39	14.46
OF	1217.20	7.08	12.39	14.46
OF	1220.50	7.08	12.39	14.46
OF	1223.80	7.08	12.39	14.46
OF	1227.00	7.08	12.39	14.47
OF	1230.30	7.09	12.39	14.47
OF	1233.60	7.09	12.39	14.47
OF	1236.90	7.09	12.39	14.47
OF	1240.20	7.09	12.39	14.47
OF	1243.40	7.09	12.39	14.47
OF	1246.70	7.10	12.39	14.48
OF	1250.00	7.10	12.39	14.48
OF	1253.30	7.10	12.39	14.48
OF	1256.60	7.10	12.39	14.48
OF	1259.80	7.10	12.39	14.48
OF	1263.10	7.11	12.39	14.48
OF	1266.40	7.11	12.39	14.48
OF	1269.70	7.10	12.39	14.48
OF	1273.00	7.10	12.39	14.48
OF	1276.20	7.10	12.39	14.48
OF	1279.50	7.10	12.39	14.48
OF	1282.80	7.09	12.39	14.47
OF	1286.10	7.10	12.39	14.48
OF	1289.40	7.16	12.39	14.52
OF	1292.60	7.14	12.39	14.51
OF	1295.90	7.13	12.39	14.50
OF	1299.20	7.11	12.39	14.49
OF	1302.50	7.10	12.39	14.48
IF	1305.80	7.09	12.39	14.47
IF	1309.10	7.07	12.39	14.46
IF	1312.30	7.06	12.39	14.45
IF	1315.60	7.05	12.39	14.44
IF	1318.90	7.05	12.39	14.45
IF	1322.20	7.06	12.39	14.45
IF	1325.50	7.08	12.39	14.47
IF	1328.70	7.10	12.39	14.48
IF	1332.00	7.10	12.39	14.48
IF	1335.30	7.08	12.39	14.47
IF	1338.60	7.06	12.39	14.45
IF	1341.90	7.07	12.39	14.46
IF	1345.10	7.09	12.39	14.47
IF	1348.40	7.08	12.39	14.46
IF	1351.70	7.05	12.39	14.45
IF	1355.00	7.08	12.39	14.47
IF	1358.30	7.07	12.39	14.46
IF	1361.50	7.06	12.39	14.45
IF	1364.80	7.00	12.39	14.41
IF	1368.10	7.01	12.39	14.42
IF	1371.40	7.02	12.39	14.43
IF	1374.70	7.04	12.39	14.44
IF	1377.90	7.02	12.39	14.42
IF	1381.20	6.83	12.39	14.29
IF	1384.50	6.81	12.39	14.28
IF	1387.80	6.82	12.39	14.28
IF	1391.10	6.62	12.39	14.14
IF	1394.40	6.59	12.39	14.13
IF	1397.60	6.61	12.39	14.14

IF	1400.90	6.60	12.39	14.13
IF	1404.20	6.56	12.39	14.10
IF	1407.50	6.51	12.39	14.07
IF	1410.80	6.46	12.39	14.03
IF	1414.00	6.41	12.39	14.00
IF	1417.30	6.36	12.39	13.96
IF	1420.60	6.32	12.39	13.94
IF	1423.90	6.29	12.39	13.91
IF	1427.20	6.24	12.39	13.88
IF	1430.40	6.18	12.39	13.84
IF	1433.70	6.13	12.39	13.80
IF	1437.00	6.08	12.39	13.77
IF	1440.30	6.04	12.39	13.74
IF	1443.60	5.99	12.39	13.71
IF	1446.80	5.91	12.39	13.65
IF	1450.10	5.77	12.39	13.55
IF	1453.40	5.63	12.39	13.45
IF	1456.70	5.56	12.39	13.40
IF	1460.00	5.57	12.39	13.41
IF	1463.30	5.57	12.39	13.41
IF	1466.50	5.45	12.39	13.33
IF	1469.80	5.31	12.39	13.23
IF	1473.10	5.19	12.39	13.15
IF	1476.40	5.08	12.39	13.07
IF	1479.70	4.86	12.39	12.91
IF	1482.90	4.53	12.39	12.68
IF	1486.20	4.46	12.39	12.63
IF	1489.50	4.28	12.39	12.51
IF	1492.80	4.06	12.39	12.36
IF	1496.10	3.87	12.39	12.23
IF	1499.30	3.69	12.39	12.11
IF	1502.60	3.48	12.39	11.96
IF	1505.90	3.26	12.39	11.81
IF	1509.20	3.04	12.39	11.67
IF	1512.50	2.59	12.39	11.36
IF	1515.70	2.15	12.39	11.06
IF	1519.00	2.02	12.39	11.01
IF	1522.30	1.89	12.39	10.95
IF	1525.60	1.81	12.39	10.92
IF	1528.90	1.74	12.39	10.90
IF	1532.10	1.67	12.39	10.88
IF	1535.40	1.60	12.39	10.85
IF	1538.70	0.37	12.39	10.22
IF	1539.50	0.01	12.39	9.97
AS	1688.00	0.00	0.00	9.64
IF	1690.00	0.03	0.19	9.66
IF	1697.50	0.07	0.30	9.68
IF	1707.00	0.10	0.38	9.71
IF	1711.50	0.10	0.40	9.71
IF	1715.50	0.12	0.42	9.73
IF	1721.50	0.15	0.45	9.74
IF	1728.70	0.01	0.48	9.64
AS	1734.30	0.00	0.00	9.64
IF	1738.50	0.04	0.23	9.67
IF	1751.00	0.09	0.36	9.70
IF	1763.00	0.13	0.43	9.73
IF	1774.00	0.17	0.48	9.76
IF	1788.00	0.08	0.53	9.70
IF	1796.00	0.16	0.55	9.75
IF	1798.70	0.01	0.56	9.64
AS	1816.80	0.00	0.00	9.64
IF	1819.00	0.03	0.19	9.66
IF	1821.70	0.01	0.24	9.64
AS	1882.20	0.00	0.00	9.64
IF	1885.00	0.03	0.21	9.66
IF	1887.10	0.01	0.24	9.64
AS	1911.90	0.00	0.00	9.64
IF	1912.50	0.01	0.14	9.65
IF	1922.50	0.07	0.31	9.69
IF	1933.00	0.10	0.39	9.71
IF	1936.20	0.01	0.41	9.64
AS	1956.90	0.00	0.00	9.64
IF	1961.00	0.04	0.23	9.67
IF	1968.00	0.01	0.32	9.64
AS	1983.90	0.00	0.00	9.64
IF	2004.50	0.11	0.39	9.71
IF	2027.00	0.14	0.49	9.74
IF	2042.00	0.21	0.54	9.79
IF	2058.00	0.24	0.59	9.81
IF	2065.20	0.01	0.61	9.64
AS	2085.60	0.00	0.00	9.64
IF	2088.00	0.03	0.20	9.66
IF	2092.00	0.01	0.27	9.64
AS	2106.60	0.00	0.00	9.64
IF	2109.00	0.02	0.20	9.65
IF	2120.50	0.08	0.34	9.70
IF	2128.00	0.11	0.39	9.72
IF	2142.00	0.16	0.46	9.75
IF	2160.50	0.21	0.53	9.78
IF	2174.30	0.01	0.57	9.64
AS	2182.70	0.00	0.00	9.60
IF	2198.00	0.09	0.35	9.66
IF	2205.00	0.12	0.40	9.68
IF	2207.00	0.12	0.41	9.68
IF	2217.50	0.15	0.46	9.71
IF	2232.50	0.20	0.52	9.73
IF	2239.00	0.21	0.54	9.75
IF	2242.00	0.22	0.55	9.75
IF	2250.00	0.24	0.57	9.77
IF	2262.00	0.27	0.60	9.79
IF	2269.50	0.28	0.62	9.80
IF	2280.00	0.31	0.65	9.81

IF	2288.00	0.32	0.66	9.83
IF	2290.50	0.33	0.67	9.83
IF	2297.50	0.34	0.68	9.84
IF	2307.50	0.36	0.70	9.85
IF	2315.50	0.38	0.72	9.86
IF	2321.00	0.39	0.73	9.87
IF	2327.50	0.40	0.74	9.88
IF	2337.00	0.41	0.75	9.89
IF	2345.50	0.43	0.77	9.90
IF	2354.00	0.44	0.78	9.91
IF	2367.00	0.47	0.80	9.93
IF	2375.00	0.48	0.81	9.94
IF	2377.00	0.48	0.81	9.94
IF	2382.50	0.49	0.82	9.95
IF	2390.50	0.50	0.83	9.96
IF	2396.50	0.51	0.84	9.96
IF	2401.00	0.52	0.84	9.97
IF	2406.00	0.53	0.85	9.97
IF	2413.00	0.54	0.86	9.98
IF	2419.50	0.55	0.87	9.99
IF	2426.50	0.56	0.88	10.00
IF	2431.00	0.57	0.88	10.00
IF	2436.00	0.58	0.89	10.01
IF	2443.00	0.59	0.90	10.01
IF	2447.00	0.59	0.90	10.02
IF	2449.00	0.60	0.90	10.02
IF	2452.50	0.60	0.91	10.02
IF	2459.00	0.61	0.91	10.03
IF	2464.50	0.62	0.92	10.04
IF	2469.50	0.63	0.92	10.04
IF	2473.50	0.63	0.93	10.04
IF	2480.00	0.64	0.94	10.05
IF	2491.50	0.66	0.95	10.06
IF	2499.00	0.67	0.95	10.07
IF	2504.50	0.68	0.96	10.08
IF	2511.00	0.68	0.97	10.08
IF	2515.50	0.69	0.97	10.09
IF	2525.50	0.70	0.98	10.10
OF	2554.00	0.74	1.01	10.13
IF	2556.50	0.75	1.01	10.13
IF	2562.00	0.75	1.01	10.13
IF	2567.00	0.76	1.02	10.14
OF	2677.00	0.90	1.11	10.24
OF	2721.00	0.95	1.14	10.28
OF	2722.00	0.95	1.14	10.28
OF	2723.00	0.95	1.14	10.28
OF	2746.00	0.98	1.16	10.30
OF	2747.00	0.98	1.16	10.30
OF	2748.00	0.98	1.16	10.30
OF	2749.00	0.98	1.16	10.30
OF	2750.00	0.98	1.16	10.30
OF	2751.00	0.99	1.16	10.30
OF	2752.00	0.99	1.16	10.30
OF	2753.00	0.99	1.16	10.30
OF	2754.00	0.99	1.16	10.30
OF	2755.00	0.99	1.16	10.30
OF	2756.00	0.99	1.16	10.31
OF	2757.00	0.99	1.16	10.31
OF	2758.00	0.99	1.17	10.31
OF	2759.00	1.00	1.17	10.31
OF	2760.00	1.00	1.17	10.31
OF	2761.00	1.00	1.17	10.31
OF	2762.00	1.00	1.17	10.31
OF	2763.00	1.00	1.17	10.31
OF	2764.00	1.00	1.17	10.31
OF	2765.00	1.00	1.17	10.31
OF	2766.00	1.00	1.17	10.31
OF	2767.00	1.00	1.17	10.32
OF	2768.00	1.01	1.17	10.32
OF	2769.00	1.01	1.17	10.32
OF	2770.00	1.01	1.17	10.32
OF	2771.00	1.01	1.17	10.32
OF	2772.00	1.01	1.17	10.32
OF	2773.00	1.01	1.18	10.32
OF	2774.00	1.01	1.18	10.32
OF	2775.00	1.01	1.18	10.32
OF	2776.00	1.01	1.18	10.32
OF	2777.00	1.02	1.18	10.32
OF	2778.00	1.02	1.18	10.32
OF	2779.00	1.02	1.18	10.32
OF	2780.00	1.02	1.18	10.33
OF	2781.00	1.02	1.18	10.33
OF	2782.00	1.02	1.18	10.33
OF	2783.00	1.02	1.18	10.33
OF	2784.00	1.02	1.18	10.33
OF	2785.00	1.02	1.18	10.33
OF	2786.00	1.03	1.18	10.33
OF	2787.00	1.03	1.18	10.33
OF	2788.00	1.03	1.19	10.33
OF	2789.00	1.03	1.19	10.33
OF	2790.00	1.03	1.19	10.33
OF	2791.00	1.03	1.19	10.33
OF	2792.00	1.03	1.19	10.33
OF	2793.00	1.03	1.19	10.34
OF	2794.00	1.04	1.19	10.34
OF	2795.00	1.04	1.19	10.34
OF	2796.00	1.04	1.19	10.34
OF	2797.00	1.04	1.19	10.34
OF	2798.00	1.04	1.19	10.34
OF	2800.00	1.04	1.19	10.34
OF	2801.00	1.04	1.19	10.34
OF	2803.00	1.05	1.19	10.34

OF	2804.00	1.05	1.20	10.34
OF	2806.00	1.05	1.20	10.35
OF	2807.00	1.05	1.20	10.35
OF	2809.00	1.05	1.20	10.35
OF	2810.00	1.05	1.20	10.35
OF	2812.00	1.06	1.20	10.35
OF	2813.00	1.06	1.20	10.35
OF	2818.00	1.06	1.20	10.36
OF	2819.00	1.06	1.21	10.36
OF	2822.00	1.07	1.21	10.36
OF	2824.00	1.07	1.21	10.36
OF	2831.00	1.08	1.21	10.37
OF	2845.00	1.09	1.22	10.38
OF	2854.50	1.10	1.23	10.38
IF	2885.00	1.13	1.25	10.41
IF	2897.50	1.15	1.25	10.42
IF	2903.50	1.15	1.26	10.42
IF	2911.50	1.16	1.26	10.43
IF	2920.50	1.17	1.27	10.43
IF	2931.50	1.18	1.27	10.44
IF	2938.50	1.19	1.28	10.45
IF	2942.50	1.19	1.28	10.45
IF	2951.50	1.20	1.28	10.46
IF	2961.50	1.21	1.29	10.46
IF	2969.00	1.22	1.29	10.47
IF	2979.50	1.23	1.30	10.48
IF	2988.00	1.24	1.30	10.48
IF	2991.00	1.24	1.30	10.48
IF	3001.00	1.25	1.31	10.49
IF	3012.50	1.26	1.32	10.50
IF	3020.00	1.27	1.32	10.51
IF	3028.00	1.28	1.32	10.51
IF	3037.50	1.29	1.33	10.52
IF	3045.00	1.29	1.33	10.52
IF	3052.00	1.30	1.34	10.53
IF	3061.50	1.30	1.34	10.53
IF	3070.00	1.31	1.34	10.54
IF	3080.00	1.32	1.35	10.55
IF	3091.00	1.33	1.36	10.55
IF	3102.00	1.34	1.36	10.56
IF	3111.50	1.35	1.37	10.56
IF	3118.00	1.36	1.37	10.57
IF	3128.50	1.36	1.37	10.57
IF	3140.70	0.01	1.38	9.63
AS	3158.40	0.00	0.00	9.62
IF	3164.50	0.05	0.26	9.65
IF	3177.00	0.10	0.37	9.69
IF	3188.00	0.01	0.44	9.63

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN	1539.50	AND	1688.00
BETWEEN	1728.70	AND	1734.30
BETWEEN	1798.70	AND	1816.80
BETWEEN	1821.70	AND	1882.20
BETWEEN	1887.10	AND	1911.90
BETWEEN	1936.20	AND	1956.90
BETWEEN	1968.00	AND	1983.90
BETWEEN	2065.20	AND	2085.60
BETWEEN	2092.00	AND	2106.60
BETWEEN	2174.30	AND	2182.70
BETWEEN	3140.70	AND	3158.40

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
3.30	1.00	9.41
26.20	1.00	9.41
36.10	1.00	9.41
49.20	1.00	9.41
59.10	1.00	9.41
68.90	1.00	9.41
78.70	1.00	9.41
85.30	1.00	9.41
91.90	1.00	9.42
101.70	1.00	9.42
108.30	1.00	9.42
114.80	1.00	9.42
121.40	1.00	9.42
128.00	1.00	9.42
131.20	1.00	9.42
137.80	1.00	9.42
144.40	1.00	9.42
150.90	1.00	9.43
160.80	1.00	9.43
167.30	1.00	9.43
180.40	1.00	9.43
190.30	1.00	9.43
200.10	1.00	9.43
210.00	1.00	9.43
219.80	1.00	9.43
229.70	1.00	9.43
236.20	1.00	9.43
246.10	1.00	9.44
252.60	1.00	9.44
259.20	1.00	9.44
269.00	1.00	9.44
275.60	1.00	9.44
282.20	1.00	9.44
288.70	1.00	9.44
298.60	1.00	9.44
305.10	1.00	9.44
311.70	1.00	9.44
318.20	1.00	9.44
328.10	1.00	9.45
334.60	1.00	9.45

341.20	1.00	9.45
351.00	1.00	9.45
357.60	1.00	9.45
364.20	1.00	9.45
370.70	1.00	9.45
380.60	1.00	9.45
387.10	1.00	9.45
393.70	1.00	9.45
403.50	1.00	9.46
410.10	1.00	9.46
416.70	1.00	9.46
423.20	1.00	9.46
429.80	1.00	9.46
439.60	1.00	9.46
446.20	1.00	9.46
456.00	1.00	9.46
462.60	1.00	9.46
472.40	1.00	9.47
482.30	1.00	9.47
492.10	1.00	9.47
502.00	1.00	9.47
511.80	1.00	9.47
518.40	1.00	9.47
524.90	1.00	9.47
531.50	1.00	9.47
541.30	1.00	9.47
547.90	1.00	9.47
557.70	1.00	9.48
564.30	1.00	9.48
577.40	1.00	9.48
587.30	1.00	9.48
600.40	1.00	9.48
633.20	1.00	9.48
659.40	1.00	9.48
695.50	1.00	9.48
764.40	1.00	9.48
780.80	1.00	9.48
794.00	1.00	9.48
810.40	1.00	9.48
823.50	1.00	9.48
843.20	1.00	9.48
856.30	1.00	9.48
869.40	1.00	9.49
882.50	1.00	9.49
892.40	1.00	9.49
908.80	1.00	9.49
921.90	1.00	9.49
935.00	1.00	9.49
948.20	1.00	9.49
964.60	1.00	9.49
981.00	1.00	9.49
994.10	1.00	9.49
1010.50	1.00	9.50
1033.50	1.00	9.50
1053.10	1.00	9.50
1072.80	1.00	9.50
1092.50	1.00	9.50
1115.50	1.00	9.50
1118.80	1.00	9.50
1148.30	1.00	9.50
1158.10	1.00	9.50
1161.40	1.00	9.50
1171.30	1.00	9.50
1181.10	1.00	9.51
1200.80	1.00	9.51
1213.90	1.00	9.51
1236.90	1.00	9.51
1253.30	1.00	9.51
1289.40	1.00	9.51
1295.90	1.00	9.51
1305.80	1.00	9.51
1325.50	1.00	9.51
1328.70	1.00	9.51
1335.30	1.00	9.51
1345.10	1.00	9.51
1351.70	1.00	9.51
1355.00	1.00	9.51
1371.40	1.00	9.51
1381.20	1.00	9.51
1387.80	1.00	9.51
1391.10	1.00	9.51
1394.40	1.00	9.51
1423.90	1.00	9.51
1443.60	1.00	9.51
1450.10	1.00	9.51
1453.40	1.00	9.51
1456.70	1.00	9.51
1460.00	1.00	9.51
1463.30	1.00	9.51
1469.80	1.00	9.51
1476.40	1.00	9.51
1479.70	1.00	9.51
1482.90	1.00	9.51
1486.20	1.00	9.51
1489.50	1.00	9.52
1492.80	1.00	9.52
1496.10	1.00	9.52
1499.30	1.00	9.52
1502.60	1.00	9.53
1505.90	1.00	9.53
1509.20	1.00	9.54
1512.50	1.00	9.55

1515.70	1.00	9.56
1519.00	1.00	9.59
1522.30	1.00	9.62
1525.60	1.00	9.65
1528.90	1.00	9.69
1532.10	1.00	9.71
1535.40	1.00	9.73
1538.70	1.00	9.97
1688.00	1.00	9.64
2182.70	1.00	9.60
2242.00	1.00	9.60
2269.50	1.00	9.60
2297.50	1.00	9.60
2354.00	1.00	9.60
2459.00	1.00	9.60
2491.50	1.00	9.60
2511.00	1.00	9.60
2554.00	1.00	9.61
2562.00	1.00	9.61
2677.00	1.00	9.61
2763.00	1.00	9.61
2845.00	1.00	9.61
2885.00	1.00	9.61
2920.50	1.00	9.61
2951.50	1.00	9.62
2988.00	1.00	9.62
3012.50	1.00	9.62
3045.00	1.00	9.62
3128.50	1.00	9.62

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
1509.47	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	15.35	V23	EL=15	130
3.30	15.35	V23	EL=15	130
23.00	15.35	V23	EL=15	130
26.20	15.35	V23	EL=15	130
32.80	15.35	V23	EL=15	130
36.10	15.35	V23	EL=15	130
45.90	15.35	V23	EL=15	130
49.20	15.35	V23	EL=15	130
55.80	15.36	V23	EL=15	130
59.10	15.36	V23	EL=15	130
65.60	15.36	V23	EL=15	130
68.90	15.36	V23	EL=15	130
75.50	15.37	V23	EL=15	130
78.70	15.37	V23	EL=15	130
82.00	15.37	V23	EL=15	130
85.30	15.37	V23	EL=15	130
88.60	15.37	V23	EL=15	130
91.90	15.37	V23	EL=15	130
98.40	15.38	V23	EL=15	130
101.70	15.38	V23	EL=15	130
105.00	15.38	V23	EL=15	130
108.30	15.38	V23	EL=15	130
111.50	15.38	V23	EL=15	130
114.80	15.39	V23	EL=15	130
118.10	15.39	V23	EL=15	130
121.40	15.39	V23	EL=15	130
124.70	15.39	V23	EL=15	130
128.00	15.39	V23	EL=15	130
131.20	15.40	V23	EL=15	130
134.50	15.40	V23	EL=15	130
137.80	15.40	V23	EL=15	130
141.10	15.40	V23	EL=15	130
144.40	15.40	V23	EL=15	130
147.60	15.40	V23	EL=15	130

150.90	15.41	V23	EL=15	130
157.50	15.41	V23	EL=15	130
160.80	15.41	V23	EL=15	130
164.00	15.41	V23	EL=15	130
167.30	15.41	V23	EL=15	130
177.20	15.41	V23	EL=15	130
180.40	15.41	V23	EL=15	130
187.00	15.41	V23	EL=15	130
190.30	15.41	V23	EL=15	130
196.80	15.41	V23	EL=15	130
200.10	15.41	V23	EL=15	130
206.70	15.40	V23	EL=15	130
210.00	15.40	V23	EL=15	130
216.50	15.40	V23	EL=15	130
219.80	15.40	V23	EL=15	130
226.40	15.39	V23	EL=15	130
229.70	15.39	V23	EL=15	130
232.90	15.39	V23	EL=15	130
236.20	15.39	V23	EL=15	130
242.80	15.39	V23	EL=15	130
246.10	15.39	V23	EL=15	130
249.30	15.39	V23	EL=15	130
252.60	15.39	V23	EL=15	130
255.90	15.38	V23	EL=15	130
259.20	15.38	V23	EL=15	130
265.70	15.36	V23	EL=15	130
269.00	15.35	V23	EL=15	130
272.30	15.35	V23	EL=15	130
275.60	15.34	V23	EL=15	130
278.90	15.33	V23	EL=15	130
282.20	15.32	V23	EL=15	130
285.40	15.32	V23	EL=15	130
288.70	15.31	V23	EL=15	130
295.30	15.29	V23	EL=15	130
298.60	15.29	V23	EL=15	130
301.80	15.28	V23	EL=15	130
305.10	15.27	V23	EL=15	130
308.40	15.26	V23	EL=15	130
311.70	15.26	V23	EL=15	130
315.00	15.25	V23	EL=15	130
318.20	15.25	V23	EL=15	130
324.80	15.23	V23	EL=15	130
328.10	15.22	V23	EL=15	130
331.40	15.22	V23	EL=15	130
334.60	15.21	V23	EL=15	130
337.90	15.20	V23	EL=15	130
341.20	15.20	V23	EL=15	130
347.80	15.18	V23	EL=15	130
351.00	15.18	V23	EL=15	130
354.30	15.17	V23	EL=15	130
357.60	15.16	V23	EL=15	130

360.90	15.16	V23	EL=15	130
364.20	15.15	V23	EL=15	130
367.50	15.14	V23	EL=15	130
370.70	15.14	V23	EL=15	130
377.30	15.12	V23	EL=15	130
380.60	15.11	V23	EL=15	130
383.90	15.11	V23	EL=15	130
387.10	15.10	V23	EL=15	130
390.40	15.09	V23	EL=15	130
393.70	15.09	V23	EL=15	130
400.30	15.07	V23	EL=15	130
403.50	15.07	V23	EL=15	130
406.80	15.06	V23	EL=15	130
410.10	15.06	V23	EL=15	130
413.40	15.06	V23	EL=15	130
416.70	15.06	V23	EL=15	130
419.90	15.06	V23	EL=15	130
423.20	15.06	V23	EL=15	130
426.50	15.06	V23	EL=15	130
429.80	15.06	V23	EL=15	130
436.40	15.06	V23	EL=15	130
439.60	15.06	V23	EL=15	130
442.90	15.06	V23	EL=15	130
446.20	15.06	V23	EL=15	130
452.80	15.06	V23	EL=15	130
456.00	15.07	V23	EL=15	130
459.30	15.07	V23	EL=15	130
462.60	15.07	V23	EL=15	130
469.20	15.07	V23	EL=15	130
472.40	15.07	V23	EL=15	130
479.00	15.07	V23	EL=15	130
482.30	15.07	V23	EL=15	130
488.80	15.07	V23	EL=15	130
492.10	15.07	V23	EL=15	130
498.70	15.07	V23	EL=15	130
502.00	15.07	V23	EL=15	130
508.50	15.08	V23	EL=15	130
511.80	15.09	V23	EL=15	130
515.10	15.09	V23	EL=15	130
518.40	15.10	V23	EL=15	130
521.70	15.10	V23	EL=15	130
524.90	15.11	V23	EL=15	130
528.20	15.11	V23	EL=15	130
531.50	15.12	V23	EL=15	130
538.10	15.13	V23	EL=15	130
541.30	15.14	V23	EL=15	130
544.60	15.15	V23	EL=15	130
547.90	15.16	V23	EL=15	130
554.50	15.17	V23	EL=15	130
557.70	15.18	V23	EL=15	130
561.00	15.18	V23	EL=15	130

564.30	15.19	V23	EL=15	130
574.10	15.21	V23	EL=15	130
577.40	15.22	V23	EL=15	130
584.00	15.23	V23	EL=15	130
587.30	15.24	V23	EL=15	130
597.10	15.25	V23	EL=15	130
600.40	15.25	V23	EL=15	130
629.90	15.27	V23	EL=15	130
633.20	15.28	V23	EL=15	130
656.20	15.27	V23	EL=15	130
659.40	15.27	V23	EL=15	130
692.30	15.22	V23	EL=15	130
695.50	15.22	V23	EL=15	130
761.20	14.95	V23	EL=15	130
764.40	14.94	V23	EL=15	130
777.60	14.91	V23	EL=15	130
780.80	14.91	V23	EL=15	130
790.70	14.89	V23	EL=15	130
794.00	14.89	V23	EL=15	130
807.10	14.87	V23	EL=15	130
810.40	14.86	V23	EL=15	130
820.20	14.85	V23	EL=15	130
823.50	14.84	V23	EL=15	130
839.90	14.82	V23	EL=15	130
843.20	14.81	V23	EL=15	130
853.00	14.80	V23	EL=15	130
856.30	14.80	V23	EL=15	130
866.10	14.78	V23	EL=15	130
869.40	14.78	V23	EL=15	130
879.30	14.77	V23	EL=15	130
882.50	14.77	V23	EL=15	130
889.10	14.76	V23	EL=15	130
892.40	14.76	V23	EL=15	130
905.50	14.76	V23	EL=15	130
908.80	14.76	V23	EL=15	130
918.60	14.75	V23	EL=15	130
921.90	14.75	V23	EL=15	130
931.80	14.75	V23	EL=15	130
935.00	14.75	V23	EL=15	130
944.90	14.75	V23	EL=15	130
948.20	14.75	V23	EL=15	130
961.30	14.74	V23	EL=15	130
964.60	14.74	V23	EL=15	130
977.70	14.74	V23	EL=15	130
981.00	14.75	V23	EL=15	130
990.80	14.75	V23	EL=15	130
994.10	14.75	V23	EL=15	130
1007.20	14.74	V23	EL=15	130
1010.50	14.74	V23	EL=15	130
1030.20	14.72	V23	EL=15	130
1033.50	14.71	V23	EL=15	130

1049.90	14.70	V23	EL=15	130
1053.10	14.70	V23	EL=15	130
1069.60	14.68	V23	EL=15	130
1072.80	14.68	V23	EL=15	130
1089.20	14.66	V23	EL=15	130
1092.50	14.66	V23	EL=15	130
1112.20	14.60	V23	EL=15	130
1115.50	14.63	V23	EL=15	130
1118.80	14.65	V23	EL=15	130
1145.00	14.62	V23	EL=15	130
1148.30	14.63	V23	EL=15	130
1154.90	14.62	V23	EL=15	130
1158.10	14.55	V23	EL=15	130
1160.00	14.50	V23	EL=14	130
1161.40	14.47	V23	EL=14	130
1168.00	14.37	V23	EL=14	130
1171.30	14.39	V23	EL=14	130
1177.80	14.39	V23	EL=14	130
1181.10	14.44	V23	EL=14	130
1197.50	14.45	V23	EL=14	130
1200.80	14.45	V23	EL=14	130
1210.60	14.46	V23	EL=14	130
1213.90	14.46	V23	EL=14	130
1233.60	14.47	V23	EL=14	130
1236.90	14.47	V23	EL=14	130
1250.00	14.48	V23	EL=14	130
1253.30	14.48	V23	EL=14	130
1286.10	14.48	V23	EL=14	130
1287.80	14.50	V23	EL=14	130
1289.40	14.52	V23	EL=15	130
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1295.56	14.50	V23	EL=15	130
1295.90	14.50	V23	EL=14	130
1302.50	14.48	V23	EL=14	130
1305.80	14.47	V23	EL=14	130
1322.20	14.45	V23	EL=14	130
1325.50	14.47	V23	EL=14	130
1328.70	14.48	V23	EL=14	130
1332.00	14.48	V23	EL=14	130
1335.30	14.47	V23	EL=14	130
1341.90	14.46	V23	EL=14	130
1345.10	14.47	V23	EL=14	130
1348.40	14.46	V23	EL=14	130
1351.70	14.45	V23	EL=14	130
1355.00	14.47	V23	EL=14	130
1368.10	14.42	V23	EL=14	130
1371.40	14.43	V23	EL=14	130
1377.90	14.42	V23	EL=14	130
1381.20	14.29	V23	EL=14	130
1384.50	14.28	V23	EL=14	130
1387.80	14.28	V23	EL=14	130

1391.10	14.14	V23	EL=14	130
1394.40	14.13	V23	EL=14	130
1420.60	13.94	V23	EL=14	130
1423.90	13.91	V23	EL=14	130
1440.30	13.74	V23	EL=14	130
1443.60	13.71	V23	EL=14	130
1446.80	13.65	V23	EL=14	130
1450.10	13.55	V23	EL=14	130
1451.81	13.50	V23	EL=13	130
1453.40	13.45	V23	EL=13	130
1456.70	13.40	V23	EL=13	130
1460.00	13.41	V23	EL=13	130
1463.30	13.41	V23	EL=13	130
1466.50	13.33	V23	EL=13	130
1469.80	13.23	V23	EL=13	130
1473.10	13.15	V23	EL=13	130
1476.40	13.07	V23	EL=13	130
1479.70	12.91	V23	EL=13	130
1482.90	12.68	V23	EL=13	130
1486.20	12.63	V23	EL=13	130
1489.50	12.51	V23	EL=13	130
1489.70	12.50	V23	EL=12	130
1492.80	12.36	V23	EL=12	130
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1499.30	12.11	V23	EL=12	130
1502.60	11.96	V23	EL=12	130
1505.90	11.81	V23	EL=12	130
1509.20	11.67	V23	EL=12	130
1509.47	11.64	A18	EL=12	90
1511.00	11.50	A18	EL=11	90
1512.50	11.36	A18	EL=11	90
1515.70	11.06	A18	EL=11	90
1519.00	11.01	A18	EL=11	90
1522.30	10.95	A18	EL=11	90
1525.60	10.92	A18	EL=11	90
1528.90	10.90	A18	EL=11	90
1532.10	10.88	A18	EL=11	90
1535.40	10.85	A18	EL=11	90
1537.25	10.50	A18	EL=10	90
1538.70	10.22	A18	EL=10	90
1539.50	9.97			
1688.00	9.64	A18	EL=10	90
1728.70	9.64			
1734.30	9.64	A18	EL=10	90
1798.70	9.64			
1816.80	9.64	A18	EL=10	90
1821.70	9.64			
1882.20	9.64	A18	EL=10	90
1887.10	9.64			
1911.90	9.64	A18	EL=10	90
1936.20	9.64			
1956.90	9.64	A18	EL=10	90
1968.00	9.64			
1983.90	9.64	A18	EL=10	90
2065.20	9.64			

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                    2085.60          9.64
                                                A18  EL=10      90
                    2092.00          9.64
                    2106.60          9.64
                                                A18  EL=10      90
                    2174.30          9.64
                    2182.70          9.60
                                                A18  EL=10      90
                    2239.00          9.75
                                                A18  EL=10      90
                    2242.00          9.75
                                                A18  EL=10      90
                    2262.00          9.79
                                                A18  EL=10      90
                    2269.50          9.80
                                                A18  EL=10      90
                    2290.50          9.83
                                                A18  EL=10      90
                    2297.50          9.84
                                                A18  EL=10      90
                    2345.50          9.90
                                                A18  EL=10      90
                    2354.00          9.91
                                                A18  EL=10      90
                    2452.50         10.02
                                                A18  EL=10      90
                    2459.00         10.03
                                                A18  EL=10      90
                    2480.00         10.05
                                                A18  EL=10      90
                    2491.50         10.06
                                                A18  EL=10      90
                    2504.50         10.08
                                                A18  EL=10      90
                    2511.00         10.08
                                                A18  EL=10      90
                    2525.50         10.10
                                                A18  EL=10      90
                    2554.00         10.13
                                                A18  EL=10      90
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                                                A18  EL=10      90
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                    2762.00         10.31
                                                A18  EL=10      90
                    2763.00         10.31
                                                A18  EL=10      90
                    2831.00         10.37
                                                A18  EL=10      90
                    2845.00         10.38
                                                A18  EL=10      90
                    2854.50         10.38
                                                A18  EL=10      90
                    2885.00         10.41
                                                A18  EL=10      90
                    2911.50         10.43
                                                A18  EL=10      90
                    2920.50         10.43
                                                A18  EL=10      90
                    2942.50         10.45
                                                A18  EL=10      90
                    2951.50         10.46
                                                A18  EL=10      90
                    2979.50         10.48
                                                A18  EL=10      90
                    2988.00         10.48
                                                A18  EL=10      90
                    3001.00         10.49
                                                A18  EL=10      90
                    3011.81         10.50
                                                A18  EL=11      90
                    3012.50         10.50
                                                A18  EL=11      90
                    3037.50         10.52
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                    3045.00         10.52
                                                A18  EL=11      90
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                                                A18  EL=11      90
                    3128.50         10.57
                                                A18  EL=11      90
                    3129.46         10.50
                                                A18  EL=10      90
                    3140.70          9.63
                    3158.40          9.62
                                                A18  EL=10      90
                    3188.00          9.63
                          ZONE TERMINATED AT END OF TRANSECT
                          PART 7   POSTSCRIPT NOTES
              PS#  1   START(384861.9271,4804904.6659)
              PS#  2   END(384040.4609,4805779.4928)
-1.000000e+00
```

YK-105
100-year WHAFIS Output
Zero Station: -70.42459732, 43.39045908
Onshore Dir: 133.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-1000
-500
0
500
1000
1500
2000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-105
Two Percent Run-up Elevation is 15.6 Feet-NAVD88
Run-up Height is 6.0 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
0
2
4
6
8
10
12
14
16
280
300
320
340
360
380
400
420
440
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-105
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-105sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-105-runup';
SWEL=9.4073;  % 100-yr still water level including wave setup.
H0=3.7367;    % significant wave height at toe of structure
Tp=12.3575;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.8768;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.10581;
maxSetup=0.56123;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-105'

plotTitle =

Iterative TAW for YK-105



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                   9.51311

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                  10.07434



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          645.768678645481


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                   3.90806


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                  15.11816


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          326.792027257982

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          393.344106523961


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          393.344106523961

toe_sta

toe_sta =

          326.792027257982




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 69.7 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.23 feet


ans =

-!!-       SWEL is adjusted to 9.64 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
    21




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
```

```
% determine slope for this iteration
top_sta=-999;
for kk=1:length(sta)-1
   if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
      top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
      break;
   end
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% get the length of the slope (not accounting for berm)
Lslope=top_sta-toe_sta

% loop over profile segments to determine berm factor
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
```

```
    if TAW_VALID == 0
       TAW_ALWAYS_VALID=0;
    end

    if (Irb*gamma_berm < 1.8)
       R2_new=gamma*H0*1.77*Irb
    else
       R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
    end


    % check to see if we need to evaluate a shallow foreshore
    if berm_width > 0.25 * L0;
       disp ('!   Berm_width is greater than 1/4 wave length')
       disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
       % do the foreshore calculation
       fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
       % get upper slope
       fore_toe_sta=-999;
       fore_toe_dep=-999;
       for kk=length(dep)-1:-1:1
          ddep=dep(kk+1)-dep(kk);
          dsta=sta(kk+1)-sta(kk);
          s=ddep/dsta;
          if s < 1/15
             break
          end
          fore_toe_sta=sta(kk);
          fore_toe_dep=dep(kk);
          upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
       end
       fore_Irb=upper_slope/(sqrt(fore_H0/L0));
       fore_gamma=gamma_perm*gamma_beta*gamma_rough;
       if (fore_Irb < 1.8)
          fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
       else
          fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
       end
       if berm_width >= L0
          R2_new=fore_R2
          disp ('berm is wider than one wavelength, use full shallow foreshore solution');
       else
          w2=(berm_width-0.25*L0)/(0.75*L0)
          w1=1-w2
          R2_new=w2*fore_R2 + w1*R2_new
       end
    end % end berm width check
    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;
    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                    3.90806
toe_sta =
          326.792027257982
top_sta =
          393.344106523961
Z2 =
                  15.11816
H0 =
                    3.7367
Tp =
                   12.3575
T0 =
          11.2340909090909
R2 =
                   11.2101
Z2 =
           20.845954296252
top_sta =
          453.683043773131
Lslope =
          126.891016515149
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 26
dh =
          2.81252729625202
rdh_sum =
         0.310601809144891
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 27
dh =
          2.75101129625202
rdh_sum =
         0.609302070071349
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 28
dh =
          2.68949579625202
rdh_sum =
         0.896235481783274
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 29
dh =
          2.62798029625202
rdh_sum =
           1.1715445140836
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 30
dh =
          2.56646429625202
rdh_sum =
          1.43537931694017
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 31
dh =
          2.50494829625202
rdh_sum =
          1.68789780791434
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 32
dh =
          2.44343279625202
rdh_sum =
          1.92926556143339
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 33
dh =
          2.38841079625202
rdh_sum =
          2.16080593444696
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 34
dh =
          2.34637479625202
rdh_sum =
          2.38493482809601
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 35
dh =
          2.31083229625202
rdh_sum =
          2.60286424384892
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 36
dh =
          2.27528979625202
rdh_sum =
          2.81465714801225
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
          2.23974729625202
rdh_sum =
          3.02037787673931
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
          2.20420479625202
rdh_sum =
          3.22009212166845
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
          2.16866229625202
rdh_sum =
          3.41386691525881
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
          2.13312029625202
rdh_sum =
          3.60177069793231
ans =
```

```
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
          2.09757779625202
rdh_sum =
          3.78387305550811
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
          2.06203529625202
rdh_sum =
           3.9602449519276
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
          2.02649279625202
rdh_sum =
          4.13095863033672
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
          1.99095029625202
rdh_sum =
          4.29608759695922
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    19
rB =
          0.14973479227926
rdh_mean =
         0.226109873524169
gamma_berm =
         0.884121722665171
slope =
         0.156990774981472
Irb =
          2.06380426567465
gamma_berm =
         0.884121722665171
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.530473033599103
ans =
!!! - - Iribaren number:   1.82 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:6.4 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           6.315854067419
R2del =
           4.894245932581
Z2 =
          15.951708363671
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                    3.90806
toe_sta =
          326.792027257982
top_sta =
          402.125047285504
Z2 =
          15.951708363671
H0 =
                     3.7367
Tp =
                    12.3575
T0 =
          11.2340909090909
R2 =
           6.315854067419
Z2 =
          15.951708363671
top_sta =
          402.125047285504
Lslope =
          75.3330200275217
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 26
dh =
          2.81252729625202
rdh_sum =
         0.310601809144891
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 27
dh =
```

```
          2.75101129625202
rdh_sum =
         0.609302070071349
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 28
dh =
          2.68949579625202
rdh_sum =
         0.896235481783274
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 29
dh =
          2.62798029625202
rdh_sum =
           1.1715445140836
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 30
dh =
          2.56646429625202
rdh_sum =
          1.43537931694017
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 31
dh =
          2.50494829625202
rdh_sum =
          1.68789780791434
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 32
dh =
          2.44343279625202
rdh_sum =
          1.92926556143339
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 33
dh =
          2.38841079625202
rdh_sum =
          2.16080593444696
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 34
dh =
          2.34637479625202
rdh_sum =
          2.38493482809601
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 35
dh =
          2.31083229625202
rdh_sum =
          2.60286424384892
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 36
dh =
          2.27528979625202
rdh_sum =
          2.81465714801225
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
          2.23974729625202
rdh_sum =
          3.02037787673931
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
          2.20420479625202
rdh_sum =
          3.22009212166845
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
          2.16866229625202
rdh_sum =
          3.41386691525881
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
          2.13312029625202
rdh_sum =
          3.60177069793231
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
          2.09757779625202
rdh_sum =
          3.78387305550811
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
```

```
          2.06203529625202
rdh_sum =
           3.9602449519276
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
          2.02649279625202
rdh_sum =
          4.13095863033672
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
          1.99095029625202
rdh_sum =
          4.29608759695922
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    19
rB =
         0.252213438317734
rdh_mean =
         0.226109873524169
gamma_berm =
         0.804814510321385
slope =
         0.213793763547331
Irb =
          2.81053763340994
gamma_berm =
         0.804814510321385
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.482888706192831
ans =
!!! - - Iribaren number:   2.26 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:4.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          6.03685528351079
R2del =
         0.278998783908204
Z2 =
          15.6727095797628
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                   3.90806
toe_sta =
          326.792027257982
top_sta =
          399.185959524296
Z2 =
          15.6727095797628
H0 =
                    3.7367
Tp =
                   12.3575
T0 =
          11.2340909090909
R2 =
          6.03685528351079
Z2 =
          15.6727095797628
top_sta =
          399.185959524296
Lslope =
          72.3939322663136
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 26
dh =
          2.81252729625202
rdh_sum =
         0.310601809144891
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 27
dh =
          2.75101129625202
rdh_sum =
         0.609302070071349
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 28
dh =
          2.68949579625202
rdh_sum =
```

```
         0.896235481783274
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 29
dh =
          2.62798029625202
rdh_sum =
           1.1715445140836
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 30
dh =
          2.56646429625202
rdh_sum =
          1.43537931694017
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 31
dh =
          2.50494829625202
rdh_sum =
          1.68789780791434
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 32
dh =
          2.44343279625202
rdh_sum =
          1.92926556143339
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 33
dh =
          2.38841079625202
rdh_sum =
          2.16080593444696
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 34
dh =
          2.34637479625202
rdh_sum =
          2.38493482809601
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 35
dh =
          2.31083229625202
rdh_sum =
          2.60286424384892
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 36
dh =
          2.27528979625202
rdh_sum =
          2.81465714801225
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
          2.23974729625202
rdh_sum =
          3.02037787673931
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
          2.20420479625202
rdh_sum =
          3.22009212166845
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
          2.16866229625202
rdh_sum =
          3.41386691525881
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
          2.13312029625202
rdh_sum =
          3.60177069793231
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
          2.09757779625202
rdh_sum =
          3.78387305550811
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
          2.06203529625202
rdh_sum =
           3.9602449519276
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
          2.02649279625202
rdh_sum =
```

```
          4.13095863033672
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
          1.99095029625202
rdh_sum =
          4.29608759695922
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    19
rB =
         0.262452935007111
rdh_mean =
         0.226109873524169
gamma_berm =
         0.796890264933394
slope =
         0.220336826309853
Irb =
           2.8965528839332
gamma_berm =
         0.796890264933394
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.478134158960036
ans =
!!! - - Iribaren number:   2.31 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:4.5 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          6.00292477229057
R2del =
        0.0339305112202197
Z2 =
          15.6387790685426
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
                   3.90806
toe_sta =
          326.792027257982
top_sta =
          398.828521585456
Z2 =
          15.6387790685426
H0 =
                    3.7367
Tp =
                   12.3575
T0 =
          11.2340909090909
R2 =
          6.00292477229057
Z2 =
          15.6387790685426
top_sta =
          398.828521585456
Lslope =
          72.0364943274741
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 26
dh =
          2.81252729625202
rdh_sum =
         0.310601809144891
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 27
dh =
          2.75101129625202
rdh_sum =
         0.609302070071349
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 28
dh =
          2.68949579625202
rdh_sum =
         0.896235481783274
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 29
dh =
          2.62798029625202
rdh_sum =
           1.1715445140836
ans =
```

```
Berm Factor Calculation: Iteration 4, Profile Segment: 30
dh =
          2.56646429625202
rdh_sum =
          1.43537931694017
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 31
dh =
          2.50494829625202
rdh_sum =
          1.68789780791434
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 32
dh =
          2.44343279625202
rdh_sum =
          1.92926556143339
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 33
dh =
          2.38841079625202
rdh_sum =
          2.16080593444696
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 34
dh =
          2.34637479625202
rdh_sum =
          2.38493482809601
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 35
dh =
          2.31083229625202
rdh_sum =
          2.60286424384892
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 36
dh =
          2.27528979625202
rdh_sum =
          2.81465714801225
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 37
dh =
          2.23974729625202
rdh_sum =
          3.02037787673931
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 38
dh =
          2.20420479625202
rdh_sum =
          3.22009212166845
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 39
dh =
          2.16866229625202
rdh_sum =
          3.41386691525881
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
          2.13312029625202
rdh_sum =
          3.60177069793231
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
          2.09757779625202
rdh_sum =
          3.78387305550811
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
          2.06203529625202
rdh_sum =
           3.9602449519276
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
          2.02649279625202
rdh_sum =
          4.13095863033672
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
          1.99095029625202
rdh_sum =
          4.29608759695922
ans =
```

```
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    19
rB =
          0.26375520043531
rdh_mean =
         0.226109873524169
gamma_berm =
          0.79588245457646
slope =
         0.221182022252663
Irb =
          2.90766384884376
gamma_berm =
          0.79588245457646
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.477529472745876
ans =
!!! - - Iribaren number:   2.31 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:4.5 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          5.99854119440962
R2del =
       0.00438357788095534
Z2 =
          15.6343954906616
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          15.6343954906616
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-105

Station locations shifted by: -5.83 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-105

Incident significant wave height: 5.31 feet

Peak wave period: 12.39 seconds

Mean wave height: 3.32 feet

Local Depth below SWEL: 11.74 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 11.74
    Period, T = 10.53
    Waveheight, H = 3.32
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*10.53*10.53/6.28 = 568.16
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 568.16/10.53 = 53.94
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/10.53 = 0.60
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.60*0.60*11.74/32.17 = 0.13
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 19.01
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(53.94/19.01) = 1.68
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 3.32/1.68 = 1.97
```

Deepwater mean wave height: 1.97 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-105

RUNUP2 SWEL:
9.40
9.40
9.40
9.40

9.40
9.40
9.40
9.40
9.40

RUNUP2 deepwater mean wave heights:
1.87
1.87
1.87
1.97
1.97
1.97
2.07
2.07
2.07

RUNUP2 mean wave periods:
10.01
10.53
11.06
10.01
10.53
11.06
10.01
10.53
11.06

RUNUP2 runup above SWEL:
0.07
0.16
0.16
0.16
0.18
0.18
0.17
0.19
0.20

RUNUP2 Mean runup height above SWEL: 0.16 feet

RUNUP2 2-percent runup height above SWEL: 0.36 feet

RUNUP2 2-percent runup elevation: 9.76 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 5.31 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 3.15 feet

Peak wave period: 12.39 seconds

Average beach Slope: 1:89.34 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     3.15
Wave Period,                        T  =    12.39
Beach Slope,                        S  =    0.011

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 1.9,  1.7,   1.6,    1.3,    0.8]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 1.71 feet

ACES Beach 2-percent runup elevation: 11.11 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-105                                                    1
8.00
  -2.34 -1156.2 0.6
  -2.18 -1115.2 0.6
  -2.17 -988.2 0.6
  -1.89 -941.2 0.6
  -1.01 -745.2 0.6
  -1.01 -423.2 0.6
  -0.70 -387.2 0.6
  -0.38 -280.2 0.6
  -0.31 -156.2 0.6
  -0.01 -4.2   0.6
  0.50  20.3   0.6
  0.50  219.8  0.6
  1.02  251.3  0.6
  1.74  289.3  0.6
  2.99  321.8  0.6
  5.65  353.3  0.6
  6.76  359.3  0.6
  7.68  379.3  0.6
  13.91 390.3  0.6
1 15.06 398.3  0.6
 9.4   1.87  10.01
 9.4   1.87  10.53
 9.4   1.87  11.06
 9.4   1.97  10.01
 9.4   1.97  10.53
 9.4   1.97  11.06
 9.4   2.07  10.01
 9.4   2.07  10.53
 9.4   2.07  11.06
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-1156.0	-2.3		
			.00	.60
2	-1115.0	-2.2		
			FLAT	.60
3	-988.2	-2.2		
			167.86	.60
4	-941.2	-1.9		
			222.73	.60
5	-745.2	-1.0		
			FLAT	.60
6	-423.2	-1.0		
			116.13	.60
7	-387.2	-.7		
			334.38	.60
8	-280.2	-.4		
			FLAT	.60
9	-156.2	-.3		
			506.67	.60
10	-4.2	.0		
			48.04	.60
11	20.3	.5		
			FLAT	.60
12	219.8	.5		
			60.58	.60
13	251.3	1.0		
			52.78	.60
14	289.3	1.8		
			26.00	.60
15	321.8	3.0		
			11.84	.60
16	353.3	5.7		
			5.41	.60
17	359.3	6.8		
			21.74	.60
18	379.3	7.7		
			1.77	.60
19	390.3	13.9		
			6.96	.60
20	398.3	15.1		

LAST SLOPE 8.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.40	1.87	10.01	11	18	.07	4.58
9.40	1.87	10.53	11	18	.16	4.72
9.40	1.87	11.06	11	18	.16	4.85
9.40	1.97	10.01	11	18	.16	4.76
9.40	1.97	10.53	11	18	.18	4.90
9.40	1.97	11.06	11	18	.18	5.04
9.40	2.07	10.01	11	18	.17	4.94
9.40	2.07	10.53	11	18	.19	5.07
9.40	2.07	11.06	11	18	.20	5.22

Runup2 2% runup elevation for Transect: YK-105
Ground
Swel
2% Runup
Two Percent Run-up Elevation is 9.8 Feet-NAVD88
Run-up Height is 0.4 Feet
Elevation (ft)
Station (ft)
20
15
10
5
0
-1200
-1000
-800
-600
-400
-200
0
200
400

Transect Number: YK-106
Adams Corner
Clock Farm Corner
ME 9
Timber Island
43.41
43.405
43.4
43.395
43.39
43.385
43.38
43.375
Latitude
-70.44
-70.43
-70.42
-70.41
-70.4
-70.39
Longitude

Elevation profile
50
40
30
20
10
0
-10
-20
-30
-40
Elevation (ft)
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-106

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -1030.5 ft
LON: -70.4188 deg E
LAT: 43.3932 deg N
Bottom ELEV: -11.9477 ft-NAVD88
TWL: 9.3612 ft-NAVD88
HS: 8.2135 ft
TP: 12.9 sec
Wave Direction bin: 135 deg CCW from East (90 deg sector)
Transect Direction: 142.1434 deg CCW from East

TAW/RUNUP input

toe sta: 159 ft
toe elev: 4.5636 ft-NAVD88
top sta: 222 ft
top elev: 14.4718 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-106: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-1000
-800
-600
-400
-200
0
200
400
600

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-106zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-106.swn
swan output name:     2_swan/swanfiles/YK-106.dat

Boundary Conditions:
    TWL- 2.8533 meters
    HS-  2.5035 meters
    PER- 12.9 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.86394 feet
SWAN output at toe:
    SETUP- 0.66269 feet
    HS-    2.2239 feet
    PER-   12.5841 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.86394 feet
SWAN output at toe:
    SETUP- 0.66269 feet
    HS-    2.2239 feet
    PER-   12.5841 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-106
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-5000
-4000
-3000
-2000
-1000
0
1000
2000

```
1
                    Execution started at 20200401.174322


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      369       0.   369     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      369   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-106zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   2.5035     12.9     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      369  369    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-106.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             370 MYC              1
                     : MCGRD           371
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  11.09 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.28 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in   7.57 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  60.82 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  99.46 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  99.46 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  99.73 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	2.50081	12.5697	12.4477	11.6385	0.000	31.5062	6.4900	0.000000
1.	0.	2.50524	12.5719	12.4477	11.5365	0.000	31.5036	6.4900	0.000016
2.	0.	2.51014	12.5741	12.4477	11.4403	0.000	31.4985	6.4800	-0.000020
3.	0.	2.51414	12.5761	12.4477	11.3491	0.000	31.4911	6.4800	-0.000004
4.	0.	2.51836	12.5781	12.4477	11.2643	0.000	31.4649	6.4700	-0.000038
5.	0.	2.52246	12.5799	12.4477	11.1853	0.000	31.4474	6.4599	-0.000073
6.	0.	2.52565	12.5815	12.4477	11.1111	0.000	31.4317	6.4599	-0.000056
7.	0.	2.52931	12.5831	12.4477	11.0422	0.000	31.4155	6.4499	-0.000091
8.	0.	2.53206	12.5845	12.4477	10.9773	0.000	31.3986	6.4499	-0.000074
9.	0.	2.53530	12.5859	12.4477	10.9168	0.000	31.3806	6.4399	-0.000109
10.	0.	2.53790	12.5872	12.4477	10.8593	0.000	31.3776	6.4399	-0.000092
11.	0.	2.54019	12.5884	12.4477	10.8052	0.000	31.3634	6.4399	-0.000075
12.	0.	2.54294	12.5895	12.4477	10.7547	0.000	31.3448	6.4299	-0.000109
13.	0.	2.54508	12.5905	12.4477	10.7063	0.000	31.3402	6.4299	-0.000091
14.	0.	2.54693	12.5915	12.4477	10.6605	0.000	31.3244	6.4299	-0.000072
15.	0.	2.54927	12.5924	12.4477	10.6177	0.000	31.3043	6.4199	-0.000106
16.	0.	2.55116	12.5932	12.4477	10.5753	0.000	31.2988	6.4199	-0.000087
17.	0.	2.55283	12.5940	12.4477	10.5347	0.000	31.2829	6.4199	-0.000067
18.	0.	2.55502	12.5948	12.4477	10.4964	0.000	31.2632	6.4099	-0.000098
19.	0.	2.55666	12.5954	12.4477	10.4592	0.000	31.2575	6.4099	-0.000078
20.	0.	2.55806	12.5960	12.4477	10.4237	0.000	31.2423	6.4099	-0.000056
21.	0.	2.55998	12.5966	12.4477	10.3903	0.000	31.2239	6.3999	-0.000085
22.	0.	2.56137	12.5972	12.4477	10.3576	0.000	31.2178	6.3999	-0.000064
23.	0.	2.56254	12.5976	12.4477	10.3263	0.000	31.2025	6.4000	-0.000040
24.	0.	2.56422	12.5981	12.4477	10.2969	0.000	31.1839	6.3899	-0.000069
25.	0.	2.56540	12.5985	12.4477	10.2680	0.000	31.1771	6.3900	-0.000046
26.	0.	2.56637	12.5989	12.4477	10.2402	0.000	31.1614	6.3900	-0.000022
27.	0.	2.56786	12.5992	12.4477	10.2142	0.000	31.1422	6.3800	-0.000049
28.	0.	2.56885	12.5995	12.4477	10.1884	0.000	31.1350	6.3800	-0.000026
29.	0.	2.56964	12.5998	12.4477	10.1635	0.000	31.1187	6.3800	0.000000
30.	0.	2.57096	12.6001	12.4477	10.1403	0.000	31.0994	6.3700	-0.000027
31.	0.	2.57179	12.6003	12.4477	10.1171	0.000	31.0919	6.3700	-0.000002
32.	0.	2.57244	12.6005	12.4477	10.0948	0.000	31.0757	6.3700	0.000025
33.	0.	2.57361	12.6007	12.4477	10.0739	0.000	31.0568	6.3600	-0.000001
34.	0.	2.57410	12.6008	12.4477	10.0529	0.000	31.0377	6.3600	0.000028
35.	0.	2.57517	12.6009	12.4477	10.0333	0.000	31.0181	6.3500	0.000004
36.	0.	2.57580	12.6010	12.4477	10.0135	0.000	31.0098	6.3500	0.000031
37.	0.	2.57626	12.6011	12.4477	9.9942	0.001	30.9937	6.3501	0.000059
38.	0.	2.57727	12.6012	12.4477	9.9762	0.001	30.9748	6.3400	0.000035
39.	0.	2.57781	12.6013	12.4477	9.9579	0.001	30.9665	6.3401	0.000063
40.	0.	2.57819	12.6013	12.4477	9.9402	0.001	30.9503	6.3401	0.000093
41.	0.	2.57911	12.6013	12.4477	9.9236	0.001	30.9312	6.3301	0.000069
42.	0.	2.57957	12.6013	12.4477	9.9067	0.001	30.9227	6.3301	0.000098
43.	0.	2.57987	12.6013	12.4477	9.8903	0.001	30.9063	6.3301	0.000128
44.	0.	2.58070	12.6013	12.4477	9.8751	0.001	30.8870	6.3201	0.000106
45.	0.	2.58109	12.6012	12.4477	9.8594	0.002	30.8782	6.3201	0.000135
46.	0.	2.58133	12.6012	12.4477	9.8441	0.002	30.8617	6.3202	0.000167
47.	0.	2.58273	12.6011	12.4477	9.8253	0.003	30.8461	6.3101	0.000145
48.	0.	2.58388	12.6011	12.4477	9.8045	0.003	30.8421	6.3102	0.000177
49.	0.	2.58491	12.6010	12.4477	9.7837	0.003	30.8307	6.3102	0.000210
50.	0.	2.58648	12.6009	12.4477	9.7641	0.003	30.8165	6.3002	0.000191
51.	0.	2.58758	12.6007	12.4477	9.7441	0.003	30.8127	6.3002	0.000224
52.	0.	2.58851	12.6006	12.4477	9.7244	0.004	30.8010	6.3003	0.000259
53.	0.	2.58996	12.6005	12.4477	9.7060	0.004	30.7865	6.2902	0.000241
54.	0.	2.59095	12.6003	12.4477	9.6871	0.004	30.7823	6.2903	0.000275
55.	0.	2.59178	12.6001	12.4477	9.6686	0.004	30.7703	6.2903	0.000311
56.	0.	2.59312	12.6000	12.4477	9.6512	0.005	30.7554	6.2803	0.000294
57.	0.	2.59382	12.5998	12.4477	9.6333	0.005	30.7400	6.2803	0.000332
58.	0.	2.59506	12.5996	12.4477	9.6166	0.005	30.7237	6.2703	0.000316
59.	0.	2.59588	12.5994	12.4477	9.5993	0.006	30.7184	6.2704	0.000352

60.	0.	2.59654	12.5991	12.4477	9.5824	0.006	30.7057	6.2704	0.000391
61.	0.	2.59771	12.5989	12.4477	9.5666	0.006	30.6902	6.2604	0.000376
62.	0.	2.59826	12.5987	12.4477	9.5501	0.006	30.6744	6.2604	0.000416
63.	0.	2.59935	12.5985	12.4477	9.5348	0.007	30.6577	6.2504	0.000402
64.	0.	2.59984	12.5982	12.4477	9.5197	0.006	30.6539	6.2504	0.000447
65.	0.	2.60005	12.5980	12.4477	9.5055	0.003	30.6436	6.2505	0.000497
66.	0.	2.60073	12.5977	12.4477	9.4926	359.998	30.6308	6.2405	0.000494
67.	0.	2.60071	12.5974	12.4477	9.4794	359.992	30.6173	6.2405	0.000548
68.	0.	2.60123	12.5972	12.4477	9.4673	359.985	30.6032	6.2305	0.000549
69.	0.	2.60135	12.5969	12.4477	9.4543	359.978	30.5999	6.2306	0.000602
70.	0.	2.60129	12.5966	12.4477	9.4418	359.969	30.5886	6.2307	0.000658
71.	0.	2.60171	12.5963	12.4477	9.4305	359.960	30.5745	6.2207	0.000660
72.	0.	2.60170	12.5961	12.4477	9.4176	359.954	30.5596	6.2207	0.000714
73.	0.	2.60230	12.5958	12.4477	9.4055	359.949	30.5439	6.2107	0.000711
74.	0.	2.60252	12.5955	12.4477	9.3924	359.945	30.5390	6.2108	0.000762
75.	0.	2.60263	12.5952	12.4477	9.3793	359.941	30.5271	6.2108	0.000813
76.	0.	2.60326	12.5949	12.4477	9.3673	359.938	30.5126	6.2008	0.000810
77.	0.	2.60332	12.5946	12.4477	9.3544	359.934	30.4979	6.2009	0.000863
78.	0.	2.60390	12.5943	12.4477	9.3426	359.931	30.4827	6.1909	0.000860
79.	0.	2.60428	12.5940	12.4477	9.3286	359.923	30.4798	6.1909	0.000912
80.	0.	2.60479	12.5937	12.4477	9.3131	359.918	30.4714	6.1910	0.000965
81.	0.	2.60586	12.5934	12.4477	9.2983	359.916	30.4610	6.1810	0.000963
82.	0.	2.60638	12.5931	12.4477	9.2823	359.914	30.4504	6.1810	0.001018
83.	0.	2.60742	12.5928	12.4477	9.2676	359.912	30.4389	6.1710	0.001017
84.	0.	2.60787	12.5925	12.4477	9.2520	359.910	30.4278	6.1711	0.001073
85.	0.	2.60866	12.5922	12.4477	9.2377	359.908	30.4059	6.1611	0.001075
86.	0.	2.60935	12.5919	12.4477	9.2236	359.906	30.3804	6.1511	0.001079
87.	0.	2.61015	12.5917	12.4477	9.2097	359.903	30.3635	6.1411	0.001082
88.	0.	2.61043	12.5914	12.4477	9.1949	359.901	30.3499	6.1411	0.001141
89.	0.	2.61106	12.5911	12.4477	9.1814	359.899	30.3265	6.1311	0.001146
90.	0.	2.61161	12.5909	12.4477	9.1680	359.897	30.2999	6.1212	0.001152
91.	0.	2.61211	12.5906	12.4477	9.1548	359.895	30.2720	6.1112	0.001160
92.	0.	2.61256	12.5904	12.4477	9.1417	359.892	30.2435	6.1012	0.001168
93.	0.	2.61296	12.5901	12.4477	9.1289	359.890	30.2148	6.0912	0.001178
94.	0.	2.61332	12.5899	12.4477	9.1170	359.886	30.1972	6.0812	0.001193
95.	0.	2.61294	12.5896	12.4477	9.1052	359.881	30.1848	6.0813	0.001270
96.	0.	2.61281	12.5894	12.4477	9.0952	359.877	30.1634	6.0713	0.001295
97.	0.	2.61251	12.5892	12.4477	9.0857	359.872	30.1389	6.0613	0.001323
98.	0.	2.61212	12.5889	12.4477	9.0766	359.868	30.1130	6.0514	0.001353
99.	0.	2.61164	12.5887	12.4477	9.0678	359.865	30.0862	6.0414	0.001386
100.	0.	2.61124	12.5885	12.4477	9.0594	359.860	30.0682	6.0314	0.001419
101.	0.	2.61034	12.5883	12.4477	9.0499	359.855	30.0538	6.0315	0.001509
102.	0.	2.60976	12.5880	12.4477	9.0419	359.852	30.0295	6.0215	0.001544
103.	0.	2.60910	12.5878	12.4477	9.0341	359.850	30.0019	6.0116	0.001580
104.	0.	2.60839	12.5876	12.4477	9.0263	359.848	29.9732	6.0016	0.001618
105.	0.	2.60817	12.5874	12.4477	9.0162	359.845	29.9424	5.9916	0.001644
106.	0.	2.60825	12.5872	12.4477	9.0055	359.843	29.9205	5.9817	0.001665
107.	0.	2.60785	12.5870	12.4477	8.9935	359.841	29.9023	5.9817	0.001744
108.	0.	2.60763	12.5868	12.4477	8.9837	359.836	29.8763	5.9718	0.001772
109.	0.	2.60722	12.5866	12.4477	8.9745	359.828	29.8471	5.9618	0.001803
110.	0.	2.60673	12.5864	12.4477	8.9656	359.819	29.8164	5.9518	0.001837
111.	0.	2.60634	12.5862	12.4477	8.9568	359.810	29.7948	5.9419	0.001871
112.	0.	2.60545	12.5860	12.4477	8.9470	359.801	29.7770	5.9420	0.001963
113.	0.	2.60508	12.5858	12.4477	8.9385	359.792	29.7593	5.9320	0.001998
114.	0.	2.60415	12.5856	12.4477	8.9289	359.783	29.7426	5.9321	0.002092
115.	0.	2.60371	12.5854	12.4477	8.9207	359.773	29.7247	5.9221	0.002128
116.	0.	2.60272	12.5852	12.4477	8.9115	359.763	29.7076	5.9222	0.002223
117.	0.	2.60224	12.5850	12.4477	8.9036	359.753	29.6897	5.9123	0.002260
118.	0.	2.60121	12.5848	12.4477	8.8945	359.743	29.6727	5.9124	0.002357
119.	0.	2.60068	12.5846	12.4477	8.8868	359.734	29.6549	5.9024	0.002395
120.	0.	2.59960	12.5844	12.4477	8.8780	359.724	29.6380	5.9025	0.002493
121.	0.	2.59902	12.5843	12.4477	8.8706	359.714	29.6203	5.8925	0.002532
122.	0.	2.59790	12.5841	12.4477	8.8619	359.705	29.6035	5.8926	0.002631
123.	0.	2.59728	12.5839	12.4477	8.8547	359.695	29.5860	5.8827	0.002672
124.	0.	2.59611	12.5837	12.4477	8.8463	359.686	29.5693	5.8828	0.002772
125.	0.	2.59545	12.5836	12.4477	8.8393	359.677	29.5519	5.8728	0.002814
126.	0.	2.59424	12.5834	12.4477	8.8310	359.668	29.5354	5.8729	0.002916

127.	0.	2.59354	12.5832	12.4477	8.8242	359.659	29.5181	5.8630	0.002959
128.	0.	2.59230	12.5831	12.4477	8.8162	359.650	29.5016	5.8631	0.003061
129.	0.	2.59156	12.5829	12.4477	8.8095	359.641	29.4845	5.8531	0.003105
130.	0.	2.59028	12.5828	12.4477	8.8016	359.632	29.4682	5.8532	0.003209
131.	0.	2.58950	12.5826	12.4477	8.7951	359.623	29.4512	5.8433	0.003254
132.	0.	2.58838	12.5824	12.4477	8.7866	359.619	29.4351	5.8434	0.003354
133.	0.	2.58786	12.5823	12.4477	8.7789	359.616	29.4183	5.8334	0.003394
134.	0.	2.58677	12.5821	12.4477	8.7701	359.614	29.4023	5.8335	0.003494
135.	0.	2.58615	12.5820	12.4477	8.7628	359.614	29.3857	5.8235	0.003537
136.	0.	2.58502	12.5818	12.4477	8.7541	359.615	29.3698	5.8236	0.003639
137.	0.	2.58441	12.5817	12.4477	8.7468	359.617	29.3532	5.8137	0.003683
138.	0.	2.58326	12.5815	12.4477	8.7381	359.618	29.3375	5.8138	0.003786
139.	0.	2.58262	12.5814	12.4477	8.7309	359.621	29.3209	5.8038	0.003831
140.	0.	2.58142	12.5813	12.4477	8.7224	359.623	29.3054	5.8039	0.003936
141.	0.	2.58071	12.5811	12.4477	8.7155	359.625	29.2893	5.7940	0.003982
142.	0.	2.57945	12.5810	12.4477	8.7073	359.627	29.2742	5.7941	0.004089
143.	0.	2.57868	12.5809	12.4477	8.7006	359.630	29.2585	5.7841	0.004137
144.	0.	2.57739	12.5807	12.4477	8.6926	359.633	29.2437	5.7842	0.004245
145.	0.	2.57659	12.5806	12.4477	8.6860	359.636	29.2279	5.7743	0.004294
146.	0.	2.57525	12.5805	12.4477	8.6782	359.640	29.2128	5.7744	0.004403
147.	0.	2.57442	12.5804	12.4477	8.6718	359.644	29.1970	5.7645	0.004453
148.	0.	2.57306	12.5802	12.4477	8.6640	359.647	29.1820	5.7646	0.004563
149.	0.	2.57220	12.5801	12.4477	8.6576	359.651	29.1663	5.7546	0.004614
150.	0.	2.57079	12.5800	12.4477	8.6501	359.655	29.1516	5.7547	0.004725
151.	0.	2.56987	12.5799	12.4477	8.6440	359.659	29.1361	5.7448	0.004778
152.	0.	2.56836	12.5798	12.4477	8.6369	359.661	29.1211	5.7449	0.004892
153.	0.	2.56733	12.5797	12.4477	8.6313	359.664	29.1048	5.7349	0.004946
154.	0.	2.56576	12.5796	12.4477	8.6244	359.668	29.0893	5.7351	0.005062
155.	0.	2.56457	12.5795	12.4477	8.6190	359.671	29.0638	5.7251	0.005118
156.	0.	2.56330	12.5794	12.4477	8.6136	359.675	29.0352	5.7152	0.005175
157.	0.	2.56210	12.5793	12.4477	8.6083	359.679	29.0145	5.7052	0.005234
158.	0.	2.56041	12.5792	12.4477	8.6017	359.683	28.9972	5.7054	0.005353
159.	0.	2.55910	12.5791	12.4477	8.5966	359.687	28.9710	5.6954	0.005413
160.	0.	2.55772	12.5790	12.4477	8.5915	359.691	28.9419	5.6855	0.005474
161.	0.	2.55641	12.5789	12.4477	8.5866	359.696	28.9208	5.6755	0.005537
162.	0.	2.55460	12.5788	12.4477	8.5803	359.701	28.9031	5.6757	0.005661
163.	0.	2.55316	12.5787	12.4477	8.5756	359.706	28.8764	5.6657	0.005725
164.	0.	2.55165	12.5786	12.4477	8.5709	359.712	28.8475	5.6558	0.005792
165.	0.	2.55010	12.5786	12.4477	8.5663	359.718	28.8178	5.6459	0.005859
166.	0.	2.54862	12.5785	12.4477	8.5618	359.724	28.7966	5.6359	0.005929
167.	0.	2.54675	12.5784	12.4477	8.5556	359.727	28.7789	5.6361	0.006057
168.	0.	2.54530	12.5783	12.4477	8.5506	359.730	28.7528	5.6261	0.006125
169.	0.	2.54378	12.5782	12.4477	8.5457	359.733	28.7244	5.6162	0.006194
170.	0.	2.54224	12.5782	12.4477	8.5408	359.736	28.6952	5.6063	0.006264
171.	0.	2.54077	12.5781	12.4477	8.5360	359.739	28.6739	5.5963	0.006336
172.	0.	2.53882	12.5780	12.4477	8.5297	359.742	28.6562	5.5965	0.006469
173.	0.	2.53727	12.5779	12.4477	8.5249	359.745	28.6304	5.5865	0.006542
174.	0.	2.53568	12.5779	12.4477	8.5201	359.747	28.6020	5.5766	0.006615
175.	0.	2.53417	12.5778	12.4477	8.5153	359.750	28.5808	5.5667	0.006689
176.	0.	2.53218	12.5777	12.4477	8.5090	359.752	28.5630	5.5668	0.006826
177.	0.	2.53062	12.5777	12.4477	8.5040	359.754	28.5366	5.5569	0.006900
178.	0.	2.52901	12.5776	12.4477	8.4991	359.756	28.5077	5.5470	0.006975
179.	0.	2.52735	12.5775	12.4477	8.4942	359.758	28.4779	5.5371	0.007052
180.	0.	2.52578	12.5775	12.4477	8.4893	359.760	28.4560	5.5271	0.007130
181.	0.	2.52371	12.5774	12.4477	8.4831	359.762	28.4378	5.5273	0.007270
182.	0.	2.52208	12.5774	12.4477	8.4782	359.763	28.4114	5.5173	0.007349
183.	0.	2.52039	12.5773	12.4477	8.4733	359.764	28.3828	5.5074	0.007428
184.	0.	2.51865	12.5773	12.4477	8.4684	359.764	28.3532	5.4975	0.007509
185.	0.	2.51700	12.5772	12.4477	8.4637	359.765	28.3312	5.4876	0.007592
186.	0.	2.51485	12.5771	12.4477	8.4575	359.765	28.3127	5.4877	0.007737
187.	0.	2.51310	12.5771	12.4477	8.4528	359.766	28.2861	5.4778	0.007820
188.	0.	2.51129	12.5771	12.4477	8.4482	359.766	28.2572	5.4679	0.007905
189.	0.	2.50943	12.5770	12.4477	8.4436	359.766	28.2276	5.4580	0.007992
190.	0.	2.50753	12.5770	12.4477	8.4391	359.765	28.1976	5.4481	0.008080
191.	0.	2.50561	12.5769	12.4477	8.4346	359.765	28.1674	5.4382	0.008170
192.	0.	2.50354	12.5769	12.4477	8.4301	359.764	28.1293	5.4283	0.008262
193.	0.	2.50191	12.5769	12.4477	8.4271	359.764	28.0872	5.4083	0.008292

194.	0.	2.49983	12.5768	12.4477	8.4226	359.762	28.0529	5.3984	0.008389
195.	0.	2.49775	12.5768	12.4477	8.4181	359.761	28.0208	5.3885	0.008487
196.	0.	2.49553	12.5768	12.4477	8.4136	359.759	27.9816	5.3786	0.008587
197.	0.	2.49381	12.5768	12.4477	8.4105	359.759	27.9388	5.3586	0.008624
198.	0.	2.49162	12.5767	12.4477	8.4058	359.758	27.9038	5.3487	0.008728
199.	0.	2.48933	12.5767	12.4477	8.4011	359.758	27.8633	5.3388	0.008833
200.	0.	2.48750	12.5767	12.4477	8.3980	359.758	27.8198	5.3189	0.008877
201.	0.	2.48518	12.5767	12.4477	8.3933	359.758	27.7843	5.3090	0.008989
202.	0.	2.48276	12.5767	12.4477	8.3887	359.758	27.7434	5.2991	0.009102
203.	0.	2.48078	12.5767	12.4477	8.3856	359.759	27.6994	5.2792	0.009153
204.	0.	2.47831	12.5767	12.4477	8.3812	359.760	27.6634	5.2693	0.009273
205.	0.	2.47584	12.5766	12.4477	8.3767	359.761	27.6297	5.2594	0.009394
206.	0.	2.47324	12.5766	12.4477	8.3723	359.763	27.5892	5.2495	0.009518
207.	0.	2.47109	12.5766	12.4477	8.3695	359.765	27.5450	5.2296	0.009577
208.	0.	2.46845	12.5766	12.4477	8.3652	359.767	27.5087	5.2197	0.009707
209.	0.	2.46570	12.5766	12.4477	8.3609	359.769	27.4669	5.2098	0.009839
210.	0.	2.46341	12.5766	12.4477	8.3582	359.772	27.4219	5.1899	0.009906
211.	0.	2.46062	12.5766	12.4477	8.3540	359.775	27.3851	5.1800	0.010044
212.	0.	2.45774	12.5766	12.4477	8.3498	359.778	27.3429	5.1702	0.010183
213.	0.	2.45531	12.5766	12.4477	8.3472	359.781	27.2977	5.1503	0.010258
214.	0.	2.45239	12.5766	12.4477	8.3431	359.785	27.2607	5.1404	0.010404
215.	0.	2.44946	12.5766	12.4477	8.3390	359.788	27.2262	5.1306	0.010552
216.	0.	2.44644	12.5766	12.4477	8.3349	359.792	27.1846	5.1207	0.010701
217.	0.	2.44388	12.5767	12.4477	8.3323	359.796	27.1393	5.1008	0.010784
218.	0.	2.44073	12.5767	12.4477	8.3281	359.801	27.0943	5.0909	0.010938
219.	0.	2.43806	12.5767	12.4477	8.3256	359.805	27.0477	5.0710	0.011027
220.	0.	2.43489	12.5767	12.4477	8.3215	359.810	27.0101	5.0612	0.011189
221.	0.	2.43173	12.5767	12.4477	8.3174	359.815	26.9752	5.0514	0.011352
222.	0.	2.42856	12.5767	12.4477	8.3133	359.820	26.9415	5.0415	0.011517
223.	0.	2.42541	12.5768	12.4477	8.3091	359.825	26.9080	5.0317	0.011682
224.	0.	2.42229	12.5768	12.4477	8.3047	359.832	26.8743	5.0218	0.011846
225.	0.	2.41922	12.5768	12.4477	8.3000	359.839	26.8404	5.0120	0.012010
226.	0.	2.41624	12.5768	12.4477	8.2948	359.849	26.8064	5.0022	0.012171
227.	0.	2.41341	12.5769	12.4477	8.2890	359.863	26.7721	4.9923	0.012327
228.	0.	2.41064	12.5769	12.4477	8.2828	359.879	26.7385	4.9825	0.012483
229.	0.	2.40783	12.5769	12.4477	8.2767	359.895	26.7051	4.9726	0.012641
230.	0.	2.40500	12.5769	12.4477	8.2705	359.912	26.6719	4.9628	0.012801
231.	0.	2.40217	12.5770	12.4477	8.2643	359.930	26.6393	4.9530	0.012961
232.	0.	2.39938	12.5770	12.4477	8.2578	359.950	26.6079	4.9431	0.013121
233.	0.	2.39657	12.5770	12.4477	8.2513	359.971	26.5767	4.9333	0.013283
234.	0.	2.39375	12.5771	12.4477	8.2448	359.993	26.5457	4.9234	0.013446
235.	0.	2.39091	12.5771	12.4477	8.2383	0.015	26.5148	4.9136	0.013610
236.	0.	2.38805	12.5772	12.4477	8.2318	0.037	26.4842	4.9038	0.013775
237.	0.	2.38518	12.5772	12.4477	8.2253	0.059	26.4537	4.8939	0.013941
238.	0.	2.38229	12.5773	12.4477	8.2187	0.083	26.4234	4.8841	0.014108
239.	0.	2.37938	12.5773	12.4477	8.2122	0.106	26.3932	4.8743	0.014277
240.	0.	2.37646	12.5774	12.4477	8.2056	0.130	26.3631	4.8644	0.014447
241.	0.	2.37351	12.5774	12.4477	8.1991	0.153	26.3329	4.8546	0.014618
242.	0.	2.37055	12.5775	12.4477	8.1926	0.177	26.3028	4.8448	0.014790
243.	0.	2.36757	12.5775	12.4477	8.1861	0.202	26.2726	4.8350	0.014963
244.	0.	2.36456	12.5776	12.4477	8.1796	0.226	26.2423	4.8251	0.015137
245.	0.	2.36154	12.5776	12.4477	8.1731	0.250	26.2121	4.8153	0.015313
246.	0.	2.35852	12.5777	12.4477	8.1666	0.276	26.1823	4.8055	0.015489
247.	0.	2.35547	12.5778	12.4477	8.1600	0.301	26.1524	4.7957	0.015667
248.	0.	2.35240	12.5778	12.4477	8.1535	0.326	26.1223	4.7858	0.015846
249.	0.	2.34923	12.5779	12.4477	8.1470	0.351	26.0842	4.7760	0.016025
250.	0.	2.34653	12.5780	12.4477	8.1422	0.377	26.0421	4.7561	0.016134
251.	0.	2.34338	12.5780	12.4477	8.1358	0.402	26.0158	4.7463	0.016321
252.	0.	2.33974	12.5781	12.4477	8.1277	0.428	25.9959	4.7466	0.016581
253.	0.	2.33668	12.5782	12.4477	8.1214	0.454	25.9767	4.7368	0.016767
254.	0.	2.33318	12.5782	12.4477	8.1134	0.479	25.9675	4.7370	0.017026
255.	0.	2.32968	12.5783	12.4477	8.1054	0.505	25.9534	4.7373	0.017280
256.	0.	2.32673	12.5784	12.4477	8.0993	0.530	25.9367	4.7275	0.017459
257.	0.	2.32332	12.5784	12.4477	8.0914	0.556	25.9288	4.7277	0.017710
258.	0.	2.32000	12.5785	12.4477	8.0836	0.582	25.9237	4.7280	0.017958
259.	0.	2.31665	12.5785	12.4477	8.0758	0.608	25.9116	4.7282	0.018202
260.	0.	2.31383	12.5786	12.4477	8.0697	0.633	25.8962	4.7184	0.018370

261.	0.	2.31057	12.5787	12.4477	8.0620	0.659	25.8893	4.7186	0.018611
262.	0.	2.30738	12.5787	12.4477	8.0544	0.685	25.8851	4.7188	0.018849
263.	0.	2.30416	12.5788	12.4477	8.0467	0.711	25.8739	4.7191	0.019082
264.	0.	2.30147	12.5789	12.4477	8.0408	0.736	25.8592	4.7092	0.019241
265.	0.	2.29834	12.5789	12.4477	8.0332	0.762	25.8529	4.7095	0.019472
266.	0.	2.29531	12.5790	12.4477	8.0256	0.787	25.8493	4.7097	0.019699
267.	0.	2.29226	12.5790	12.4477	8.0178	0.812	25.8387	4.7099	0.019922
268.	0.	2.28973	12.5791	12.4477	8.0119	0.837	25.8246	4.7001	0.020071
269.	0.	2.28676	12.5792	12.4477	8.0042	0.861	25.8190	4.7003	0.020292
270.	0.	2.28386	12.5792	12.4477	7.9965	0.886	25.8160	4.7005	0.020510
271.	0.	2.28093	12.5793	12.4477	7.9889	0.911	25.8060	4.7007	0.020724
272.	0.	2.27851	12.5794	12.4477	7.9831	0.935	25.7924	4.6909	0.020865
273.	0.	2.27565	12.5794	12.4477	7.9755	0.959	25.7872	4.6911	0.021077
274.	0.	2.27285	12.5795	12.4477	7.9680	0.983	25.7846	4.6913	0.021287
275.	0.	2.27006	12.5795	12.4477	7.9603	1.008	25.7750	4.6915	0.021492
276.	0.	2.26778	12.5796	12.4477	7.9544	1.032	25.7620	4.6816	0.021625
277.	0.	2.26506	12.5797	12.4477	7.9468	1.057	25.7573	4.6818	0.021828
278.	0.	2.26241	12.5797	12.4477	7.9392	1.082	25.7550	4.6820	0.022029
279.	0.	2.25942	12.5798	12.4477	7.9313	1.107	25.7142	4.6822	0.022224
280.	0.	2.25840	12.5799	12.4477	7.9323	1.127	25.6146	4.6321	0.022067
281.	0.	2.25697	12.5801	12.4477	7.9332	1.147	25.4949	4.5819	0.021919
282.	0.	2.25520	12.5803	12.4477	7.9341	1.167	25.3665	4.5318	0.021784
283.	0.	2.25326	12.5804	12.4477	7.9347	1.188	25.2246	4.4816	0.021648
284.	0.	2.25168	12.5806	12.4477	7.9370	1.210	25.0767	4.4214	0.021441
285.	0.	2.24918	12.5808	12.4477	7.9374	1.232	24.9369	4.3713	0.021339
286.	0.	2.24636	12.5810	12.4477	7.9378	1.256	24.7970	4.3213	0.021258
287.	0.	2.24318	12.5812	12.4477	7.9381	1.280	24.6552	4.2712	0.021200
288.	0.	2.23956	12.5814	12.4477	7.9382	1.304	24.5045	4.2212	0.021165
289.	0.	2.23615	12.5817	12.4477	7.9403	1.328	24.3476	4.1611	0.021066
290.	0.	2.23176	12.5819	12.4477	7.9402	1.355	24.1962	4.1111	0.021086
291.	0.	2.22712	12.5821	12.4477	7.9399	1.384	24.0526	4.0611	0.021132
292.	0.	2.22142	12.5823	12.4477	7.9375	1.414	23.9122	4.0213	0.021307
293.	0.	2.21611	12.5825	12.4477	7.9366	1.446	23.7599	3.9714	0.021399
294.	0.	2.21047	12.5827	12.4477	7.9353	1.480	23.6021	3.9215	0.021516
295.	0.	2.20435	12.5829	12.4477	7.9337	1.514	23.4412	3.8717	0.021670
296.	0.	2.19774	12.5831	12.4477	7.9319	1.549	23.2777	3.8219	0.021864
297.	0.	2.19061	12.5833	12.4477	7.9300	1.585	23.1119	3.7721	0.022101
298.	0.	2.18295	12.5835	12.4477	7.9279	1.622	22.9441	3.7224	0.022385
299.	0.	2.17475	12.5837	12.4477	7.9257	1.659	22.7744	3.6727	0.022714
300.	0.	2.16598	12.5839	12.4477	7.9233	1.698	22.6030	3.6231	0.023095
301.	0.	2.15667	12.5840	12.4477	7.9207	1.737	22.4295	3.5735	0.023528
302.	0.	2.14682	12.5842	12.4477	7.9176	1.777	22.2543	3.5240	0.024012
303.	0.	2.13623	12.5843	12.4477	7.9143	1.815	22.0516	3.4745	0.024547
304.	0.	2.12725	12.5845	12.4477	7.9168	1.856	21.8123	3.3948	0.024750
305.	0.	2.11641	12.5846	12.4477	7.9163	1.897	21.5694	3.3252	0.025187
306.	0.	2.10449	12.5847	12.4477	7.9155	1.938	21.3220	3.2557	0.025730
307.	0.	2.09148	12.5848	12.4477	7.9142	1.978	21.0710	3.1864	0.026387
308.	0.	2.07732	12.5848	12.4477	7.9126	2.017	20.8202	3.1172	0.027169
309.	0.	2.06200	12.5848	12.4477	7.9106	2.056	20.5711	3.0481	0.028084
310.	0.	2.04546	12.5848	12.4477	7.9079	2.096	20.3108	2.9791	0.029133
311.	0.	2.02924	12.5848	12.4477	7.9072	2.147	20.1482	2.9002	0.030190
312.	0.	2.00070	12.5845	12.4477	7.8767	2.201	20.0453	2.9534	0.033399
313.	0.	1.98512	12.5845	12.4477	7.8802	2.231	19.8128	2.8643	0.034259
314.	0.	1.96776	12.5844	12.4477	7.8800	2.269	19.5667	2.7854	0.035381
315.	0.	1.94713	12.5842	12.4477	7.8751	2.308	19.3452	2.7270	0.037032
316.	0.	1.92466	12.5840	12.4477	7.8677	2.348	19.1324	2.6790	0.038977
317.	0.	1.90265	12.5838	12.4477	7.8623	2.389	18.9089	2.6208	0.040819
318.	0.	1.87964	12.5836	12.4477	7.8566	2.425	18.6424	2.5628	0.042768
319.	0.	1.85963	12.5834	12.4477	7.8591	2.462	18.3181	2.4641	0.044098
320.	0.	1.83613	12.5831	12.4477	7.8587	2.499	17.9918	2.3760	0.045958
321.	0.	1.80929	12.5828	12.4477	7.8553	2.536	17.6620	2.2984	0.048354
322.	0.	1.78201	12.5825	12.4477	7.8529	2.584	17.3755	2.2108	0.050838
323.	0.	1.74626	12.5821	12.4477	7.8371	2.638	17.1918	2.1850	0.054961
324.	0.	1.71030	12.5818	12.4477	7.8208	2.689	17.0247	2.1692	0.059154
325.	0.	1.67897	12.5815	12.4477	7.8135	2.736	16.8375	2.1225	0.062519
326.	0.	1.64633	12.5813	12.4477	7.8052	2.770	16.5834	2.0861	0.066085
327.	0.	1.62127	12.5811	12.4477	7.8136	2.788	16.1663	1.9781	0.068142

328.	0.	1.59774	12.5810	12.4477	7.8268	2.808	15.6494	1.8298	0.069770
329.	0.	1.56865	12.5808	12.4477	7.8342	2.868	15.2144	1.6824	0.072439
330.	0.	1.51912	12.5806	12.4477	7.8134	2.952	14.9922	1.6494	0.079404
331.	0.	1.46614	12.5803	12.4477	7.7880	3.030	14.8355	1.6571	0.087058
332.	0.	1.42306	12.5803	12.4477	7.7812	3.063	14.5379	1.6126	0.092645
333.	0.	1.39118	12.5804	12.4477	7.7966	3.066	14.0653	1.4760	0.095982
334.	0.	1.35040	12.5807	12.4477	7.8251	3.037	13.5738	1.3410	0.100995
335.	0.	1.29502	12.5812	12.4477	7.8440	2.980	13.1522	1.2492	0.109238
336.	0.	1.23265	12.5817	12.4477	7.8527	2.929	12.8057	1.1892	0.119237
337.	0.	1.17227	12.5822	12.4477	7.8551	2.924	12.5293	1.1391	0.129084
338.	0.	1.11844	12.5826	12.4477	7.8041	3.000	12.2194	1.1080	0.138008
339.	0.	1.06867	12.5831	12.4477	7.8042	2.997	11.8611	1.0359	0.145852
340.	0.	1.02040	12.5837	12.4477	7.8179	2.952	11.6057	0.9537	0.153693
341.	0.	0.95884	12.5840	12.4477	7.8010	3.005	11.6003	0.9645	0.164531
342.	0.	0.90819	12.5843	12.4477	7.7310	3.146	11.7134	1.0030	0.173024
343.	0.	0.86566	12.5844	12.4477	7.7011	3.274	11.9187	1.0395	0.179510
344.	0.	0.83139	12.5845	12.4477	7.6869	3.397	12.1772	1.0743	0.184345
345.	0.	0.80315	12.5845	12.4477	7.6748	3.533	12.5216	1.1181	0.188112
346.	0.	0.77914	12.5845	12.4477	7.6573	3.675	12.9163	1.1812	0.191166
347.	0.	0.76155	12.5845	12.4477	7.6429	3.784	13.2036	1.2332	0.193244
348.	0.	0.75113	12.5845	12.4477	7.6412	3.851	13.3556	1.2443	0.194347
349.	0.	0.74200	12.5845	12.4477	7.6391	3.898	13.4383	1.2553	0.195284
350.	0.	0.73477	12.5845	12.4477	7.6399	3.937	13.4973	1.2560	0.195989
351.	0.	0.72714	12.5845	12.4477	7.6371	3.973	13.5498	1.2667	0.196748
352.	0.	0.72109	12.5845	12.4477	7.6373	4.000	13.5776	1.2673	0.197317
353.	0.	0.71554	12.5845	12.4477	7.6374	4.050	13.6910	1.2678	0.197849
354.	0.	0.70731	12.5845	12.4477	7.6243	4.190	14.1465	1.3088	0.198777
355.	0.	0.69343	12.5844	12.4477	7.5807	4.417	14.9263	1.4404	0.200367
356.	0.	0.68279	12.5842	12.4477	7.5360	4.651	15.7123	1.5715	0.201544
357.	0.	0.67455	12.5841	12.4477	7.4939	4.820	16.2183	1.6924	0.202395
358.	0.	0.67188	12.5840	12.4477	7.4772	4.871	16.3106	1.7327	0.202655
359.	0.	0.67367	12.5841	12.4477	7.4830	4.867	16.2787	1.7025	0.202495
360.	0.	0.67410	12.5841	12.4477	7.4823	4.856	16.2224	1.6924	0.202448
361.	0.	0.67451	12.5840	12.4477	7.4816	4.841	16.1553	1.6824	0.202402
362.	0.	0.67469	12.5840	12.4477	7.4808	4.797	15.9754	1.6724	0.202356
363.	0.	0.67786	12.5841	12.4477	7.4963	4.677	15.5496	1.6120	0.201988
364.	0.	0.68534	12.5842	12.4477	7.5320	4.510	15.0026	1.4911	0.201147
365.	0.	0.69180	12.5843	12.4477	7.5651	4.280	14.2528	1.3803	0.200287
366.	0.	0.70595	12.5845	12.4477	7.6376	3.925	13.1219	1.1683	0.198254
367.	0.	0.72357	12.5851	12.4477	7.7524	3.470	11.5721	0.8748	0.194816
368.	0.	0.70241	12.5912	12.4477	8.2611	2.910	11.5156	0.5466	0.196577
369.	0.	0.42286	13.0565	12.4477	10.4525	1.821	15.1016	0.2733	0.263328

PART 3: WHAFIS

WHAFIS input: YK-106.dat
WHAFIS output: YK-106.out

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-106
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500
3000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-106.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-106.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-11.947	1.000	1.000	9.361	13.142	12.900	56.140	0.006	0.000
OF	1.000	-11.941	0.000	9.361	0.000	0.000	0.000	0.000	0.006	0.000
OF	2.000	-11.935	0.000	9.361	0.000	0.000	0.000	0.000	0.006	0.000
OF	3.300	-11.927	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	105.000	-11.521	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	111.500	-11.498	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	114.800	-11.487	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
OF	118.100	-11.476	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	121.400	-11.464	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	124.700	-11.453	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
OF	128.000	-11.442	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	131.200	-11.430	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	134.500	-11.419	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	137.800	-11.407	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	141.100	-11.396	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
OF	144.400	-11.385	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	147.600	-11.373	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	150.900	-11.362	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
OF	154.200	-11.351	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	157.500	-11.339	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	160.800	-11.328	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	164.000	-11.316	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	167.300	-11.305	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
OF	170.600	-11.294	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	173.900	-11.282	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	177.200	-11.271	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
OF	180.400	-11.260	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	183.700	-11.248	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	187.000	-11.237	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	190.300	-11.224	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	193.600	-11.211	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
OF	196.800	-11.197	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	200.100	-11.184	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	203.400	-11.171	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	206.700	-11.158	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	210.000	-11.145	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	213.300	-11.131	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	216.500	-11.118	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	219.800	-11.105	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	223.100	-11.092	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	226.400	-11.079	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	229.700	-11.065	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	232.900	-11.052	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
OF	236.200	-11.039	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	239.500	-11.026	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	242.800	-11.013	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	246.100	-10.999	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	249.300	-10.986	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	252.600	-10.973	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	255.900	-10.960	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	259.200	-10.947	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	262.500	-10.933	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	265.700	-10.920	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
OF	269.000	-10.907	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
OF	272.300	-10.894	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
OF	275.600	-10.878	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
OF	278.900	-10.850	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	282.200	-10.823	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
OF	285.400	-10.795	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
OF	288.700	-10.767	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	292.000	-10.740	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	295.300	-10.712	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	298.600	-10.685	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
OF	301.800	-10.657	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
OF	305.100	-10.629	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	308.400	-10.602	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	311.700	-10.574	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
OF	315.000	-10.547	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
OF	318.200	-10.519	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
OF	321.500	-10.491	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
OF	324.800	-10.464	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
OF	328.100	-10.436	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
OF	331.400	-10.409	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
OF	334.600	-10.381	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
OF	337.900	-10.353	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
OF	341.200	-10.326	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
OF	344.500	-10.298	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
OF	347.800	-10.271	0.000	9.367	0.000	0.000	0.000	0.000	0.009	0.000
OF	351.000	-10.243	0.000	9.367	0.000	0.000	0.000	0.000	0.009	0.000
OF	354.300	-10.215	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
OF	357.600	-10.188	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
OF	360.900	-10.160	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
OF	364.200	-10.133	0.000	9.367	0.000	0.000	0.000	0.000	0.007	0.000
OF	367.500	-10.117	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
OF	370.700	-10.100	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
OF	374.000	-10.084	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
OF	377.300	-10.068	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
OF	380.600	-10.052	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
OF	383.900	-10.035	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	387.100	-10.019	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	390.400	-10.003	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	393.700	-9.987	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	397.000	-9.970	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000

OF	400.300	-9.954	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
OF	403.500	-9.938	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
OF	406.800	-9.922	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
OF	410.100	-9.905	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
OF	413.400	-9.889	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
OF	416.700	-9.873	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
OF	419.900	-9.857	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
OF	423.200	-9.840	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
OF	426.500	-9.824	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
OF	429.800	-9.808	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
OF	433.100	-9.791	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
OF	436.400	-9.775	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
OF	439.600	-9.759	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
OF	442.900	-9.743	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
OF	446.200	-9.726	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
OF	449.500	-9.710	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
OF	452.800	-9.694	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
OF	456.000	-9.677	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
OF	459.300	-9.661	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
OF	462.600	-9.645	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
OF	465.900	-9.629	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
OF	469.200	-9.612	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
OF	472.400	-9.596	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
OF	475.700	-9.580	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
OF	479.000	-9.564	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
OF	482.300	-9.547	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
OF	485.600	-9.531	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
OF	488.800	-9.513	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
OF	492.100	-9.495	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
OF	495.400	-9.478	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
OF	498.700	-9.460	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
OF	502.000	-9.443	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
OF	505.200	-9.425	0.000	9.378	0.000	0.000	0.000	0.000	0.006	0.000
OF	508.500	-9.405	0.000	9.378	0.000	0.000	0.000	0.000	0.007	0.000
OF	511.800	-9.380	0.000	9.378	0.000	0.000	0.000	0.000	0.008	0.000
OF	515.100	-9.354	0.000	9.378	0.000	0.000	0.000	0.000	0.008	0.000
OF	518.400	-9.329	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
OF	521.700	-9.303	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
OF	524.900	-9.278	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
OF	528.200	-9.252	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
OF	531.500	-9.226	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
OF	534.800	-9.200	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
OF	538.100	-9.174	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
OF	541.300	-9.148	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
OF	544.600	-9.123	0.000	9.381	0.000	0.000	0.000	0.000	0.008	0.000
OF	547.900	-9.097	0.000	9.381	0.000	0.000	0.000	0.000	0.008	0.000
OF	551.200	-9.071	0.000	9.381	0.000	0.000	0.000	0.000	0.008	0.000
OF	554.500	-9.045	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
OF	557.700	-9.019	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
OF	561.000	-8.993	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
OF	564.300	-8.968	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
OF	567.600	-8.942	0.000	9.383	0.000	0.000	0.000	0.000	0.008	0.000
OF	570.900	-8.916	0.000	9.383	0.000	0.000	0.000	0.000	0.008	0.000
OF	574.100	-8.890	0.000	9.383	0.000	0.000	0.000	0.000	0.008	0.000
OF	577.400	-8.864	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
OF	580.700	-8.838	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
OF	584.000	-8.813	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
OF	587.300	-8.787	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
OF	590.500	-8.761	0.000	9.385	0.000	0.000	0.000	0.000	0.008	0.000
OF	593.800	-8.735	0.000	9.385	0.000	0.000	0.000	0.000	0.008	0.000
OF	597.100	-8.709	0.000	9.385	0.000	0.000	0.000	0.000	0.008	0.000
OF	600.400	-8.683	0.000	9.386	0.000	0.000	0.000	0.000	0.008	0.000
OF	603.700	-8.658	0.000	9.386	0.000	0.000	0.000	0.000	0.008	0.000
OF	607.000	-8.632	0.000	9.386	0.000	0.000	0.000	0.000	0.008	0.000
OF	610.200	-8.606	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
OF	613.500	-8.580	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
OF	616.800	-8.554	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
OF	620.100	-8.528	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
OF	623.400	-8.499	0.000	9.388	0.000	0.000	0.000	0.000	0.011	0.000
OF	626.600	-8.456	0.000	9.388	0.000	0.000	0.000	0.000	0.013	0.000
OF	629.900	-8.414	0.000	9.388	0.000	0.000	0.000	0.000	0.013	0.000
OF	633.200	-8.371	0.000	9.388	0.000	0.000	0.000	0.000	0.013	0.000
OF	636.500	-8.328	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
OF	639.800	-8.286	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
OF	643.000	-8.243	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
OF	646.300	-8.201	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
OF	649.600	-8.158	0.000	9.390	0.000	0.000	0.000	0.000	0.013	0.000
OF	652.900	-8.115	0.000	9.390	0.000	0.000	0.000	0.000	0.013	0.000
OF	656.200	-8.073	0.000	9.390	0.000	0.000	0.000	0.000	0.013	0.000
OF	659.400	-8.030	0.000	9.391	0.000	0.000	0.000	0.000	0.013	0.000
OF	662.700	-7.987	0.000	9.391	0.000	0.000	0.000	0.000	0.013	0.000
OF	666.000	-7.945	0.000	9.391	0.000	0.000	0.000	0.000	0.013	0.000
OF	669.300	-7.902	0.000	9.392	0.000	0.000	0.000	0.000	0.013	0.000
OF	672.600	-7.859	0.000	9.392	0.000	0.000	0.000	0.000	0.013	0.000
OF	675.900	-7.817	0.000	9.392	0.000	0.000	0.000	0.000	0.013	0.000
OF	679.100	-7.774	0.000	9.393	0.000	0.000	0.000	0.000	0.013	0.000
OF	682.400	-7.732	0.000	9.393	0.000	0.000	0.000	0.000	0.013	0.000
OF	685.700	-7.689	0.000	9.394	0.000	0.000	0.000	0.000	0.013	0.000
OF	689.000	-7.646	0.000	9.394	0.000	0.000	0.000	0.000	0.013	0.000
OF	692.300	-7.604	0.000	9.394	0.000	0.000	0.000	0.000	0.013	0.000
OF	695.500	-7.561	0.000	9.395	0.000	0.000	0.000	0.000	0.013	0.000
OF	698.800	-7.518	0.000	9.395	0.000	0.000	0.000	0.000	0.013	0.000
OF	702.100	-7.476	0.000	9.395	0.000	0.000	0.000	0.000	0.013	0.000
OF	705.400	-7.433	0.000	9.396	0.000	0.000	0.000	0.000	0.013	0.000
OF	708.700	-7.391	0.000	9.396	0.000	0.000	0.000	0.000	0.013	0.000
OF	711.900	-7.346	0.000	9.397	0.000	0.000	0.000	0.000	0.014	0.000
OF	715.200	-7.300	0.000	9.397	0.000	0.000	0.000	0.000	0.014	0.000
OF	718.500	-7.253	0.000	9.397	0.000	0.000	0.000	0.000	0.014	0.000
OF	721.800	-7.206	0.000	9.398	0.000	0.000	0.000	0.000	0.014	0.000
OF	725.100	-7.160	0.000	9.399	0.000	0.000	0.000	0.000	0.012	0.000
OF	728.300	-7.127	0.000	9.399	0.000	0.000	0.000	0.000	0.010	0.000
OF	731.600	-7.095	0.000	9.400	0.000	0.000	0.000	0.000	0.010	0.000

OF	734.900	-7.063	0.000	9.400	0.000	0.000	0.000	0.000	0.010	0.000
OF	738.200	-7.030	0.000	9.401	0.000	0.000	0.000	0.000	0.010	0.000
OF	741.500	-6.998	0.000	9.401	0.000	0.000	0.000	0.000	0.010	0.000
OF	744.700	-6.966	0.000	9.402	0.000	0.000	0.000	0.000	0.010	0.000
OF	748.000	-6.934	0.000	9.402	0.000	0.000	0.000	0.000	0.010	0.000
OF	751.300	-6.902	0.000	9.403	0.000	0.000	0.000	0.000	0.010	0.000
OF	754.600	-6.870	0.000	9.403	0.000	0.000	0.000	0.000	0.010	0.000
OF	757.900	-6.837	0.000	9.404	0.000	0.000	0.000	0.000	0.010	0.000
OF	761.200	-6.805	0.000	9.404	0.000	0.000	0.000	0.000	0.010	0.000
OF	764.400	-6.773	0.000	9.405	0.000	0.000	0.000	0.000	0.010	0.000
OF	767.700	-6.741	0.000	9.405	0.000	0.000	0.000	0.000	0.010	0.000
OF	771.000	-6.709	0.000	9.406	0.000	0.000	0.000	0.000	0.010	0.000
OF	774.300	-6.677	0.000	9.406	0.000	0.000	0.000	0.000	0.010	0.000
OF	777.600	-6.644	0.000	9.407	0.000	0.000	0.000	0.000	0.010	0.000
OF	780.800	-6.612	0.000	9.408	0.000	0.000	0.000	0.000	0.010	0.000
OF	784.100	-6.580	0.000	9.408	0.000	0.000	0.000	0.000	0.010	0.000
OF	787.400	-6.548	0.000	9.409	0.000	0.000	0.000	0.000	0.010	0.000
OF	790.700	-6.516	0.000	9.409	0.000	0.000	0.000	0.000	0.010	0.000
OF	794.000	-6.484	0.000	9.410	0.000	0.000	0.000	0.000	0.010	0.000
OF	797.200	-6.449	0.000	9.410	0.000	0.000	0.000	0.000	0.011	0.000
OF	800.500	-6.414	0.000	9.411	0.000	0.000	0.000	0.000	0.011	0.000
OF	803.800	-6.379	0.000	9.411	0.000	0.000	0.000	0.000	0.011	0.000
OF	807.100	-6.344	0.000	9.412	0.000	0.000	0.000	0.000	0.011	0.000
OF	810.400	-6.310	0.000	9.413	0.000	0.000	0.000	0.000	0.011	0.000
OF	813.600	-6.274	0.000	9.413	0.000	0.000	0.000	0.000	0.011	0.000
OF	816.900	-6.240	0.000	9.414	0.000	0.000	0.000	0.000	0.011	0.000
OF	820.200	-6.205	0.000	9.414	0.000	0.000	0.000	0.000	0.011	0.000
OF	823.500	-6.170	0.000	9.415	0.000	0.000	0.000	0.000	0.009	0.000
OF	826.800	-6.145	0.000	9.416	0.000	0.000	0.000	0.000	0.006	0.000
OF	830.100	-6.131	0.000	9.416	0.000	0.000	0.000	0.000	0.004	0.000
OF	833.300	-6.120	0.000	9.417	0.000	0.000	0.000	0.000	0.003	0.000
OF	836.600	-6.111	0.000	9.418	0.000	0.000	0.000	0.000	0.002	0.000
OF	839.900	-6.103	0.000	9.418	0.000	0.000	0.000	0.000	0.002	0.000
OF	843.200	-6.095	0.000	9.419	0.000	0.000	0.000	0.000	0.002	0.000
OF	846.500	-6.087	0.000	9.420	0.000	0.000	0.000	0.000	0.002	0.000
OF	849.700	-6.079	0.000	9.421	0.000	0.000	0.000	0.000	0.002	0.000
OF	853.000	-6.071	0.000	9.422	0.000	0.000	0.000	0.000	0.002	0.000
OF	856.300	-6.063	0.000	9.422	0.000	0.000	0.000	0.000	0.002	0.000
OF	859.600	-6.055	0.000	9.423	0.000	0.000	0.000	0.000	0.002	0.000
OF	862.900	-6.047	0.000	9.424	0.000	0.000	0.000	0.000	0.002	0.000
OF	866.100	-6.039	0.000	9.424	0.000	0.000	0.000	0.000	0.002	0.000
OF	869.400	-6.031	0.000	9.425	0.000	0.000	0.000	0.000	0.002	0.000
OF	872.700	-6.023	0.000	9.426	0.000	0.000	0.000	0.000	0.002	0.000
OF	876.000	-6.015	0.000	9.427	0.000	0.000	0.000	0.000	0.002	0.000
OF	879.300	-6.007	0.000	9.427	0.000	0.000	0.000	0.000	0.002	0.000
OF	882.500	-5.999	0.000	9.428	0.000	0.000	0.000	0.000	0.002	0.000
OF	885.800	-5.991	0.000	9.429	0.000	0.000	0.000	0.000	0.002	0.000
OF	889.100	-5.983	0.000	9.429	0.000	0.000	0.000	0.000	0.002	0.000
OF	892.400	-5.975	0.000	9.430	0.000	0.000	0.000	0.000	0.002	0.000
OF	895.700	-5.966	0.000	9.430	0.000	0.000	0.000	0.000	0.002	0.000
OF	898.900	-5.958	0.000	9.431	0.000	0.000	0.000	0.000	0.002	0.000
OF	902.200	-5.950	0.000	9.432	0.000	0.000	0.000	0.000	0.002	0.000
OF	905.500	-5.942	0.000	9.432	0.000	0.000	0.000	0.000	0.002	0.000
OF	908.800	-5.934	0.000	9.433	0.000	0.000	0.000	0.000	0.002	0.000
OF	912.100	-5.926	0.000	9.434	0.000	0.000	0.000	0.000	0.003	0.000
OF	915.400	-5.915	0.000	9.434	0.000	0.000	0.000	0.000	0.024	0.000
OF	918.600	-5.770	0.000	9.434	0.000	0.000	0.000	0.000	0.049	0.000
OF	921.900	-5.599	0.000	9.433	0.000	0.000	0.000	0.000	0.052	0.000
OF	925.200	-5.428	0.000	9.433	0.000	0.000	0.000	0.000	0.052	0.000
OF	928.500	-5.257	0.000	9.432	0.000	0.000	0.000	0.000	0.052	0.000
OF	931.800	-5.086	0.000	9.432	0.000	0.000	0.000	0.000	0.053	0.000
OF	935.000	-4.916	0.000	9.431	0.000	0.000	0.000	0.000	0.053	0.000
OF	938.300	-4.745	0.000	9.431	0.000	0.000	0.000	0.000	0.052	0.000
OF	941.600	-4.574	0.000	9.431	0.000	0.000	0.000	0.000	0.052	0.000
OF	944.900	-4.403	0.000	9.431	0.000	0.000	0.000	0.000	0.052	0.000
OF	948.200	-4.233	0.000	9.430	0.000	0.000	0.000	0.000	0.051	0.000
OF	951.400	-4.071	0.000	9.430	0.000	0.000	0.000	0.000	0.050	0.000
OF	954.700	-3.909	0.000	9.431	0.000	0.000	0.000	0.000	0.049	0.000
OF	958.000	-3.747	0.000	9.431	0.000	0.000	0.000	0.000	0.049	0.000
OF	961.300	-3.586	0.000	9.431	0.000	0.000	0.000	0.000	0.049	0.000
OF	964.600	-3.424	0.000	9.432	0.000	0.000	0.000	0.000	0.050	0.000
OF	967.800	-3.262	0.000	9.432	0.000	0.000	0.000	0.000	0.050	0.000
OF	971.100	-3.101	0.000	9.433	0.000	0.000	0.000	0.000	0.049	0.000
OF	974.400	-2.939	0.000	9.434	0.000	0.000	0.000	0.000	0.049	0.000
OF	977.700	-2.777	0.000	9.435	0.000	0.000	0.000	0.000	0.049	0.000
OF	981.000	-2.615	0.000	9.436	0.000	0.000	0.000	0.000	0.050	0.000
OF	984.200	-2.454	0.000	9.437	0.000	0.000	0.000	0.000	0.050	0.000
OF	987.500	-2.292	0.000	9.438	0.000	0.000	0.000	0.000	0.049	0.000
OF	990.800	-2.130	0.000	9.440	0.000	0.000	0.000	0.000	0.052	0.000
OF	994.100	-1.946	0.000	9.442	0.000	0.000	0.000	0.000	0.063	0.000
OF	997.400	-1.712	0.000	9.442	0.000	0.000	0.000	0.000	0.071	0.000
OF	1000.700	-1.477	0.000	9.444	0.000	0.000	0.000	0.000	0.072	0.000
OF	1003.900	-1.242	0.000	9.446	0.000	0.000	0.000	0.000	0.072	0.000
OF	1007.200	-1.007	0.000	9.448	0.000	0.000	0.000	0.000	0.071	0.000
OF	1010.500	-0.772	0.000	9.450	0.000	0.000	0.000	0.000	0.071	0.000
OF	1013.800	-0.537	0.000	9.453	0.000	0.000	0.000	0.000	0.071	0.000
OF	1017.100	-0.302	0.000	9.457	0.000	0.000	0.000	0.000	0.072	0.000
OF	1020.300	-0.067	0.000	9.460	0.000	0.000	0.000	0.000	0.014	0.000
OF	1023.600	-0.208	0.000	9.471	0.000	0.000	0.000	0.000	0.020	0.000
IF	1026.900	0.065	0.000	9.474	0.000	0.000	0.000	0.000	0.083	0.000
IF	1030.200	0.338	0.000	9.477	0.000	0.000	0.000	0.000	0.070	0.000
IF	1033.500	0.529	0.000	9.483	0.000	0.000	0.000	0.000	0.057	0.000
IF	1036.700	0.711	0.000	9.489	0.000	0.000	0.000	0.000	0.055	0.000
IF	1040.000	0.884	0.000	9.495	0.000	0.000	0.000	0.000	0.060	0.000
IF	1043.300	1.107	0.000	9.502	0.000	0.000	0.000	0.000	0.079	0.000
IF	1046.600	1.406	0.000	9.506	0.000	0.000	0.000	0.000	0.091	0.000
IF	1049.900	1.704	0.000	9.512	0.000	0.000	0.000	0.000	0.091	0.000
IF	1053.100	1.996	0.000	9.520	0.000	0.000	0.000	0.000	0.089	0.000
IF	1056.400	2.283	0.000	9.528	0.000	0.000	0.000	0.000	0.056	0.000
IF	1059.700	2.365	0.000	9.542	0.000	0.000	0.000	0.000	0.022	0.000
IF	1063.000	2.425	0.000	9.555	0.000	0.000	0.000	0.000	0.036	0.000
IF	1066.300	2.601	0.000	9.566	0.000	0.000	0.000	0.000	0.049	0.000

IF	1069.600	2.744	0.000	9.578	0.000	0.000	0.000	0.000	0.076	0.000
IF	1072.800	3.093	0.000	9.585	0.000	0.000	0.000	0.000	0.131	0.000
IF	1076.100	3.593	0.000	9.590	0.000	0.000	0.000	0.000	0.149	0.000
IF	1079.400	4.074	0.000	9.599	0.000	0.000	0.000	0.000	0.096	0.000
IF	1082.700	4.226	0.000	9.622	0.000	0.000	0.000	0.000	0.021	0.000
IF	1086.000	4.212	0.000	9.647	0.000	0.000	0.000	0.000	0.023	0.000
IF	1089.200	4.373	0.000	9.665	0.000	0.000	0.000	0.000	0.094	0.000
IF	1092.500	4.825	0.000	9.676	0.000	0.000	0.000	0.000	0.141	0.000
IF	1095.800	5.305	0.000	9.693	0.000	0.000	0.000	0.000	0.122	0.000
IF	1099.100	5.631	0.000	9.720	0.000	0.000	0.000	0.000	0.085	0.000
IF	1102.400	5.866	0.000	9.752	0.000	0.000	0.000	0.000	0.062	0.000
IF	1105.600	6.032	0.000	9.785	0.000	0.000	0.000	0.000	0.048	0.000
IF	1108.900	6.181	0.000	9.814	0.000	0.000	0.000	0.000	0.064	0.000
IF	1112.200	6.453	0.000	9.840	0.000	0.000	0.000	0.000	0.086	0.000
IF	1115.500	6.751	0.000	9.866	0.000	0.000	0.000	0.000	0.043	0.000
IF	1118.800	6.737	0.000	9.901	0.000	0.000	0.000	0.000	-0.016	0.000
IF	1122.000	6.648	0.000	9.929	0.000	0.000	0.000	0.000	-0.030	0.000
IF	1125.300	6.542	0.000	9.950	0.000	0.000	0.000	0.000	-0.030	0.000
IF	1128.600	6.453	0.000	9.966	0.000	0.000	0.000	0.000	-0.034	0.000
IF	1131.900	6.316	0.000	9.978	0.000	0.000	0.000	0.000	-0.051	0.000
IF	1135.200	6.115	0.000	9.988	0.000	0.000	0.000	0.000	-0.058	0.000
IF	1138.400	5.938	0.000	9.995	0.000	0.000	0.000	0.000	-0.031	0.000
IF	1141.700	5.911	0.000	9.999	0.000	0.000	0.000	0.000	-0.008	0.000
IF	1145.000	5.884	0.000	10.002	0.000	0.000	0.000	0.000	-0.006	0.000
IF	1148.300	5.871	0.000	10.004	0.000	0.000	0.000	0.000	-0.003	0.000
IF	1151.600	5.863	0.000	10.007	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1154.900	5.856	0.000	10.009	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1158.100	5.848	0.000	10.010	0.000	0.000	0.000	0.000	-0.020	0.000
IF	1161.400	5.726	0.000	10.013	0.000	0.000	0.000	0.000	-0.083	0.000
IF	1164.700	5.304	0.000	10.019	0.000	0.000	0.000	0.000	-0.128	0.000
IF	1168.000	4.882	0.000	10.023	0.000	0.000	0.000	0.000	-0.128	0.000
IF	1171.300	4.461	0.000	10.025	0.000	0.000	0.000	0.000	-0.081	0.000
IF	1174.500	4.357	0.000	10.026	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1177.800	4.447	0.000	10.026	0.000	0.000	0.000	0.000	0.020	0.000
IF	1181.100	4.489	0.000	10.025	0.000	0.000	0.000	0.000	0.011	0.000
IF	1184.400	4.518	0.000	10.025	0.000	0.000	0.000	0.000	0.009	0.000
IF	1187.700	4.547	0.000	10.025	0.000	0.000	0.000	0.000	0.033	0.000
IF	1190.900	4.732	0.000	10.024	0.000	0.000	0.000	0.000	0.087	0.000
IF	1194.200	5.115	0.000	10.021	0.000	0.000	0.000	0.000	0.116	0.000
IF	1197.500	5.497	0.000	10.018	0.000	0.000	0.000	0.000	0.161	0.000
IF	1200.800	6.176	0.000	10.012	0.000	0.000	0.000	0.000	0.246	0.000
IF	1204.100	7.121	0.000	10.000	0.000	0.000	0.000	0.000	0.314	0.000
IF	1207.300	8.217	0.000	10.006	0.000	0.000	0.000	0.000	0.337	0.000
IF	1210.600	9.313	0.000	10.225	0.000	0.000	0.000	0.000	0.329	0.000
IF	1213.400	10.225	0.000	10.225	0.000	0.000	0.000	0.000	0.326	0.000
AS	1278.000	9.639	0.000	9.639	0.000	0.000	0.000	0.000	-0.324	0.000
IF	1280.500	8.829	0.000	9.639	0.000	0.000	0.000	0.000	-0.027	0.000
IF	1292.000	9.255	0.000	9.639	0.000	0.000	0.000	0.000	-0.008	0.000
IF	1300.500	8.665	0.000	9.639	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1316.000	8.960	0.000	9.639	0.000	0.000	0.000	0.000	0.049	0.000
IF	1320.400	9.639	0.000	9.639	0.000	0.000	0.000	0.000	0.154	0.000
AS	1444.400	9.605	0.000	9.605	0.000	0.000	0.000	0.000	-0.054	0.000
IF	1448.500	9.383	0.000	9.605	0.000	0.000	0.000	0.000	-0.023	0.000
IF	1458.500	9.285	0.000	9.605	0.000	0.000	0.000	0.000	-0.045	0.000
IF	1468.500	8.488	0.000	9.605	0.000	0.000	0.000	0.000	-0.071	0.000
IF	1473.000	8.258	0.000	9.605	0.000	0.000	0.000	0.000	0.003	0.000
IF	1486.000	8.533	0.000	9.605	0.000	0.000	0.000	0.000	-0.003	0.000
IF	1501.500	8.173	0.000	9.605	0.000	0.000	0.000	0.000	0.013	0.000
IF	1509.500	8.829	0.000	9.605	0.000	0.000	0.000	0.000	0.012	0.000
IF	1537.000	8.599	0.000	9.605	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1552.000	8.632	0.000	9.605	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1564.000	8.533	0.000	9.605	0.000	0.000	0.000	0.000	0.034	0.000
IF	1572.000	9.321	0.000	9.606	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1589.000	8.435	0.000	9.606	0.000	0.000	0.000	0.000	0.000	0.000
IF	1617.500	9.301	0.000	9.606	0.000	0.000	0.000	0.000	0.015	0.000
IF	1627.000	9.026	0.000	9.606	0.000	0.000	0.000	0.000	-0.046	0.000
IF	1637.000	8.402	0.000	9.607	0.000	0.000	0.000	0.000	-0.062	0.000
IF	1646.500	7.812	0.000	9.607	0.000	0.000	0.000	0.000	-0.011	0.000
IF	1660.500	8.140	0.000	9.607	0.000	0.000	0.000	0.000	0.007	0.000
IF	1673.500	8.009	0.000	9.607	0.000	0.000	0.000	0.000	-0.018	0.000
IF	1684.000	7.713	0.000	9.607	0.000	0.000	0.000	0.000	-0.110	0.000
IF	1695.000	5.643	0.000	9.608	0.000	0.000	0.000	0.000	-0.075	0.000
IF	1709.500	5.807	0.000	9.608	0.000	0.000	0.000	0.000	-0.035	0.000
IF	1722.500	4.692	0.000	9.608	0.000	0.000	0.000	0.000	-0.061	0.000
IF	1732.000	4.429	0.000	9.608	0.000	0.000	0.000	0.000	0.004	0.000
IF	1739.500	4.757	0.000	9.608	0.000	0.000	0.000	0.000	0.016	0.000
IF	1746.000	4.659	0.000	9.609	0.000	0.000	0.000	0.000	-0.030	0.000
IF	1751.500	4.396	0.000	9.609	0.000	0.000	0.000	0.000	0.012	0.000
IF	1759.500	4.823	0.000	9.609	0.000	0.000	0.000	0.000	0.077	0.000
IF	1771.500	5.938	0.000	9.609	0.000	0.000	0.000	0.000	0.030	0.000
IF	1780.500	5.450	0.000	9.609	0.000	0.000	0.000	0.000	0.042	0.000
IF	1789.500	6.696	0.000	9.609	0.000	0.000	0.000	0.000	0.060	0.000
IF	1797.000	6.434	0.000	9.609	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1800.500	6.565	0.000	9.610	0.000	0.000	0.000	0.000	0.028	0.000
IF	1804.000	6.631	0.000	9.610	0.000	0.000	0.000	0.000	0.027	0.000
IF	1809.000	6.795	0.000	9.610	0.000	0.000	0.000	0.000	0.046	0.000
IF	1815.500	7.155	0.000	9.610	0.000	0.000	0.000	0.000	0.000	0.000
IF	1827.500	6.795	0.000	9.610	0.000	0.000	0.000	0.000	0.026	0.000
IF	1837.000	7.713	0.000	9.610	0.000	0.000	0.000	0.000	0.106	0.000
IF	1845.500	8.698	0.000	9.610	0.000	0.000	0.000	0.000	0.056	0.000
IF	1860.500	9.026	0.000	9.609	0.000	0.000	0.000	0.000	-0.009	0.000
IF	1878.500	8.402	0.000	9.609	0.000	0.000	0.000	0.000	-0.013	0.000
IF	1900.000	8.533	0.000	9.608	0.000	0.000	0.000	0.000	-0.031	0.000
IF	1919.500	7.123	0.000	9.607	0.000	0.000	0.000	0.000	-0.043	0.000
IF	1932.000	7.155	0.000	9.607	0.000	0.000	0.000	0.000	-0.069	0.000
IF	1939.000	5.778	0.000	9.607	0.000	0.000	0.000	0.000	-0.140	0.000
IF	1943.000	5.614	0.000	9.607	0.000	0.000	0.000	0.000	-0.035	0.000
IF	1946.500	5.515	0.000	9.607	0.000	0.000	0.000	0.000	-0.235	0.000
OF	1986.000	-4.471	0.000	9.607	0.000	0.000	0.000	0.000	-0.251	0.000
OF	1987.000	-4.647	0.000	9.607	0.000	0.000	0.000	0.000	-0.008	0.000
OF	2051.000	-4.983	0.000	9.607	0.000	0.000	0.000	0.000	-0.004	0.000
OF	2062.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000

OF	2063.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
OF	2064.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
OF	2065.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
OF	2066.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
OF	2067.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
OF	2068.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
OF	2070.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.024	0.000
OF	2071.000	-4.911	0.000	9.607	0.000	0.000	0.000	0.000	0.097	0.000
OF	2073.000	-4.693	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2074.000	-4.583	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2076.000	-4.365	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2077.000	-4.255	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2079.000	-4.036	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2080.000	-3.927	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2082.000	-3.708	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
OF	2083.000	-3.599	0.000	9.607	0.000	0.000	0.000	0.000	0.061	0.000
OF	2088.000	-3.342	0.000	9.608	0.000	0.000	0.000	0.000	0.051	0.000
OF	2089.000	-3.292	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2094.000	-3.043	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2095.000	-2.994	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2098.000	-2.844	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2100.000	-2.745	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2104.000	-2.545	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2107.000	-2.396	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2109.000	-2.297	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2116.000	-1.948	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2118.000	-1.849	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2125.000	-1.500	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2127.000	-1.401	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
OF	2154.000	-0.042	0.000	9.609	0.000	0.000	0.000	0.000	0.138	0.000
IF	2158.000	2.890	0.000	9.609	0.000	0.000	0.000	0.000	0.137	0.000
IF	2167.000	1.742	0.000	9.609	0.000	0.000	0.000	0.000	0.031	0.000
IF	2176.000	3.448	0.000	9.609	0.000	0.000	0.000	0.000	0.113	0.000
IF	2185.500	3.842	0.000	9.610	0.000	0.000	0.000	0.000	0.017	0.000
IF	2197.500	3.809	0.000	9.610	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2208.000	3.547	0.000	9.610	0.000	0.000	0.000	0.000	0.002	0.000
IF	2216.000	3.842	0.000	9.611	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2224.000	3.510	0.000	9.611	0.000	0.000	0.000	0.000	-0.031	0.000
IF	2229.000	3.445	0.000	9.611	0.000	0.000	0.000	0.000	0.007	0.000
IF	2233.500	3.576	0.000	9.611	0.000	0.000	0.000	0.000	0.066	0.000
IF	2243.500	4.396	0.000	9.611	0.000	0.000	0.000	0.000	0.056	0.000
IF	2251.000	4.560	0.000	9.611	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2254.000	4.331	0.000	9.611	0.000	0.000	0.000	0.000	-0.048	0.000
IF	2256.500	4.298	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
IF	2264.500	4.331	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
IF	2273.500	4.298	0.000	9.611	0.000	0.000	0.000	0.000	-0.022	0.000
IF	2281.000	3.970	0.000	9.612	0.000	0.000	0.000	0.000	-0.048	0.000
IF	2290.000	3.510	0.000	9.612	0.000	0.000	0.000	0.000	0.011	0.000
IF	2296.000	4.134	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
IF	2300.500	3.510	0.000	9.612	0.000	0.000	0.000	0.000	-0.137	0.000
IF	2308.000	2.493	0.000	9.612	0.000	0.000	0.000	0.000	0.052	0.000
IF	2315.500	4.298	0.000	9.612	0.000	0.000	0.000	0.000	0.131	0.000
IF	2323.000	4.462	0.000	9.612	0.000	0.000	0.000	0.000	0.015	0.000
IF	2331.000	4.528	0.000	9.612	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2336.000	4.134	0.000	9.613	0.000	0.000	0.000	0.000	-0.051	0.000
IF	2337.500	4.200	0.000	9.613	0.000	0.000	0.000	0.000	0.030	0.000
IF	2346.000	4.429	0.000	9.613	0.000	0.000	0.000	0.000	0.021	0.000
IF	2359.500	4.659	0.000	9.613	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2368.000	4.298	0.000	9.613	0.000	0.000	0.000	0.000	0.000	0.000
IF	2374.000	4.659	0.000	9.613	0.000	0.000	0.000	0.000	0.013	0.000
IF	2390.500	4.593	0.000	9.614	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2404.000	4.462	0.000	9.614	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2410.500	4.528	0.000	9.614	0.000	0.000	0.000	0.000	0.000	0.000
IF	2418.500	4.462	0.000	9.614	0.000	0.000	0.000	0.000	0.002	0.000
IF	2423.500	4.560	0.000	9.614	0.000	0.000	0.000	0.000	-0.014	0.000
IF	2433.000	4.265	0.000	9.615	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2443.500	4.331	0.000	9.615	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2453.500	4.137	0.000	9.616	0.000	0.000	0.000	0.000	0.000	0.000
IF	2464.500	4.334	0.000	9.616	0.000	0.000	0.000	0.000	0.002	0.000
IF	2475.500	4.170	0.000	9.617	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2488.000	4.203	0.000	9.617	0.000	0.000	0.000	0.000	0.016	0.000
IF	2502.500	4.593	0.000	9.618	0.000	0.000	0.000	0.000	0.032	0.000
IF	2536.500	5.741	0.000	9.619	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2540.000	4.495	0.000	9.619	0.000	0.000	0.000	0.000	-0.106	0.000
IF	2552.000	4.101	0.000	9.619	0.000	0.000	0.000	0.000	0.010	0.000
IF	2566.500	4.757	0.000	9.620	0.000	0.000	0.000	0.000	0.010	0.000
IF	2574.500	4.331	0.000	9.620	0.000	0.000	0.000	0.000	-0.021	0.000
IF	2583.500	4.396	0.000	9.620	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2590.500	4.232	0.000	9.621	0.000	0.000	0.000	0.000	0.007	0.000
IF	2597.000	4.495	0.000	9.621	0.000	0.000	0.000	0.000	0.020	0.000
IF	2607.000	4.560	0.000	9.621	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2618.000	4.232	0.000	9.622	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2628.500	4.364	0.000	9.622	0.000	0.000	0.000	0.000	0.014	0.000
IF	2639.000	4.528	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
IF	2646.000	4.298	0.000	9.623	0.000	0.000	0.000	0.000	0.007	0.000
IF	2648.000	4.593	0.000	9.623	0.000	0.000	0.000	0.000	-0.029	0.000
IF	2654.000	4.068	0.000	9.623	0.000	0.000	0.000	0.000	-0.018	0.000
IF	2663.000	4.331	0.000	9.623	0.000	0.000	0.000	0.000	0.037	0.000
IF	2674.500	4.823	0.000	9.623	0.000	0.000	0.000	0.000	0.036	0.000
IF	2684.000	5.085	0.000	9.623	0.000	0.000	0.000	0.000	0.020	0.000
IF	2694.000	5.216	0.000	9.623	0.000	0.000	0.000	0.000	0.097	0.000
IF	2705.000	7.116	0.000	9.623	0.000	0.000	0.000	0.000	0.176	0.000
IF	2716.000	9.088	0.000	9.623	0.000	0.000	0.000	0.000	0.098	0.000
IF	2730.500	9.623	0.000	9.623	0.000	0.000	0.000	0.000	0.037	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-11.947	1.000	1.000	9.361	13.142	12.900	56.140	0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1.000	-11.941	0.000	9.361	0.000	0.000	0.000	0.000	0.006	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2.000	-11.935	0.000	9.361	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3.300	-11.927	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-11.521	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-11.498	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-11.487	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-11.476	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-11.464	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-11.453	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-11.442	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-11.430	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-11.419	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-11.407	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-11.396	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.400	-11.385	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.600	-11.373	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.900	-11.362	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.200	-11.351	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.500	-11.339	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.800	-11.328	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-11.316	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.300	-11.305	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.600	-11.294	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.900	-11.282	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.200	-11.271	0.000	9.362	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.400	-11.260	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.700	-11.248	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	187.000	-11.237	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	190.300	-11.224	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.600	-11.211	0.000	9.362	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.800	-11.197	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.100	-11.184	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	203.400	-11.171	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.700	-11.158	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	210.000	-11.145	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	213.300	-11.131	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.500	-11.118	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	219.800	-11.105	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	223.100	-11.092	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	226.400	-11.079	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.700	-11.065	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	232.900	-11.052	0.000	9.363	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	236.200	-11.039	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	239.500	-11.026	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	242.800	-11.013	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	246.100	-10.999	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.300	-10.986	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	252.600	-10.973	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.900	-10.960	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-10.947	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-10.933	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-10.920	0.000	9.364	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-10.907	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-10.894	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-10.878	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-10.850	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-10.823	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-10.795	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-10.767	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-10.740	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-10.712	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-10.685	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-10.657	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-10.629	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-10.602	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-10.574	0.000	9.365	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-10.547	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-10.519	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-10.491	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-10.464	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-10.436	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-10.409	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-10.381	0.000	9.366	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-10.353	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-10.326	0.000	9.366	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-10.298	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.800	-10.271	0.000	9.367	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-10.243	0.000	9.367	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-10.215	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	357.600	-10.188	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-10.160	0.000	9.367	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-10.133	0.000	9.367	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	367.500	-10.117	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.700	-10.100	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	374.000	-10.084	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.300	-10.068	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	380.600	-10.052	0.000	9.368	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.900	-10.035	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	387.100	-10.019	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	390.400	-10.003	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	393.700	-9.987	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	397.000	-9.970	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	400.300	-9.954	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	403.500	-9.938	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	406.800	-9.922	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	410.100	-9.905	0.000	9.370	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	413.400	-9.889	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	416.700	-9.873	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	419.900	-9.857	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	423.200	-9.840	0.000	9.371	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	426.500	-9.824	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	429.800	-9.808	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	433.100	-9.791	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	436.400	-9.775	0.000	9.372	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	439.600	-9.759	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	442.900	-9.743	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	446.200	-9.726	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	449.500	-9.710	0.000	9.373	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	452.800	-9.694	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	456.000	-9.677	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	459.300	-9.661	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	462.600	-9.645	0.000	9.374	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	465.900	-9.629	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	469.200	-9.612	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	472.400	-9.596	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	475.700	-9.580	0.000	9.375	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	479.000	-9.564	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	482.300	-9.547	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	485.600	-9.531	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	488.800	-9.513	0.000	9.376	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	492.100	-9.495	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	495.400	-9.478	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	498.700	-9.460	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	502.000	-9.443	0.000	9.377	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	505.200	-9.425	0.000	9.378	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	508.500	-9.405	0.000	9.378	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	511.800	-9.380	0.000	9.378	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	515.100	-9.354	0.000	9.378	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	518.400	-9.329	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	521.700	-9.303	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	524.900	-9.278	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	528.200	-9.252	0.000	9.379	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	531.500	-9.226	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	534.800	-9.200	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	538.100	-9.174	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	541.300	-9.148	0.000	9.380	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	544.600	-9.123	0.000	9.381	0.000	0.000	0.000	0.000	0.008	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	547.900	-9.097	0.000	9.381	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	551.200	-9.071	0.000	9.381	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	554.500	-9.045	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	557.700	-9.019	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	561.000	-8.993	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	564.300	-8.968	0.000	9.382	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	567.600	-8.942	0.000	9.383	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	570.900	-8.916	0.000	9.383	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	574.100	-8.890	0.000	9.383	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	577.400	-8.864	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	580.700	-8.838	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	584.000	-8.813	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	587.300	-8.787	0.000	9.384	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	590.500	-8.761	0.000	9.385	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	593.800	-8.735	0.000	9.385	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	597.100	-8.709	0.000	9.385	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	600.400	-8.683	0.000	9.386	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	603.700	-8.658	0.000	9.386	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	607.000	-8.632	0.000	9.386	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	610.200	-8.606	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	613.500	-8.580	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	616.800	-8.554	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	620.100	-8.528	0.000	9.387	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	623.400	-8.499	0.000	9.388	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	626.600	-8.456	0.000	9.388	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	629.900	-8.414	0.000	9.388	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	633.200	-8.371	0.000	9.388	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	636.500	-8.328	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	639.800	-8.286	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	643.000	-8.243	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	646.300	-8.201	0.000	9.389	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	649.600	-8.158	0.000	9.390	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	652.900	-8.115	0.000	9.390	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	656.200	-8.073	0.000	9.390	0.000	0.000	0.000	0.000	0.013	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	659.400	-8.030	0.000	9.391	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	662.700	-7.987	0.000	9.391	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	666.000	-7.945	0.000	9.391	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	669.300	-7.902	0.000	9.392	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	672.600	-7.859	0.000	9.392	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	675.900	-7.817	0.000	9.392	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	679.100	-7.774	0.000	9.393	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	682.400	-7.732	0.000	9.393	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	685.700	-7.689	0.000	9.394	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	689.000	-7.646	0.000	9.394	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	692.300	-7.604	0.000	9.394	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	695.500	-7.561	0.000	9.395	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	698.800	-7.518	0.000	9.395	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	702.100	-7.476	0.000	9.395	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	705.400	-7.433	0.000	9.396	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	708.700	-7.391	0.000	9.396	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	711.900	-7.346	0.000	9.397	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	715.200	-7.300	0.000	9.397	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	718.500	-7.253	0.000	9.397	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	721.800	-7.206	0.000	9.398	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	725.100	-7.160	0.000	9.399	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	728.300	-7.127	0.000	9.399	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	731.600	-7.095	0.000	9.400	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	734.900	-7.063	0.000	9.400	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	738.200	-7.030	0.000	9.401	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	741.500	-6.998	0.000	9.401	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	744.700	-6.966	0.000	9.402	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	748.000	-6.934	0.000	9.402	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	751.300	-6.902	0.000	9.403	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	754.600	-6.870	0.000	9.403	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	757.900	-6.837	0.000	9.404	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	761.200	-6.805	0.000	9.404	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	764.400	-6.773	0.000	9.405	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	767.700	-6.741	0.000	9.405	0.000	0.000	0.000	0.000	0.010	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	771.000	-6.709	0.000	9.406	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	774.300	-6.677	0.000	9.406	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	777.600	-6.644	0.000	9.407	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	780.800	-6.612	0.000	9.408	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	784.100	-6.580	0.000	9.408	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	787.400	-6.548	0.000	9.409	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	790.700	-6.516	0.000	9.409	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	794.000	-6.484	0.000	9.410	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	797.200	-6.449	0.000	9.410	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	800.500	-6.414	0.000	9.411	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	803.800	-6.379	0.000	9.411	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	807.100	-6.344	0.000	9.412	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	810.400	-6.310	0.000	9.413	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	813.600	-6.274	0.000	9.413	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	816.900	-6.240	0.000	9.414	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	820.200	-6.205	0.000	9.414	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	823.500	-6.170	0.000	9.415	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	826.800	-6.145	0.000	9.416	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	830.100	-6.131	0.000	9.416	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	833.300	-6.120	0.000	9.417	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	836.600	-6.111	0.000	9.418	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	839.900	-6.103	0.000	9.418	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	843.200	-6.095	0.000	9.419	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	846.500	-6.087	0.000	9.420	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	849.700	-6.079	0.000	9.421	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	853.000	-6.071	0.000	9.422	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	856.300	-6.063	0.000	9.422	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	859.600	-6.055	0.000	9.423	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	862.900	-6.047	0.000	9.424	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	866.100	-6.039	0.000	9.424	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	869.400	-6.031	0.000	9.425	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	872.700	-6.023	0.000	9.426	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	876.000	-6.015	0.000	9.427	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	879.300	-6.007	0.000	9.427	0.000	0.000	0.000	0.000	0.002	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	882.500	-5.999	0.000	9.428	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	885.800	-5.991	0.000	9.429	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	889.100	-5.983	0.000	9.429	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	892.400	-5.975	0.000	9.430	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	895.700	-5.966	0.000	9.430	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	898.900	-5.958	0.000	9.431	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	902.200	-5.950	0.000	9.432	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	905.500	-5.942	0.000	9.432	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	908.800	-5.934	0.000	9.433	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	912.100	-5.926	0.000	9.434	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	915.400	-5.915	0.000	9.434	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	918.600	-5.770	0.000	9.434	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	921.900	-5.599	0.000	9.433	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	925.200	-5.428	0.000	9.433	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	928.500	-5.257	0.000	9.432	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	931.800	-5.086	0.000	9.432	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	935.000	-4.916	0.000	9.431	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	938.300	-4.745	0.000	9.431	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	941.600	-4.574	0.000	9.431	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	944.900	-4.403	0.000	9.431	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	948.200	-4.233	0.000	9.430	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	951.400	-4.071	0.000	9.430	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	954.700	-3.909	0.000	9.431	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	958.000	-3.747	0.000	9.431	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	961.300	-3.586	0.000	9.431	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	964.600	-3.424	0.000	9.432	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	967.800	-3.262	0.000	9.432	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	971.100	-3.101	0.000	9.433	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	974.400	-2.939	0.000	9.434	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	977.700	-2.777	0.000	9.435	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	981.000	-2.615	0.000	9.436	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	984.200	-2.454	0.000	9.437	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	987.500	-2.292	0.000	9.438	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	990.800	-2.130	0.000	9.440	0.000	0.000	0.000	0.000	0.052	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	994.100	-1.946	0.000	9.442	0.000	0.000	0.000	0.000	0.063	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	997.400	-1.712	0.000	9.442	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1000.700	-1.477	0.000	9.444	0.000	0.000	0.000	0.000	0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1003.900	-1.242	0.000	9.446	0.000	0.000	0.000	0.000	0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1007.200	-1.007	0.000	9.448	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1010.500	-0.772	0.000	9.450	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1013.800	-0.537	0.000	9.453	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1017.100	-0.302	0.000	9.457	0.000	0.000	0.000	0.000	0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1020.300	-0.067	0.000	9.460	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1023.600	-0.208	0.000	9.471	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1026.900	0.065	0.000	9.474	0.000	0.000	0.000	0.000	0.083	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1030.200	0.338	0.000	9.477	0.000	0.000	0.000	0.000	0.070	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1033.500	0.529	0.000	9.483	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1036.700	0.711	0.000	9.489	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1040.000	0.884	0.000	9.495	0.000	0.000	0.000	0.000	0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1043.300	1.107	0.000	9.502	0.000	0.000	0.000	0.000	0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1046.600	1.406	0.000	9.506	0.000	0.000	0.000	0.000	0.091	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1049.900	1.704	0.000	9.512	0.000	0.000	0.000	0.000	0.091	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1053.100	1.996	0.000	9.520	0.000	0.000	0.000	0.000	0.089	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1056.400	2.283	0.000	9.528	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1059.700	2.365	0.000	9.542	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1063.000	2.425	0.000	9.555	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1066.300	2.601	0.000	9.566	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1069.600	2.744	0.000	9.578	0.000	0.000	0.000	0.000	0.076	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1072.800	3.093	0.000	9.585	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1076.100	3.593	0.000	9.590	0.000	0.000	0.000	0.000	0.149	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1079.400	4.074	0.000	9.599	0.000	0.000	0.000	0.000	0.096	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1082.700	4.226	0.000	9.622	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1086.000	4.212	0.000	9.647	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1089.200	4.373	0.000	9.665	0.000	0.000	0.000	0.000	0.094	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1092.500	4.825	0.000	9.676	0.000	0.000	0.000	0.000	0.141	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1095.800	5.305	0.000	9.693	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1099.100	5.631	0.000	9.720	0.000	0.000	0.000	0.000	0.085	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1102.400	5.866	0.000	9.752	0.000	0.000	0.000	0.000	0.062	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1105.600	6.032	0.000	9.785	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1108.900	6.181	0.000	9.814	0.000	0.000	0.000	0.000	0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1112.200	6.453	0.000	9.840	0.000	0.000	0.000	0.000	0.086	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1115.500	6.751	0.000	9.866	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1118.800	6.737	0.000	9.901	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1122.000	6.648	0.000	9.929	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1125.300	6.542	0.000	9.950	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1128.600	6.453	0.000	9.966	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1131.900	6.316	0.000	9.978	0.000	0.000	0.000	0.000	-0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1135.200	6.115	0.000	9.988	0.000	0.000	0.000	0.000	-0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1138.400	5.938	0.000	9.995	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1141.700	5.911	0.000	9.999	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1145.000	5.884	0.000	10.002	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1148.300	5.871	0.000	10.004	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1151.600	5.863	0.000	10.007	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1154.900	5.856	0.000	10.009	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1158.100	5.848	0.000	10.010	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1161.400	5.726	0.000	10.013	0.000	0.000	0.000	0.000	-0.083	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1164.700	5.304	0.000	10.019	0.000	0.000	0.000	0.000	-0.128	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1168.000	4.882	0.000	10.023	0.000	0.000	0.000	0.000	-0.128	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1171.300	4.461	0.000	10.025	0.000	0.000	0.000	0.000	-0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1174.500	4.357	0.000	10.026	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1177.800	4.447	0.000	10.026	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1181.100	4.489	0.000	10.025	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1184.400	4.518	0.000	10.025	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1187.700	4.547	0.000	10.025	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1190.900	4.732	0.000	10.024	0.000	0.000	0.000	0.000	0.087	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1194.200	5.115	0.000	10.021	0.000	0.000	0.000	0.000	0.116	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1197.500	5.497	0.000	10.018	0.000	0.000	0.000	0.000	0.161	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1200.800	6.176	0.000	10.012	0.000	0.000	0.000	0.000	0.246	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1204.100	7.121	0.000	10.000	0.000	0.000	0.000	0.000	0.314	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1207.300	8.217	0.000	10.006	0.000	0.000	0.000	0.000	0.337	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1210.600	9.313	0.000	10.225	0.000	0.000	0.000	0.000	0.329	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1213.400	10.225	0.000	10.225	0.000	0.000	0.000	0.000	0.326	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1278.000	9.639	0.000	9.639	0.000	0.000	0.000	0.000	-0.324	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1280.500	8.829	0.000	9.639	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1292.000	9.255	0.000	9.639	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1300.500	8.665	0.000	9.639	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1316.000	8.960	0.000	9.639	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1320.400	9.639	0.000	9.639	0.000	0.000	0.000	0.000	0.154	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1444.400	9.605	0.000	9.605	0.000	0.000	0.000	0.000	-0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1448.500	9.383	0.000	9.605	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1458.500	9.285	0.000	9.605	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1468.500	8.488	0.000	9.605	0.000	0.000	0.000	0.000	-0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1473.000	8.258	0.000	9.605	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1486.000	8.533	0.000	9.605	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1501.500	8.173	0.000	9.605	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1509.500	8.829	0.000	9.605	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1537.000	8.599	0.000	9.605	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1552.000	8.632	0.000	9.605	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1564.000	8.533	0.000	9.605	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1572.000	9.321	0.000	9.606	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1589.000	8.435	0.000	9.606	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1617.500	9.301	0.000	9.606	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1627.000	9.026	0.000	9.606	0.000	0.000	0.000	0.000	-0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1637.000	8.402	0.000	9.607	0.000	0.000	0.000	0.000	-0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1646.500	7.812	0.000	9.607	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1660.500	8.140	0.000	9.607	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1673.500	8.009	0.000	9.607	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1684.000	7.713	0.000	9.607	0.000	0.000	0.000	0.000	-0.110	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1695.000	5.643	0.000	9.608	0.000	0.000	0.000	0.000	-0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1709.500	5.807	0.000	9.608	0.000	0.000	0.000	0.000	-0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1722.500	4.692	0.000	9.608	0.000	0.000	0.000	0.000	-0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1732.000	4.429	0.000	9.608	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1739.500	4.757	0.000	9.608	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1746.000	4.659	0.000	9.609	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1751.500	4.396	0.000	9.609	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1759.500	4.823	0.000	9.609	0.000	0.000	0.000	0.000	0.077	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1771.500	5.938	0.000	9.609	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1780.500	5.450	0.000	9.609	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1789.500	6.696	0.000	9.609	0.000	0.000	0.000	0.000	0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1797.000	6.434	0.000	9.609	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1800.500	6.565	0.000	9.610	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1804.000	6.631	0.000	9.610	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1809.000	6.795	0.000	9.610	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1815.500	7.155	0.000	9.610	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1827.500	6.795	0.000	9.610	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1837.000	7.713	0.000	9.610	0.000	0.000	0.000	0.000	0.106	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1845.500	8.698	0.000	9.610	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1860.500	9.026	0.000	9.609	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1878.500	8.402	0.000	9.609	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1900.000	8.533	0.000	9.608	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1919.500	7.123	0.000	9.607	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1932.000	7.155	0.000	9.607	0.000	0.000	0.000	0.000	-0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1939.000	5.778	0.000	9.607	0.000	0.000	0.000	0.000	-0.140	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1943.000	5.614	0.000	9.607	0.000	0.000	0.000	0.000	-0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1946.500	5.515	0.000	9.607	0.000	0.000	0.000	0.000	-0.235	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1986.000	-4.471	0.000	9.607	0.000	0.000	0.000	0.000	-0.251	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1987.000	-4.647	0.000	9.607	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2051.000	-4.983	0.000	9.607	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2062.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2063.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2064.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2065.000	-4.984	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2066.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2067.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2068.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2070.000	-4.985	0.000	9.607	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2071.000	-4.911	0.000	9.607	0.000	0.000	0.000	0.000	0.097	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2073.000	-4.693	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2074.000	-4.583	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2076.000	-4.365	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2077.000	-4.255	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2079.000	-4.036	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2080.000	-3.927	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2082.000	-3.708	0.000	9.607	0.000	0.000	0.000	0.000	0.109	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2083.000	-3.599	0.000	9.607	0.000	0.000	0.000	0.000	0.061	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2088.000	-3.342	0.000	9.608	0.000	0.000	0.000	0.000	0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2089.000	-3.292	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2094.000	-3.043	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2095.000	-2.994	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2098.000	-2.844	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2100.000	-2.745	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2104.000	-2.545	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2107.000	-2.396	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2109.000	-2.297	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2116.000	-1.948	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2118.000	-1.849	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2125.000	-1.500	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2127.000	-1.401	0.000	9.608	0.000	0.000	0.000	0.000	0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	2154.000	-0.042	0.000	9.609	0.000	0.000	0.000	0.000	0.138	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2158.000	2.890	0.000	9.609	0.000	0.000	0.000	0.000	0.137	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2167.000	1.742	0.000	9.609	0.000	0.000	0.000	0.000	0.031	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2176.000	3.448	0.000	9.609	0.000	0.000	0.000	0.000	0.113	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2185.500	3.842	0.000	9.610	0.000	0.000	0.000	0.000	0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2197.500	3.809	0.000	9.610	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2208.000	3.547	0.000	9.610	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2216.000	3.842	0.000	9.611	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2224.000	3.510	0.000	9.611	0.000	0.000	0.000	0.000	-0.031	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2229.000	3.445	0.000	9.611	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2233.500	3.576	0.000	9.611	0.000	0.000	0.000	0.000	0.066	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2243.500	4.396	0.000	9.611	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2251.000	4.560	0.000	9.611	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2254.000	4.331	0.000	9.611	0.000	0.000	0.000	0.000	-0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2256.500	4.298	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2264.500	4.331	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2273.500	4.298	0.000	9.611	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2281.000	3.970	0.000	9.612	0.000	0.000	0.000	0.000	-0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2290.000	3.510	0.000	9.612	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2296.000	4.134	0.000	9.612	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2300.500	3.510	0.000	9.612	0.000	0.000	0.000	0.000	-0.137	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2308.000	2.493	0.000	9.612	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2315.500	4.298	0.000	9.612	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2323.000	4.462	0.000	9.612	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2331.000	4.528	0.000	9.612	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2336.000	4.134	0.000	9.613	0.000	0.000	0.000	0.000	-0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2337.500	4.200	0.000	9.613	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2346.000	4.429	0.000	9.613	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2359.500	4.659	0.000	9.613	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2368.000	4.298	0.000	9.613	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2374.000	4.659	0.000	9.613	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2390.500	4.593	0.000	9.614	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2404.000	4.462	0.000	9.614	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2410.500	4.528	0.000	9.614	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2418.500	4.462	0.000	9.614	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2423.500	4.560	0.000	9.614	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2433.000	4.265	0.000	9.615	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2443.500	4.331	0.000	9.615	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2453.500	4.137	0.000	9.616	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2464.500	4.334	0.000	9.616	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2475.500	4.170	0.000	9.617	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2488.000	4.203	0.000	9.617	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2502.500	4.593	0.000	9.618	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2536.500	5.741	0.000	9.619	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2540.000	4.495	0.000	9.619	0.000	0.000	0.000	0.000	-0.106	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2552.000	4.101	0.000	9.619	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2566.500	4.757	0.000	9.620	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2574.500	4.331	0.000	9.620	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2583.500	4.396	0.000	9.620	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2590.500	4.232	0.000	9.621	0.000	0.000	0.000	0.000	0.007	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2597.000	4.495	0.000	9.621	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2607.000	4.560	0.000	9.621	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2618.000	4.232	0.000	9.622	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2628.500	4.364	0.000	9.622	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2639.000	4.528	0.000	9.622	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2646.000	4.298	0.000	9.623	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2648.000	4.593	0.000	9.623	0.000	0.000	0.000	0.000	-0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2654.000	4.068	0.000	9.623	0.000	0.000	0.000	0.000	-0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2663.000	4.331	0.000	9.623	0.000	0.000	0.000	0.000	0.037	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2674.500	4.823	0.000	9.623	0.000	0.000	0.000	0.000	0.036	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2684.000	5.085	0.000	9.623	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2694.000	5.216	0.000	9.623	0.000	0.000	0.000	0.000	0.097	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2705.000	7.116	0.000	9.623	0.000	0.000	0.000	0.000	0.176	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2716.000	9.088	0.000	9.623	0.000	0.000	0.000	0.000	0.098	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2730.500	9.623	0.000	9.623	0.000	0.000	0.000	0.000	0.037	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	13.14	12.90	18.56
OF	1.00	13.14	12.90	18.56
OF	2.00	13.15	12.90	18.56
OF	3.30	13.15	12.90	18.56
OF	105.00	13.09	12.90	18.53
OF	111.50	13.09	12.90	18.53
OF	114.80	13.09	12.90	18.53
OF	118.10	13.09	12.90	18.53
OF	121.40	13.09	12.90	18.53
OF	124.70	13.10	12.90	18.53
OF	128.00	13.10	12.90	18.53
OF	131.20	13.10	12.90	18.53
OF	134.50	13.10	12.90	18.53
OF	137.80	13.10	12.90	18.53
OF	141.10	13.10	12.90	18.53
OF	144.40	13.10	12.90	18.53
OF	147.60	13.10	12.90	18.53
OF	150.90	13.10	12.90	18.53
OF	154.20	13.10	12.90	18.53
OF	157.50	13.10	12.90	18.54
OF	160.80	13.11	12.90	18.54
OF	164.00	13.11	12.90	18.54
OF	167.30	13.11	12.90	18.54
OF	170.60	13.11	12.90	18.54
OF	173.90	13.11	12.90	18.54
OF	177.20	13.11	12.90	18.54
OF	180.40	13.11	12.90	18.54
OF	183.70	13.11	12.90	18.54
OF	187.00	13.11	12.90	18.54
OF	190.30	13.11	12.90	18.54
OF	193.60	13.11	12.90	18.54
OF	196.80	13.11	12.90	18.54
OF	200.10	13.12	12.90	18.54
OF	203.40	13.12	12.90	18.54
OF	206.70	13.12	12.90	18.54
OF	210.00	13.12	12.90	18.55
OF	213.30	13.12	12.90	18.55
OF	216.50	13.12	12.90	18.55
OF	219.80	13.12	12.90	18.55
OF	223.10	13.12	12.90	18.55
OF	226.40	13.12	12.90	18.55
OF	229.70	13.12	12.90	18.55
OF	232.90	13.12	12.90	18.55
OF	236.20	13.12	12.90	18.55
OF	239.50	13.12	12.90	18.55
OF	242.80	13.12	12.90	18.55
OF	246.10	13.12	12.90	18.55
OF	249.30	13.12	12.90	18.55
OF	252.60	13.13	12.90	18.55

OF	255.90	13.13	12.90	18.55
OF	259.20	13.13	12.90	18.55
OF	262.50	13.13	12.90	18.55
OF	265.70	13.13	12.90	18.55
OF	269.00	13.13	12.90	18.55
OF	272.30	13.13	12.90	18.56
OF	275.60	13.13	12.90	18.56
OF	278.90	13.13	12.90	18.55
OF	282.20	13.13	12.90	18.55
OF	285.40	13.12	12.90	18.55
OF	288.70	13.12	12.90	18.55
OF	292.00	13.12	12.90	18.55
OF	295.30	13.12	12.90	18.55
OF	298.60	13.12	12.90	18.55
OF	301.80	13.12	12.90	18.55
OF	305.10	13.11	12.90	18.54
OF	308.40	13.11	12.90	18.54
OF	311.70	13.11	12.90	18.54
OF	315.00	13.11	12.90	18.54
OF	318.20	13.11	12.90	18.54
OF	321.50	13.11	12.90	18.54
OF	324.80	13.10	12.90	18.54
OF	328.10	13.10	12.90	18.54
OF	331.40	13.10	12.90	18.54
OF	334.60	13.10	12.90	18.53
OF	337.90	13.10	12.90	18.53
OF	341.20	13.09	12.90	18.53
OF	344.50	13.09	12.90	18.53
OF	347.80	13.09	12.90	18.53
OF	351.00	13.09	12.90	18.53
OF	354.30	13.09	12.90	18.53
OF	357.60	13.09	12.90	18.53
OF	360.90	13.08	12.90	18.53
OF	364.20	13.08	12.90	18.52
OF	367.50	13.08	12.90	18.53
OF	370.70	13.08	12.90	18.53
OF	374.00	13.08	12.90	18.53
OF	377.30	13.08	12.90	18.53
OF	380.60	13.08	12.90	18.53
OF	383.90	13.08	12.90	18.53
OF	387.10	13.08	12.90	18.53
OF	390.40	13.08	12.90	18.53
OF	393.70	13.08	12.90	18.53
OF	397.00	13.08	12.90	18.53
OF	400.30	13.08	12.90	18.53
OF	403.50	13.08	12.90	18.53
OF	406.80	13.08	12.90	18.53
OF	410.10	13.08	12.90	18.53
OF	413.40	13.08	12.90	18.53
OF	416.70	13.08	12.90	18.53
OF	419.90	13.08	12.90	18.53
OF	423.20	13.08	12.90	18.53
OF	426.50	13.08	12.90	18.53
OF	429.80	13.08	12.90	18.53
OF	433.10	13.08	12.90	18.53
OF	436.40	13.08	12.90	18.53
OF	439.60	13.08	12.90	18.53
OF	442.90	13.08	12.90	18.53
OF	446.20	13.08	12.90	18.53
OF	449.50	13.08	12.90	18.53
OF	452.80	13.08	12.90	18.53
OF	456.00	13.08	12.90	18.53
OF	459.30	13.08	12.90	18.53
OF	462.60	13.08	12.90	18.53
OF	465.90	13.08	12.90	18.53
OF	469.20	13.08	12.90	18.53
OF	472.40	13.08	12.90	18.53
OF	475.70	13.08	12.90	18.53
OF	479.00	13.08	12.90	18.53
OF	482.30	13.08	12.90	18.53
OF	485.60	13.08	12.90	18.53
OF	488.80	13.08	12.90	18.53
OF	492.10	13.08	12.90	18.53
OF	495.40	13.08	12.90	18.53
OF	498.70	13.08	12.90	18.53
OF	502.00	13.08	12.90	18.53
OF	505.20	13.08	12.90	18.53
OF	508.50	13.07	12.90	18.53
OF	511.80	13.07	12.90	18.53
OF	515.10	13.07	12.90	18.53
OF	518.40	13.07	12.90	18.53
OF	521.70	13.07	12.90	18.53
OF	524.90	13.07	12.90	18.52
OF	528.20	13.06	12.90	18.52
OF	531.50	13.06	12.90	18.52
OF	534.80	13.06	12.90	18.52
OF	538.10	13.06	12.90	18.52
OF	541.30	13.06	12.90	18.52
OF	544.60	13.05	12.90	18.52
OF	547.90	13.05	12.90	18.52
OF	551.20	13.05	12.90	18.52
OF	554.50	13.05	12.90	18.52
OF	557.70	13.05	12.90	18.51
OF	561.00	13.04	12.90	18.51
OF	564.30	13.04	12.90	18.51
OF	567.60	13.04	12.90	18.51
OF	570.90	13.04	12.90	18.51
OF	574.10	13.03	12.90	18.51
OF	577.40	13.03	12.90	18.51
OF	580.70	13.03	12.90	18.51
OF	584.00	13.03	12.90	18.50
OF	587.30	13.03	12.90	18.50

OF	590.50	13.02	12.90	18.50
OF	593.80	13.02	12.90	18.50
OF	597.10	13.02	12.90	18.50
OF	600.40	13.02	12.90	18.50
OF	603.70	13.02	12.90	18.50
OF	607.00	13.01	12.90	18.50
OF	610.20	13.01	12.90	18.49
OF	613.50	13.01	12.90	18.49
OF	616.80	13.01	12.90	18.49
OF	620.10	13.00	12.90	18.49
OF	623.40	13.00	12.90	18.49
OF	626.60	13.00	12.90	18.48
OF	629.90	12.99	12.90	18.48
OF	633.20	12.98	12.90	18.48
OF	636.50	12.98	12.90	18.47
OF	639.80	12.97	12.90	18.47
OF	643.00	12.97	12.90	18.47
OF	646.30	12.96	12.90	18.46
OF	649.60	12.96	12.90	18.46
OF	652.90	12.95	12.90	18.45
OF	656.20	12.94	12.90	18.45
OF	659.40	12.94	12.90	18.45
OF	662.70	12.93	12.90	18.44
OF	666.00	12.93	12.90	18.44
OF	669.30	12.92	12.90	18.44
OF	672.60	12.91	12.90	18.43
OF	675.90	12.91	12.90	18.43
OF	679.10	12.90	12.90	18.42
OF	682.40	12.90	12.90	18.42
OF	685.70	12.90	12.90	18.42
OF	689.00	12.88	12.90	18.41
OF	692.30	12.85	12.90	18.39
OF	695.50	12.82	12.90	18.37
OF	698.80	12.79	12.90	18.35
OF	702.10	12.76	12.90	18.33
OF	705.40	12.73	12.90	18.31
OF	708.70	12.70	12.90	18.29
OF	711.90	12.67	12.90	18.26
OF	715.20	12.63	12.90	18.24
OF	718.50	12.60	12.90	18.22
OF	721.80	12.56	12.90	18.19
OF	725.10	12.53	12.90	18.17
OF	728.30	12.51	12.90	18.15
OF	731.60	12.48	12.90	18.14
OF	734.90	12.46	12.90	18.12
OF	738.20	12.44	12.90	18.11
OF	741.50	12.41	12.90	18.09
OF	744.70	12.39	12.90	18.08
OF	748.00	12.37	12.90	18.06
OF	751.30	12.35	12.90	18.04
OF	754.60	12.32	12.90	18.03
OF	757.90	12.30	12.90	18.01
OF	761.20	12.27	12.90	18.00
OF	764.40	12.25	12.90	17.98
OF	767.70	12.23	12.90	17.96
OF	771.00	12.21	12.90	17.95
OF	774.30	12.18	12.90	17.93
OF	777.60	12.16	12.90	17.92
OF	780.80	12.14	12.90	17.90
OF	784.10	12.11	12.90	17.89
OF	787.40	12.09	12.90	17.87
OF	790.70	12.07	12.90	17.85
OF	794.00	12.04	12.90	17.84
OF	797.20	12.02	12.90	17.82
OF	800.50	11.99	12.90	17.81
OF	803.80	11.97	12.90	17.79
OF	807.10	11.94	12.90	17.77
OF	810.40	11.92	12.90	17.75
OF	813.60	11.89	12.90	17.74
OF	816.90	11.87	12.90	17.72
OF	820.20	11.84	12.90	17.70
OF	823.50	11.82	12.90	17.69
OF	826.80	11.80	12.90	17.67
OF	830.10	11.79	12.90	17.67
OF	833.30	11.78	12.90	17.66
OF	836.60	11.77	12.90	17.66
OF	839.90	11.77	12.90	17.66
OF	843.20	11.76	12.90	17.65
OF	846.50	11.76	12.90	17.65
OF	849.70	11.75	12.90	17.65
OF	853.00	11.75	12.90	17.65
OF	856.30	11.74	12.90	17.64
OF	859.60	11.74	12.90	17.64
OF	862.90	11.73	12.90	17.64
OF	866.10	11.73	12.90	17.63
OF	869.40	11.72	12.90	17.63
OF	872.70	11.72	12.90	17.63
OF	876.00	11.71	12.90	17.62
OF	879.30	11.70	12.90	17.62
OF	882.50	11.70	12.90	17.62
OF	885.80	11.69	12.90	17.61
OF	889.10	11.69	12.90	17.61
OF	892.40	11.68	12.90	17.61
OF	895.70	11.68	12.90	17.60
OF	898.90	11.67	12.90	17.60
OF	902.20	11.67	12.90	17.60
OF	905.50	11.66	12.90	17.59
OF	908.80	11.65	12.90	17.59
OF	912.10	11.65	12.90	17.59
OF	915.40	11.64	12.90	17.58
OF	918.60	11.53	12.90	17.51
OF	921.90	11.41	12.90	17.42

OF	925.20	11.28	12.90	17.33
OF	928.50	11.15	12.90	17.24
OF	931.80	11.03	12.90	17.15
OF	935.00	10.90	12.90	17.06
OF	938.30	10.77	12.90	16.97
OF	941.60	10.65	12.90	16.88
OF	944.90	10.52	12.90	16.80
OF	948.20	10.39	12.90	16.71
OF	951.40	10.27	12.90	16.62
OF	954.70	10.15	12.90	16.54
OF	958.00	10.03	12.90	16.45
OF	961.30	9.91	12.90	16.37
OF	964.60	9.79	12.90	16.29
OF	967.80	9.67	12.90	16.20
OF	971.10	9.55	12.90	16.12
OF	974.40	9.43	12.90	16.04
OF	977.70	9.31	12.90	15.96
OF	981.00	9.19	12.90	15.87
OF	984.20	9.08	12.90	15.79
OF	987.50	8.95	12.90	15.71
OF	990.80	8.84	12.90	15.62
OF	994.10	8.70	12.90	15.53
OF	997.40	8.52	12.90	15.41
OF	1000.70	8.35	12.90	15.29
OF	1003.90	8.17	12.90	15.17
OF	1007.20	8.00	12.90	15.05
OF	1010.50	7.83	12.90	14.93
OF	1013.80	7.65	12.90	14.81
OF	1017.10	7.48	12.90	14.69
OF	1020.30	7.30	12.90	14.57
OF	1023.60	7.33	12.90	14.60
IF	1026.90	7.21	12.90	14.52
IF	1030.20	7.01	12.90	14.38
IF	1033.50	6.87	12.90	14.29
IF	1036.70	6.74	12.90	14.21
IF	1040.00	6.61	12.90	14.12
IF	1043.30	6.45	12.90	14.02
IF	1046.60	6.22	12.90	13.86
IF	1049.90	6.00	12.90	13.71
IF	1053.10	5.79	12.90	13.57
IF	1056.40	5.58	12.90	13.43
IF	1059.70	5.52	12.90	13.41
IF	1063.00	5.49	12.90	13.40
IF	1066.30	5.36	12.90	13.32
IF	1069.60	5.26	12.90	13.26
IF	1072.80	5.00	12.90	13.09
IF	1076.10	4.63	12.90	12.83
IF	1079.40	4.27	12.90	12.59
IF	1082.70	4.17	12.90	12.54
IF	1086.00	4.18	12.90	12.57
IF	1089.20	4.09	12.90	12.53
IF	1092.50	3.75	12.90	12.30
IF	1095.80	3.40	12.90	12.07
IF	1099.10	3.17	12.90	11.94
IF	1102.40	3.01	12.90	11.86
IF	1105.60	2.91	12.90	11.82
IF	1108.90	2.81	12.90	11.78
IF	1112.20	2.63	12.90	11.68
IF	1115.50	2.42	12.90	11.56
IF	1118.80	2.43	12.90	11.60
IF	1122.00	2.45	12.90	11.65
IF	1125.30	2.48	12.90	11.68
IF	1128.60	2.50	12.90	11.72
IF	1131.90	2.53	12.90	11.75
IF	1135.20	2.56	12.90	11.78
IF	1138.40	2.59	12.90	11.81
IF	1141.70	2.60	12.90	11.82
IF	1145.00	2.60	12.90	11.82
IF	1148.30	2.61	12.90	11.83
IF	1151.60	2.61	12.90	11.83
IF	1154.90	2.61	12.90	11.84
IF	1158.10	2.62	12.90	11.84
IF	1161.40	2.63	12.90	11.86
IF	1164.70	2.69	12.90	11.90
IF	1168.00	2.73	12.90	11.93
IF	1171.30	2.77	12.90	11.96
IF	1174.50	2.77	12.90	11.96
IF	1177.80	2.78	12.90	11.97
IF	1181.10	2.78	12.90	11.97
IF	1184.40	2.78	12.90	11.97
IF	1187.70	2.78	12.90	11.97
IF	1190.90	2.76	12.90	11.96
IF	1194.20	2.73	12.90	11.93
IF	1197.50	2.69	12.90	11.90
IF	1200.80	2.60	12.90	11.83
IF	1204.10	2.23	12.90	11.56
IF	1207.30	1.39	12.90	10.98
IF	1210.60	0.71	12.90	10.72
IF	1213.40	0.01	12.90	10.23
AS	1278.00	0.00	0.00	9.64
IF	1280.50	0.03	0.20	9.66
IF	1292.00	0.08	0.34	9.70
IF	1300.50	0.12	0.40	9.72
IF	1316.00	0.16	0.47	9.75
IF	1320.40	0.01	0.49	9.64
AS	1444.40	0.00	0.00	9.60
IF	1448.50	0.04	0.23	9.63
IF	1458.50	0.08	0.34	9.66
IF	1468.50	0.12	0.41	9.69
IF	1473.00	0.14	0.43	9.70
IF	1486.00	0.17	0.49	9.73
IF	1501.50	0.21	0.54	9.75

IF	1509.50	0.23	0.56	9.77
IF	1537.00	0.29	0.63	9.81
IF	1552.00	0.32	0.67	9.83
IF	1564.00	0.34	0.69	9.84
IF	1572.00	0.19	0.71	9.74
IF	1589.00	0.31	0.74	9.83
IF	1617.50	0.20	0.78	9.75
IF	1627.00	0.26	0.79	9.79
IF	1637.00	0.33	0.81	9.84
IF	1646.50	0.38	0.82	9.88
IF	1660.50	0.43	0.84	9.91
IF	1673.50	0.47	0.86	9.94
IF	1684.00	0.51	0.87	9.96
IF	1695.00	0.54	0.88	9.99
IF	1709.50	0.58	0.90	10.02
IF	1722.50	0.61	0.91	10.04
IF	1732.00	0.63	0.92	10.05
IF	1739.50	0.64	0.93	10.05
IF	1746.00	0.65	0.94	10.06
IF	1751.50	0.65	0.94	10.07
IF	1759.50	0.66	0.95	10.07
IF	1771.50	0.68	0.96	10.09
IF	1780.50	0.69	0.97	10.09
IF	1789.50	0.70	0.98	10.10
IF	1797.00	0.71	0.99	10.11
IF	1800.50	0.72	0.99	10.11
IF	1804.00	0.72	1.00	10.12
IF	1809.00	0.73	1.00	10.12
IF	1815.50	0.73	1.01	10.12
IF	1827.50	0.75	1.02	10.14
IF	1837.00	0.73	1.02	10.12
IF	1845.50	0.53	1.03	9.98
IF	1860.50	0.38	1.04	9.88
IF	1878.50	0.46	1.06	9.93
IF	1900.00	0.51	1.08	9.97
IF	1919.50	0.61	1.09	10.03
IF	1932.00	0.64	1.10	10.05
IF	1939.00	0.67	1.11	10.07
IF	1943.00	0.68	1.11	10.08
IF	1946.50	0.68	1.11	10.09
OF	1986.00	0.76	1.14	10.14
OF	1987.00	0.76	1.14	10.14
OF	2051.00	0.88	1.18	10.23
OF	2062.00	0.90	1.19	10.24
OF	2063.00	0.90	1.19	10.24
OF	2064.00	0.91	1.19	10.24
OF	2065.00	0.91	1.19	10.24
OF	2066.00	0.91	1.19	10.24
OF	2067.00	0.91	1.19	10.24
OF	2068.00	0.91	1.20	10.25
OF	2070.00	0.92	1.20	10.25
OF	2071.00	0.92	1.20	10.25
OF	2073.00	0.92	1.20	10.25
OF	2074.00	0.92	1.20	10.25
OF	2076.00	0.93	1.20	10.25
OF	2077.00	0.93	1.20	10.26
OF	2079.00	0.93	1.20	10.26
OF	2080.00	0.93	1.20	10.26
OF	2082.00	0.94	1.20	10.26
OF	2083.00	0.94	1.20	10.26
OF	2088.00	0.95	1.21	10.27
OF	2089.00	0.95	1.21	10.27
OF	2094.00	0.95	1.21	10.28
OF	2095.00	0.96	1.21	10.28
OF	2098.00	0.96	1.21	10.28
OF	2100.00	0.96	1.22	10.28
OF	2104.00	0.97	1.22	10.29
OF	2107.00	0.98	1.22	10.29
OF	2109.00	0.98	1.22	10.29
OF	2116.00	0.99	1.23	10.30
OF	2118.00	0.99	1.23	10.30
OF	2125.00	1.00	1.23	10.31
OF	2127.00	1.01	1.23	10.31
OF	2154.00	1.05	1.25	10.34
IF	2158.00	1.06	1.25	10.35
IF	2167.00	1.07	1.26	10.36
IF	2176.00	1.08	1.26	10.37
IF	2185.50	1.09	1.27	10.38
IF	2197.50	1.11	1.27	10.39
IF	2208.00	1.12	1.28	10.40
IF	2216.00	1.13	1.28	10.40
IF	2224.00	1.14	1.29	10.41
IF	2229.00	1.15	1.29	10.42
IF	2233.50	1.16	1.29	10.42
IF	2243.50	1.17	1.30	10.43
IF	2251.00	1.18	1.30	10.43
IF	2254.00	1.18	1.30	10.44
IF	2256.50	1.18	1.31	10.44
IF	2264.50	1.19	1.31	10.45
IF	2273.50	1.20	1.31	10.45
IF	2281.00	1.21	1.32	10.46
IF	2290.00	1.22	1.32	10.47
IF	2296.00	1.23	1.33	10.47
IF	2300.50	1.24	1.33	10.48
IF	2308.00	1.25	1.33	10.48
IF	2315.50	1.25	1.34	10.49
IF	2323.00	1.26	1.34	10.49
IF	2331.00	1.27	1.34	10.50
IF	2336.00	1.28	1.35	10.51
IF	2337.50	1.28	1.35	10.51
IF	2346.00	1.29	1.35	10.51
IF	2359.50	1.30	1.36	10.52

IF	2368.00	1.31	1.36	10.53
IF	2374.00	1.31	1.36	10.53
IF	2390.50	1.33	1.37	10.55
IF	2404.00	1.35	1.38	10.56
IF	2410.50	1.35	1.38	10.56
IF	2418.50	1.36	1.39	10.57
IF	2423.50	1.37	1.39	10.57
IF	2433.00	1.38	1.39	10.58
IF	2443.50	1.39	1.40	10.59
IF	2453.50	1.40	1.40	10.60
IF	2464.50	1.41	1.41	10.60
IF	2475.50	1.42	1.41	10.61
IF	2488.00	1.43	1.42	10.62
IF	2502.50	1.44	1.42	10.63
IF	2536.50	1.45	1.44	10.63
IF	2540.00	1.48	1.44	10.65
IF	2552.00	1.50	1.45	10.67
IF	2566.50	1.50	1.45	10.67
IF	2574.50	1.51	1.46	10.68
IF	2583.50	1.52	1.46	10.68
IF	2590.50	1.53	1.46	10.69
IF	2597.00	1.53	1.46	10.69
IF	2607.00	1.54	1.47	10.70
IF	2618.00	1.55	1.47	10.71
IF	2628.50	1.56	1.48	10.71
IF	2639.00	1.57	1.48	10.72
IF	2646.00	1.58	1.48	10.73
IF	2648.00	1.57	1.49	10.72
IF	2654.00	1.59	1.49	10.73
IF	2663.00	1.59	1.49	10.74
IF	2674.50	1.59	1.50	10.74
IF	2684.00	1.59	1.50	10.74
IF	2694.00	1.59	1.50	10.74
IF	2705.00	1.32	1.51	10.55
IF	2716.00	0.39	1.51	9.90
IF	2730.50	0.01	1.52	9.63

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN 1213.40 AND 1278.00

BETWEEN 1320.40 AND 1444.40

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
141.10	1.00	9.36
196.80	1.00	9.36
236.20	1.00	9.36
269.00	1.00	9.36
315.00	1.00	9.37
344.50	1.00	9.37
367.50	1.00	9.37
383.90	1.00	9.37
397.00	1.00	9.37
413.40	1.00	9.37
426.50	1.00	9.37
439.60	1.00	9.37
452.80	1.00	9.37
465.90	1.00	9.38
479.00	1.00	9.38
492.10	1.00	9.38
505.20	1.00	9.38
518.40	1.00	9.38
531.50	1.00	9.38
544.60	1.00	9.38
554.50	1.00	9.38
567.60	1.00	9.38
577.40	1.00	9.38
590.50	1.00	9.39
600.40	1.00	9.39
610.20	1.00	9.39
623.40	1.00	9.39
636.50	1.00	9.39
649.60	1.00	9.39
659.40	1.00	9.39
669.30	1.00	9.39
679.10	1.00	9.39
685.70	1.00	9.39
695.50	1.00	9.40
705.40	1.00	9.40
711.90	1.00	9.40
721.80	1.00	9.40
725.10	1.00	9.40
731.60	1.00	9.40
738.20	1.00	9.40
744.70	1.00	9.40
751.30	1.00	9.40
757.90	1.00	9.40
764.40	1.00	9.40
771.00	1.00	9.41
777.60	1.00	9.41
780.80	1.00	9.41
787.40	1.00	9.41
794.00	1.00	9.41
800.50	1.00	9.41
807.10	1.00	9.41
810.40	1.00	9.41
816.90	1.00	9.41
823.50	1.00	9.41
826.80	1.00	9.42
833.30	1.00	9.42
836.60	1.00	9.42
843.20	1.00	9.42
846.50	1.00	9.42
849.70	1.00	9.42
853.00	1.00	9.42

859.60	1.00	9.42
862.90	1.00	9.42
869.40	1.00	9.43
872.70	1.00	9.43
876.00	1.00	9.43
882.50	1.00	9.43
885.80	1.00	9.43
892.40	1.00	9.43
898.90	1.00	9.43
902.20	1.00	9.43
908.80	1.00	9.43
912.10	1.00	9.43
921.90	1.00	9.43
928.50	1.00	9.43
935.00	1.00	9.43
948.20	1.00	9.43
954.70	1.00	9.43
964.60	1.00	9.43
971.10	1.00	9.43
974.40	1.00	9.43
977.70	1.00	9.44
981.00	1.00	9.44
984.20	1.00	9.44
987.50	1.00	9.44
990.80	1.00	9.44
994.10	1.00	9.44
1000.70	1.00	9.44
1003.90	1.00	9.45
1007.20	1.00	9.45
1010.50	1.00	9.45
1013.80	1.00	9.45
1017.10	1.00	9.46
1020.30	1.00	9.46
1023.60	1.00	9.47
1026.90	1.00	9.47
1030.20	1.00	9.48
1033.50	1.00	9.48
1036.70	1.00	9.49
1040.00	1.00	9.49
1043.30	1.00	9.50
1046.60	1.00	9.51
1049.90	1.00	9.51
1053.10	1.00	9.52
1056.40	1.00	9.53
1059.70	1.00	9.54
1063.00	1.00	9.56
1066.30	1.00	9.57
1069.60	1.00	9.58
1072.80	1.00	9.59
1076.10	1.00	9.59
1079.40	1.00	9.60
1082.70	1.00	9.62
1086.00	1.00	9.65
1089.20	1.00	9.66
1092.50	1.00	9.68
1095.80	1.00	9.69
1099.10	1.00	9.72
1102.40	1.00	9.75
1105.60	1.00	9.78
1108.90	1.00	9.81
1112.20	1.00	9.84
1115.50	1.00	9.87
1118.80	1.00	9.90
1122.00	1.00	9.93
1125.30	1.00	9.95
1128.60	1.00	9.97
1131.90	1.00	9.98
1135.20	1.00	9.99
1138.40	1.00	9.99
1141.70	1.00	10.00
1145.00	1.00	10.00
1148.30	1.00	10.00
1151.60	1.00	10.01
1154.90	1.00	10.01
1158.10	1.00	10.01
1161.40	1.00	10.01
1164.70	1.00	10.02
1168.00	1.00	10.02
1171.30	1.00	10.02
1174.50	1.00	10.03
1181.10	1.00	10.02
1190.90	1.00	10.02
1194.20	1.00	10.02
1197.50	1.00	10.02
1200.80	1.00	10.01
1204.10	1.00	10.00
1207.30	1.00	10.01
1210.60	1.00	10.23
1278.00	1.00	9.64
1444.40	1.00	9.60
1572.00	1.00	9.61
1637.00	1.00	9.61
1695.00	1.00	9.61
1746.00	1.00	9.61
1800.50	1.00	9.61
1860.50	1.00	9.61
1900.00	1.00	9.61
1919.50	1.00	9.61
2088.00	1.00	9.61
2154.00	1.00	9.61
2185.50	1.00	9.61
2216.00	1.00	9.61

2281.00	1.00	9.61
2336.00	1.00	9.61
2390.50	1.00	9.61
2433.00	1.00	9.61
2453.50	1.00	9.62
2475.50	1.00	9.62
2502.50	1.00	9.62
2536.50	1.00	9.62
2566.50	1.00	9.62
2590.50	1.00	9.62
2618.00	1.00	9.62
2646.00	1.00	9.62

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
1102.69	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	18.56	V23 EL=19	130
137.80	18.53	V23 EL=19	130
141.10	18.53	V23 EL=19	130
193.60	18.54	V23 EL=19	130
196.80	18.54	V23 EL=19	130
232.90	18.55	V23 EL=19	130
236.20	18.55	V23 EL=19	130
265.70	18.55	V23 EL=19	130
269.00	18.55	V23 EL=19	130
311.70	18.54	V23 EL=19	130
315.00	18.54	V23 EL=19	130
341.20	18.53	V23 EL=19	130
344.50	18.53	V23 EL=19	130
364.20	18.52	V23 EL=19	130
367.50	18.53	V23 EL=19	130
380.60	18.53	V23 EL=19	130
383.90	18.53	V23 EL=19	130
393.70	18.53	V23 EL=19	130
397.00	18.53	V23 EL=19	130
410.10	18.53	V23 EL=19	130
413.40	18.53	V23 EL=19	130
423.20	18.53	V23 EL=19	130
426.50	18.53	V23 EL=19	130
436.40	18.53	V23 EL=19	130
439.60	18.53	V23 EL=19	130
449.50	18.53	V23 EL=19	130
452.80	18.53	V23 EL=19	130
462.60	18.53	V23 EL=19	130
465.90	18.53	V23 EL=19	130
475.70	18.53	V23 EL=19	130
479.00	18.53	V23 EL=19	130
488.80	18.53	V23 EL=19	130
492.10	18.53	V23 EL=19	130
502.00	18.53	V23 EL=19	130
505.20	18.53	V23 EL=19	130
515.10	18.53	V23 EL=19	130
518.40	18.53	V23 EL=19	130
528.20	18.52	V23 EL=19	130
531.50	18.52	V23 EL=19	130
541.30	18.52	V23 EL=19	130
544.60	18.52	V23 EL=19	130
551.20	18.52	V23 EL=19	130
554.50	18.52		

		V23	EL=19	130
564.30	18.51	V23	EL=19	130
567.60	18.51	V23	EL=19	130
574.10	18.51	V23	EL=19	130
577.40	18.51	V23	EL=19	130
587.30	18.50	V23	EL=19	130
590.50	18.50	V23	EL=19	130
594.22	18.50	V23	EL=18	130
597.10	18.50	V23	EL=18	130
600.40	18.50	V23	EL=18	130
607.00	18.50	V23	EL=18	130
610.20	18.49	V23	EL=18	130
620.10	18.49	V23	EL=18	130
623.40	18.49	V23	EL=18	130
633.20	18.48	V23	EL=18	130
636.50	18.47	V23	EL=18	130
646.30	18.46	V23	EL=18	130
649.60	18.46	V23	EL=18	130
656.20	18.45	V23	EL=18	130
659.40	18.45	V23	EL=18	130
666.00	18.44	V23	EL=18	130
669.30	18.44	V23	EL=18	130
675.90	18.43	V23	EL=18	130
679.10	18.42	V23	EL=18	130
682.40	18.42	V23	EL=18	130
685.70	18.42	V23	EL=18	130
692.30	18.39	V23	EL=18	130
695.50	18.37	V23	EL=18	130
702.10	18.33	V23	EL=18	130
705.40	18.31	V23	EL=18	130
708.70	18.29	V23	EL=18	130
711.90	18.26	V23	EL=18	130
718.50	18.22	V23	EL=18	130
721.80	18.19	V23	EL=18	130
725.10	18.17	V23	EL=18	130
728.30	18.15	V23	EL=18	130
731.60	18.14	V23	EL=18	130
734.90	18.12	V23	EL=18	130
738.20	18.11	V23	EL=18	130
741.50	18.09	V23	EL=18	130
744.70	18.08	V23	EL=18	130
748.00	18.06	V23	EL=18	130
751.30	18.04	V23	EL=18	130
754.60	18.03	V23	EL=18	130
757.90	18.01	V23	EL=18	130
761.20	18.00	V23	EL=18	130
764.40	17.98	V23	EL=18	130
767.70	17.96	V23	EL=18	130
771.00	17.95	V23	EL=18	130
774.30	17.93	V23	EL=18	130
777.60	17.92	V23	EL=18	130
780.80	17.90			

		V23	EL=18	130
784.10	17.89	V23	EL=18	130
787.40	17.87	V23	EL=18	130
790.70	17.85	V23	EL=18	130
794.00	17.84	V23	EL=18	130
797.20	17.82	V23	EL=18	130
800.50	17.81	V23	EL=18	130
803.80	17.79	V23	EL=18	130
807.10	17.77	V23	EL=18	130
810.40	17.75	V23	EL=18	130
813.60	17.74	V23	EL=18	130
816.90	17.72	V23	EL=18	130
820.20	17.70	V23	EL=18	130
823.50	17.69	V23	EL=18	130
826.80	17.67	V23	EL=18	130
830.10	17.67	V23	EL=18	130
833.30	17.66	V23	EL=18	130
836.60	17.66	V23	EL=18	130
839.90	17.66	V23	EL=18	130
843.20	17.65	V23	EL=18	130
846.50	17.65	V23	EL=18	130
849.70	17.65	V23	EL=18	130
853.00	17.65	V23	EL=18	130
856.30	17.64	V23	EL=18	130
859.60	17.64	V23	EL=18	130
862.90	17.64	V23	EL=18	130
866.10	17.63	V23	EL=18	130
869.40	17.63	V23	EL=18	130
872.70	17.63	V23	EL=18	130
876.00	17.62	V23	EL=18	130
879.30	17.62	V23	EL=18	130
882.50	17.62	V23	EL=18	130
885.80	17.61	V23	EL=18	130
889.10	17.61	V23	EL=18	130
892.40	17.61	V23	EL=18	130
895.70	17.60	V23	EL=18	130
898.90	17.60	V23	EL=18	130
902.20	17.60	V23	EL=18	130
905.50	17.59	V23	EL=18	130
908.80	17.59	V23	EL=18	130
912.10	17.59	V23	EL=18	130
918.60	17.51	V23	EL=18	130
918.90	17.50	V23	EL=17	130
921.90	17.42	V23	EL=17	130
925.20	17.33	V23	EL=17	130
928.50	17.24	V23	EL=17	130
931.80	17.15	V23	EL=17	130
935.00	17.06	V23	EL=17	130
944.90	16.80	V23	EL=17	130
948.20	16.71	V23	EL=17	130
951.40	16.62	V23	EL=17	130
954.70	16.54			

956.23	16.50	V23	EL=17	130
961.30	16.37	V23	EL=16	130
964.60	16.29	V23	EL=16	130
967.80	16.20	V23	EL=16	130
971.10	16.12	V23	EL=16	130
974.40	16.04	V23	EL=16	130
977.70	15.96	V23	EL=16	130
981.00	15.87	V23	EL=16	130
984.20	15.79	V23	EL=16	130
987.50	15.71	V23	EL=16	130
990.80	15.62	V23	EL=16	130
994.10	15.53	V23	EL=16	130
994.95	15.50	V23	EL=16	130
997.40	15.41	V23	EL=15	130
1000.70	15.29	V23	EL=15	130
1003.90	15.17	V23	EL=15	130
1007.20	15.05	V23	EL=15	130
1010.50	14.93	V23	EL=15	130
1013.80	14.81	V23	EL=15	130
1017.10	14.69	V23	EL=15	130
1020.30	14.57	V23	EL=15	130
1023.60	14.60	V23	EL=15	130
1026.90	14.52	V23	EL=15	130
1027.45	14.50	V23	EL=15	130
1030.20	14.38	V23	EL=14	130
1033.50	14.29	V23	EL=14	130
1036.70	14.21	V23	EL=14	130
1040.00	14.12	V23	EL=14	130
1043.30	14.02	V23	EL=14	130
1046.60	13.86	V23	EL=14	130
1049.90	13.71	V23	EL=14	130
1053.10	13.57	V23	EL=14	130
1054.79	13.50	V23	EL=14	130
1056.40	13.43	V23	EL=13	130
1059.70	13.41	V23	EL=13	130
1063.00	13.40	V23	EL=13	130
1066.30	13.32	V23	EL=13	130
1069.60	13.26	V23	EL=13	130
1072.80	13.09	V23	EL=13	130
1076.10	12.83	V23	EL=13	130
1079.40	12.59	V23	EL=13	130
1082.70	12.54	V23	EL=13	130
1086.00	12.57	V23	EL=13	130
1089.20	12.53	V23	EL=13	130
1089.59	12.50	V23	EL=13	130
1092.50	12.30	V23	EL=12	130
1095.80	12.07	V23	EL=12	130
1099.10	11.94	V24	EL=12	140
1102.40	11.86	V24	EL=12	140
1102.69	11.87	V24	EL=12	140
1105.60	11.82	A19	EL=12	95

1108.90	11.78	A19	EL=12	95
1112.20	11.68	A19	EL=12	95
1115.50	11.56	A19	EL=12	95
1118.80	11.60	A19	EL=12	95
1122.00	11.65	A19	EL=12	95
1125.30	11.68	A19	EL=12	95
1128.60	11.72	A19	EL=12	95
1131.90	11.75	A19	EL=12	95
1135.20	11.78	A19	EL=12	95
1138.40	11.81	A19	EL=12	95
1141.70	11.82	A19	EL=12	95
1145.00	11.82	A19	EL=12	95
1148.30	11.83	A19	EL=12	95
1151.60	11.83	A19	EL=12	95
1154.90	11.84	A19	EL=12	95
1158.10	11.84	A19	EL=12	95
1161.40	11.86	A19	EL=12	95
1164.70	11.90	A19	EL=12	95
1168.00	11.93	A19	EL=12	95
1171.30	11.96	A19	EL=12	95
1174.50	11.96	A19	EL=12	95
1177.80	11.97	A19	EL=12	95
1181.10	11.97	A19	EL=12	95
1187.70	11.97	A19	EL=12	95
1190.90	11.96	A19	EL=12	95
1194.20	11.93	A19	EL=12	95
1197.50	11.90	A19	EL=12	95
1200.80	11.83	A19	EL=12	95
1204.10	11.56	A19	EL=12	95
1204.45	11.50	A19	EL=11	95
1207.30	10.98	A19	EL=11	95
1210.60	10.72	A19	EL=11	95
1211.86	10.50	A19	EL=10	95
1213.40	10.23			
1278.00	9.64	A19	EL=10	95
1320.40	9.64			
1444.40	9.60	A19	EL=10	95
1564.00	9.84	A19	EL=10	95
1572.00	9.74	A19	EL=10	95
1627.00	9.79	A19	EL=10	95
1637.00	9.84	A19	EL=10	95
1684.00	9.96	A19	EL=10	95
1695.00	9.99	A19	EL=10	95
1739.50	10.05	A19	EL=10	95
1746.00	10.06	A19	EL=10	95
1797.00	10.11	A19	EL=10	95
1800.50	10.11	A19	EL=10	95
1845.50	9.98	A19	EL=10	95
1860.50	9.88	A19	EL=10	95
1878.50	9.93	A19	EL=10	95
1900.00	9.97	A19	EL=10	95
1919.50	10.03			

		A19	EL=10	95
2083.00	10.26			
		A19	EL=10	95
2088.00	10.27			
		A19	EL=10	95
2127.00	10.31			
		A19	EL=10	95
2154.00	10.34			
		A19	EL=10	95
2176.00	10.37			
		A19	EL=10	95
2185.50	10.38			
		A19	EL=10	95
2208.00	10.40			
		A19	EL=10	95
2216.00	10.40			
		A19	EL=10	95
2273.50	10.45			
		A19	EL=10	95
2281.00	10.46			
		A19	EL=10	95
2330.46	10.50			
		A19	EL=11	95
2331.00	10.50			
		A19	EL=11	95
2336.00	10.51			
		A19	EL=11	95
2374.00	10.53			
		A19	EL=11	95
2390.50	10.55			
		A19	EL=11	95
2423.50	10.57			
		A19	EL=11	95
2433.00	10.58			
		A19	EL=11	95
2443.50	10.59			
		A19	EL=11	95
2453.50	10.60			
		A19	EL=11	95
2464.50	10.60			
		A19	EL=11	95
2475.50	10.61			
		A19	EL=11	95
2488.00	10.62			
		A19	EL=11	95
2502.50	10.63			
		A19	EL=11	95
2536.50	10.63			
		A19	EL=11	95
2552.00	10.67			
		A19	EL=11	95
2566.50	10.67			
		A19	EL=11	95
2583.50	10.68			
		A19	EL=11	95
2590.50	10.69			
		A19	EL=11	95
2607.00	10.70			
		A19	EL=11	95
2618.00	10.71			
		A19	EL=11	95
2639.00	10.72			
		A19	EL=11	95
2646.00	10.73			
		A19	EL=11	95
2705.83	10.50			
		A19	EL=10	95
2730.50	9.63			

ZONE TERMINATED AT END OF TRANSECT
PART 7 POSTSCRIPT NOTES

PS# 1 START(385094.3735,4805455.9209)
PS# 2 END(384505.3791,4806105.5345)

-1.000000e+00

YK-106
100-year WHAFIS Output
Zero Station: -70.42145434, 43.39523496
Onshore Dir: 132.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-1000
-500
0
500
1000
1500
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-106
Two Percent Run-up Elevation is 14.7 Feet-NAVD88
Run-up Height is 4.5 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
16
14
12
10
8
6
4
140
160
180
200
220
240
260
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-106
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-106sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-106-runup';
SWEL=9.3612;  % 100-yr still water level including wave setup.
H0=2.2239;    % significant wave height at toe of structure
Tp=12.5841;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.94278;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.66269;
maxSetup=0.86394;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-106'

plotTitle =

Iterative TAW for YK-106



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                  10.02389

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                  10.88783



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          669.668791633084


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                    6.68804


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                   13.35974


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          172.270232810157


top_sta =

          205.328239137445

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          205.328239137445

toe_sta

toe_sta =

          172.270232810157




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 27.5 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.76 feet


ans =

-!!-       SWEL is adjusted to 10.12 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
```

```
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% get the length of the slope (not accounting for berm)
Lslope=top_sta-toe_sta

% loop over profile segments to determine berm factor
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
```

```
        R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
    end


    % check to see if we need to evaluate a shallow foreshore
    if berm_width > 0.25 * L0;
        disp ('!   Berm_width is greater than 1/4 wave length')
        disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
        % do the foreshore calculation
        fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
        % get upper slope
        fore_toe_sta=-999;
        fore_toe_dep=-999;
        for kk=length(dep)-1:-1:1
            ddep=dep(kk+1)-dep(kk);
            dsta=sta(kk+1)-sta(kk);
            s=ddep/dsta;
            if s < 1/15
                break
            end
            fore_toe_sta=sta(kk);
            fore_toe_dep=dep(kk);
            upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
        end
        fore_Irb=upper_slope/(sqrt(fore_H0/L0));
        fore_gamma=gamma_perm*gamma_beta*gamma_rough;
        if (fore_Irb < 1.8)
            fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
        else
            fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
        end
        if berm_width >= L0
            R2_new=fore_R2
            disp ('berm is wider than one wavelength, use full shallow foreshore solution');
        else
            w2=(berm_width-0.25*L0)/(0.75*L0)
            w1=1-w2
            R2_new=w2*fore_R2 + w1*R2_new
        end
    end % end berm width check
    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;
    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
        if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
            top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
            break;
        end
    end
    if top_sta==-999
        dy=Z2-dep(end);
        top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                  6.68804
toe_sta =
         172.270232810157
top_sta =
         205.328239137445
Z2 =
                 13.35974
H0 =
                   2.2239
Tp =
                  12.5841
T0 =
         11.4400909090909
R2 =
                   6.6717
Z2 =
          16.792859666885
top_sta =
         257.373068974275
Lslope =
         85.1028361641183
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
        -3.53041583311496
rdh_sum =
        0.545744151092099
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
```

```
dh =
         -3.59603233311496
rdh_sum =
          1.10684807754562
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
         -3.66164883311496
rdh_sum =
          1.68325345007157
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
         -3.72726583311496
rdh_sum =
          2.27488744847745
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
         -3.79288283311496
rdh_sum =
            2.881662598394
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
         -3.85849983311496
rdh_sum =
          3.50347697161712
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
         -3.92411633311496
rdh_sum =
          4.14021417017599
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
         -3.98973283311496
rdh_sum =
          4.79174366590274
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
         -4.05534983311496
rdh_sum =
          5.45792092105712
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
         -4.12096683311496
rdh_sum =
          6.13858730182598
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
         -4.18658383311496
rdh_sum =
          6.83357034298923
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
         -4.25220033311496
rdh_sum =
          7.54268380562533
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 49
dh =
         -4.31781683311496
rdh_sum =
          8.26572807179969
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    13
rB =
         0.152756366132497
rdh_mean =
         0.635825236292284
gamma_berm =
         0.944369986458848
slope =
         0.140144551926983
Irb =
          2.43191629101195
gamma_berm =
         0.944369986458848
gamma_perm =
     1
gamma_beta =
     1
```

```
gamma_rough =
                      0.6
gamma =
         0.566621991875309
ans =
!!! - - Iribaren number:   2.30 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.1 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          4.12560728910278
R2del =
          2.54609271089722
Z2 =
          14.2467669559878
top_sta =
          218.570720331436
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                   6.68804
toe_sta =
          172.270232810157
top_sta =
          218.570720331436
Z2 =
          14.2467669559878
H0 =
                    2.2239
Tp =
                   12.5841
T0 =
          11.4400909090909
R2 =
          4.12560728910278
Z2 =
          14.2467669559878
top_sta =
          218.570720331436
Lslope =
          46.3004875212792
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
         -3.53041583311496
rdh_sum =
         0.949518231292898
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
         -3.59603233311496
rdh_sum =
          1.90941029675155
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
         -3.66164883311496
rdh_sum =
           2.8785282676531
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
         -3.72726583311496
rdh_sum =
          3.85570124351448
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
         -3.79288283311496
rdh_sum =
          4.83973814287964
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
         -3.85849983311496
rdh_sum =
          5.82943075110932
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
         -3.92411633311496
rdh_sum =
          6.82355670713583
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
         -3.98973283311496
rdh_sum =
          7.82088263160731
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
```

```
dh =
         -4.05534983311496
rdh_sum =
          8.82016716796591
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
         -4.12096683311496
rdh_sum =
          9.82016404162643
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
         -4.18658383311496
rdh_sum =
          10.8196251999236
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    11
rB =
         0.237578491909929
rdh_mean =
         0.983602290902147
gamma_berm =
         0.996104257001754
slope =
         0.214125285137533
Irb =
          3.71569755715408
gamma_berm =
         0.996104257001754
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.597662554201053
ans =
!!! - - Iribaren number:   3.70 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:4.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          4.61206673401333
R2del =
         0.486459444910555
Z2 =
          14.7332264008984
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                  6.68804
toe_sta =
          172.270232810157
top_sta =
          225.984354677879
Z2 =
          14.7332264008984
H0 =
                   2.2239
Tp =
                  12.5841
T0 =
          11.4400909090909
R2 =
          4.61206673401333
Z2 =
          14.7332264008984
top_sta =
          225.984354677879
Lslope =
          53.7141218677221
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
         -3.53041583311496
rdh_sum =
         0.870315245154172
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
         -3.59603233311496
rdh_sum =
          1.75527150410681
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
         -3.66164883311496
```

```
rdh_sum =
          2.65409987120616
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
         -3.72726583311496
rdh_sum =
          3.56600382940036
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
         -3.79288283311496
rdh_sum =
          4.49016063558538
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
         -3.85849983311496
rdh_sum =
          5.42572307263599
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
         -3.92411633311496
rdh_sum =
          6.37182106473792
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
         -3.98973283311496
rdh_sum =
          7.32756358269138
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
         -4.05534983311496
rdh_sum =
           8.2920403965119
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
         -4.12096683311496
rdh_sum =
          9.26432375329019
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
dh =
         -4.18658383311496
rdh_sum =
          10.2434703072117
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
         -4.25220033311496
rdh_sum =
          11.2285229624827
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 49
dh =
         -4.31781683311496
rdh_sum =
          12.2185128824641
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    13
rB =
         0.242022014843958
rdh_mean =
          0.93988560634339
gamma_berm =
         0.985450993326104
slope =
         0.197601864705242
Irb =
          3.42896807120544
gamma_berm =
         0.985450993326104
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.591270595995663
ans =
!!! - - Iribaren number:   3.38 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.1 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
```

```
R2_new =
          4.51802392308553
R2del =
        0.0940428109277986
Z2 =
          14.6391835899706
ans =
!---------------- STARTING ITERATION 4 ----------------!
Ztoe =
                   6.68804
toe_sta =
          172.270232810157
top_sta =
           224.55114665362
Z2 =
          14.6391835899706
H0 =
                    2.2239
Tp =
                   12.5841
T0 =
          11.4400909090909
R2 =
          4.51802392308553
Z2 =
          14.6391835899706
top_sta =
           224.55114665362
Lslope =
          52.2809138434632
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 37
dh =
         -3.53041583311496
rdh_sum =
         0.886661042345764
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 38
dh =
         -3.59603233311496
rdh_sum =
          1.78737847312912
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 39
dh =
         -3.66164883311496
rdh_sum =
          2.70131824448724
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
         -3.72726583311496
rdh_sum =
          3.62761887859615
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
         -3.79288283311496
rdh_sum =
          4.56539306553805
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
         -3.85849983311496
rdh_sum =
          5.51372961413297
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
         -3.92411633311496
rdh_sum =
          6.47169527874202
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
         -3.98973283311496
rdh_sum =
          7.43833685579963
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 45
dh =
         -4.05534983311496
rdh_sum =
          8.41268313878004
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 46
dh =
         -4.12096683311496
rdh_sum =
          9.39374681467531
```

```
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 47
dh =
         -4.18658383311496
rdh_sum =
          10.3805265887733
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 48
dh =
         -4.25220033311496
rdh_sum =
          11.3720092368213
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 49
dh =
         -4.31781683311496
rdh_sum =
          12.3671717934558
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    13
rB =
         0.248656709385837
rdh_mean =
         0.951320907188907
gamma_berm =
         0.987895616965706
slope =
         0.202417479940929
Irb =
          3.51253302597452
gamma_berm =
         0.987895616965706
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.592737370179424
ans =
!!! - - Iribaren number:   3.47 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:4.9 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          4.54286185909809
R2del =
        0.0248379360125632
Z2 =
          14.6640215259831
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
                   6.68804
toe_sta =
          172.270232810157
top_sta =
          224.929675632582
Z2 =
          14.6640215259831
H0 =
                    2.2239
Tp =
                   12.5841
T0 =
          11.4400909090909
R2 =
          4.54286185909809
Z2 =
          14.6640215259831
top_sta =
          224.929675632582
Lslope =
          52.6594428224254
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 37
dh =
         -3.53041583311496
rdh_sum =
         0.882371522388302
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 38
dh =
         -3.59603233311496
rdh_sum =
          1.77896334649868
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 39
```

```
dh =
         -3.66164883311496
rdh_sum =
          2.68895901158635
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
         -3.72726583311496
rdh_sum =
          3.61151455493854
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
         -3.79288283311496
rdh_sum =
          4.54576005123253
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
         -3.85849983311496
rdh_sum =
          5.49080150875659
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 43
dh =
         -3.92411633311496
rdh_sum =
          6.44572263815255
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 44
dh =
         -3.98973283311496
rdh_sum =
          7.40958689655306
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 45
dh =
         -4.05534983311496
rdh_sum =
          8.38143938712393
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 46
dh =
         -4.12096683311496
rdh_sum =
          9.36030869572424
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 47
dh =
         -4.18658383311496
rdh_sum =
            10.34520896252
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 48
dh =
         -4.25220033311496
rdh_sum =
          11.3351418770797
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 49
dh =
         -4.31781683311496
rdh_sum =
          12.3290988180249
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
    13
rB =
         0.246869304026587
rdh_mean =
         0.948392216771146
gamma_berm =
         0.987259622471938
slope =
         0.201111789736822
Irb =
          3.48987549676827
gamma_berm =
         0.987259622471938
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.592355773483163
ans =
!!! - - Iribaren number:   3.45 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
```

```
ans =
!!! - - slope: 1:5.0 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          4.53629239466394
R2del =
       0.00656946443415762
Z2 =
           14.657452061549
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
           14.657452061549
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-106

Station locations shifted by: -4.38 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-106

Incident significant wave height: 8.21 feet

Peak wave period: 12.90 seconds

Mean wave height: 5.14 feet

Local Depth below SWEL: 21.31 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 21.31
    Period, T = 10.97
    Waveheight, H = 5.14
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*10.97*10.97/6.28 = 615.66
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 615.66/10.97 = 56.15
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/10.97 = 0.57
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.57*0.57*21.31/32.17 = 0.22
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 25.23
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(56.15/25.23) = 1.49
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 5.14/1.49 = 3.45
```

Deepwater mean wave height: 3.45 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-106

RUNUP2 SWEL:
9.40
9.40
9.40
9.40

9.40
9.40
9.40
9.40
9.40

RUNUP2 deepwater mean wave heights:
3.27
3.27
3.27
3.45
3.45
3.45
3.62
3.62
3.62

RUNUP2 mean wave periods:
10.42
10.97
11.51
10.42
10.97
11.51
10.42
10.97
11.51

RUNUP2 runup above SWEL:
1.32
1.39
1.47
1.36
1.44
1.49
1.40
1.47
1.54

RUNUP2 Mean runup height above SWEL: 1.43 feet

RUNUP2 2-percent runup height above SWEL: 3.15 feet

RUNUP2 2-percent runup elevation: 12.55 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 8.21 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 5.51 feet

Peak wave period: 12.90 seconds

Average beach Slope: 1:47.41 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     5.51
Wave Period,                        T  =    12.90
Beach Slope,                        S  =    0.021

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 4.6,  4.0,   3.6,    3.0,    1.9]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 3.96 feet

ACES Beach 2-percent runup elevation: 13.36 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-106                                                    1
15.0
  -11.95 -1026.1 0.6
  -11.81 -1003.1 0.6
  -10.88 -751.1 0.6
  -10.13 -662.1 0.6
  -9.41 -518.1 0.6
  -8.50 -403.1 0.6
  -7.16 -301.1 0.6
  -6.15 -201.1 0.6
  -5.91 -110.1 0.6
  -2.02 -33.1  0.6
  -0.02 -5.1   0.6
  0.99  15.9   0.6
  2.33  30.9   0.6
  2.79  44.9   0.6
  4.24  54.4   0.6
  6.80  89.9   0.6
  6.80  176.4  0.6
  10.27 187.4  0.6
  12.77 201.4  0.6
1 14.47 226.4  0.6
 9.4   3.27  10.42
 9.4   3.27  10.97
 9.4   3.27  11.51
 9.4   3.45  10.42
 9.4   3.45  10.97
 9.4   3.45  11.51
 9.4   3.62  10.42
 9.4   3.62  10.97
 9.4   3.62  11.51
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-102.6	-11.9		
			.00	10.60
2	-100.3	-11.8		
			-650.70	10.60
3	-751.0	-10.8		
			127.14	.60
4	-662.0	-10.1		
			208.55	.60
5	-518.1	-9.4		
			126.37	.60
6	-403.1	-8.5		
			76.12	.60
7	-301.1	-7.2		
			99.01	.60
8	-201.1	-6.1		
			379.17	.60
9	-110.1	-5.9		
			19.79	.60
10	-33.1	-2.0		
			14.00	.60
11	-5.1	.0		
			20.79	.60
12	15.9	1.0		
			11.19	.60
13	30.9	2.3		
			30.43	.60
14	44.9	2.8		
			6.55	.60
15	54.4	4.3		
			13.87	.60
16	89.9	6.8		
			FLAT	.60
17	176.4	6.8		
			3.17	.60
18	187.4	10.3		
			5.60	.60
19	201.4	12.8		
			14.71	.60
20	226.4	14.5		

LAST SLOPE 15.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.40	3.27	10.42	11	18	1.32	5.76
9.40	3.27	10.97	11	18	1.39	5.89
9.40	3.27	11.51	11	18	1.47	6.02
9.40	3.45	10.42	11	18	1.36	6.01
9.40	3.45	10.97	11	18	1.44	6.14
9.40	3.45	11.51	11	18	1.49	6.27
9.40	3.62	10.42	11	18	1.40	6.24
9.40	3.62	10.97	11	18	1.47	6.38
9.40	3.62	11.51	11	18	1.54	6.51

Runup2 2% runup elevation for Transect: YK-106
Ground
Swel
2% Runup
Two Percent Run-up Elevation is 12.5 Feet-NAVD88
Run-up Height is 3.1 Feet
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-1200
-1000
-800
-600
-400
-200
0
200
400

Transect Number: YK-107
43.415
43.41
43.405
43.4
43.395
43.39
43.385
43.38
Latitude
-70.44
-70.43
-70.42
-70.41
-70.4
-70.39
Longitude
ams Corner
Clock Farm Corner
ME 9
Timber Island

Elevation profile
40
30
20
10
0
-10
-20
-30
-40
-50
Elevation (ft)
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-107

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -1395 ft
LON: -70.4143 deg E
LAT: 43.3939 deg N
Bottom ELEV: -13.3352 ft-NAVD88
TWL: 9.3596 ft-NAVD88
HS: 5.739 ft
TP: 13.2087 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 102.4838 deg CCW from East

TAW/RUNUP input

toe sta: 0 ft
toe elev: 1.3517 ft-NAVD88
top sta: 168.5 ft
top elev: 14.1798 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-107: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-1400
-1200
-1000
-800
-600
-400
-200
0
200
400
600

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-107zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-107.swn
swan output name:     2_swan/swanfiles/YK-107.dat

Boundary Conditions:
    TWL- 2.8528 meters
    HS-  1.7492 meters
    PER- 13.2087 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.61291 feet
SWAN output at toe:
    SETUP- -0.0031758 feet
    HS-    5.7654 feet
    PER-   13.2478 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.61291 feet
SWAN output at toe:
    SETUP- -0.0031758 feet
    HS-    5.7654 feet
    PER-   13.2478 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-107
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000

```
                    Execution started at 20200401.174324


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      472       0.   472     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      472   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-107zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   1.7492     13.2087     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      472  472    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-107.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             473 MYC              1
                     : MCGRD           474
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  25.48 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.22 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  17.41 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  45.44 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  99.58 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	1.74786	13.1110	12.4477	11.9153	0.025	31.6225	6.9200	0.000000
1.	0.	1.74914	13.1149	12.4477	11.8783	0.025	31.5848	6.9100	-0.000019
2.	0.	1.75056	13.1188	12.4477	11.8420	0.025	31.5624	6.9000	-0.000040
3.	0.	1.75152	13.1226	12.4477	11.8064	0.025	31.5448	6.9000	-0.000038
4.	0.	1.75279	13.1263	12.4477	11.7721	0.025	31.5132	6.8899	-0.000058
5.	0.	1.75413	13.1294	13.8874	11.7387	0.025	31.4922	6.8799	-0.000079
6.	0.	1.75502	13.1318	13.8874	11.7060	0.025	31.4743	6.8799	-0.000078
7.	0.	1.75635	13.1341	13.8874	11.6745	0.025	31.4572	6.8699	-0.000099
8.	0.	1.75720	13.1364	13.8874	11.6435	0.025	31.4405	6.8699	-0.000098
9.	0.	1.75834	13.1386	13.8874	11.6137	0.025	31.4089	6.8599	-0.000119
10.	0.	1.75957	13.1407	13.8874	11.5847	0.025	31.3871	6.8499	-0.000141
11.	0.	1.76034	13.1428	13.8874	11.5557	0.025	31.3685	6.8499	-0.000140
12.	0.	1.76145	13.1448	13.8874	11.5276	0.025	31.3363	6.8398	-0.000161
13.	0.	1.76265	13.1468	13.8874	11.5001	0.025	31.3141	6.8298	-0.000182
14.	0.	1.76339	13.1487	13.8874	11.4727	0.025	31.2977	6.8298	-0.000181
15.	0.	1.76445	13.1506	13.8874	11.4464	0.025	31.2709	6.8198	-0.000201
16.	0.	1.76559	13.1524	13.8874	11.4206	0.025	31.2531	6.8098	-0.000222
17.	0.	1.76615	13.1542	13.8874	11.3950	0.025	31.2264	6.8098	-0.000219
18.	0.	1.76743	13.1560	13.8874	11.3708	0.025	31.1849	6.7897	-0.000261
19.	0.	1.76819	13.1577	13.8874	11.3466	0.025	31.1387	6.7797	-0.000279
20.	0.	1.76938	13.1594	13.8874	11.3232	0.026	31.0911	6.7597	-0.000320
21.	0.	1.77023	13.1610	13.8874	11.2998	0.026	31.0558	6.7497	-0.000340
22.	0.	1.77111	13.1626	13.8874	11.2768	0.026	31.0245	6.7396	-0.000360
23.	0.	1.77200	13.1641	13.8874	11.2542	0.026	30.9943	6.7296	-0.000380
24.	0.	1.77288	13.1657	13.8874	11.2321	0.026	30.9646	6.7196	-0.000400
25.	0.	1.77361	13.1671	13.8874	11.2103	0.026	30.9242	6.7096	-0.000420
26.	0.	1.77450	13.1686	13.8874	11.1894	0.026	30.8585	6.6895	-0.000461
27.	0.	1.77563	13.1701	13.8874	11.1693	0.027	30.7739	6.6595	-0.000525
28.	0.	1.77681	13.1716	13.8874	11.1494	0.027	30.6936	6.6294	-0.000590
29.	0.	1.77757	13.1730	13.8874	11.1290	0.027	30.6150	6.6094	-0.000632
30.	0.	1.77867	13.1745	13.8874	11.1094	0.027	30.5259	6.5793	-0.000699
31.	0.	1.77976	13.1759	13.8874	11.0900	0.028	30.4335	6.5492	-0.000766
32.	0.	1.78087	13.1773	13.8874	11.0705	0.028	30.3397	6.5192	-0.000836
33.	0.	1.78212	13.1787	13.8874	11.0510	0.028	30.2560	6.4891	-0.000907
34.	0.	1.78296	13.1801	13.8874	11.0309	0.028	30.1758	6.4690	-0.000954
35.	0.	1.78418	13.1814	13.8874	11.0115	0.028	30.0858	6.4390	-0.001027
36.	0.	1.78539	13.1828	13.8874	10.9922	0.029	29.9928	6.4089	-0.001101
37.	0.	1.78674	13.1841	13.8874	10.9728	0.029	29.9092	6.3788	-0.001177
38.	0.	1.78765	13.1854	13.8874	10.9530	0.029	29.8291	6.3588	-0.001228
39.	0.	1.78897	13.1867	13.8874	10.9338	0.029	29.7393	6.3287	-0.001306
40.	0.	1.79027	13.1880	13.8874	10.9147	0.030	29.6465	6.2986	-0.001386
41.	0.	1.79169	13.1893	13.8874	10.8957	0.030	29.5631	6.2685	-0.001467
42.	0.	1.79267	13.1905	13.8874	10.8761	0.030	29.4834	6.2485	-0.001522
43.	0.	1.79408	13.1918	13.8874	10.8572	0.031	29.3940	6.2184	-0.001606
44.	0.	1.79547	13.1930	13.8874	10.8382	0.031	29.3018	6.1883	-0.001691
45.	0.	1.79704	13.1943	13.8874	10.8186	0.031	29.2193	6.1582	-0.001777
46.	0.	1.79817	13.1954	13.8874	10.7983	0.031	29.1405	6.1382	-0.001836
47.	0.	1.79973	13.1966	13.8874	10.7785	0.032	29.0523	6.1081	-0.001925
48.	0.	1.80130	13.1977	13.8874	10.7588	0.032	28.9613	6.0780	-0.002016
49.	0.	1.80298	13.1989	13.8874	10.7390	0.032	28.8796	6.0479	-0.002108
50.	0.	1.80420	13.2000	13.8874	10.7186	0.033	28.8016	6.0278	-0.002171
51.	0.	1.80587	13.2011	13.8874	10.6989	0.033	28.7179	5.9977	-0.002265
52.	0.	1.80756	13.2021	13.8874	10.6789	0.033	28.6357	5.9676	-0.002358
53.	0.	1.80935	13.2032	13.8874	10.6590	0.034	28.5630	5.9375	-0.002454
54.	0.	1.81067	13.2042	13.8874	10.6384	0.034	28.4940	5.9175	-0.002518
55.	0.	1.81245	13.2052	13.8874	10.6184	0.035	28.4169	5.8874	-0.002616
56.	0.	1.81424	13.2062	13.8874	10.5984	0.036	28.3376	5.8573	-0.002715
57.	0.	1.81614	13.2071	13.8874	10.5782	0.036	28.2669	5.8272	-0.002816
58.	0.	1.81757	13.2080	13.8874	10.5572	0.037	28.1995	5.8071	-0.002885
59.	0.	1.81949	13.2089	13.8874	10.5367	0.037	28.1238	5.7770	-0.002989

60.	0.	1.82143	13.2098	13.8874	10.5161	0.038	28.0458	5.7469	-0.003094
61.	0.	1.82350	13.2107	13.8874	10.4950	0.039	27.9772	5.7168	-0.003202
62.	0.	1.82511	13.2115	13.8874	10.4729	0.041	27.9129	5.6967	-0.003275
63.	0.	1.82725	13.2123	13.8874	10.4512	0.042	27.8414	5.6666	-0.003385
64.	0.	1.82943	13.2131	13.8874	10.4290	0.043	27.7698	5.6365	-0.003496
65.	0.	1.83173	13.2138	13.8874	10.4066	0.046	27.7071	5.6064	-0.003609
66.	0.	1.83366	13.2145	13.8874	10.3817	0.050	27.6518	5.5863	-0.003686
67.	0.	1.83614	13.2152	13.8874	10.3572	0.055	27.5918	5.5562	-0.003801
68.	0.	1.83865	13.2159	13.8874	10.3323	0.061	27.5318	5.5261	-0.003918
69.	0.	1.84130	13.2166	13.8874	10.3068	0.067	27.4817	5.4960	-0.004036
70.	0.	1.84341	13.2172	13.8874	10.2808	0.074	27.4371	5.4759	-0.004117
71.	0.	1.84601	13.2179	13.8874	10.2559	0.082	27.3866	5.4458	-0.004238
72.	0.	1.84860	13.2185	13.8874	10.2310	0.089	27.3357	5.4156	-0.004361
73.	0.	1.85130	13.2191	13.8874	10.2060	0.096	27.2944	5.3855	-0.004486
74.	0.	1.85347	13.2196	13.8874	10.1802	0.101	27.2568	5.3654	-0.004572
75.	0.	1.85608	13.2202	13.8874	10.1560	0.100	27.2052	5.3353	-0.004700
76.	0.	1.85883	13.2207	13.8874	10.1321	0.095	27.1660	5.3052	-0.004830
77.	0.	1.86062	13.2212	13.8874	10.1064	0.090	27.1502	5.2951	-0.004876
78.	0.	1.86253	13.2216	13.8874	10.0812	0.086	27.1487	5.2851	-0.004922
79.	0.	1.86392	13.2220	13.8874	10.0561	0.085	27.1573	5.2851	-0.004925
80.	0.	1.86524	13.2223	13.8874	10.0316	0.085	27.1610	5.2851	-0.004928
81.	0.	1.86707	13.2226	13.8874	10.0087	0.085	27.1612	5.2750	-0.004974
82.	0.	1.86836	13.2229	13.8874	9.9856	0.085	27.1693	5.2750	-0.004976
83.	0.	1.86956	13.2231	13.8874	9.9630	0.085	27.1700	5.2750	-0.004978
84.	0.	1.87131	13.2234	13.8874	9.9417	0.085	27.1681	5.2650	-0.005024
85.	0.	1.87254	13.2236	13.8874	9.9189	0.081	27.1658	5.2650	-0.005026
86.	0.	1.87436	13.2238	13.8874	9.8971	0.077	27.1624	5.2549	-0.005071
87.	0.	1.87577	13.2240	13.8874	9.8736	0.075	27.1682	5.2549	-0.005073
88.	0.	1.87715	13.2241	13.8874	9.8502	0.075	27.1677	5.2549	-0.005075
89.	0.	1.87898	13.2243	13.8874	9.8286	0.075	27.1661	5.2449	-0.005117
90.	0.	1.88018	13.2244	13.8874	9.8066	0.075	27.1648	5.2449	-0.005114
91.	0.	1.88189	13.2245	13.8874	9.7861	0.075	27.1626	5.2348	-0.005154
92.	0.	1.88305	13.2246	13.8874	9.7652	0.073	27.1693	5.2349	-0.005149
93.	0.	1.88417	13.2247	13.8874	9.7445	0.071	27.1690	5.2349	-0.005145
94.	0.	1.88584	13.2248	13.8874	9.7249	0.070	27.1660	5.2248	-0.005185
95.	0.	1.88703	13.2249	13.8874	9.7044	0.069	27.1710	5.2248	-0.005182
96.	0.	1.88814	13.2250	13.8874	9.6843	0.068	27.1695	5.2248	-0.005178
97.	0.	1.88975	13.2251	13.8874	9.6658	0.067	27.1656	5.2148	-0.005218
98.	0.	1.89074	13.2251	13.8874	9.6466	0.064	27.1609	5.2148	-0.005213
99.	0.	1.89225	13.2252	13.8874	9.6291	0.061	27.1538	5.2047	-0.005252
100.	0.	1.89328	13.2252	13.8874	9.6106	0.057	27.1557	5.2048	-0.005247
101.	0.	1.89422	13.2253	13.8874	9.5925	0.054	27.1513	5.2048	-0.005242
102.	0.	1.89568	13.2253	13.8874	9.5759	0.050	27.1442	5.1947	-0.005281
103.	0.	1.89665	13.2253	13.8874	9.5583	0.046	27.1452	5.1947	-0.005276
104.	0.	1.89755	13.2254	13.8874	9.5409	0.042	27.1400	5.1947	-0.005270
105.	0.	1.89896	13.2254	13.8874	9.5251	0.038	27.1321	5.1847	-0.005309
106.	0.	1.89980	13.2254	13.8874	9.5082	0.034	27.1244	5.1847	-0.005304
107.	0.	1.90112	13.2255	13.8874	9.4932	0.030	27.1160	5.1747	-0.005341
108.	0.	1.90189	13.2254	13.8874	9.4776	0.024	27.1171	5.1747	-0.005333
109.	0.	1.90255	13.2254	13.8874	9.4625	0.018	27.1125	5.1747	-0.005323
110.	0.	1.90364	13.2255	13.8874	9.4496	0.011	27.1058	5.1646	-0.005357
111.	0.	1.90413	13.2254	13.8874	9.4358	0.005	27.0997	5.1647	-0.005344
112.	0.	1.90511	13.2255	13.8874	9.4236	359.999	27.0921	5.1546	-0.005376
113.	0.	1.90558	13.2254	13.8874	9.4106	359.993	27.0919	5.1546	-0.005362
114.	0.	1.90591	13.2254	13.8874	9.3983	359.987	27.0853	5.1547	-0.005347
115.	0.	1.90672	13.2254	13.8874	9.3878	359.981	27.0743	5.1446	-0.005376
116.	0.	1.90704	13.2254	13.8874	9.3762	359.974	27.0708	5.1446	-0.005361
117.	0.	1.90728	13.2253	13.8874	9.3650	359.968	27.0611	5.1447	-0.005345
118.	0.	1.90798	13.2253	13.8874	9.3555	359.964	27.0485	5.1346	-0.005374
119.	0.	1.90812	13.2253	13.8874	9.3448	359.960	27.0361	5.1346	-0.005358
120.	0.	1.90877	13.2253	13.8874	9.3358	359.956	27.0224	5.1246	-0.005386
121.	0.	1.90924	13.2252	13.8874	9.3235	359.953	27.0163	5.1246	-0.005375
122.	0.	1.90973	13.2252	13.8874	9.3109	359.950	27.0043	5.1246	-0.005367
123.	0.	1.91076	13.2251	13.8874	9.2995	359.947	26.9903	5.1146	-0.005404
124.	0.	1.91136	13.2251	13.8874	9.2866	359.945	26.9846	5.1146	-0.005396
125.	0.	1.91192	13.2250	13.8874	9.2736	359.943	26.9731	5.1146	-0.005388
126.	0.	1.91298	13.2250	13.8874	9.2621	359.942	26.9598	5.1046	-0.005426

127.	0.	1.91343	13.2249	13.8874	9.2498	359.941	26.9479	5.1046	-0.005415
128.	0.	1.91433	13.2248	13.8874	9.2394	359.939	26.9353	5.0946	-0.005448
129.	0.	1.91476	13.2248	13.8874	9.2277	359.936	26.9312	5.0946	-0.005435
130.	0.	1.91513	13.2247	13.8874	9.2161	359.933	26.9214	5.0946	-0.005421
131.	0.	1.91600	13.2246	13.8874	9.2061	359.930	26.9096	5.0845	-0.005454
132.	0.	1.91645	13.2245	13.8874	9.1944	359.927	26.9062	5.0846	-0.005440
133.	0.	1.91685	13.2244	13.8874	9.1826	359.923	26.8972	5.0846	-0.005427
134.	0.	1.91775	13.2243	13.8874	9.1724	359.920	26.8864	5.0745	-0.005459
135.	0.	1.91815	13.2242	13.8874	9.1606	359.915	26.8765	5.0746	-0.005445
136.	0.	1.91914	13.2241	13.8874	9.1502	359.910	26.8736	5.0645	-0.005477
137.	0.	1.91932	13.2240	13.8874	9.1370	359.905	26.8971	5.0746	-0.005416
138.	0.	1.91957	13.2238	13.8874	9.1240	359.900	26.9290	5.0846	-0.005355
139.	0.	1.91987	13.2236	13.8874	9.1112	359.896	26.9641	5.0947	-0.005295
140.	0.	1.92018	13.2234	13.8874	9.0985	359.892	27.0009	5.1048	-0.005236
141.	0.	1.92041	13.2232	13.8874	9.0860	359.888	27.0271	5.1148	-0.005178
142.	0.	1.92110	13.2231	13.8874	9.0751	359.884	27.0490	5.1148	-0.005165
143.	0.	1.92144	13.2229	13.8874	9.0625	359.882	27.0823	5.1249	-0.005109
144.	0.	1.92183	13.2227	13.8874	9.0500	359.880	27.1193	5.1349	-0.005054
145.	0.	1.92222	13.2225	13.8874	9.0379	359.879	27.1579	5.1450	-0.005000
146.	0.	1.92261	13.2223	13.8874	9.0260	359.878	27.1973	5.1551	-0.004945
147.	0.	1.92288	13.2221	13.8874	9.0143	359.877	27.2253	5.1651	-0.004891
148.	0.	1.92361	13.2219	13.8874	9.0042	359.876	27.2488	5.1651	-0.004882
149.	0.	1.92395	13.2217	13.8874	8.9927	359.876	27.2840	5.1752	-0.004829
150.	0.	1.92433	13.2215	13.8874	8.9814	359.875	27.3228	5.1852	-0.004777
151.	0.	1.92473	13.2212	13.8874	8.9702	359.874	27.3632	5.1953	-0.004725
152.	0.	1.92513	13.2210	13.8874	8.9592	359.874	27.4042	5.2053	-0.004673
153.	0.	1.92543	13.2208	13.8874	8.9483	359.874	27.4339	5.2154	-0.004623
154.	0.	1.92617	13.2206	13.8874	8.9389	359.874	27.4594	5.2154	-0.004615
155.	0.	1.92651	13.2204	13.8874	8.9283	359.874	27.4967	5.2254	-0.004564
156.	0.	1.92689	13.2202	13.8874	8.9178	359.874	27.5375	5.2355	-0.004513
157.	0.	1.92729	13.2199	13.8874	8.9074	359.874	27.5796	5.2455	-0.004463
158.	0.	1.92768	13.2197	13.8874	8.8972	359.874	27.6221	5.2556	-0.004413
159.	0.	1.92808	13.2195	13.8874	8.8871	359.873	27.6647	5.2656	-0.004363
160.	0.	1.92836	13.2193	13.8874	8.8771	359.872	27.6952	5.2757	-0.004315
161.	0.	1.92906	13.2191	13.8874	8.8688	359.871	27.7212	5.2757	-0.004307
162.	0.	1.92940	13.2188	13.8874	8.8592	359.870	27.7586	5.2857	-0.004260
163.	0.	1.92978	13.2186	13.8874	8.8498	359.870	27.7990	5.2958	-0.004212
164.	0.	1.93016	13.2184	13.8874	8.8405	359.870	27.8405	5.3058	-0.004165
165.	0.	1.93056	13.2182	13.8874	8.8313	359.870	27.8822	5.3159	-0.004119
166.	0.	1.93084	13.2180	13.8874	8.8221	359.870	27.9118	5.3259	-0.004074
167.	0.	1.93154	13.2178	13.8874	8.8146	359.870	27.9376	5.3259	-0.004069
168.	0.	1.93191	13.2176	13.8874	8.8055	359.870	27.9753	5.3360	-0.004024
169.	0.	1.93231	13.2173	13.8874	8.7966	359.871	28.0158	5.3460	-0.003980
170.	0.	1.93273	13.2171	13.8874	8.7878	359.871	28.0576	5.3561	-0.003936
171.	0.	1.93314	13.2169	13.8874	8.7791	359.872	28.0999	5.3661	-0.003893
172.	0.	1.93344	13.2167	13.8874	8.7704	359.872	28.1301	5.3762	-0.003850
173.	0.	1.93415	13.2165	13.8874	8.7633	359.872	28.1569	5.3762	-0.003846
174.	0.	1.93443	13.2163	13.8874	8.7546	359.873	28.1837	5.3862	-0.003804
175.	0.	1.93514	13.2162	13.8874	8.7475	359.874	28.2093	5.3862	-0.003801
176.	0.	1.93553	13.2160	13.8874	8.7390	359.874	28.2479	5.3962	-0.003759
177.	0.	1.93583	13.2158	13.8874	8.7305	359.874	28.2768	5.4063	-0.003717
178.	0.	1.93655	13.2156	13.8874	8.7237	359.875	28.3029	5.4063	-0.003715
179.	0.	1.93685	13.2154	13.8874	8.7152	359.875	28.3288	5.4163	-0.003674
180.	0.	1.93758	13.2153	13.8874	8.7083	359.875	28.3535	5.4163	-0.003673
181.	0.	1.93800	13.2151	13.8874	8.6999	359.874	28.3911	5.4264	-0.003633
182.	0.	1.93833	13.2149	13.8874	8.6916	359.873	28.4188	5.4364	-0.003593
183.	0.	1.93906	13.2148	13.8874	8.6850	359.872	28.4444	5.4364	-0.003592
184.	0.	1.93948	13.2146	13.8874	8.6769	359.871	28.4825	5.4464	-0.003553
185.	0.	1.93981	13.2144	13.8874	8.6689	359.871	28.5106	5.4565	-0.003514
186.	0.	1.94054	13.2143	13.8874	8.6624	359.870	28.5374	5.4565	-0.003513
187.	0.	1.94085	13.2141	13.8874	8.6544	359.870	28.5647	5.4665	-0.003474
188.	0.	1.94146	13.2140	13.8874	8.6479	359.870	28.5790	5.4665	-0.003474
189.	0.	1.94205	13.2138	13.8874	8.6414	359.869	28.5916	5.4665	-0.003474
190.	0.	1.94251	13.2137	13.8874	8.6350	359.868	28.5920	5.4665	-0.003473
191.	0.	1.94335	13.2136	13.8874	8.6300	359.868	28.5877	5.4565	-0.003511
192.	0.	1.94389	13.2135	13.8874	8.6233	359.868	28.5935	5.4565	-0.003510
193.	0.	1.94434	13.2134	13.8874	8.6167	359.868	28.5915	5.4565	-0.003510

194.	0.	1.94518	13.2133	13.8874	8.6118	359.868	28.5857	5.4465	-0.003547
195.	0.	1.94569	13.2132	13.8874	8.6053	359.867	28.5895	5.4465	-0.003547
196.	0.	1.94624	13.2131	13.8874	8.5989	359.866	28.5963	5.4465	-0.003547
197.	0.	1.94671	13.2130	13.8874	8.5924	359.865	28.5939	5.4465	-0.003547
198.	0.	1.94754	13.2129	13.8874	8.5875	359.864	28.5877	5.4364	-0.003585
199.	0.	1.94806	13.2128	13.8874	8.5810	359.862	28.5920	5.4364	-0.003585
200.	0.	1.94861	13.2127	13.8874	8.5746	359.861	28.5995	5.4364	-0.003584
201.	0.	1.94917	13.2126	13.8874	8.5683	359.859	28.6083	5.4364	-0.003584
202.	0.	1.94972	13.2125	13.8874	8.5620	359.858	28.6174	5.4364	-0.003583
203.	0.	1.95025	13.2124	13.8874	8.5559	359.858	28.6265	5.4364	-0.003583
204.	0.	1.95068	13.2123	13.8874	8.5497	359.858	28.6250	5.4364	-0.003582
205.	0.	1.95147	13.2122	13.8874	8.5452	359.858	28.6191	5.4264	-0.003619
206.	0.	1.95194	13.2121	13.8874	8.5393	359.858	28.6231	5.4264	-0.003618
207.	0.	1.95244	13.2120	13.8874	8.5333	359.859	28.6302	5.4264	-0.003617
208.	0.	1.95294	13.2119	13.8874	8.5274	359.859	28.6382	5.4264	-0.003616
209.	0.	1.95345	13.2119	13.8874	8.5216	359.860	28.6463	5.4264	-0.003615
210.	0.	1.95394	13.2118	13.8874	8.5158	359.861	28.6541	5.4264	-0.003614
211.	0.	1.95434	13.2117	13.8874	8.5099	359.862	28.6520	5.4264	-0.003613
212.	0.	1.95511	13.2116	13.8874	8.5057	359.863	28.6453	5.4163	-0.003650
213.	0.	1.95555	13.2115	13.8874	8.5000	359.864	28.6482	5.4164	-0.003649
214.	0.	1.95600	13.2114	13.8874	8.4945	359.865	28.6534	5.4164	-0.003648
215.	0.	1.95645	13.2114	13.8874	8.4890	359.865	28.6594	5.4164	-0.003646
216.	0.	1.95690	13.2113	13.8874	8.4836	359.866	28.6661	5.4164	-0.003645
217.	0.	1.95736	13.2112	13.8874	8.4782	359.868	28.6732	5.4164	-0.003643
218.	0.	1.95772	13.2111	13.8874	8.4727	359.871	28.6709	5.4164	-0.003641
219.	0.	1.95845	13.2111	13.8874	8.4688	359.872	28.6649	5.4063	-0.003678
220.	0.	1.95886	13.2110	13.8874	8.4633	359.874	28.6690	5.4063	-0.003676
221.	0.	1.95929	13.2109	13.8874	8.4579	359.876	28.6760	5.4063	-0.003674
222.	0.	1.95972	13.2108	13.8874	8.4527	359.878	28.6838	5.4063	-0.003672
223.	0.	1.96014	13.2107	13.8874	8.4475	359.879	28.6918	5.4063	-0.003670
224.	0.	1.96055	13.2107	13.8874	8.4425	359.881	28.6994	5.4063	-0.003667
225.	0.	1.96084	13.2106	13.8874	8.4375	359.882	28.6970	5.4063	-0.003665
226.	0.	1.96148	13.2106	13.8874	8.4342	359.884	28.6897	5.3963	-0.003700
227.	0.	1.96180	13.2105	13.8874	8.4294	359.886	28.6920	5.3963	-0.003697
228.	0.	1.96215	13.2104	13.8874	8.4247	359.888	28.6971	5.3963	-0.003695
229.	0.	1.96251	13.2103	13.8874	8.4200	359.890	28.7031	5.3963	-0.003692
230.	0.	1.96287	13.2103	13.8874	8.4153	359.892	28.7094	5.3963	-0.003689
231.	0.	1.96323	13.2102	13.8874	8.4106	359.894	28.7159	5.3963	-0.003687
232.	0.	1.96349	13.2101	13.8874	8.4060	359.896	28.7123	5.3963	-0.003684
233.	0.	1.96411	13.2101	13.8874	8.4029	359.898	28.7045	5.3863	-0.003720
234.	0.	1.96439	13.2100	13.8874	8.3985	359.900	28.7063	5.3863	-0.003716
235.	0.	1.96469	13.2099	13.8874	8.3941	359.903	28.7103	5.3863	-0.003713
236.	0.	1.96499	13.2099	13.8874	8.3898	359.905	28.7149	5.3863	-0.003709
237.	0.	1.96529	13.2098	13.8874	8.3855	359.907	28.7194	5.3863	-0.003706
238.	0.	1.96557	13.2097	13.8874	8.3813	359.909	28.7238	5.3863	-0.003702
239.	0.	1.96575	13.2097	13.8874	8.3772	359.912	28.7187	5.3863	-0.003698
240.	0.	1.96630	13.2096	13.8874	8.3747	359.914	28.7094	5.3763	-0.003733
241.	0.	1.96642	13.2096	13.8874	8.3705	359.916	28.7004	5.3763	-0.003729
242.	0.	1.96684	13.2095	13.8874	8.3680	359.918	28.6796	5.3662	-0.003764
243.	0.	1.96731	13.2095	13.8874	8.3656	359.920	28.6643	5.3562	-0.003799
244.	0.	1.96739	13.2094	13.8874	8.3616	359.921	28.6523	5.3562	-0.003794
245.	0.	1.96779	13.2094	13.8874	8.3592	359.922	28.6308	5.3462	-0.003829
246.	0.	1.96826	13.2094	13.8874	8.3567	359.924	28.6164	5.3361	-0.003863
247.	0.	1.96835	13.2093	13.8874	8.3526	359.925	28.6061	5.3361	-0.003858
248.	0.	1.96876	13.2093	13.8874	8.3500	359.926	28.5860	5.3261	-0.003893
249.	0.	1.96922	13.2092	13.8874	8.3475	359.927	28.5719	5.3161	-0.003927
250.	0.	1.96929	13.2092	13.8874	8.3434	359.928	28.5610	5.3161	-0.003922
251.	0.	1.96967	13.2091	13.8874	8.3410	359.929	28.5400	5.3060	-0.003956
252.	0.	1.97010	13.2091	13.8874	8.3387	359.931	28.5251	5.2960	-0.003990
253.	0.	1.97015	13.2090	13.8874	8.3347	359.933	28.5138	5.2960	-0.003983
254.	0.	1.97051	13.2090	13.8874	8.3323	359.935	28.4926	5.2860	-0.004018
255.	0.	1.97093	13.2090	13.8874	8.3300	359.937	28.4775	5.2759	-0.004051
256.	0.	1.97093	13.2089	13.8874	8.3262	359.939	28.4650	5.2760	-0.004044
257.	0.	1.97126	13.2089	13.8874	8.3240	359.941	28.4421	5.2659	-0.004078
258.	0.	1.97164	13.2088	13.8874	8.3219	359.942	28.4256	5.2559	-0.004111
259.	0.	1.97163	13.2087	13.8874	8.3181	359.942	28.4128	5.2559	-0.004103
260.	0.	1.97196	13.2087	13.8874	8.3158	359.943	28.3908	5.2459	-0.004136

261.	0.	1.97238	13.2087	13.8874	8.3134	359.945	28.3760	5.2358	-0.004170
262.	0.	1.97240	13.2086	13.8874	8.3092	359.946	28.3651	5.2358	-0.004161
263.	0.	1.97277	13.2085	13.8874	8.3066	359.947	28.3452	5.2258	-0.004195
264.	0.	1.97319	13.2085	13.8874	8.3042	359.949	28.3311	5.2158	-0.004229
265.	0.	1.97319	13.2084	13.8874	8.3001	359.950	28.3195	5.2158	-0.004220
266.	0.	1.97353	13.2084	13.8874	8.2977	359.951	28.2981	5.2057	-0.004254
267.	0.	1.97393	13.2083	13.8874	8.2953	359.951	28.2827	5.1957	-0.004288
268.	0.	1.97392	13.2083	13.8874	8.2912	359.952	28.2705	5.1957	-0.004279
269.	0.	1.97426	13.2082	13.8874	8.2887	359.953	28.2489	5.1857	-0.004312
270.	0.	1.97466	13.2082	13.8874	8.2863	359.954	28.2338	5.1757	-0.004345
271.	0.	1.97464	13.2081	13.8874	8.2822	359.956	28.2224	5.1757	-0.004335
272.	0.	1.97496	13.2080	13.8874	8.2798	359.956	28.2009	5.1656	-0.004368
273.	0.	1.97523	13.2080	13.8874	8.2774	359.956	28.1759	5.1556	-0.004401
274.	0.	1.97550	13.2080	13.8874	8.2750	359.956	28.1504	5.1456	-0.004435
275.	0.	1.97576	13.2079	13.8874	8.2726	359.956	28.1250	5.1355	-0.004467
276.	0.	1.97598	13.2079	13.8874	8.2704	359.956	28.0989	5.1255	-0.004499
277.	0.	1.97618	13.2078	13.8874	8.2682	359.956	28.0727	5.1155	-0.004531
278.	0.	1.97638	13.2078	13.8874	8.2660	359.957	28.0464	5.1054	-0.004562
279.	0.	1.97656	13.2078	13.8874	8.2638	359.957	28.0201	5.0954	-0.004592
280.	0.	1.97673	13.2077	13.8874	8.2617	359.957	27.9936	5.0854	-0.004623
281.	0.	1.97681	13.2077	13.8874	8.2595	359.957	27.9587	5.0753	-0.004653
282.	0.	1.97731	13.2077	13.8874	8.2588	359.957	27.9192	5.0553	-0.004729
283.	0.	1.97744	13.2077	13.8874	8.2565	359.957	27.8886	5.0452	-0.004759
284.	0.	1.97757	13.2076	13.8874	8.2541	359.958	27.8601	5.0352	-0.004788
285.	0.	1.97778	13.2076	13.8874	8.2520	359.958	27.8405	5.0252	-0.004817
286.	0.	1.97755	13.2075	13.8874	8.2480	359.958	27.8255	5.0252	-0.004798
287.	0.	1.97771	13.2074	13.8874	8.2458	359.957	27.8017	5.0152	-0.004827
288.	0.	1.97791	13.2074	13.8874	8.2435	359.957	27.7836	5.0051	-0.004854
289.	0.	1.97768	13.2073	13.8874	8.2395	359.957	27.7689	5.0052	-0.004834
290.	0.	1.97782	13.2073	13.8874	8.2373	359.957	27.7449	4.9951	-0.004861
291.	0.	1.97800	13.2072	13.8874	8.2350	359.957	27.7266	4.9851	-0.004888
292.	0.	1.97773	13.2072	13.8874	8.2311	359.957	27.7117	4.9851	-0.004867
293.	0.	1.97783	13.2071	13.8874	8.2289	359.956	27.6877	4.9751	-0.004893
294.	0.	1.97790	13.2071	13.8874	8.2267	359.956	27.6609	4.9651	-0.004919
295.	0.	1.97803	13.2071	13.8874	8.2246	359.955	27.6414	4.9551	-0.004945
296.	0.	1.97771	13.2070	13.8874	8.2207	359.955	27.6259	4.9551	-0.004922
297.	0.	1.97777	13.2070	13.8874	8.2186	359.955	27.6013	4.9451	-0.004947
298.	0.	1.97779	13.2069	13.8874	8.2165	359.955	27.5742	4.9350	-0.004971
299.	0.	1.97779	13.2069	13.8874	8.2144	359.955	27.5461	4.9250	-0.004996
300.	0.	1.97777	13.2069	13.8874	8.2123	359.955	27.5174	4.9150	-0.005019
301.	0.	1.97774	13.2068	13.8874	8.2102	359.955	27.4885	4.9050	-0.005042
302.	0.	1.97770	13.2068	13.8874	8.2081	359.955	27.4593	4.8949	-0.005065
303.	0.	1.97765	13.2068	13.8874	8.2059	359.956	27.4300	4.8849	-0.005087
304.	0.	1.97758	13.2068	13.8874	8.2037	359.956	27.4006	4.8749	-0.005108
305.	0.	1.97751	13.2067	13.8874	8.2015	359.956	27.3711	4.8649	-0.005129
306.	0.	1.97750	13.2067	13.8874	8.1993	359.957	27.3497	4.8549	-0.005148
307.	0.	1.97704	13.2067	13.8874	8.1953	359.959	27.3331	4.8549	-0.005117
308.	0.	1.97697	13.2066	13.8874	8.1931	359.960	27.3074	4.8449	-0.005136
309.	0.	1.97686	13.2066	13.8874	8.1909	359.960	27.2792	4.8348	-0.005154
310.	0.	1.97673	13.2066	13.8874	8.1887	359.961	27.2502	4.8248	-0.005172
311.	0.	1.97658	13.2066	13.8874	8.1864	359.961	27.2208	4.8148	-0.005189
312.	0.	1.97640	13.2066	13.8874	8.1842	359.962	27.1914	4.8048	-0.005205
313.	0.	1.97621	13.2066	13.8874	8.1820	359.962	27.1619	4.7948	-0.005221
314.	0.	1.97600	13.2065	13.8874	8.1798	359.963	27.1323	4.7848	-0.005235
315.	0.	1.97577	13.2065	13.8874	8.1776	359.963	27.1026	4.7748	-0.005249
316.	0.	1.97552	13.2065	13.8874	8.1755	359.964	27.0730	4.7647	-0.005262
317.	0.	1.97526	13.2065	13.8874	8.1733	359.965	27.0436	4.7547	-0.005274
318.	0.	1.97498	13.2065	13.8874	8.1711	359.966	27.0139	4.7447	-0.005285
319.	0.	1.97468	13.2065	13.8874	8.1688	359.967	26.9844	4.7347	-0.005295
320.	0.	1.97445	13.2065	13.8874	8.1666	359.968	26.9627	4.7247	-0.005304
321.	0.	1.97374	13.2065	13.8874	8.1626	359.968	26.9456	4.7247	-0.005259
322.	0.	1.97343	13.2065	13.8874	8.1605	359.969	26.9196	4.7147	-0.005268
323.	0.	1.97309	13.2065	13.8874	8.1582	359.969	26.8910	4.7047	-0.005275
324.	0.	1.97272	13.2065	13.8874	8.1561	359.969	26.8613	4.6947	-0.005282
325.	0.	1.97232	13.2065	13.8874	8.1539	359.969	26.8310	4.6847	-0.005287
326.	0.	1.97197	13.2065	13.8874	8.1518	359.970	26.8084	4.6747	-0.005291
327.	0.	1.97123	13.2065	13.8874	8.1478	359.971	26.7990	4.6748	-0.005240

328.	0.	1.97046	13.2065	13.8874	8.1437	359.972	26.7855	4.6748	-0.005189
329.	0.	1.97015	13.2065	13.8874	8.1416	359.973	26.7691	4.6648	-0.005192
330.	0.	1.96942	13.2065	13.8874	8.1375	359.975	26.7625	4.6649	-0.005140
331.	0.	1.96866	13.2065	13.8874	8.1333	359.976	26.7508	4.6649	-0.005088
332.	0.	1.96835	13.2066	13.8874	8.1311	359.977	26.7358	4.6549	-0.005090
333.	0.	1.96762	13.2065	13.8874	8.1270	359.978	26.7302	4.6550	-0.005036
334.	0.	1.96685	13.2066	13.8874	8.1228	359.980	26.7192	4.6550	-0.004984
335.	0.	1.96651	13.2066	13.8874	8.1206	359.980	26.7039	4.6450	-0.004985
336.	0.	1.96576	13.2066	13.8874	8.1166	359.981	26.6980	4.6451	-0.004931
337.	0.	1.96496	13.2066	13.8874	8.1125	359.982	26.6869	4.6451	-0.004877
338.	0.	1.96461	13.2067	13.8874	8.1104	359.983	26.6723	4.6351	-0.004878
339.	0.	1.96385	13.2067	13.8874	8.1063	359.984	26.6671	4.6352	-0.004823
340.	0.	1.96303	13.2067	13.8874	8.1022	359.985	26.6565	4.6352	-0.004768
341.	0.	1.96267	13.2068	13.8874	8.1001	359.987	26.6424	4.6252	-0.004768
342.	0.	1.96189	13.2068	13.8874	8.0961	359.988	26.6375	4.6253	-0.004712
343.	0.	1.96106	13.2068	13.8874	8.0920	359.990	26.6274	4.6253	-0.004657
344.	0.	1.96069	13.2069	13.8874	8.0899	359.992	26.6138	4.6153	-0.004656
345.	0.	1.95989	13.2069	13.8874	8.0858	359.993	26.6094	4.6154	-0.004599
346.	0.	1.95906	13.2070	13.8874	8.0818	359.995	26.5999	4.6155	-0.004543
347.	0.	1.95866	13.2071	13.8874	8.0797	359.996	26.5867	4.6055	-0.004541
348.	0.	1.95779	13.2071	13.8874	8.0756	359.998	26.5746	4.6055	-0.004484
349.	0.	1.95738	13.2072	13.8874	8.0735	359.999	26.5603	4.5955	-0.004482
350.	0.	1.95655	13.2072	13.8874	8.0695	0.001	26.5555	4.5956	-0.004423
351.	0.	1.95568	13.2073	13.8874	8.0654	0.002	26.5454	4.5956	-0.004366
352.	0.	1.95526	13.2074	13.8874	8.0633	0.004	26.5317	4.5856	-0.004362
353.	0.	1.95443	13.2074	13.8874	8.0592	0.005	26.5270	4.5857	-0.004303
354.	0.	1.95356	13.2075	13.8874	8.0551	0.006	26.5165	4.5858	-0.004245
355.	0.	1.95313	13.2076	13.8874	8.0530	0.008	26.5022	4.5758	-0.004241
356.	0.	1.95220	13.2077	13.8874	8.0490	0.008	26.4886	4.5758	-0.004182
357.	0.	1.95167	13.2078	13.8874	8.0469	0.008	26.4653	4.5658	-0.004177
358.	0.	1.95116	13.2079	13.8874	8.0449	0.009	26.4476	4.5558	-0.004171
359.	0.	1.95025	13.2080	13.8874	8.0409	0.010	26.4419	4.5559	-0.004109
360.	0.	1.94937	13.2081	13.8874	8.0369	0.011	26.4395	4.5560	-0.004046
361.	0.	1.94842	13.2081	13.8874	8.0330	0.012	26.4305	4.5560	-0.003984
362.	0.	1.94791	13.2083	13.8874	8.0311	0.013	26.4173	4.5460	-0.003977
363.	0.	1.94698	13.2083	13.8874	8.0273	0.013	26.4126	4.5461	-0.003914
364.	0.	1.94608	13.2084	13.8874	8.0235	0.014	26.4108	4.5461	-0.003851
365.	0.	1.94519	13.2085	13.8874	8.0197	0.015	26.4099	4.5462	-0.003788
366.	0.	1.94431	13.2086	13.8874	8.0159	0.016	26.4095	4.5463	-0.003725
367.	0.	1.94337	13.2087	13.8874	8.0121	0.016	26.4014	4.5463	-0.003663
368.	0.	1.94284	13.2088	13.8874	8.0104	0.017	26.3887	4.5363	-0.003656
369.	0.	1.94190	13.2089	13.8874	8.0068	0.018	26.3845	4.5364	-0.003592
370.	0.	1.94098	13.2090	13.8874	8.0032	0.018	26.3826	4.5365	-0.003529
371.	0.	1.94008	13.2091	13.8874	7.9995	0.019	26.3818	4.5365	-0.003466
372.	0.	1.93912	13.2092	13.8874	7.9958	0.020	26.3738	4.5366	-0.003403
373.	0.	1.93860	13.2094	13.8874	7.9941	0.020	26.3612	4.5266	-0.003396
374.	0.	1.93767	13.2095	13.8874	7.9904	0.021	26.3575	4.5267	-0.003333
375.	0.	1.93676	13.2096	13.8874	7.9867	0.022	26.3562	4.5267	-0.003270
376.	0.	1.93585	13.2097	13.8874	7.9831	0.023	26.3556	4.5268	-0.003207
377.	0.	1.93489	13.2098	13.8874	7.9795	0.024	26.3475	4.5269	-0.003144
378.	0.	1.93435	13.2099	13.8874	7.9779	0.025	26.3348	4.5169	-0.003137
379.	0.	1.93340	13.2100	13.8874	7.9743	0.026	26.3306	4.5169	-0.003073
380.	0.	1.93248	13.2102	13.8874	7.9708	0.027	26.3283	4.5170	-0.003010
381.	0.	1.93150	13.2103	13.8874	7.9672	0.028	26.3189	4.5171	-0.002948
382.	0.	1.93095	13.2104	13.8874	7.9657	0.028	26.3049	4.5071	-0.002940
383.	0.	1.92999	13.2106	13.8874	7.9622	0.029	26.2995	4.5071	-0.002877
384.	0.	1.92905	13.2107	13.8874	7.9587	0.029	26.2962	4.5072	-0.002813
385.	0.	1.92813	13.2108	13.8874	7.9553	0.030	26.2938	4.5072	-0.002750
386.	0.	1.92708	13.2109	13.8874	7.9517	0.032	26.2759	4.5073	-0.002689
387.	0.	1.92662	13.2112	13.8874	7.9520	0.033	26.2177	4.4873	-0.002738
388.	0.	1.92671	13.2115	13.8874	7.9562	0.034	26.1184	4.4471	-0.002899
389.	0.	1.92703	13.2119	13.8874	7.9626	0.036	26.0026	4.3969	-0.003114
390.	0.	1.92668	13.2122	13.8874	7.9672	0.037	25.8810	4.3567	-0.003268
391.	0.	1.92664	13.2127	13.8874	7.9742	0.038	25.7526	4.3065	-0.003476
392.	0.	1.92594	13.2131	13.8874	7.9792	0.038	25.6231	4.2664	-0.003620
393.	0.	1.92556	13.2135	13.8874	7.9864	0.038	25.4910	4.2162	-0.003818
394.	0.	1.92448	13.2140	13.8874	7.9917	0.038	25.3592	4.1761	-0.003944

395.	0.	1.92370	13.2145	13.8874	7.9993	0.038	25.2227	4.1259	-0.004126
396.	0.	1.92217	13.2150	13.8874	8.0048	0.037	25.0858	4.0858	-0.004232
397.	0.	1.92087	13.2156	13.8874	8.0127	0.036	24.9369	4.0356	-0.004396
398.	0.	1.91934	13.2162	13.8874	8.0208	0.035	24.7906	3.9855	-0.004546
399.	0.	1.91700	13.2168	13.8874	8.0267	0.035	24.6463	3.9454	-0.004610
400.	0.	1.91494	13.2175	13.8874	8.0350	0.035	24.4979	3.8953	-0.004733
401.	0.	1.91209	13.2182	13.8874	8.0410	0.035	24.3570	3.8552	-0.004763
402.	0.	1.90899	13.2189	13.8874	8.0471	0.036	24.2165	3.8152	-0.004777
403.	0.	1.90563	13.2197	13.8874	8.0532	0.037	24.0749	3.7752	-0.004773
404.	0.	1.90199	13.2205	13.8874	8.0592	0.038	23.9321	3.7352	-0.004751
405.	0.	1.89807	13.2214	13.8874	8.0652	0.039	23.7877	3.6953	-0.004710
406.	0.	1.89387	13.2223	13.8874	8.0710	0.042	23.6418	3.6554	-0.004648
407.	0.	1.88938	13.2233	13.8874	8.0767	0.044	23.4943	3.6154	-0.004566
408.	0.	1.88460	13.2243	13.8874	8.0822	0.048	23.3455	3.5755	-0.004461
409.	0.	1.87957	13.2254	13.8874	8.0872	0.053	23.1953	3.5357	-0.004334
410.	0.	1.87430	13.2265	13.8874	8.0915	0.061	23.0439	3.4958	-0.004186
411.	0.	1.86878	13.2276	13.8874	8.0953	0.071	22.8914	3.4560	-0.004014
412.	0.	1.86271	13.2288	13.8874	8.0987	0.083	22.7032	3.4162	-0.003819
413.	0.	1.85849	13.2303	13.8874	8.1113	0.098	22.4477	3.3360	-0.003978
414.	0.	1.85398	13.2320	13.8874	8.1256	0.119	22.1547	3.2458	-0.004185
415.	0.	1.84846	13.2338	13.8874	8.1386	0.146	21.8439	3.1557	-0.004322
416.	0.	1.84182	13.2357	13.8874	8.1504	0.178	21.5282	3.0656	-0.004363
417.	0.	1.83392	13.2377	13.8874	8.1610	0.214	21.2112	2.9757	-0.004291
418.	0.	1.82789	13.2397	13.8874	8.1700	0.257	21.3864	2.8860	-0.004045
419.	0.	1.79038	13.2394	13.8874	8.0678	0.290	21.8717	3.2412	0.001169
420.	0.	1.78695	13.2407	13.8874	8.0789	0.316	21.7124	3.1510	0.000988
421.	0.	1.78686	13.2425	13.8874	8.1054	0.357	21.2942	2.9900	0.000037
422.	0.	1.78416	13.2442	13.8874	8.1282	0.404	20.8133	2.8393	-0.000739
423.	0.	1.77711	13.2457	13.8874	8.1411	0.462	20.3221	2.7190	-0.000993
424.	0.	1.76885	13.2470	13.8874	8.1538	0.531	19.8144	2.5888	-0.001199
425.	0.	1.75730	13.2478	13.8874	8.1607	0.611	19.3535	2.4690	-0.000968
426.	0.	1.73926	13.2481	13.8874	8.1553	0.692	18.9869	2.3903	0.000312
427.	0.	1.71876	13.2478	13.8874	8.1449	0.783	18.6610	2.3220	0.002007
428.	0.	1.69686	13.2471	13.8874	8.1329	0.878	18.3383	2.2539	0.003911
429.	0.	1.67465	13.2461	13.8874	8.1219	0.978	18.0025	2.1758	0.005831
430.	0.	1.65074	13.2448	13.8874	8.1088	1.082	17.6600	2.0980	0.008016
431.	0.	1.62509	13.2433	13.8874	8.0931	1.192	17.2808	2.0205	0.010465
432.	0.	1.60137	13.2419	13.8874	8.0811	1.315	16.8145	1.9125	0.012488
433.	0.	1.57677	13.2405	13.8874	8.0686	1.454	16.2830	1.7846	0.014571
434.	0.	1.54696	13.2391	13.8874	8.0505	1.600	15.7741	1.6576	0.017601
435.	0.	1.50269	13.2374	13.8874	8.0434	1.658	15.3123	1.5632	0.023244
436.	0.	1.45271	13.2357	13.8874	8.0376	1.694	14.8856	1.4801	0.030105
437.	0.	1.39958	13.2341	13.8874	8.0295	1.734	14.5491	1.4078	0.037819
438.	0.	1.33947	13.2326	13.8874	8.0151	1.775	14.3283	1.3871	0.047119
439.	0.	1.28376	13.2314	13.8874	8.0092	1.808	14.1514	1.3655	0.055503
440.	0.	1.25644	13.2302	13.8874	7.8403	2.344	14.0481	1.3400	0.060031
441.	0.	1.22261	13.2297	13.8874	7.7965	2.551	13.6977	1.2546	0.064625
442.	0.	1.17849	13.2302	13.8874	7.8171	2.531	13.2367	1.1407	0.070730
443.	0.	1.12323	13.2315	13.8874	7.8399	2.462	12.8828	1.0695	0.079494
444.	0.	1.06340	13.2321	13.8874	7.8169	2.508	12.6618	1.0596	0.089615
445.	0.	1.01258	13.2326	13.8874	7.7649	2.697	12.6611	1.0481	0.098086
446.	0.	0.96615	13.2329	13.8874	7.7459	2.801	12.6219	1.0254	0.105394
447.	0.	0.91883	13.2330	13.8874	7.7304	2.897	12.6876	1.0427	0.112741
448.	0.	0.87766	13.2330	13.8874	7.7216	2.917	12.5276	1.0687	0.118661
449.	0.	0.85947	13.2337	13.8874	7.7620	2.864	12.1151	0.9405	0.120461
450.	0.	0.82634	13.2343	13.8874	7.7804	2.844	11.8041	0.8852	0.125206
451.	0.	0.78873	13.2351	13.8874	7.7873	2.851	11.5775	0.8609	0.130904
452.	0.	0.75357	13.2362	13.8874	7.7945	2.871	11.4001	0.8362	0.136162
453.	0.	0.71957	13.2376	13.8874	7.8026	2.916	11.2834	0.8212	0.141207
454.	0.	0.68790	13.2392	13.8874	7.8078	2.979	11.2069	0.8158	0.145811
455.	0.	0.66039	13.2412	13.8874	7.8104	3.041	11.1450	0.8097	0.149672
456.	0.	0.63623	13.2433	13.8874	7.8123	3.101	11.0886	0.8030	0.152957
457.	0.	0.61481	13.2456	13.8874	7.8139	3.159	11.0349	0.7958	0.155791
458.	0.	0.59564	13.2479	13.8874	7.8151	3.221	10.9981	0.7883	0.158268
459.	0.	0.57741	13.2502	13.8874	7.8121	3.296	11.0190	0.7906	0.160601
460.	0.	0.56059	13.2524	13.8874	7.8046	3.388	11.1189	0.8027	0.162711
461.	0.	0.54560	13.2542	13.8874	7.7925	3.521	11.3924	0.8246	0.164553

462.	0.	0.52966	13.2556	13.8874	7.7647	3.696	11.8486	0.8865	0.166472
463.	0.	0.51770	13.2564	13.8874	7.7363	3.860	12.2962	0.9478	0.167816
464.	0.	0.51000	13.2571	13.8874	7.7158	3.917	12.3965	0.9886	0.168598
465.	0.	0.51257	13.2582	13.8874	7.7329	3.870	12.1983	0.9282	0.168229
466.	0.	0.51305	13.2595	13.8874	7.7489	3.800	11.9009	0.8780	0.168045
467.	0.	0.51292	13.2612	13.8874	7.7708	3.666	11.4027	0.8179	0.167858
468.	0.	0.51701	13.2643	13.8874	7.8247	3.481	10.6888	0.6869	0.166940
469.	0.	0.51121	13.2695	13.8874	7.8832	3.110	9.4948	0.5672	0.167208
470.	0.	0.40475	13.4239	13.8874	9.1657	0.492	10.9966	0.2668	0.186816
471.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
472.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

```
WHAFIS input:  YK-107.dat
WHAFIS output: YK-107.out
```

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-107
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
Transect Profile
SWAN 1-D points
TSWL

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-107.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-107.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-13.335	1.000	1.000	9.360	9.182	13.209	56.140	0.007	0.000
OF	3.000	-13.315	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	4.000	-13.309	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	9.000	-13.276	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	10.000	-13.270	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	15.000	-13.237	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	16.000	-13.231	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	21.000	-13.198	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	22.000	-13.192	0.000	9.360	0.000	0.000	0.000	0.000	0.006	0.000
OF	27.000	-13.160	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	28.000	-13.153	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	33.000	-13.121	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	34.000	-13.114	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	39.000	-13.082	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	40.000	-13.075	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	45.000	-13.043	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	46.000	-13.036	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	51.000	-13.004	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	52.000	-12.997	0.000	9.360	0.000	0.000	0.000	0.000	0.009	0.000
OF	57.000	-12.951	0.000	9.360	0.000	0.000	0.000	0.000	0.010	0.000
OF	58.000	-12.937	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	63.000	-12.865	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	64.000	-12.851	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	69.000	-12.780	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	70.000	-12.766	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
OF	76.000	-12.701	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
OF	79.000	-12.670	0.000	9.361	0.000	0.000	0.000	0.000	0.010	0.000
OF	84.000	-12.617	0.000	9.360	0.000	0.000	0.000	0.000	0.013	0.000
OF	85.000	-12.590	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	90.000	-12.452	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	91.000	-12.424	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	96.000	-12.286	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	97.000	-12.259	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	102.000	-12.121	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	103.000	-12.094	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	108.000	-11.956	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	109.000	-11.928	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	114.000	-11.791	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	115.000	-11.763	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	120.000	-11.625	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	121.000	-11.598	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	126.000	-11.460	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	127.000	-11.432	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	132.000	-11.295	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	133.000	-11.267	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	139.000	-11.102	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	144.000	-10.964	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	145.000	-10.936	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	156.000	-10.633	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	157.000	-10.606	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	168.000	-10.303	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	169.000	-10.275	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	180.000	-9.973	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	181.000	-9.945	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	192.000	-9.642	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	193.000	-9.615	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	204.000	-9.311	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	205.000	-9.284	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	216.000	-8.981	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	217.000	-8.953	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	228.000	-8.650	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	229.000	-8.623	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	240.000	-8.320	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
OF	241.000	-8.292	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
OF	250.000	-8.044	0.000	9.357	0.000	0.000	0.000	0.000	0.026	0.000
OF	251.000	-8.031	0.000	9.357	0.000	0.000	0.000	0.000	0.005	0.000
OF	262.000	-7.988	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	263.000	-7.985	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	274.000	-7.942	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	275.000	-7.939	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	286.000	-7.896	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	287.000	-7.893	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	298.000	-7.851	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	299.000	-7.847	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	310.000	-7.805	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	311.000	-7.801	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	322.000	-7.759	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	323.000	-7.755	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	334.000	-7.713	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	335.000	-7.709	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	346.000	-7.667	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	347.000	-7.663	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	358.000	-7.621	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	359.000	-7.617	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	370.000	-7.575	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	371.000	-7.571	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	382.000	-7.529	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	383.000	-7.525	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	394.000	-7.483	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	395.000	-7.479	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	406.000	-7.438	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	407.000	-7.434	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	418.000	-7.393	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000

OF	419.000	-7.389	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	430.000	-7.348	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	431.000	-7.344	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	442.000	-7.302	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	443.000	-7.299	0.000	9.356	0.000	0.000	0.000	0.000	-0.008	0.000
OF	562.000	-8.259	0.000	9.358	0.000	0.000	0.000	0.000	-0.007	0.000
OF	614.000	-8.581	0.000	9.359	0.000	0.000	0.000	0.000	-0.006	0.000
OF	615.000	-8.587	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
OF	626.000	-8.568	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	627.000	-8.564	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
OF	638.000	-8.528	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
OF	639.000	-8.524	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	651.000	-8.502	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	652.000	-8.500	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
OF	663.000	-8.484	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	664.000	-8.483	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	675.000	-8.467	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	676.000	-8.465	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	687.000	-8.449	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	688.000	-8.448	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	699.000	-8.432	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	700.000	-8.430	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	711.000	-8.414	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	712.000	-8.413	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	723.000	-8.397	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	724.000	-8.395	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	735.000	-8.379	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	736.000	-8.378	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	747.000	-8.362	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	748.000	-8.360	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	759.000	-8.344	0.000	9.361	0.000	0.000	0.000	0.000	0.001	0.000
OF	760.000	-8.343	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	772.000	-8.325	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	778.000	-8.317	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	781.000	-8.312	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
OF	792.000	-8.269	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	793.000	-8.263	0.000	9.361	0.000	0.000	0.000	0.000	0.007	0.000
OF	804.000	-8.190	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	805.000	-8.183	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	816.000	-8.110	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	817.000	-8.103	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	828.000	-8.030	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	829.000	-8.024	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	840.000	-7.950	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	841.000	-7.944	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	852.000	-7.871	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	853.000	-7.864	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	864.000	-7.791	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	865.000	-7.784	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	876.000	-7.711	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	877.000	-7.705	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	888.000	-7.631	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	889.000	-7.625	0.000	9.362	0.000	0.000	0.000	0.000	0.009	0.000
OF	900.000	-7.528	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
OF	901.000	-7.517	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	912.000	-7.398	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	913.000	-7.387	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	924.000	-7.268	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	925.000	-7.258	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
OF	936.000	-7.148	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
OF	937.000	-7.141	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	948.000	-7.065	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	949.000	-7.058	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	960.000	-6.982	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	961.000	-6.975	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	972.000	-6.898	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	973.000	-6.888	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
OF	984.000	-6.786	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	985.000	-6.777	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	996.000	-6.675	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	997.000	-6.666	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1008.000	-6.563	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1009.000	-6.554	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1020.000	-6.452	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1021.000	-6.443	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1032.000	-6.341	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1033.000	-6.332	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1044.000	-6.229	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1045.000	-6.220	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1056.000	-6.118	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
OF	1057.000	-6.109	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
OF	1072.000	-6.002	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
OF	1073.000	-5.998	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
OF	1084.000	-5.960	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
OF	1085.000	-5.956	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1096.000	-5.918	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1097.000	-5.915	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1108.000	-5.876	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1109.000	-5.873	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1120.000	-5.834	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1121.000	-5.831	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1132.000	-5.793	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1133.000	-5.789	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1144.000	-5.751	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1145.000	-5.747	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1156.000	-5.709	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1157.000	-5.705	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1168.000	-5.656	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	1169.000	-5.650	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	1181.000	-5.589	0.000	9.369	0.000	0.000	0.000	0.000	0.003	0.000
OF	1195.000	-5.577	0.000	9.369	0.000	0.000	0.000	0.000	0.001	0.000
OF	1196.000	-5.575	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000

OF	1207.000	-5.551	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1208.000	-5.549	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1219.000	-5.526	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1220.000	-5.523	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1232.000	-5.498	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1243.000	-5.474	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1244.000	-5.472	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1262.000	-5.433	0.000	9.369	0.000	0.000	0.000	0.000	0.012	0.000
OF	1276.000	-5.100	0.000	9.368	0.000	0.000	0.000	0.000	0.025	0.000
OF	1277.000	-5.054	0.000	9.368	0.000	0.000	0.000	0.000	0.039	0.000
OF	1374.700	-1.285	0.000	9.363	0.000	0.000	0.000	0.000	0.040	0.000
OF	1377.900	-0.975	0.000	9.363	0.000	0.000	0.000	0.000	0.127	0.000
OF	1381.200	-0.460	0.000	9.360	0.000	0.000	0.000	0.000	0.127	0.000
IF	1397.600	1.534	0.000	9.361	0.000	0.000	0.000	0.000	0.113	0.000
IF	1400.900	1.761	0.000	9.366	0.000	0.000	0.000	0.000	0.069	0.000
IF	1404.200	1.990	0.000	9.372	0.000	0.000	0.000	0.000	0.073	0.000
IF	1407.500	2.245	0.000	9.379	0.000	0.000	0.000	0.000	0.077	0.000
IF	1410.800	2.499	0.000	9.386	0.000	0.000	0.000	0.000	0.078	0.000
IF	1414.000	2.754	0.000	9.394	0.000	0.000	0.000	0.000	0.097	0.000
IF	1417.300	3.132	0.000	9.401	0.000	0.000	0.000	0.000	0.123	0.000
IF	1420.600	3.563	0.000	9.407	0.000	0.000	0.000	0.000	0.131	0.000
IF	1423.900	3.994	0.000	9.417	0.000	0.000	0.000	0.000	0.112	0.000
IF	1427.200	4.305	0.000	9.436	0.000	0.000	0.000	0.000	0.091	0.000
IF	1430.400	4.588	0.000	9.458	0.000	0.000	0.000	0.000	0.087	0.000
IF	1433.700	4.871	0.000	9.484	0.000	0.000	0.000	0.000	0.059	0.000
IF	1437.000	4.979	0.000	9.514	0.000	0.000	0.000	0.000	0.030	0.000
IF	1440.300	5.072	0.000	9.542	0.000	0.000	0.000	0.000	0.028	0.000
IF	1443.600	5.164	0.000	9.557	0.000	0.000	0.000	0.000	0.061	0.000
IF	1446.800	5.468	0.000	9.572	0.000	0.000	0.000	0.000	0.106	0.000
IF	1450.100	5.855	0.000	9.592	0.000	0.000	0.000	0.000	0.097	0.000
IF	1453.400	6.107	0.000	9.620	0.000	0.000	0.000	0.000	0.049	0.000
IF	1456.700	6.179	0.000	9.654	0.000	0.000	0.000	0.000	0.023	0.000
IF	1460.000	6.257	0.000	9.681	0.000	0.000	0.000	0.000	0.024	0.000
IF	1463.300	6.340	0.000	9.705	0.000	0.000	0.000	0.000	0.010	0.000
IF	1466.500	6.323	0.000	9.729	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1469.800	6.245	0.000	9.749	0.000	0.000	0.000	0.000	0.053	0.000
IF	1473.100	6.672	0.000	9.755	0.000	0.000	0.000	0.000	0.095	0.000
IF	1476.400	6.872	0.000	9.770	0.000	0.000	0.000	0.000	0.046	0.000
IF	1479.700	6.974	0.000	9.789	0.000	0.000	0.000	0.000	0.031	0.000
IF	1482.900	7.076	0.000	9.806	0.000	0.000	0.000	0.000	0.023	0.000
IF	1486.200	7.124	0.000	9.823	0.000	0.000	0.000	0.000	0.013	0.000
IF	1489.500	7.162	0.000	9.838	0.000	0.000	0.000	0.000	0.011	0.000
IF	1492.800	7.199	0.000	9.851	0.000	0.000	0.000	0.000	0.011	0.000
IF	1496.100	7.233	0.000	9.861	0.000	0.000	0.000	0.000	0.009	0.000
IF	1499.300	7.260	0.000	9.871	0.000	0.000	0.000	0.000	0.008	0.000
IF	1502.600	7.287	0.000	9.879	0.000	0.000	0.000	0.000	0.003	0.000
IF	1505.900	7.279	0.000	9.887	0.000	0.000	0.000	0.000	-0.003	0.000
IF	1509.200	7.266	0.000	9.893	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1512.500	7.197	0.000	9.899	0.000	0.000	0.000	0.000	-0.042	0.000
IF	1515.700	6.993	0.000	9.906	0.000	0.000	0.000	0.000	-0.063	0.000
IF	1519.000	6.788	0.000	9.910	0.000	0.000	0.000	0.000	-0.047	0.000
IF	1522.300	6.681	0.000	9.913	0.000	0.000	0.000	0.000	0.013	0.000
IF	1525.600	6.875	0.000	9.911	0.000	0.000	0.000	0.000	0.054	0.000
IF	1528.900	7.038	0.000	9.911	0.000	0.000	0.000	0.000	0.056	0.000
IF	1532.100	7.239	0.000	9.910	0.000	0.000	0.000	0.000	0.093	0.000
IF	1535.400	7.644	0.000	9.907	0.000	0.000	0.000	0.000	0.123	0.000
IF	1538.700	8.049	0.000	9.908	0.000	0.000	0.000	0.000	0.221	0.000
IF	1542.000	9.105	0.000	9.972	0.000	0.000	0.000	0.000	0.370	0.000
IF	1543.900	9.972	0.000	9.972	0.000	0.000	0.000	0.000	0.457	0.000
AS	1681.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.021	0.000
IF	1685.500	9.521	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	1692.200	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.012	0.000
AS	1705.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.023	0.000
IF	1710.000	9.501	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	1712.300	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.045	0.000
AS	1816.100	9.579	0.000	9.579	0.000	0.000	0.000	0.000	-0.157	0.000
IF	1824.000	8.340	0.000	9.579	0.000	0.000	0.000	0.000	-0.022	0.000
IF	1853.500	8.747	0.000	9.579	0.000	0.000	0.000	0.000	0.012	0.000
IF	1885.000	9.042	0.000	9.579	0.000	0.000	0.000	0.000	0.008	0.000
IF	1899.500	9.108	0.000	9.579	0.000	0.000	0.000	0.000	-0.026	0.000
IF	1905.500	8.517	0.000	9.579	0.000	0.000	0.000	0.000	-0.050	0.000
IF	1916.500	8.251	0.000	9.580	0.000	0.000	0.000	0.000	-0.006	0.000
IF	1929.000	8.386	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
IF	1941.000	8.222	0.000	9.580	0.000	0.000	0.000	0.000	0.004	0.000
IF	1950.000	8.481	0.000	9.580	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1970.500	7.881	0.000	9.580	0.000	0.000	0.000	0.000	0.011	0.000
IF	2005.000	9.062	0.000	9.580	0.000	0.000	0.000	0.000	0.008	0.000
IF	2023.000	8.320	0.000	9.580	0.000	0.000	0.000	0.000	-0.046	0.000
IF	2033.500	7.749	0.000	9.580	0.000	0.000	0.000	0.000	-0.032	0.000
IF	2051.500	7.421	0.000	9.580	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2066.000	7.224	0.000	9.581	0.000	0.000	0.000	0.000	0.014	0.000
IF	2078.500	7.795	0.000	9.581	0.000	0.000	0.000	0.000	0.015	0.000
IF	2095.500	7.661	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2108.000	7.365	0.000	9.581	0.000	0.000	0.000	0.000	-0.022	0.000
IF	2118.500	7.159	0.000	9.581	0.000	0.000	0.000	0.000	0.001	0.000
IF	2135.500	7.402	0.000	9.580	0.000	0.000	0.000	0.000	0.006	0.000
IF	2143.000	7.300	0.000	9.580	0.000	0.000	0.000	0.000	0.051	0.000
IF	2149.500	8.110	0.000	9.580	0.000	0.000	0.000	0.000	0.000	0.000
IF	2160.500	7.300	0.000	9.580	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2185.000	7.234	0.000	9.579	0.000	0.000	0.000	0.000	0.006	0.000
IF	2215.500	7.651	0.000	9.578	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2229.000	7.106	0.000	9.578	0.000	0.000	0.000	0.000	-0.060	0.000
IF	2235.000	6.480	0.000	9.578	0.000	0.000	0.000	0.000	-0.024	0.000
IF	2247.000	6.667	0.000	9.578	0.000	0.000	0.000	0.000	0.014	0.000
IF	2260.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	0.016	0.000
IF	2269.500	7.028	0.000	9.578	0.000	0.000	0.000	0.000	0.011	0.000
IF	2281.500	7.060	0.000	9.578	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2285.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2297.000	6.864	0.000	9.578	0.000	0.000	0.000	0.000	-0.032	0.000
IF	2311.000	6.020	0.000	9.579	0.000	0.000	0.000	0.000	0.010	0.000
IF	2327.000	7.159	0.000	9.579	0.000	0.000	0.000	0.000	0.059	0.000
IF	2341.500	7.815	0.000	9.579	0.000	0.000	0.000	0.000	-0.004	0.000

IF	2349.000	7.060	0.000	9.579	0.000	0.000	0.000	0.000	-0.044	0.000
IF	2356.500	7.159	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
IF	2364.500	6.043	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
IF	2374.500	5.978	0.000	9.580	0.000	0.000	0.000	0.000	-0.051	0.000
IF	2383.000	5.092	0.000	9.580	0.000	0.000	0.000	0.000	-0.031	0.000
IF	2388.500	5.551	0.000	9.580	0.000	0.000	0.000	0.000	-0.019	0.000
IF	2395.000	4.862	0.000	9.580	0.000	0.000	0.000	0.000	-0.028	0.000
IF	2403.500	5.125	0.000	9.580	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2431.000	4.534	0.000	9.580	0.000	0.000	0.000	0.000	-0.023	0.000
IF	2437.000	4.370	0.000	9.580	0.000	0.000	0.000	0.000	-0.050	0.000
IF	2447.500	3.714	0.000	9.580	0.000	0.000	0.000	0.000	-0.033	0.000
IF	2454.000	3.812	0.000	9.580	0.000	0.000	0.000	0.000	0.017	0.000
IF	2465.000	4.009	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
IF	2477.000	3.780	0.000	9.580	0.000	0.000	0.000	0.000	0.003	0.000
IF	2489.500	4.075	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
IF	2497.500	3.976	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2506.500	3.812	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2519.000	3.780	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2531.500	3.583	0.000	9.581	0.000	0.000	0.000	0.000	0.004	0.000
IF	2541.500	3.878	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
IF	2561.000	3.878	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2570.000	3.451	0.000	9.581	0.000	0.000	0.000	0.000	-0.033	0.000
IF	2580.000	3.255	0.000	9.582	0.000	0.000	0.000	0.000	0.007	0.000
IF	2604.500	3.681	0.000	9.582	0.000	0.000	0.000	0.000	0.032	0.000
IF	2612.500	4.305	0.000	9.583	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2630.000	3.353	0.000	9.583	0.000	0.000	0.000	0.000	-0.052	0.000
IF	2638.500	2.959	0.000	9.583	0.000	0.000	0.000	0.000	0.025	0.000
IF	2661.500	4.140	0.000	9.584	0.000	0.000	0.000	0.000	0.042	0.000
IF	2670.500	4.305	0.000	9.584	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2684.500	4.075	0.000	9.585	0.000	0.000	0.000	0.000	-0.021	0.000
IF	2697.500	3.747	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
IF	2708.000	4.075	0.000	9.585	0.000	0.000	0.000	0.000	0.029	0.000
IF	2720.500	4.403	0.000	9.585	0.000	0.000	0.000	0.000	0.019	0.000
IF	2729.000	4.469	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2738.000	4.239	0.000	9.586	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2746.000	4.432	0.000	9.586	0.000	0.000	0.000	0.000	0.027	0.000
IF	2754.000	4.665	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2764.500	4.272	0.000	9.587	0.000	0.000	0.000	0.000	-0.029	0.000
IF	2772.000	4.140	0.000	9.587	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2785.500	4.239	0.000	9.587	0.000	0.000	0.000	0.000	0.008	0.000
IF	2792.000	4.301	0.000	9.587	0.000	0.000	0.000	0.000	-0.042	0.000
IF	2802.000	3.547	0.000	9.587	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2816.000	3.944	0.000	9.588	0.000	0.000	0.000	0.000	0.028	0.000
IF	2831.500	4.367	0.000	9.588	0.000	0.000	0.000	0.000	0.007	0.000
IF	2843.000	4.137	0.000	9.588	0.000	0.000	0.000	0.000	-0.020	0.000
IF	2854.000	3.908	0.000	9.589	0.000	0.000	0.000	0.000	-0.020	0.000
IF	2864.500	3.711	0.000	9.589	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2873.500	3.842	0.000	9.589	0.000	0.000	0.000	0.000	0.012	0.000
IF	2887.000	3.973	0.000	9.590	0.000	0.000	0.000	0.000	0.017	0.000
IF	2892.500	4.170	0.000	9.590	0.000	0.000	0.000	0.000	-0.001	0.000
IF	2924.500	3.940	0.000	9.590	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2932.000	3.908	0.000	9.591	0.000	0.000	0.000	0.000	-0.004	0.000
IF	2941.500	3.875	0.000	9.591	0.000	0.000	0.000	0.000	0.005	0.000
IF	2950.500	4.006	0.000	9.591	0.000	0.000	0.000	0.000	0.015	0.000
IF	2959.000	4.137	0.000	9.591	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2970.000	3.875	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2980.000	4.104	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2987.000	3.842	0.000	9.591	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2997.000	3.678	0.000	9.592	0.000	0.000	0.000	0.000	0.007	0.000
IF	3011.000	4.006	0.000	9.592	0.000	0.000	0.000	0.000	-0.020	0.000
IF	3033.000	2.956	0.000	9.592	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3041.000	3.547	0.000	9.592	0.000	0.000	0.000	0.000	0.027	0.000
IF	3074.000	4.071	0.000	9.592	0.000	0.000	0.000	0.000	0.009	0.000
IF	3082.000	3.908	0.000	9.592	0.000	0.000	0.000	0.000	-0.028	0.000
IF	3099.000	3.382	0.000	9.592	0.000	0.000	0.000	0.000	0.004	0.000
IF	3104.500	4.006	0.000	9.592	0.000	0.000	0.000	0.000	0.029	0.000
IF	3116.000	3.875	0.000	9.593	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3129.500	3.743	0.000	9.593	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3140.500	3.776	0.000	9.593	0.000	0.000	0.000	0.000	0.023	0.000
IF	3151.000	4.236	0.000	9.593	0.000	0.000	0.000	0.000	0.028	0.000
IF	3160.500	4.334	0.000	9.593	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3171.000	4.203	0.000	9.593	0.000	0.000	0.000	0.000	-0.008	0.000
IF	3186.500	4.137	0.000	9.593	0.000	0.000	0.000	0.000	-0.020	0.000
IF	3201.500	3.579	0.000	9.593	0.000	0.000	0.000	0.000	0.001	0.000
IF	3210.500	4.170	0.000	9.593	0.000	0.000	0.000	0.000	0.015	0.000
IF	3230.000	4.006	0.000	9.594	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3236.500	3.908	0.000	9.594	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3247.500	3.940	0.000	9.594	0.000	0.000	0.000	0.000	0.003	0.000
IF	3259.500	3.973	0.000	9.594	0.000	0.000	0.000	0.000	-0.011	0.000
IF	3270.500	3.678	0.000	9.594	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3277.500	3.711	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
IF	3301.500	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.001	0.000
IF	3307.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
IF	3321.000	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
IF	3325.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.011	0.000
IF	3344.000	3.908	0.000	9.594	0.000	0.000	0.000	0.000	0.002	0.000
IF	3352.000	3.809	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
IF	3368.500	3.875	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
IF	3383.000	3.940	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3390.000	3.842	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
IF	3409.500	4.334	0.000	9.595	0.000	0.000	0.000	0.000	0.007	0.000
IF	3417.000	4.039	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3429.000	4.301	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
IF	3438.000	4.268	0.000	9.595	0.000	0.000	0.000	0.000	0.008	0.000
IF	3445.000	4.432	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	3456.500	4.531	0.000	9.595	0.000	0.000	0.000	0.000	0.009	0.000
IF	3473.500	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.022	0.000
IF	3480.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3488.000	4.629	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
IF	3499.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.013	0.000
IF	3511.500	4.924	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3519.500	5.023	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000

IF	3526.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	0.035	0.000
IF	3534.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	3545.000	4.990	0.000	9.595	0.000	0.000	0.000	0.000	-0.034	0.000
IF	3554.000	4.892	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3562.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3569.000	4.793	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3580.500	4.596	0.000	9.595	0.000	0.000	0.000	0.000	0.020	0.000
IF	3597.500	5.351	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
IF	3603.500	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3612.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3619.000	5.253	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3625.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
IF	3632.500	5.417	0.000	9.595	0.000	0.000	0.000	0.000	-0.026	0.000
IF	3639.000	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	3649.500	5.646	0.000	9.595	0.000	0.000	0.000	0.000	0.048	0.000
IF	3663.000	5.843	0.000	9.595	0.000	0.000	0.000	0.000	0.010	0.000
IF	3673.000	5.876	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
IF	3678.000	6.007	0.000	9.595	0.000	0.000	0.000	0.000	-0.040	0.000
IF	3689.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3704.000	5.614	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
IF	3716.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	-0.005	0.000
IF	3724.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.032	0.000
IF	3731.000	5.089	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
IF	3739.000	5.581	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
IF	3746.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3754.000	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000
IF	3763.000	5.285	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
IF	3771.000	5.712	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
IF	3784.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.011	0.000
IF	3798.000	5.417	0.000	9.595	0.000	0.000	0.000	0.000	0.051	0.000
IF	3803.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
IF	3811.000	5.860	0.000	9.595	0.000	0.000	0.000	0.000	-0.031	0.000
IF	3823.500	5.889	0.000	9.595	0.000	0.000	0.000	0.000	0.032	0.000
IF	3831.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.062	0.000
IF	3841.500	7.005	0.000	9.595	0.000	0.000	0.000	0.000	0.054	0.000
IF	3851.000	7.566	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
IF	3865.500	7.680	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
IF	3883.000	8.665	0.000	9.595	0.000	0.000	0.000	0.000	0.042	0.000
IF	3891.500	8.763	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3901.000	8.481	0.000	9.595	0.000	0.000	0.000	0.000	-0.020	0.000
IF	3915.000	8.304	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3932.000	8.251	0.000	9.595	0.000	0.000	0.000	0.000	0.003	0.000
IF	3954.500	8.415	0.000	9.595	0.000	0.000	0.000	0.000	0.001	0.000
IF	3971.500	8.287	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
IF	3976.000	9.206	0.000	9.595	0.000	0.000	0.000	0.000	0.077	0.000
IF	3986.000	9.400	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
IF	4004.000	9.108	0.000	9.595	0.000	0.000	0.000	0.000	-0.006	0.000
IF	4029.000	9.140	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	4039.600	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.043	0.000
AS	4073.900	9.595	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000
IF	4075.000	9.583	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
IF	4075.300	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.038	0.000
AS	4123.100	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.009	0.000
IF	4129.000	9.550	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	4129.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.077	0.000
AS	4206.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.144	0.000
IF	4210.500	9.058	0.000	9.604	0.000	0.000	0.000	0.000	-0.049	0.000
IF	4222.000	8.861	0.000	9.604	0.000	0.000	0.000	0.000	0.015	0.000
IF	4232.500	9.387	0.000	9.604	0.000	0.000	0.000	0.000	0.049	0.000
IF	4237.000	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.048	0.000
AS	4270.400	9.603	0.000	9.603	0.000	0.000	0.000	0.000	-0.083	0.000
IF	4276.000	9.140	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
IF	4286.000	9.255	0.000	9.603	0.000	0.000	0.000	0.000	-0.021	0.000
IF	4296.000	8.730	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
IF	4303.000	8.875	0.000	9.603	0.000	0.000	0.000	0.000	0.024	0.000
IF	4314.000	9.170	0.000	9.603	0.000	0.000	0.000	0.000	-0.010	0.000
IF	4326.500	8.645	0.000	9.604	0.000	0.000	0.000	0.000	-0.011	0.000
IF	4338.000	8.911	0.000	9.604	0.000	0.000	0.000	0.000	0.029	0.000
IF	4347.000	9.236	0.000	9.604	0.000	0.000	0.000	0.000	0.010	0.000
IF	4360.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.017	0.000
IF	4374.500	8.776	0.000	9.604	0.000	0.000	0.000	0.000	0.022	0.000
IF	4379.000	9.567	0.000	9.604	0.000	0.000	0.000	0.000	0.032	0.000
IF	4386.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.013	0.000
IF	4401.500	9.272	0.000	9.604	0.000	0.000	0.000	0.000	0.013	0.000
IF	4416.500	9.531	0.000	9.604	0.000	0.000	0.000	0.000	0.020	0.000
IF	4417.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.052	0.000
AS	4438.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.076	0.000
IF	4446.000	9.042	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	4453.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.071	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-13.335	1.000	1.000	9.360	9.182	13.209	56.140	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.000	-13.315	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000	-13.309	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.000	-13.276	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	10.000	-13.270	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	15.000	-13.237	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.000	-13.231	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	21.000	-13.198	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	22.000	-13.192	0.000	9.360	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	27.000	-13.160	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	28.000	-13.153	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	33.000	-13.121	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	34.000	-13.114	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.000	-13.082	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	40.000	-13.075	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.000	-13.043	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	46.000	-13.036	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	51.000	-13.004	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.000	-12.997	0.000	9.360	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	57.000	-12.951	0.000	9.360	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	58.000	-12.937	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	63.000	-12.865	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	64.000	-12.851	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	69.000	-12.780	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	70.000	-12.766	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	76.000	-12.701	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	79.000	-12.670	0.000	9.361	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	84.000	-12.617	0.000	9.360	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.000	-12.590	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	90.000	-12.452	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.000	-12.424	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	96.000	-12.286	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	97.000	-12.259	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	102.000	-12.121	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	103.000	-12.094	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.000	-11.956	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	109.000	-11.928	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.000	-11.791	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	115.000	-11.763	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	120.000	-11.625	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.000	-11.598	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	126.000	-11.460	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	127.000	-11.432	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	132.000	-11.295	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	133.000	-11.267	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	139.000	-11.102	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.000	-10.964	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	145.000	-10.936	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	156.000	-10.633	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.000	-10.606	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	168.000	-10.303	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	169.000	-10.275	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.000	-9.973	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	181.000	-9.945	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	192.000	-9.642	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.000	-9.615	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	204.000	-9.311	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	205.000	-9.284	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.000	-8.981	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	217.000	-8.953	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	228.000	-8.650	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.000	-8.623	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	240.000	-8.320	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	241.000	-8.292	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	250.000	-8.044	0.000	9.357	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	251.000	-8.031	0.000	9.357	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.000	-7.988	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	263.000	-7.985	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	274.000	-7.942	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.000	-7.939	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	286.000	-7.896	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	287.000	-7.893	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.000	-7.851	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	299.000	-7.847	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	310.000	-7.805	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.000	-7.801	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	322.000	-7.759	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	323.000	-7.755	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.000	-7.713	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	335.000	-7.709	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	346.000	-7.667	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.000	-7.663	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	358.000	-7.621	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	359.000	-7.617	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.000	-7.575	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	371.000	-7.571	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	382.000	-7.529	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.000	-7.525	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	394.000	-7.483	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	395.000	-7.479	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	406.000	-7.438	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	407.000	-7.434	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	418.000	-7.393	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	419.000	-7.389	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	430.000	-7.348	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	431.000	-7.344	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	442.000	-7.302	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	443.000	-7.299	0.000	9.356	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	562.000	-8.259	0.000	9.358	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	614.000	-8.581	0.000	9.359	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	615.000	-8.587	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	626.000	-8.568	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	627.000	-8.564	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	638.000	-8.528	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	639.000	-8.524	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	651.000	-8.502	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	652.000	-8.500	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	663.000	-8.484	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	664.000	-8.483	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	675.000	-8.467	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	676.000	-8.465	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	687.000	-8.449	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	688.000	-8.448	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	699.000	-8.432	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	700.000	-8.430	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	711.000	-8.414	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	712.000	-8.413	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	723.000	-8.397	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	724.000	-8.395	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	735.000	-8.379	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	736.000	-8.378	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	747.000	-8.362	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	748.000	-8.360	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	759.000	-8.344	0.000	9.361	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	760.000	-8.343	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	772.000	-8.325	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	778.000	-8.317	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	781.000	-8.312	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	792.000	-8.269	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	793.000	-8.263	0.000	9.361	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	804.000	-8.190	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	805.000	-8.183	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	816.000	-8.110	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	817.000	-8.103	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	828.000	-8.030	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	829.000	-8.024	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	840.000	-7.950	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	841.000	-7.944	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	852.000	-7.871	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	853.000	-7.864	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	864.000	-7.791	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	865.000	-7.784	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	876.000	-7.711	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	877.000	-7.705	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	888.000	-7.631	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	889.000	-7.625	0.000	9.362	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	900.000	-7.528	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	901.000	-7.517	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	912.000	-7.398	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	913.000	-7.387	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	924.000	-7.268	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	925.000	-7.258	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	936.000	-7.148	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	937.000	-7.141	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	948.000	-7.065	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	949.000	-7.058	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	960.000	-6.982	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	961.000	-6.975	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	972.000	-6.898	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	973.000	-6.888	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	984.000	-6.786	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	985.000	-6.777	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	996.000	-6.675	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	997.000	-6.666	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1008.000	-6.563	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1009.000	-6.554	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1020.000	-6.452	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1021.000	-6.443	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1032.000	-6.341	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1033.000	-6.332	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1044.000	-6.229	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1045.000	-6.220	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1056.000	-6.118	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1057.000	-6.109	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1072.000	-6.002	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1073.000	-5.998	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1084.000	-5.960	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1085.000	-5.956	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1096.000	-5.918	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1097.000	-5.915	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1108.000	-5.876	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1109.000	-5.873	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1120.000	-5.834	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1121.000	-5.831	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1132.000	-5.793	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1133.000	-5.789	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1144.000	-5.751	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1145.000	-5.747	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1156.000	-5.709	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1157.000	-5.705	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1168.000	-5.656	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1169.000	-5.650	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1181.000	-5.589	0.000	9.369	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1195.000	-5.577	0.000	9.369	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1196.000	-5.575	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1207.000	-5.551	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1208.000	-5.549	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1219.000	-5.526	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1220.000	-5.523	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1232.000	-5.498	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1243.000	-5.474	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1244.000	-5.472	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1262.000	-5.433	0.000	9.369	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1276.000	-5.100	0.000	9.368	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1277.000	-5.054	0.000	9.368	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1374.700	-1.285	0.000	9.363	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1377.900	-0.975	0.000	9.363	0.000	0.000	0.000	0.000	0.127	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1381.200	-0.460	0.000	9.360	0.000	0.000	0.000	0.000	0.127	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1397.600	1.534	0.000	9.361	0.000	0.000	0.000	0.000	0.113	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1400.900	1.761	0.000	9.366	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1404.200	1.990	0.000	9.372	0.000	0.000	0.000	0.000	0.073	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1407.500	2.245	0.000	9.379	0.000	0.000	0.000	0.000	0.077	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1410.800	2.499	0.000	9.386	0.000	0.000	0.000	0.000	0.078	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1414.000	2.754	0.000	9.394	0.000	0.000	0.000	0.000	0.097	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1417.300	3.132	0.000	9.401	0.000	0.000	0.000	0.000	0.123	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1420.600	3.563	0.000	9.407	0.000	0.000	0.000	0.000	0.131	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1423.900	3.994	0.000	9.417	0.000	0.000	0.000	0.000	0.112	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1427.200	4.305	0.000	9.436	0.000	0.000	0.000	0.000	0.091	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1430.400	4.588	0.000	9.458	0.000	0.000	0.000	0.000	0.087	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1433.700	4.871	0.000	9.484	0.000	0.000	0.000	0.000	0.059	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1437.000	4.979	0.000	9.514	0.000	0.000	0.000	0.000	0.030	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1440.300	5.072	0.000	9.542	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1443.600	5.164	0.000	9.557	0.000	0.000	0.000	0.000	0.061	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1446.800	5.468	0.000	9.572	0.000	0.000	0.000	0.000	0.106	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1450.100	5.855	0.000	9.592	0.000	0.000	0.000	0.000	0.097	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1453.400	6.107	0.000	9.620	0.000	0.000	0.000	0.000	0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1456.700	6.179	0.000	9.654	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1460.000	6.257	0.000	9.681	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1463.300	6.340	0.000	9.705	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1466.500	6.323	0.000	9.729	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1469.800	6.245	0.000	9.749	0.000	0.000	0.000	0.000	0.053	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1473.100	6.672	0.000	9.755	0.000	0.000	0.000	0.000	0.095	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1476.400	6.872	0.000	9.770	0.000	0.000	0.000	0.000	0.046	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1479.700	6.974	0.000	9.789	0.000	0.000	0.000	0.000	0.031	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1482.900	7.076	0.000	9.806	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1486.200	7.124	0.000	9.823	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1489.500	7.162	0.000	9.838	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1492.800	7.199	0.000	9.851	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1496.100	7.233	0.000	9.861	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1499.300	7.260	0.000	9.871	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1502.600	7.287	0.000	9.879	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1505.900	7.279	0.000	9.887	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1509.200	7.266	0.000	9.893	0.000	0.000	0.000	0.000	-0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1512.500	7.197	0.000	9.899	0.000	0.000	0.000	0.000	-0.042	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1515.700	6.993	0.000	9.906	0.000	0.000	0.000	0.000	-0.063	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1519.000	6.788	0.000	9.910	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1522.300	6.681	0.000	9.913	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1525.600	6.875	0.000	9.911	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1528.900	7.038	0.000	9.911	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1532.100	7.239	0.000	9.910	0.000	0.000	0.000	0.000	0.093	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1535.400	7.644	0.000	9.907	0.000	0.000	0.000	0.000	0.123	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1538.700	8.049	0.000	9.908	0.000	0.000	0.000	0.000	0.221	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1542.000	9.105	0.000	9.972	0.000	0.000	0.000	0.000	0.370	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1543.900	9.972	0.000	9.972	0.000	0.000	0.000	0.000	0.457	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1681.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1685.500	9.521	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1692.200	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1705.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1710.000	9.501	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1712.300	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1816.100	9.579	0.000	9.579	0.000	0.000	0.000	0.000	-0.157	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1824.000	8.340	0.000	9.579	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1853.500	8.747	0.000	9.579	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1885.000	9.042	0.000	9.579	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1899.500	9.108	0.000	9.579	0.000	0.000	0.000	0.000	-0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1905.500	8.517	0.000	9.579	0.000	0.000	0.000	0.000	-0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1916.500	8.251	0.000	9.580	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1929.000	8.386	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1941.000	8.222	0.000	9.580	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1950.000	8.481	0.000	9.580	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1970.500	7.881	0.000	9.580	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2005.000	9.062	0.000	9.580	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2023.000	8.320	0.000	9.580	0.000	0.000	0.000	0.000	-0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2033.500	7.749	0.000	9.580	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2051.500	7.421	0.000	9.580	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2066.000	7.224	0.000	9.581	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2078.500	7.795	0.000	9.581	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2095.500	7.661	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2108.000	7.365	0.000	9.581	0.000	0.000	0.000	0.000	-0.022	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2118.500	7.159	0.000	9.581	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2135.500	7.402	0.000	9.580	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2143.000	7.300	0.000	9.580	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2149.500	8.110	0.000	9.580	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2160.500	7.300	0.000	9.580	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2185.000	7.234	0.000	9.579	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2215.500	7.651	0.000	9.578	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2229.000	7.106	0.000	9.578	0.000	0.000	0.000	0.000	-0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2235.000	6.480	0.000	9.578	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2247.000	6.667	0.000	9.578	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2260.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2269.500	7.028	0.000	9.578	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2281.500	7.060	0.000	9.578	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2285.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2297.000	6.864	0.000	9.578	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2311.000	6.020	0.000	9.579	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2327.000	7.159	0.000	9.579	0.000	0.000	0.000	0.000	0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2341.500	7.815	0.000	9.579	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2349.000	7.060	0.000	9.579	0.000	0.000	0.000	0.000	-0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2356.500	7.159	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2364.500	6.043	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2374.500	5.978	0.000	9.580	0.000	0.000	0.000	0.000	-0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2383.000	5.092	0.000	9.580	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2388.500	5.551	0.000	9.580	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2395.000	4.862	0.000	9.580	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2403.500	5.125	0.000	9.580	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2431.000	4.534	0.000	9.580	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2437.000	4.370	0.000	9.580	0.000	0.000	0.000	0.000	-0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2447.500	3.714	0.000	9.580	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2454.000	3.812	0.000	9.580	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2465.000	4.009	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2477.000	3.780	0.000	9.580	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2489.500	4.075	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2497.500	3.976	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2506.500	3.812	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2519.000	3.780	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2531.500	3.583	0.000	9.581	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2541.500	3.878	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2561.000	3.878	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2570.000	3.451	0.000	9.581	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2580.000	3.255	0.000	9.582	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2604.500	3.681	0.000	9.582	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2612.500	4.305	0.000	9.583	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2630.000	3.353	0.000	9.583	0.000	0.000	0.000	0.000	-0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2638.500	2.959	0.000	9.583	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2661.500	4.140	0.000	9.584	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2670.500	4.305	0.000	9.584	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2684.500	4.075	0.000	9.585	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2697.500	3.747	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2708.000	4.075	0.000	9.585	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2720.500	4.403	0.000	9.585	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2729.000	4.469	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2738.000	4.239	0.000	9.586	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2746.000	4.432	0.000	9.586	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2754.000	4.665	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2764.500	4.272	0.000	9.587	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2772.000	4.140	0.000	9.587	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2785.500	4.239	0.000	9.587	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2792.000	4.301	0.000	9.587	0.000	0.000	0.000	0.000	-0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2802.000	3.547	0.000	9.587	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2816.000	3.944	0.000	9.588	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2831.500	4.367	0.000	9.588	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2843.000	4.137	0.000	9.588	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2854.000	3.908	0.000	9.589	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2864.500	3.711	0.000	9.589	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2873.500	3.842	0.000	9.589	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2887.000	3.973	0.000	9.590	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2892.500	4.170	0.000	9.590	0.000	0.000	0.000	0.000	-0.001	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2924.500	3.940	0.000	9.590	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2932.000	3.908	0.000	9.591	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2941.500	3.875	0.000	9.591	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2950.500	4.006	0.000	9.591	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2959.000	4.137	0.000	9.591	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2970.000	3.875	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2980.000	4.104	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2987.000	3.842	0.000	9.591	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2997.000	3.678	0.000	9.592	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3011.000	4.006	0.000	9.592	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3033.000	2.956	0.000	9.592	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3041.000	3.547	0.000	9.592	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3074.000	4.071	0.000	9.592	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3082.000	3.908	0.000	9.592	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3099.000	3.382	0.000	9.592	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3104.500	4.006	0.000	9.592	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3116.000	3.875	0.000	9.593	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3129.500	3.743	0.000	9.593	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3140.500	3.776	0.000	9.593	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3151.000	4.236	0.000	9.593	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3160.500	4.334	0.000	9.593	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3171.000	4.203	0.000	9.593	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3186.500	4.137	0.000	9.593	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3201.500	3.579	0.000	9.593	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3210.500	4.170	0.000	9.593	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3230.000	4.006	0.000	9.594	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3236.500	3.908	0.000	9.594	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3247.500	3.940	0.000	9.594	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3259.500	3.973	0.000	9.594	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3270.500	3.678	0.000	9.594	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3277.500	3.711	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3301.500	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3307.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3321.000	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3325.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3344.000	3.908	0.000	9.594	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3352.000	3.809	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3368.500	3.875	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3383.000	3.940	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3390.000	3.842	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3409.500	4.334	0.000	9.595	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3417.000	4.039	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3429.000	4.301	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3438.000	4.268	0.000	9.595	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3445.000	4.432	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3456.500	4.531	0.000	9.595	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3473.500	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3480.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3488.000	4.629	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3499.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3511.500	4.924	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3519.500	5.023	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3526.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3534.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3545.000	4.990	0.000	9.595	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3554.000	4.892	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3562.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3569.000	4.793	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3580.500	4.596	0.000	9.595	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3597.500	5.351	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3603.500	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3612.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3619.000	5.253	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3625.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3632.500	5.417	0.000	9.595	0.000	0.000	0.000	0.000	-0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3639.000	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3649.500	5.646	0.000	9.595	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3663.000	5.843	0.000	9.595	0.000	0.000	0.000	0.000	0.010	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3673.000	5.876	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3678.000	6.007	0.000	9.595	0.000	0.000	0.000	0.000	-0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3689.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3704.000	5.614	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3716.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3724.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3731.000	5.089	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3739.000	5.581	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3746.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3754.000	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3763.000	5.285	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3771.000	5.712	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3784.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3798.000	5.417	0.000	9.595	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3803.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3811.000	5.860	0.000	9.595	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3823.500	5.889	0.000	9.595	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3831.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3841.500	7.005	0.000	9.595	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3851.000	7.566	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3865.500	7.680	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3883.000	8.665	0.000	9.595	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3891.500	8.763	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3901.000	8.481	0.000	9.595	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3915.000	8.304	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3932.000	8.251	0.000	9.595	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3954.500	8.415	0.000	9.595	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3971.500	8.287	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3976.000	9.206	0.000	9.595	0.000	0.000	0.000	0.000	0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3986.000	9.400	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4004.000	9.108	0.000	9.595	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4029.000	9.140	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4039.600	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	4073.900	9.595	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4075.000	9.583	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4075.300	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.038	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4123.100	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4129.000	9.550	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4129.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.077	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4206.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4210.500	9.058	0.000	9.604	0.000	0.000	0.000	0.000	-0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4222.000	8.861	0.000	9.604	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4232.500	9.387	0.000	9.604	0.000	0.000	0.000	0.000	0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4237.000	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4270.400	9.603	0.000	9.603	0.000	0.000	0.000	0.000	-0.083	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4276.000	9.140	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4286.000	9.255	0.000	9.603	0.000	0.000	0.000	0.000	-0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4296.000	8.730	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4303.000	8.875	0.000	9.603	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4314.000	9.170	0.000	9.603	0.000	0.000	0.000	0.000	-0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4326.500	8.645	0.000	9.604	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4338.000	8.911	0.000	9.604	0.000	0.000	0.000	0.000	0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4347.000	9.236	0.000	9.604	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4360.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4374.500	8.776	0.000	9.604	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4379.000	9.567	0.000	9.604	0.000	0.000	0.000	0.000	0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4386.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4401.500	9.272	0.000	9.604	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4416.500	9.531	0.000	9.604	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4417.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.052	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4438.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.076	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4446.000	9.042	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4453.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.071	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	9.18	13.21	15.79
OF	3.00	9.19	13.21	15.79
OF	4.00	9.19	13.21	15.79
OF	9.00	9.19	13.21	15.79
OF	10.00	9.19	13.21	15.79
OF	15.00	9.20	13.21	15.80
OF	16.00	9.20	13.21	15.80

OF	21.00	9.20	13.21	15.80
OF	22.00	9.21	13.21	15.80
OF	27.00	9.21	13.21	15.81
OF	28.00	9.21	13.21	15.81
OF	33.00	9.22	13.21	15.81
OF	34.00	9.22	13.21	15.81
OF	39.00	9.22	13.21	15.82
OF	40.00	9.22	13.21	15.82
OF	45.00	9.23	13.21	15.82
OF	46.00	9.23	13.21	15.82
OF	51.00	9.24	13.21	15.83
OF	52.00	9.24	13.21	15.83
OF	57.00	9.25	13.21	15.83
OF	58.00	9.25	13.21	15.83
OF	63.00	9.26	13.21	15.84
OF	64.00	9.26	13.21	15.84
OF	69.00	9.27	13.21	15.85
OF	70.00	9.27	13.21	15.85
OF	76.00	9.29	13.21	15.86
OF	79.00	9.29	13.21	15.86
OF	84.00	9.30	13.21	15.87
OF	85.00	9.30	13.21	15.87
OF	90.00	9.33	13.21	15.89
OF	91.00	9.33	13.21	15.89
OF	96.00	9.35	13.21	15.91
OF	97.00	9.36	13.21	15.91
OF	102.00	9.38	13.21	15.92
OF	103.00	9.38	13.21	15.93
OF	108.00	9.41	13.21	15.94
OF	109.00	9.41	13.21	15.95
OF	114.00	9.43	13.21	15.96
OF	115.00	9.44	13.21	15.97
OF	120.00	9.46	13.21	15.98
OF	121.00	9.47	13.21	15.99
OF	126.00	9.49	13.21	16.00
OF	127.00	9.49	13.21	16.00
OF	132.00	9.52	13.21	16.02
OF	133.00	9.52	13.21	16.02
OF	139.00	9.55	13.21	16.04
OF	144.00	9.58	13.21	16.06
OF	145.00	9.58	13.21	16.07
OF	156.00	9.64	13.21	16.10
OF	157.00	9.64	13.21	16.11
OF	168.00	9.70	13.21	16.15
OF	169.00	9.70	13.21	16.15
OF	180.00	9.76	13.21	16.19
OF	181.00	9.77	13.21	16.19
OF	192.00	9.83	13.21	16.24
OF	193.00	9.83	13.21	16.24
OF	204.00	9.89	13.21	16.28
OF	205.00	9.90	13.21	16.29
OF	216.00	9.96	13.21	16.33
OF	217.00	9.97	13.21	16.33
OF	228.00	10.00	13.21	16.36
OF	229.00	10.00	13.21	16.36
OF	240.00	9.97	13.21	16.33
OF	241.00	9.97	13.21	16.33
OF	250.00	9.94	13.21	16.32
OF	251.00	9.94	13.21	16.32
OF	262.00	9.94	13.21	16.31
OF	263.00	9.94	13.21	16.32
OF	274.00	9.94	13.21	16.31
OF	275.00	9.94	13.21	16.31
OF	286.00	9.94	13.21	16.31
OF	287.00	9.94	13.21	16.31
OF	298.00	9.94	13.21	16.31
OF	299.00	9.94	13.21	16.31
OF	310.00	9.93	13.21	16.31
OF	311.00	9.94	13.21	16.31
OF	322.00	9.93	13.21	16.31
OF	323.00	9.93	13.21	16.31
OF	334.00	9.93	13.21	16.31
OF	335.00	9.93	13.21	16.31
OF	346.00	9.93	13.21	16.31
OF	347.00	9.93	13.21	16.31
OF	358.00	9.93	13.21	16.31
OF	359.00	9.93	13.21	16.31
OF	370.00	9.93	13.21	16.31
OF	371.00	9.93	13.21	16.31
OF	382.00	9.93	13.21	16.30
OF	383.00	9.93	13.21	16.31
OF	394.00	9.93	13.21	16.30
OF	395.00	9.93	13.21	16.30
OF	406.00	9.92	13.21	16.30
OF	407.00	9.93	13.21	16.30
OF	418.00	9.92	13.21	16.30
OF	419.00	9.92	13.21	16.30
OF	430.00	9.92	13.21	16.30
OF	431.00	9.92	13.21	16.30
OF	442.00	9.92	13.21	16.30
OF	443.00	9.92	13.21	16.30
OF	562.00	10.04	13.21	16.38
OF	614.00	10.07	13.21	16.41
OF	615.00	10.08	13.21	16.41
OF	626.00	10.08	13.21	16.41
OF	627.00	10.08	13.21	16.41
OF	638.00	10.08	13.21	16.41
OF	639.00	10.08	13.21	16.41
OF	651.00	10.08	13.21	16.41
OF	652.00	10.08	13.21	16.41
OF	663.00	10.08	13.21	16.42
OF	664.00	10.08	13.21	16.42

OF	675.00	10.08	13.21	16.42
OF	676.00	10.08	13.21	16.42
OF	687.00	10.08	13.21	16.42
OF	688.00	10.09	13.21	16.42
OF	699.00	10.09	13.21	16.42
OF	700.00	10.09	13.21	16.42
OF	711.00	10.09	13.21	16.42
OF	712.00	10.09	13.21	16.42
OF	723.00	10.09	13.21	16.42
OF	724.00	10.09	13.21	16.43
OF	735.00	10.09	13.21	16.43
OF	736.00	10.10	13.21	16.43
OF	747.00	10.10	13.21	16.43
OF	748.00	10.10	13.21	16.43
OF	759.00	10.10	13.21	16.43
OF	760.00	10.10	13.21	16.43
OF	772.00	10.10	13.21	16.43
OF	778.00	10.10	13.21	16.43
OF	781.00	10.10	13.21	16.43
OF	792.00	10.10	13.21	16.43
OF	793.00	10.10	13.21	16.43
OF	804.00	10.10	13.21	16.43
OF	805.00	10.10	13.21	16.43
OF	816.00	10.09	13.21	16.43
OF	817.00	10.09	13.21	16.43
OF	828.00	10.09	13.21	16.42
OF	829.00	10.09	13.21	16.42
OF	840.00	10.08	13.21	16.42
OF	841.00	10.08	13.21	16.42
OF	852.00	10.08	13.21	16.41
OF	853.00	10.08	13.21	16.42
OF	864.00	10.07	13.21	16.41
OF	865.00	10.07	13.21	16.41
OF	876.00	10.07	13.21	16.41
OF	877.00	10.07	13.21	16.41
OF	888.00	10.06	13.21	16.40
OF	889.00	10.06	13.21	16.40
OF	900.00	10.05	13.21	16.40
OF	901.00	10.05	13.21	16.40
OF	912.00	10.04	13.21	16.39
OF	913.00	10.04	13.21	16.39
OF	924.00	10.03	13.21	16.38
OF	925.00	10.03	13.21	16.38
OF	936.00	10.02	13.21	16.38
OF	937.00	10.02	13.21	16.38
OF	948.00	10.01	13.21	16.37
OF	949.00	10.01	13.21	16.37
OF	960.00	10.00	13.21	16.37
OF	961.00	10.01	13.21	16.37
OF	972.00	10.00	13.21	16.36
OF	973.00	10.00	13.21	16.36
OF	984.00	9.99	13.21	16.36
OF	985.00	9.99	13.21	16.36
OF	996.00	9.98	13.21	16.35
OF	997.00	9.98	13.21	16.35
OF	1008.00	9.97	13.21	16.34
OF	1009.00	9.97	13.21	16.34
OF	1020.00	9.96	13.21	16.33
OF	1021.00	9.96	13.21	16.33
OF	1032.00	9.94	13.21	16.32
OF	1033.00	9.94	13.21	16.33
OF	1044.00	9.93	13.21	16.32
OF	1045.00	9.93	13.21	16.32
OF	1056.00	9.92	13.21	16.31
OF	1057.00	9.92	13.21	16.31
OF	1072.00	9.91	13.21	16.30
OF	1073.00	9.91	13.21	16.30
OF	1084.00	9.91	13.21	16.30
OF	1085.00	9.91	13.21	16.30
OF	1096.00	9.90	13.21	16.30
OF	1097.00	9.91	13.21	16.30
OF	1108.00	9.90	13.21	16.30
OF	1109.00	9.90	13.21	16.30
OF	1120.00	9.90	13.21	16.30
OF	1121.00	9.90	13.21	16.30
OF	1132.00	9.90	13.21	16.30
OF	1133.00	9.90	13.21	16.30
OF	1144.00	9.90	13.21	16.30
OF	1145.00	9.90	13.21	16.30
OF	1156.00	9.89	13.21	16.29
OF	1157.00	9.90	13.21	16.29
OF	1168.00	9.89	13.21	16.29
OF	1169.00	9.89	13.21	16.29
OF	1181.00	9.88	13.21	16.29
OF	1195.00	9.88	13.21	16.29
OF	1196.00	9.89	13.21	16.29
OF	1207.00	9.88	13.21	16.29
OF	1208.00	9.89	13.21	16.29
OF	1219.00	9.88	13.21	16.29
OF	1220.00	9.89	13.21	16.29
OF	1232.00	9.88	13.21	16.29
OF	1243.00	9.88	13.21	16.29
OF	1244.00	9.88	13.21	16.29
OF	1262.00	9.88	13.21	16.28
OF	1276.00	9.83	13.21	16.25
OF	1277.00	9.82	13.21	16.24
OF	1374.70	8.15	13.21	15.07
OF	1377.90	7.92	13.21	14.91
OF	1381.20	7.53	13.21	14.63
IF	1397.60	6.02	13.21	13.58
IF	1400.90	5.85	13.21	13.46
IF	1404.20	5.68	13.21	13.35

IF	1407.50	5.50	13.21	13.23
IF	1410.80	5.31	13.21	13.10
IF	1414.00	5.12	13.21	12.98
IF	1417.30	4.84	13.21	12.79
IF	1420.60	4.51	13.21	12.57
IF	1423.90	4.19	13.21	12.35
IF	1427.20	3.97	13.21	12.21
IF	1430.40	3.77	13.21	12.09
IF	1433.70	3.57	13.21	11.98
IF	1437.00	3.51	13.21	11.97
IF	1440.30	3.46	13.21	11.96
IF	1443.60	3.40	13.21	11.94
IF	1446.80	3.18	13.21	11.80
IF	1450.10	2.90	13.21	11.62
IF	1453.40	2.72	13.21	11.53
IF	1456.70	2.69	13.21	11.54
IF	1460.00	2.65	13.21	11.54
IF	1463.30	2.61	13.21	11.53
IF	1466.50	2.62	13.21	11.56
IF	1469.80	2.64	13.21	11.60
IF	1473.10	2.39	13.21	11.43
IF	1476.40	2.25	13.21	11.34
IF	1479.70	2.18	13.21	11.32
IF	1482.90	2.12	13.21	11.29
IF	1486.20	2.10	13.21	11.29
IF	1489.50	2.08	13.21	11.29
IF	1492.80	2.06	13.21	11.29
IF	1496.10	2.04	13.21	11.29
IF	1499.30	2.03	13.21	11.29
IF	1502.60	2.01	13.21	11.29
IF	1505.90	2.02	13.21	11.30
IF	1509.20	2.02	13.21	11.31
IF	1512.50	2.04	13.21	11.33
IF	1515.70	2.08	13.21	11.36
IF	1519.00	2.11	13.21	11.39
IF	1522.30	2.13	13.21	11.40
IF	1525.60	2.10	13.21	11.38
IF	1528.90	2.08	13.21	11.37
IF	1532.10	2.04	13.21	11.34
IF	1535.40	1.76	13.21	11.14
IF	1538.70	1.45	13.21	10.92
IF	1542.00	0.68	13.21	10.44
IF	1543.90	0.01	13.21	9.98
AS	1681.60	0.00	0.00	9.60
IF	1685.50	0.03	0.23	9.63
IF	1692.20	0.01	0.31	9.61
AS	1705.60	0.00	0.00	9.60
IF	1710.00	0.04	0.24	9.63
IF	1712.30	0.01	0.27	9.61
AS	1816.10	0.00	0.00	9.58
IF	1824.00	0.06	0.28	9.62
IF	1853.50	0.16	0.47	9.69
IF	1885.00	0.22	0.58	9.74
IF	1899.50	0.23	0.61	9.74
IF	1905.50	0.29	0.63	9.78
IF	1916.50	0.31	0.65	9.80
IF	1929.00	0.33	0.68	9.81
IF	1941.00	0.36	0.70	9.83
IF	1950.00	0.37	0.72	9.84
IF	1970.50	0.41	0.75	9.87
IF	2005.00	0.31	0.80	9.80
IF	2023.00	0.42	0.83	9.87
IF	2033.50	0.46	0.84	9.91
IF	2051.50	0.52	0.86	9.94
IF	2066.00	0.56	0.88	9.97
IF	2078.50	0.58	0.90	9.98
IF	2095.50	0.60	0.91	10.00
IF	2108.00	0.62	0.93	10.02
IF	2118.50	0.64	0.94	10.03
IF	2135.50	0.66	0.96	10.04
IF	2143.00	0.67	0.96	10.05
IF	2149.50	0.63	0.97	10.02
IF	2160.50	0.69	0.98	10.06
IF	2185.00	0.72	1.00	10.09
IF	2215.50	0.74	1.03	10.09
IF	2229.00	0.78	1.04	10.12
IF	2235.00	0.80	1.05	10.14
IF	2247.00	0.81	1.06	10.14
IF	2260.50	0.82	1.07	10.15
IF	2269.50	0.83	1.07	10.16
IF	2281.50	0.84	1.08	10.16
IF	2285.50	0.85	1.09	10.17
IF	2297.00	0.86	1.10	10.18
IF	2311.00	0.89	1.11	10.20
IF	2327.00	0.88	1.12	10.19
IF	2341.50	0.82	1.13	10.15
IF	2349.00	0.89	1.13	10.20
IF	2356.50	0.89	1.14	10.20
IF	2364.50	0.93	1.14	10.23
IF	2374.50	0.95	1.15	10.24
IF	2383.00	0.96	1.16	10.25
IF	2388.50	0.97	1.16	10.26
IF	2395.00	0.98	1.16	10.27
IF	2403.50	0.99	1.17	10.27
IF	2431.00	1.03	1.19	10.30
IF	2437.00	1.04	1.19	10.31
IF	2447.50	1.05	1.20	10.32
IF	2454.00	1.06	1.20	10.32
IF	2465.00	1.07	1.21	10.33
IF	2477.00	1.08	1.22	10.34
IF	2489.50	1.10	1.22	10.35
IF	2497.50	1.11	1.23	10.35

IF	2506.50	1.12	1.23	10.36
IF	2519.00	1.13	1.24	10.37
IF	2531.50	1.14	1.25	10.38
IF	2541.50	1.15	1.26	10.39
IF	2561.00	1.17	1.27	10.40
IF	2570.00	1.18	1.27	10.41
IF	2580.00	1.19	1.28	10.42
IF	2604.50	1.22	1.29	10.43
IF	2612.50	1.22	1.29	10.44
IF	2630.00	1.24	1.30	10.45
IF	2638.50	1.25	1.31	10.46
IF	2661.50	1.27	1.32	10.48
IF	2670.50	1.28	1.33	10.48
IF	2684.50	1.30	1.33	10.49
IF	2697.50	1.31	1.34	10.50
IF	2708.00	1.32	1.34	10.51
IF	2720.50	1.33	1.35	10.51
IF	2729.00	1.34	1.35	10.52
IF	2738.00	1.35	1.36	10.53
IF	2746.00	1.35	1.36	10.53
IF	2754.00	1.36	1.37	10.54
IF	2764.50	1.37	1.37	10.55
IF	2772.00	1.38	1.38	10.55
IF	2785.50	1.39	1.38	10.56
IF	2792.00	1.40	1.39	10.56
IF	2802.00	1.41	1.39	10.57
IF	2816.00	1.42	1.40	10.58
IF	2831.50	1.43	1.40	10.59
IF	2843.00	1.44	1.41	10.60
IF	2854.00	1.45	1.41	10.61
IF	2864.50	1.47	1.42	10.62
IF	2873.50	1.47	1.42	10.62
IF	2887.00	1.48	1.43	10.63
IF	2892.50	1.49	1.43	10.63
IF	2924.50	1.52	1.44	10.65
IF	2932.00	1.52	1.45	10.66
IF	2941.50	1.53	1.45	10.66
IF	2950.50	1.54	1.46	10.67
IF	2959.00	1.54	1.46	10.67
IF	2970.00	1.56	1.46	10.68
IF	2980.00	1.56	1.47	10.68
IF	2987.00	1.57	1.47	10.69
IF	2997.00	1.58	1.48	10.70
IF	3011.00	1.59	1.48	10.70
IF	3033.00	1.62	1.49	10.72
IF	3041.00	1.62	1.49	10.72
IF	3074.00	1.64	1.51	10.74
IF	3082.00	1.65	1.51	10.75
IF	3099.00	1.67	1.52	10.76
IF	3104.50	1.66	1.52	10.76
IF	3116.00	1.68	1.52	10.77
IF	3129.50	1.69	1.53	10.77
IF	3140.50	1.70	1.53	10.78
IF	3151.00	1.69	1.54	10.78
IF	3160.50	1.70	1.54	10.78
IF	3171.00	1.71	1.54	10.79
IF	3186.50	1.72	1.55	10.80
IF	3201.50	1.74	1.55	10.81
IF	3210.50	1.74	1.56	10.81
IF	3230.00	1.76	1.57	10.82
IF	3236.50	1.76	1.57	10.83
IF	3247.50	1.77	1.57	10.83
IF	3259.50	1.78	1.58	10.84
IF	3270.50	1.79	1.58	10.85
IF	3277.50	1.80	1.58	10.85
IF	3301.50	1.82	1.59	10.87
IF	3307.50	1.82	1.59	10.87
IF	3321.00	1.83	1.60	10.88
IF	3325.50	1.83	1.60	10.88
IF	3344.00	1.84	1.61	10.88
IF	3352.00	1.85	1.61	10.89
IF	3368.50	1.86	1.61	10.90
IF	3383.00	1.87	1.62	10.90
IF	3390.00	1.87	1.62	10.91
IF	3409.50	1.87	1.63	10.90
IF	3417.00	1.89	1.63	10.91
IF	3429.00	1.89	1.63	10.91
IF	3438.00	1.89	1.64	10.92
IF	3445.00	1.89	1.64	10.92
IF	3456.50	1.89	1.64	10.92
IF	3473.50	1.89	1.65	10.92
IF	3480.00	1.86	1.65	10.89
IF	3488.00	1.89	1.65	10.92
IF	3499.00	1.87	1.66	10.90
IF	3511.50	1.89	1.66	10.92
IF	3519.50	1.88	1.66	10.91
IF	3526.00	1.91	1.67	10.93
IF	3534.50	1.82	1.67	10.87
IF	3545.00	1.89	1.67	10.92
IF	3554.00	1.91	1.67	10.93
IF	3562.00	1.93	1.68	10.94
IF	3569.00	1.93	1.68	10.94
IF	3580.50	1.95	1.68	10.96
IF	3597.50	1.88	1.69	10.91
IF	3603.50	1.87	1.69	10.90
IF	3612.50	1.89	1.69	10.92
IF	3619.00	1.89	1.69	10.92
IF	3625.00	1.92	1.70	10.94
IF	3632.50	1.89	1.70	10.92
IF	3639.00	1.97	1.70	10.97
IF	3649.50	1.86	1.70	10.89
IF	3663.00	1.82	1.71	10.87

IF	3673.00	1.82	1.71	10.87
IF	3678.00	1.79	1.71	10.85
IF	3689.50	1.88	1.72	10.91
IF	3704.00	1.84	1.72	10.88
IF	3716.50	1.85	1.72	10.89
IF	3724.00	1.86	1.73	10.90
IF	3731.00	1.92	1.73	10.94
IF	3739.00	1.86	1.73	10.90
IF	3746.00	1.87	1.73	10.90
IF	3754.00	1.88	1.73	10.91
IF	3763.00	1.91	1.74	10.93
IF	3771.00	1.87	1.74	10.91
IF	3784.00	1.89	1.74	10.92
IF	3798.00	1.91	1.75	10.93
IF	3803.50	1.69	1.75	10.78
IF	3811.00	1.76	1.75	10.83
IF	3823.50	1.76	1.75	10.83
IF	3831.50	1.70	1.76	10.78
IF	3841.50	1.53	1.76	10.66
IF	3851.00	1.28	1.76	10.49
IF	3865.50	1.23	1.77	10.46
IF	3883.00	0.66	1.77	10.06
IF	3891.50	0.60	1.77	10.01
IF	3901.00	0.63	1.78	10.04
IF	3915.00	0.64	1.78	10.05
IF	3932.00	0.68	1.78	10.07
IF	3954.50	0.72	1.79	10.10
IF	3971.50	0.75	1.80	10.12
IF	3976.00	0.29	1.80	9.80
IF	3986.00	0.15	1.80	9.70
IF	4004.00	0.27	1.80	9.78
IF	4029.00	0.34	1.80	9.83
IF	4039.60	0.01	1.80	9.60
AS	4073.90	0.00	0.00	9.60
IF	4075.00	0.01	0.16	9.60
IF	4075.30	0.01	0.17	9.60
AS	4123.10	0.00	0.00	9.60
IF	4129.00	0.03	0.26	9.63
IF	4129.70	0.01	0.27	9.61
AS	4206.70	0.00	0.00	9.60
IF	4210.50	0.04	0.23	9.63
IF	4222.00	0.09	0.35	9.67
IF	4232.50	0.11	0.42	9.68
IF	4237.00	0.01	0.44	9.61
AS	4270.40	0.00	0.00	9.60
IF	4276.00	0.05	0.25	9.64
IF	4286.00	0.09	0.35	9.67
IF	4296.00	0.13	0.42	9.69
IF	4303.00	0.15	0.45	9.71
IF	4314.00	0.17	0.49	9.72
IF	4326.50	0.21	0.54	9.75
IF	4338.00	0.23	0.57	9.77
IF	4347.00	0.20	0.60	9.74
IF	4360.00	0.24	0.63	9.77
IF	4374.50	0.31	0.66	9.82
IF	4379.00	0.03	0.67	9.62
IF	4386.00	0.14	0.68	9.70
IF	4401.50	0.21	0.71	9.75
IF	4416.50	0.05	0.74	9.64
IF	4417.90	0.01	0.74	9.61
AS	4438.60	0.00	0.00	9.60
IF	4446.00	0.06	0.28	9.64
IF	4453.90	0.01	0.35	9.61

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN	1543.90	AND	1681.60
BETWEEN	1692.20	AND	1705.60
BETWEEN	1712.30	AND	1816.10
BETWEEN	4039.60	AND	4073.90
BETWEEN	4075.30	AND	4123.10
BETWEEN	4129.70	AND	4206.70
BETWEEN	4237.00	AND	4270.40
BETWEEN	4417.90	AND	4438.60

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
58.00	1.00	9.36
84.00	1.00	9.36
126.00	1.00	9.36
180.00	1.00	9.36
240.00	1.00	9.36
298.00	1.00	9.36
562.00	1.00	9.36
614.00	1.00	9.36
675.00	1.00	9.36
735.00	1.00	9.36
804.00	1.00	9.36
900.00	1.00	9.36
984.00	1.00	9.36
1056.00	1.00	9.36
1085.00	1.00	9.37
1120.00	1.00	9.37
1144.00	1.00	9.37
1168.00	1.00	9.37
1276.00	1.00	9.37
1374.70	1.00	9.36
1381.20	1.00	9.36
1397.60	1.00	9.36
1400.90	1.00	9.37
1404.20	1.00	9.37
1407.50	1.00	9.38
1410.80	1.00	9.39
1414.00	1.00	9.39
1417.30	1.00	9.40

1420.60	1.00	9.41
1423.90	1.00	9.42
1427.20	1.00	9.44
1430.40	1.00	9.46
1433.70	1.00	9.48
1437.00	1.00	9.51
1440.30	1.00	9.54
1443.60	1.00	9.56
1446.80	1.00	9.57
1450.10	1.00	9.59
1453.40	1.00	9.62
1456.70	1.00	9.65
1460.00	1.00	9.68
1463.30	1.00	9.70
1466.50	1.00	9.73
1469.80	1.00	9.75
1473.10	1.00	9.76
1476.40	1.00	9.77
1479.70	1.00	9.79
1482.90	1.00	9.81
1486.20	1.00	9.82
1489.50	1.00	9.84
1492.80	1.00	9.85
1496.10	1.00	9.86
1499.30	1.00	9.87
1502.60	1.00	9.88
1505.90	1.00	9.89
1509.20	1.00	9.89
1512.50	1.00	9.90
1515.70	1.00	9.91
1519.00	1.00	9.91
1522.30	1.00	9.91
1525.60	1.00	9.91
1532.10	1.00	9.91
1535.40	1.00	9.91
1538.70	1.00	9.91
1542.00	1.00	9.97
1681.60	1.00	9.60
1816.10	1.00	9.58
1916.50	1.00	9.58
2066.00	1.00	9.58
2135.50	1.00	9.58
2185.00	1.00	9.58
2215.50	1.00	9.58
2311.00	1.00	9.58
2374.50	1.00	9.58
2489.50	1.00	9.58
2580.00	1.00	9.58
2612.50	1.00	9.58
2661.50	1.00	9.58
2684.50	1.00	9.59
2729.00	1.00	9.59
2764.50	1.00	9.59
2816.00	1.00	9.59
2854.00	1.00	9.59
2887.00	1.00	9.59
2932.00	1.00	9.59
2997.00	1.00	9.59
3116.00	1.00	9.59
3230.00	1.00	9.59
3368.50	1.00	9.60
4123.10	1.00	9.60
4270.40	1.00	9.60
4326.50	1.00	9.60

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
1448.88	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	15.79	V23 EL=16	130
57.00	15.83	V23 EL=16	130
58.00	15.83	V23 EL=16	130
79.00	15.86	V23 EL=16	130
84.00	15.87	V23 EL=16	130
121.00	15.99	V23 EL=16	130
126.00	16.00	V23 EL=16	130
169.00	16.15	V23 EL=16	130
180.00	16.19	V23 EL=16	130
229.00	16.36	V23 EL=16	130
240.00	16.33	V23 EL=16	130
287.00	16.31	V23 EL=16	130
298.00	16.31	V23 EL=16	130
443.00	16.30	V23 EL=16	130
562.00	16.38	V23 EL=16	130
614.00	16.41	V23 EL=16	130
664.00	16.42		

675.00	16.42	V23	EL=16	130
724.00	16.43	V23	EL=16	130
735.00	16.43	V23	EL=16	130
793.00	16.43	V23	EL=16	130
804.00	16.43	V23	EL=16	130
889.00	16.40	V23	EL=16	130
900.00	16.40	V23	EL=16	130
973.00	16.36	V23	EL=16	130
984.00	16.36	V23	EL=16	130
1045.00	16.32	V23	EL=16	130
1056.00	16.31	V23	EL=16	130
1084.00	16.30	V23	EL=16	130
1085.00	16.30	V23	EL=16	130
1109.00	16.30	V23	EL=16	130
1120.00	16.30	V23	EL=16	130
1133.00	16.30	V23	EL=16	130
1144.00	16.30	V23	EL=16	130
1157.00	16.29	V23	EL=16	130
1168.00	16.29	V23	EL=16	130
1262.00	16.28	V23	EL=16	130
1276.00	16.25	V23	EL=16	130
1277.00	16.24	V23	EL=16	130
1338.90	15.50	V23	EL=15	130
1374.70	15.07	V23	EL=15	130
1377.90	14.91	V23	EL=15	130
1381.20	14.63	V23	EL=15	130
1383.23	14.50	V23	EL=14	130
1397.60	13.58	V23	EL=14	130
1399.83	13.50	V23	EL=13	130
1400.90	13.46	V23	EL=13	130
1404.20	13.35	V23	EL=13	130
1407.50	13.23	V23	EL=13	130
1410.80	13.10	V23	EL=13	130
1414.00	12.98	V23	EL=13	130
1417.30	12.79	V23	EL=13	130
1420.60	12.57	V23	EL=13	130
1421.60	12.50	V23	EL=13	130
1423.90	12.35	V23	EL=12	130
1427.20	12.21	V23	EL=12	130
1430.40	12.09	V23	EL=12	130
1433.70	11.98	V23	EL=12	130
1437.00	11.97	V23	EL=12	130
1440.30	11.96	V23	EL=12	130
1443.60	11.94	V23	EL=12	130
1446.80	11.80	V23	EL=12	130
1448.88	11.68	V23	EL=12	130
1450.10	11.62	A19	EL=12	95
1453.40	11.53	A19	EL=12	95
1456.70	11.54	A19	EL=12	95
1460.00	11.54	A19	EL=12	95
1463.30	11.53	A19	EL=12	95

1466.50	11.56	A19	EL=12	95
1469.80	11.60	A19	EL=12	95
1471.71	11.50	A19	EL=12	95
1473.10	11.43	A19	EL=11	95
1476.40	11.34	A19	EL=11	95
1479.70	11.32	A19	EL=11	95
1482.90	11.29	A19	EL=11	95
1486.20	11.29	A19	EL=11	95
1489.50	11.29	A19	EL=11	95
1492.80	11.29	A19	EL=11	95
1496.10	11.29	A19	EL=11	95
1499.30	11.29	A19	EL=11	95
1502.60	11.29	A19	EL=11	95
1505.90	11.30	A19	EL=11	95
1509.20	11.31	A19	EL=11	95
1512.50	11.33	A19	EL=11	95
1515.70	11.36	A19	EL=11	95
1519.00	11.39	A19	EL=11	95
1522.30	11.40	A19	EL=11	95
1525.60	11.38	A19	EL=11	95
1528.90	11.37	A19	EL=11	95
1532.10	11.34	A19	EL=11	95
1535.40	11.14	A19	EL=11	95
1538.70	10.92	A19	EL=11	95
1541.62	10.50	A19	EL=10	95
1542.00	10.44	A19	EL=10	95
1543.90	9.98			
1681.60	9.60	A19	EL=10	95
1692.20	9.61			
1705.60	9.60	A19	EL=10	95
1712.30	9.61			
1816.10	9.58	A19	EL=10	95
1905.50	9.78	A19	EL=10	95
1916.50	9.80	A19	EL=10	95
2051.50	9.94	A19	EL=10	95
2066.00	9.97	A19	EL=10	95
2118.50	10.03	A19	EL=10	95
2135.50	10.04	A19	EL=10	95
2160.50	10.06	A19	EL=10	95
2185.00	10.09	A19	EL=10	95
2215.50	10.09	A19	EL=10	95
2297.00	10.18	A19	EL=10	95
2311.00	10.20	A19	EL=10	95
2364.50	10.23	A19	EL=10	95
2374.50	10.24	A19	EL=10	95
2477.00	10.34	A19	EL=10	95
2489.50	10.35	A19	EL=10	95
2570.00	10.41	A19	EL=10	95
2580.00	10.42	A19	EL=10	95
2604.50	10.43	A19	EL=10	95
2612.50	10.44	A19	EL=10	95
2638.50	10.46	A19	EL=10	95

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                    2661.50          10.48
                                                A19  EL=10      95
                    2670.50          10.48
                                                A19  EL=10      95
                    2684.50          10.49
                                                A19  EL=10      95
                    2694.78          10.50
                                                A19  EL=11      95
                    2720.50          10.51
                                                A19  EL=11      95
                    2729.00          10.52
                                                A19  EL=11      95
                    2754.00          10.54
                                                A19  EL=11      95
                    2764.50          10.55
                                                A19  EL=11      95
                    2802.00          10.57
                                                A19  EL=11      95
                    2816.00          10.58
                                                A19  EL=11      95
                    2843.00          10.60
                                                A19  EL=11      95
                    2854.00          10.61
                                                A19  EL=11      95
                    2873.50          10.62
                                                A19  EL=11      95
                    2887.00          10.63
                                                A19  EL=11      95
                    2924.50          10.65
                                                A19  EL=11      95
                    2932.00          10.66
                                                A19  EL=11      95
                    2987.00          10.69
                                                A19  EL=11      95
                    2997.00          10.70
                                                A19  EL=11      95
                    3104.50          10.76
                                                A19  EL=11      95
                    3116.00          10.77
                                                A19  EL=11      95
                    3210.50          10.81
                                                A19  EL=11      95
                    3230.00          10.82
                                                A19  EL=11      95
                    3352.00          10.89
                                                A19  EL=11      95
                    3368.50          10.90
                                                A19  EL=11      95
                    3850.67          10.50
                                                A19  EL=10      95
                    4039.60           9.60
                    4073.90           9.60
                                                A19  EL=10      95
                    4075.30           9.60
                    4123.10           9.60
                                                A19  EL=10      95
                    4129.70           9.61
                    4206.70           9.60
                                                A19  EL=10      95
                    4237.00           9.61
                    4270.40           9.60
                                                A19  EL=10      95
                    4314.00           9.72
                                                A19  EL=10      95
                    4326.50           9.75
                                                A19  EL=10      95
                    4417.90           9.61
                    4438.60           9.60
                                                A19  EL=10      95
                    4453.90           9.61
                          ZONE TERMINATED AT END OF TRANSECT
                          PART 7   POSTSCRIPT NOTES
              PS#  1   START(385457.7677,4805531.4406)
              PS#  2   END(385240.2997,4807040.9122)
-1.000000e+00
```

YK-107
100-year WHAFIS Output
Zero Station: -70.41517308, 43.39766884
Onshore Dir: 98.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-1000
-500
0
500
1000
1500
2000
2500
3000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-107
Two Percent Run-up Elevation is 15.0 Feet-NAVD88
Run-up Height is 5.7 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
16
14
12
10
8
6
4
2
0
-2
-4
-50
0
50
100
150
200
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-107
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-107sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-107-runup';
SWEL=9.3596;  % 100-yr still water level including wave setup.
H0=5.7654;    % significant wave height at toe of structure
Tp=13.2478;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.70525;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=-0.0031758;
maxSetup=0.61291;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-107'

plotTitle =

Iterative TAW for YK-107



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                 9.3564242

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                 9.9693342



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          742.169776643312


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

         0.708324200000002


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                18.0045242


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end
% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end

toe_sta =

         -9.28910224942969

if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          244.624605765617


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          244.624605765617

toe_sta

toe_sta =

         -9.28910224942969




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- The User has selected a starting point that is 0.64 feet above the elevation of SWEL-1.5H0



ans =

-!!- This may be reasonable for some cases.  However the user may want to consider:



ans =

-!!-   1) Selecting a starting point that is at or below 0.71 feet elevation, or



ans =

-!!-   2) Reducing the incident wave height to a depth limited condition.




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta

    % loop over profile segments to determine berm factor
    % re-calculate influence of depth of berm based on this run-up elevation
    % check for berm, berm width, berm height
    berm_width=0;
    rdh_sum=0;
```

```
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end


% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
   % do the foreshore calculation
   fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
   % get upper slope
   fore_toe_sta=-999;
   fore_toe_dep=-999;
   for kk=length(dep)-1:-1:1
```

```
          ddep=dep(kk+1)-dep(kk);
          dsta=sta(kk+1)-sta(kk);
          s=ddep/dsta;
          if s < 1/15
             break
          end
          fore_toe_sta=sta(kk);
          fore_toe_dep=dep(kk);
          upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
       end
       fore_Irb=upper_slope/(sqrt(fore_H0/L0));
       fore_gamma=gamma_perm*gamma_beta*gamma_rough;
       if (fore_Irb < 1.8)
          fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
       else
          fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
       end
       if berm_width >= L0
          R2_new=fore_R2
          disp ('berm is wider than one wavelength, use full shallow foreshore solution');
       else
          w2=(berm_width-0.25*L0)/(0.75*L0)
          w1=1-w2
          R2_new=w2*fore_R2 + w1*R2_new
       end
    end % end berm width check

    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;

    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          244.624605765617
Z2 =
                18.0045242
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
          12.0434545454545
R2 =
                   17.2962
Z2 =
                26.6526242
top_sta =
          415.735189252295
Lslope =
          425.024291501724
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
                 4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
```

```
dh =
                 4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
                 4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
                 4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 59
dh =
                 3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 60
dh =
                 3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 61
dh =
                 3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 62
dh =
                 3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 63
dh =
                 3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 64
dh =
                 3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 65
dh =
                 3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 66
```

```
dh =
                 3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 67
dh =
                 3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 68
dh =
                 3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 69
dh =
                 3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 70
dh =
                 2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 71
dh =
                 3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 72
dh =
                 3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 73
dh =
                 3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 75
dh =
                 3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 81
dh =
                 2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 83
dh =
                 2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 85
```

```
dh =
                 2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 87
dh =
                 2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 89
dh =
                 2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
                 2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 96
dh =
                 2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 98
dh =
                 2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 100
```

```
dh =
                 2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
                 2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 104
dh =
                 2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 109
dh =
                 2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
                 2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 113
dh =
                 2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 115
```

```
dh =
                 2.0914862
rdh_sum =
            9.3033250348915
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
           9.38261251307542
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 117
dh =
                 2.1138252
rdh_sum =
           9.46326561177069
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
           9.54749413122066
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 119
dh =
                 2.2238782
rdh_sum =
           9.63649923617176
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
           9.73039947182654
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
           9.82931197146185
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
            9.9333524226435
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
            10.042635033858
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 124
dh =
                 2.5355582
rdh_sum =
           10.1572725015708
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
           10.2773759777207
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 126
dh =
                 2.6602302
rdh_sum =
             10.40305503766
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
           10.5316372534521
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 128
dh =
                 2.6635107
rdh_sum =
           10.6576127392301
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
           10.7782979701724
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 130
```

```
dh =
                 2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 132
dh =
                 2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 134
dh =
                 2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 169
dh =
                -4.8006863
rdh_sum =
          11.6723599774653
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    86
rB =
          0.20234137605674
rdh_mean =
         0.135725116017038
gamma_berm =
         0.825121430683608
slope =
        0.0765263748065912
Irb =
         0.868256515356538
gamma_berm =
         0.825121430683608
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.495072858410165
ans =
!!! - - Iribaren number:   0.72 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:13.1 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          4.38651762330388
R2del =
          12.9096823766961
Z2 =
          13.7429418233039
top_sta =
          163.944816826593
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          163.944816826593
```

```
Z2 =
          13.7429418233039
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
          12.0434545454545
R2 =
          4.38651762330388
Z2 =
          13.7429418233039
top_sta =
          163.944816826593
Lslope =
          173.233919076022
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
                 4.4192287
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
                 4.3629857
rdh_sum =
          3.31356880446997
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          3.62358849323221
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
dh =
                 4.3067427
rdh_sum =
          3.93007021856423
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
          4.23302534043006
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
                 4.2504997
rdh_sum =
          4.53246542581338
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          4.82840224803855
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
          5.12084778607947
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          5.30643214751562
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 59
dh =
                 3.2475002
rdh_sum =
          5.48970539181282
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 60
```

```
dh =
                 3.2256282
rdh_sum =
          5.67067876607207
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 61
dh =
                 3.2037557
rdh_sum =
          5.84936354687711
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 62
dh =
                 3.1818832
rdh_sum =
          6.02577114478887
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 63
dh =
                 3.1600112
rdh_sum =
          6.19991310289693
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 64
dh =
                 3.1364562
rdh_sum =
          6.37162802893531
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 65
dh =
                 3.1112187
rdh_sum =
          6.54075756982839
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 66
dh =
                 3.0859817
rdh_sum =
          6.70731741965698
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 67
dh =
                 3.0607447
rdh_sum =
          6.87132334261507
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 68
dh =
                 3.0355077
rdh_sum =
          7.03279122363974
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 69
dh =
                 3.0102702
rdh_sum =
          7.19173701785245
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 70
dh =
                 2.9973072
rdh_sum =
          7.34939362711243
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 71
dh =
                 3.0088937
rdh_sum =
          7.50820232468385
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 72
dh =
                 3.0327542
rdh_sum =
          7.66939425714935
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 73
dh =
                 3.0566147
rdh_sum =
          7.83298374280792
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          7.99898504932325
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 75
```

```
dh =
                 3.1043362
rdh_sum =
          8.16741224135596
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          8.28269497854575
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 81
dh =
                 2.5119012
rdh_sum =
          8.39528706484565
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          8.50521632489492
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 83
dh =
                 2.4497382
rdh_sum =
          8.61251073077935
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          8.71719840182517
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 85
dh =
                 2.3875747
rdh_sum =
          8.81930772815424
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          8.91886724262204
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 87
dh =
                 2.3254112
rdh_sum =
          9.01590562060754
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
          9.11045179939306
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 89
dh =
                 2.2681657
rdh_sum =
          9.20292260924562
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
          9.29410862674016
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          9.38440159808547
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          9.47380548367804
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          9.56232425250861
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 94
```

```
dh =
                 2.2061902
rdh_sum =
          9.64996188212385
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
          9.73672232024246
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 96
dh =
                 2.1833667
rdh_sum =
          9.82260959992809
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
          9.90762772416446
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 98
dh =
                 2.1605437
rdh_sum =
          9.99178070433689
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          10.0750725601935
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 100
dh =
                 2.1377202
rdh_sum =
          10.1575072823409
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
          10.2392086440214
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 102
dh =
                 2.1197112
rdh_sum =
          10.3202989589916
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          10.4007803191467
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 104
dh =
                 2.1033072
rdh_sum =
          10.4806548194225
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          10.5599245577854
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
          10.6385916352218
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          10.7166581557274
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          10.7941262262972
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 109
```

```
dh =
                 2.0683277
rdh_sum =
          10.8714362088885
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          10.9490272701886
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 111
dh =
                 2.0760472
rdh_sum =
           11.026899913765
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
            11.10505460649
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 113
dh =
                 2.0837672
rdh_sum =
          11.1834918149241
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          11.2622119686294
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 115
dh =
                 2.0914862
rdh_sum =
          11.3412155334203
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
          11.4205030116042
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 117
dh =
                 2.1138252
rdh_sum =
          11.5011561102995
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
          11.5853846297494
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 119
dh =
                 2.2238782
rdh_sum =
          11.6743897347005
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
          11.7682899703553
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
          11.8672024699906
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
          11.9712429211723
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
          12.0805255323868
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 124
```

```
dh =
                 2.5355582
rdh_sum =
          12.1951630000995
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
          12.3152664762495
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 126
dh =
                 2.6602302
rdh_sum =
          12.4409455361888
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
          12.5695277519809
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 128
dh =
                 2.6635107
rdh_sum =
          12.6955032377589
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
          12.8161884687011
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 130
dh =
                 2.5454007
rdh_sum =
          12.9316816385617
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          13.0420822424794
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 132
dh =
                 2.4305707
rdh_sum =
           13.147765799008
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          13.2493628579932
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 134
dh =
                 2.3354267
rdh_sum =
           13.347210470601
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          13.4413716144701
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          13.5319098054553
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    85
rB =
         0.490666033842359
rdh_mean =
          0.15919893888771
gamma_berm =
         0.587447478093586
gamma_berm =
                       0.6
slope =
         0.147727968561311
```

```
Irb =
          1.67609888130617
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
                      0.36
ans =
!!! - - Iribaren number:   1.01 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:6.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          6.15750604840807
R2del =
          1.77098842510419
Z2 =
          15.5139302484081
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          195.345922091136
Z2 =
          15.5139302484081
H0 =
                   5.7654
Tp =
                  13.2478
T0 =
          12.0434545454545
R2 =
          6.15750604840807
Z2 =
          15.5139302484081
top_sta =
          195.345922091136
Lslope =
          204.635024340565
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
                 4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
                 4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
                 4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
```

```
dh =
                 4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 59
dh =
                 3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 60
dh =
                 3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 61
dh =
                 3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 62
dh =
                 3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 63
dh =
                 3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 64
dh =
                 3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 65
dh =
                 3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 66
dh =
                 3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 67
dh =
                 3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 68
dh =
                 3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 69
dh =
                 3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 70
```

```
dh =
                 2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 71
dh =
                 3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 72
dh =
                 3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 73
dh =
                 3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 75
dh =
                 3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 81
dh =
                 2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 83
dh =
                 2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 85
dh =
                 2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 87
dh =
                 2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 89
```

```
dh =
                 2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
                 2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 96
dh =
                 2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 98
dh =
                 2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 100
dh =
                 2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
                 2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 104
```

```
dh =
                 2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 109
dh =
                 2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
                 2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 113
dh =
                 2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 115
dh =
                 2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 117
dh =
                 2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 119
```

```
dh =
                 2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
           10.042635033858
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 124
dh =
                 2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 126
dh =
                 2.6602302
rdh_sum =
            10.40305503766
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 128
dh =
                 2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 130
dh =
                 2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 132
dh =
                 2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 134
```

```
dh =
                 2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 169
dh =
                -4.8006863
rdh_sum =
           12.378922429044
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    86
rB =
         0.420260413764136
rdh_mean =
         0.143940958477256
gamma_berm =
         0.640232273003122
slope =
         0.124799620775612
Irb =
          1.41595736275642
gamma_berm =
         0.640232273003122
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.384139363801873
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.0 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          5.55062259206032
R2del =
         0.606883456347744
Z2 =
          14.9070467920603
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          183.338176768571
Z2 =
          14.9070467920603
H0 =
                   5.7654
Tp =
                  13.2478
T0 =
          12.0434545454545
R2 =
          5.55062259206032
Z2 =
          14.9070467920603
top_sta =
          183.338176768571
Lslope =
          192.627279018001
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
                 4.4192287
```

```
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
                 4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 45
dh =
                 4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 47
dh =
                 4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 59
dh =
                 3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 60
dh =
                 3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 61
dh =
                 3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 62
dh =
                 3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 63
dh =
                 3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 64
dh =
                 3.1364562
```

```
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 65
dh =
                 3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 66
dh =
                 3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 67
dh =
                 3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 68
dh =
                 3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 69
dh =
                 3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 70
dh =
                 2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 71
dh =
                 3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 72
dh =
                 3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 73
dh =
                 3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 75
dh =
                 3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 81
dh =
                 2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 83
dh =
                 2.4497382
```

```
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 85
dh =
                 2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 87
dh =
                 2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 89
dh =
                 2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 94
dh =
                 2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 96
dh =
                 2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 98
dh =
                 2.1605437
```

```
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 100
dh =
                 2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 102
dh =
                 2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 104
dh =
                 2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 109
dh =
                 2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 111
dh =
                 2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 113
dh =
                 2.0837672
```

```
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 115
dh =
                 2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 117
dh =
                 2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 119
dh =
                 2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
           10.042635033858
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 124
dh =
                 2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 126
dh =
                 2.6602302
rdh_sum =
            10.40305503766
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 128
dh =
                 2.6635107
```

```
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 130
dh =
                 2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 132
dh =
                 2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 134
dh =
                 2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 169
dh =
                -4.8006863
rdh_sum =
           12.449650311268
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    86
rB =
         0.446458053285192
rdh_mean =
         0.144763375712419
gamma_berm =
         0.618172721622367
slope =
          0.13316219566724
Irb =
          1.51083785530769
gamma_berm =
         0.618172721622367
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
          0.37090363297342
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.5 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          5.71849380898391
R2del =
         0.167871216923583
Z2 =
          15.0749180089839
```

```
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          186.659662630022
Z2 =
          15.0749180089839
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
          12.0434545454545
R2 =
          5.71849380898391
Z2 =
          15.0749180089839
top_sta =
          186.659662630022
Lslope =
          195.948764879451
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
                 4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 43
dh =
                 4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 45
dh =
                 4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 47
dh =
                 4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          3.26854164898686
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 59
dh =
                3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 60
dh =
                3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 62
dh =
                3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 63
dh =
                3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 64
dh =
                3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 65
dh =
                3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 66
dh =
                3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 67
dh =
                3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 68
dh =
                3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 69
dh =
                3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 70
dh =
                2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 71
dh =
                3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 72
dh =
                3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 73
dh =
                3.0566147
rdh_sum =
          5.79509324427916
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 75
dh =
                 3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 81
dh =
                 2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 83
dh =
                 2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 85
dh =
                 2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 87
dh =
                 2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 89
dh =
                 2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          7.43591498514927
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 94
dh =
                 2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 96
dh =
                 2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 98
dh =
                 2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 100
dh =
                 2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 102
dh =
                 2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 104
dh =
                 2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          8.67876765719867
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 109
dh =
                 2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 111
dh =
                 2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 113
dh =
                 2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 115
dh =
                 2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 117
dh =
                 2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 119
dh =
                 2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
           9.9333524226435
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
           10.042635033858
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 124
dh =
                 2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 126
dh =
                 2.6602302
rdh_sum =
            10.40305503766
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 128
dh =
                 2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 130
dh =
                 2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 132
dh =
                 2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 134
dh =
                 2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 169
dh =
                -4.8006863
rdh_sum =
           12.431794626244
```

```
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
    86
rB =
         0.438890237725702
rdh_mean =
         0.144555751467954
gamma_berm =
         0.624553870400686
slope =
         0.130666259186591
Irb =
          1.48251934268095
gamma_berm =
         0.624553870400686
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.374732322240412
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
            5.669232040686
R2del =
        0.0492617682979093
Z2 =
           15.025656240686
ans =
!----------------- STARTING ITERATION 6 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          185.684973401516
Z2 =
           15.025656240686
H0 =
                   5.7654
Tp =
                  13.2478
T0 =
          12.0434545454545
R2 =
            5.669232040686
Z2 =
           15.025656240686
top_sta =
          185.684973401516
Lslope =
          194.974075650946
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 41
dh =
                 4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 43
dh =
                 4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 45
```

```
dh =
                 4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 47
dh =
                 4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 59
dh =
                 3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 60
dh =
                 3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 61
dh =
                 3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 62
dh =
                 3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 63
dh =
                 3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 64
dh =
                 3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 65
dh =
                 3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 66
dh =
                 3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 67
dh =
                 3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 68
```

```
dh =
                 3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 69
dh =
                 3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 70
dh =
                 2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 71
dh =
                 3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 72
dh =
                 3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 73
dh =
                 3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 75
dh =
                 3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 81
dh =
                 2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 83
dh =
                 2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 85
dh =
                 2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 87
```

```
dh =
                 2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 89
dh =
                 2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 94
dh =
                 2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 96
dh =
                 2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 98
dh =
                 2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 100
dh =
                 2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 102
```

```
dh =
                 2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 104
dh =
                 2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 109
dh =
                 2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 111
dh =
                 2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 113
dh =
                 2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 115
dh =
                 2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 117
```

```
dh =
                 2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 119
dh =
                 2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
          10.042635033858
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 124
dh =
                 2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 126
dh =
                 2.6602302
rdh_sum =
           10.40305503766
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 128
dh =
                 2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 130
dh =
                 2.5454007
rdh_sum =
          10.893791140033
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 132
```

```
dh =
                 2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 134
dh =
                 2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 169
dh =
                -4.8006863
rdh_sum =
          12.4372150827059
ans =
!------- End Berm Factor Calculation, Iter: 6 ---------!
berm_width =
    86
rB =
         0.441084281142907
rdh_mean =
         0.144618780031464
gamma_berm =
         0.622704789487036
slope =
         0.131382917956981
Irb =
          1.49065044321003
gamma_berm =
         0.622704789487036
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.373622873692222
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.6 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          5.68344916884426
R2del =
         0.014217128158263
Z2 =
          15.0398733688443
ans =
!----------------- STARTING ITERATION 7 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          185.966272310486
Z2 =
          15.0398733688443
H0 =
                   5.7654
Tp =
                  13.2478
T0 =
          12.0434545454545
R2 =
          5.68344916884426
Z2 =
          15.0398733688443
top_sta =
          185.966272310486
```

```
Lslope =
          195.255374559916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 40
dh =
                 4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 41
dh =
                 4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 42
dh =
                 4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 43
dh =
                 4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 44
dh =
                 4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 45
dh =
                 4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 46
dh =
                 4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 47
dh =
                 4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 48
dh =
                 4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 49
dh =
                 4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 58
dh =
                 3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 59
dh =
                 3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 60
dh =
                 3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 61
dh =
                 3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 62
dh =
                 3.1818832
```

```
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 63
dh =
                 3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 64
dh =
                 3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 65
dh =
                 3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 66
dh =
                 3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 67
dh =
                 3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 68
dh =
                 3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 69
dh =
                 3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 70
dh =
                 2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 71
dh =
                 3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 72
dh =
                 3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 73
dh =
                 3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 74
dh =
                 3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 75
dh =
                 3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 80
dh =
                 2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 81
dh =
                 2.5119012
```

```
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 82
dh =
                 2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 83
dh =
                 2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 84
dh =
                 2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 85
dh =
                 2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 86
dh =
                 2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 87
dh =
                 2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 88
dh =
                 2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 89
dh =
                 2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 90
dh =
                 2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 91
dh =
                 2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 92
dh =
                 2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 93
dh =
                 2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 94
dh =
                 2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 95
dh =
                 2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 96
dh =
                 2.1833667
```

```
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 97
dh =
                 2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 98
dh =
                 2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 99
dh =
                 2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 100
dh =
                 2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 101
dh =
                 2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 102
dh =
                 2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 103
dh =
                 2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 104
dh =
                 2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 105
dh =
                 2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 106
dh =
                 2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 107
dh =
                 2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 108
dh =
                 2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 109
dh =
                 2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 110
dh =
                 2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 111
dh =
                 2.0760472
```

```
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 112
dh =
                 2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 113
dh =
                 2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 114
dh =
                 2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 115
dh =
                 2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 116
dh =
                 2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 117
dh =
                 2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 118
dh =
                 2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 119
dh =
                 2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 120
dh =
                 2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 121
dh =
                 2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 122
dh =
                 2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 123
dh =
                 2.4732222
rdh_sum =
           10.042635033858
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 124
dh =
                 2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 125
dh =
                 2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 126
dh =
                 2.6602302
```

```
rdh_sum =
            10.40305503766
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 127
dh =
                 2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 128
dh =
                 2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 129
dh =
                 2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 130
dh =
                 2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 131
dh =
                 2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 132
dh =
                 2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 133
dh =
                 2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 134
dh =
                 2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 135
dh =
                 2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 136
dh =
                 2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 169
dh =
                -4.8006863
rdh_sum =
          12.4356649294839
ans =
!------- End Berm Factor Calculation, Iter: 7 ---------!
berm_width =
    86
rB =
          0.44044882346432
rdh_mean =
         0.144600754993998
gamma_berm =
         0.623240408944839
slope =
         0.131174774939651
Irb =
          1.48828888444837
gamma_berm =
         0.623240408944839
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
```

```
gamma =
         0.373944245366903
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.6 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          5.67932605393606
R2del =
       0.00412311490820283
Z2 =
          15.0357502539361
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          15.0357502539361
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-107

Station locations shifted by: -10.79 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-107

Incident significant wave height: 5.74 feet

Peak wave period: 13.21 seconds

Mean wave height: 3.59 feet

Local Depth below SWEL: 22.69 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 22.69
    Period, T = 11.23
    Waveheight, H = 3.59
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*11.23*11.23/6.28 = 645.48
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 645.48/11.23 = 57.49
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/11.23 = 0.56
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.56*0.56*22.69/32.17 = 0.22
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 26.03
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(57.49/26.03) = 1.49
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 3.59/1.49 = 2.42
```

Deepwater mean wave height: 2.42 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-107

RUNUP2 SWEL:
9.40
9.40
9.40
9.40

9.40
9.40
9.40
9.40
9.40

RUNUP2 deepwater mean wave heights:
2.30
2.30
2.30
2.42
2.42
2.42
2.54
2.54
2.54

RUNUP2 mean wave periods:
10.67
11.23
11.79
10.67
11.23
11.79
10.67
11.23
11.79

RUNUP2 runup above SWEL:
0.98
1.15
1.27
1.11
1.22
1.32
1.17
1.26
1.37

RUNUP2 Mean runup height above SWEL: 1.21 feet

RUNUP2 2-percent runup height above SWEL: 2.65 feet

RUNUP2 2-percent runup elevation: 12.05 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 5.74 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 3.86 feet

Peak wave period: 13.21 seconds

Average beach Slope: 1:56.82 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

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# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     3.86
Wave Period,                        T  =    13.21
Beach Slope,                        S  =    0.018

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 3.2,  2.8,   2.6,    2.1,    1.4]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 2.82 feet

ACES Beach 2-percent runup elevation: 12.22 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-107                                                   1
11.0
  -13.34 -1384.2 0.6
  -12.62 -1300.2 0.6
  -8.04 -1134.2 0.6
  -7.29 -938.2 0.6
  -7.29 -462.2 0.6
  -6.03 -318.2 0.6
  -5.58 -189.2 0.6
  -5.42 -115.2 0.6
  -1.85 -32.2  0.6
  -0.06 -12.2  0.6
  -0.03 -0.2   0.6
  1.35  10.8   0.6
  2.83  30.8   0.6
  4.90  49.8   0.6
  6.08  67.8   0.6
  7.09  99.3   0.6
  7.29  147.3  0.6
  8.21  155.8  0.6
  12.93 166.3  0.6
1 14.18 179.3  0.6
 9.4   2.30  10.67
 9.4   2.30  11.23
 9.4   2.30  11.79
 9.4   2.42  10.67
 9.4   2.42  11.23
 9.4   2.42  11.79
 9.4   2.54  10.67
 9.4   2.54  11.23
 9.4   2.54  11.79
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-138.4	-13.3		
			.00	20.60
2	-130.0	-12.6		
			-220.18	20.60
3	-1134.0	-8.0		
			261.07	.60
4	-938.2	-7.3		
			FLAT	.60
5	-462.2	-7.3		
			114.29	.60
6	-318.2	-6.0		
			286.67	.60
7	-189.2	-5.6		
			462.50	.60
8	-115.2	-5.4		
			23.25	.60
9	-32.2	-1.8		
			11.17	.60
10	-12.2	-.1		
			400.00	.60
11	-.2	.0		
			7.97	.60
12	10.8	1.4		
			13.51	.60
13	30.8	2.8		
			9.18	.60
14	49.8	4.9		
			15.25	.60
15	67.8	6.1		
			31.19	.60
16	99.3	7.1		
			240.00	.60
17	147.3	7.3		
			9.24	.60
18	155.8	8.2		
			2.22	.60
19	166.3	12.9		
			10.40	.60
20	179.3	14.2		

LAST SLOPE 11.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.40	2.30	10.67	11	18	.98	5.53
9.40	2.30	11.23	11	18	1.15	5.69
9.40	2.30	11.79	11	18	1.27	5.85
9.40	2.42	10.67	11	18	1.11	5.74
9.40	2.42	11.23	11	18	1.22	5.91
9.40	2.42	11.79	11	18	1.32	6.07
9.40	2.54	10.67	11	18	1.17	5.95
9.40	2.54	11.23	11	18	1.26	6.12
9.40	2.54	11.79	11	18	1.37	6.28

Runup2 2% runup elevation for Transect: YK-107
Two Percent Run-up Elevation is 12.1 Feet-NAVD88
Run-up Height is 2.7 Feet
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-1400
-1200
-1000
-800
-600
-400
-200
0
200
Ground
Swel
2% Runup

Transect Number: YK-108
Clock Farm Corner
Timber Island
Latitude
Longitude
43.415
43.41
43.405
43.4
43.395
43.39
43.385
43.38
-70.43
-70.42
-70.41
-70.4
-70.39
-70.38

Elevation profile
Elevation (ft)
Station (ft)
40
30
20
10
0
-10
-20
-30
-40
-50
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
5000

DATA LOG FOR TRANSECT ID: YK-108

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -368 ft
LON: -70.4082 deg E
LAT: 43.3982 deg N
Bottom ELEV: -6.5279 ft-NAVD88
TWL: 9.0347 ft-NAVD88
HS: 7.0598 ft
TP: 12.8 sec
Wave Direction bin: 135 deg CCW from East (90 deg sector)
Transect Direction: 153.0954 deg CCW from East

TAW/RUNUP input

toe sta: 211.5 ft
toe elev: 5.7152 ft-NAVD88
top sta: 336.5 ft
top elev: 14.1109 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-108: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-400
-200
0
200
400
600
800
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-108zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-108.swn
swan output name:     2_swan/swanfiles/YK-108.dat

Boundary Conditions:
    TWL- 2.7538 meters
    HS-  2.1518 meters
    PER- 12.8 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.68007 feet
SWAN output at toe:
    SETUP- 0.41366 feet
    HS-    2.4638 feet
    PER-   12.522 seconds

PART 2 COMPLETE_____________________________________________


SWAN maximum additional wave setup: 0.68007 feet
SWAN output at toe:
    SETUP- 0.41366 feet
    HS-    2.4638 feet
    PER-   12.522 seconds

PART 2 COMPLETE_____________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-108
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000

```
                    Execution started at 20200401.174325


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      199       0.   199     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      199   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-108zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   2.1518     12.8     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      199  199    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-108.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             200 MYC              1
                     : MCGRD           201
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  10.06 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.51 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  12.07 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  47.24 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  98.50 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  99.00 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  99.50 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	2.15170	12.4979	12.4477	11.5501	0.000	31.5057	4.7400	0.000000
1.	0.	2.15604	12.5015	12.4477	11.3729	0.000	31.3554	4.7200	-0.000047
2.	0.	2.16052	12.5049	12.4477	11.2109	0.000	31.1804	4.6898	-0.000164
3.	0.	2.16433	12.5081	12.4477	11.0654	0.000	31.0186	4.6597	-0.000267
4.	0.	2.16781	12.5109	12.4477	10.9351	0.000	30.8866	4.6296	-0.000362
5.	0.	2.16992	12.5135	12.4477	10.8179	0.000	30.7619	4.6096	-0.000375
6.	0.	2.17227	12.5158	12.4477	10.7129	0.000	30.6199	4.5795	-0.000458
7.	0.	2.17411	12.5179	12.4477	10.6178	0.000	30.4709	4.5495	-0.000536
8.	0.	2.17597	12.5198	12.4477	10.5289	0.000	30.3358	4.5194	-0.000611
9.	0.	2.17669	12.5215	12.4477	10.4464	0.000	30.2049	4.4994	-0.000600
10.	0.	2.17781	12.5230	12.4477	10.3711	0.000	30.0582	4.4693	-0.000662
11.	0.	2.17857	12.5243	12.4477	10.3015	0.000	29.9059	4.4393	-0.000718
12.	0.	2.17901	12.5255	12.4477	10.2370	0.000	29.7513	4.4092	-0.000766
13.	0.	2.17936	12.5265	12.4477	10.1771	0.000	29.6115	4.3792	-0.000808
14.	0.	2.17860	12.5274	12.4477	10.1208	0.000	29.4770	4.3592	-0.000756
15.	0.	2.17833	12.5282	12.4477	10.0691	0.000	29.3278	4.3292	-0.000782
16.	0.	2.17775	12.5289	12.4477	10.0208	0.000	29.1736	4.2992	-0.000799
17.	0.	2.17708	12.5294	12.4477	9.9756	0.000	29.0334	4.2692	-0.000807
18.	0.	2.17550	12.5299	12.4477	9.9325	0.000	28.9137	4.2493	-0.000716
19.	0.	2.17396	12.5303	12.4477	9.8923	0.000	28.8163	4.2294	-0.000618
20.	0.	2.17159	12.5305	12.4477	9.8539	0.000	28.7424	4.2196	-0.000421
21.	0.	2.16934	12.5307	12.4477	9.8182	0.000	28.6916	4.2098	-0.000221
22.	0.	2.16769	12.5307	12.4477	9.7681	0.000	28.6565	4.2101	0.000075
23.	0.	2.16710	12.5307	12.4477	9.7166	0.000	28.6098	4.2003	0.000285
24.	0.	2.16635	12.5305	12.4477	9.6663	0.000	28.5585	4.1905	0.000501
25.	0.	2.16535	12.5303	12.4477	9.6183	0.000	28.5052	4.1807	0.000725
26.	0.	2.16329	12.5299	12.4477	9.5773	359.991	28.4590	4.1710	0.000993
27.	0.	2.16119	12.5295	12.4477	9.5375	359.987	28.4093	4.1613	0.001257
28.	0.	2.15814	12.5290	12.4477	9.5041	359.964	28.3619	4.1516	0.001559
29.	0.	2.15471	12.5284	12.4477	9.4735	359.934	28.3127	4.1419	0.001871
30.	0.	2.15102	12.5277	12.4477	9.4452	359.897	28.2603	4.1322	0.002190
31.	0.	2.14722	12.5270	12.4477	9.4182	359.862	28.2089	4.1225	0.002512
32.	0.	2.14333	12.5263	12.4477	9.3924	359.827	28.1575	4.1128	0.002835
33.	0.	2.13934	12.5254	12.4477	9.3678	359.794	28.1060	4.1032	0.003161
34.	0.	2.13527	12.5246	12.4477	9.3443	359.761	28.0539	4.0935	0.003487
35.	0.	2.13195	12.5237	12.4477	9.3171	359.749	28.0003	4.0838	0.003780
36.	0.	2.12883	12.5228	12.4477	9.2893	359.744	27.9459	4.0741	0.004062
37.	0.	2.12572	12.5219	12.4477	9.2620	359.743	27.8910	4.0643	0.004342
38.	0.	2.12255	12.5209	12.4477	9.2355	359.744	27.8356	4.0546	0.004622
39.	0.	2.11945	12.5199	12.4477	9.2099	359.745	27.7929	4.0449	0.004904
40.	0.	2.11584	12.5189	12.4477	9.1791	359.733	27.7612	4.0453	0.005301
41.	0.	2.11406	12.5179	12.4477	9.1398	359.741	27.7183	4.0356	0.005603
42.	0.	2.11271	12.5170	12.4477	9.0968	359.746	27.6708	4.0259	0.005898
43.	0.	2.11111	12.5162	12.4477	9.0551	359.750	27.6232	4.0162	0.006201
44.	0.	2.10662	12.5154	12.4477	9.0295	359.753	27.5825	4.0066	0.006615
45.	0.	2.10386	12.5148	12.4477	8.9988	359.754	27.5089	3.9869	0.006885
46.	0.	2.10017	12.5142	12.4477	8.9727	359.727	27.4308	3.9672	0.007189
47.	0.	2.09613	12.5136	12.4477	8.9481	359.691	27.3449	3.9475	0.007504
48.	0.	2.09191	12.5131	12.4477	8.9240	359.655	27.2571	3.9278	0.007826
49.	0.	2.08749	12.5127	12.4477	8.9008	359.621	27.1687	3.9082	0.008158
50.	0.	2.08286	12.5123	12.4477	8.8782	359.588	27.0795	3.8885	0.008499
51.	0.	2.07804	12.5119	12.4477	8.8565	359.556	26.9901	3.8689	0.008851
52.	0.	2.07301	12.5116	12.4477	8.8356	359.525	26.9004	3.8492	0.009212
53.	0.	2.06775	12.5114	12.4477	8.8156	359.493	26.8091	3.8296	0.009584
54.	0.	2.06338	12.5112	12.4477	8.7903	359.488	26.7162	3.8099	0.009922
55.	0.	2.05898	12.5110	12.4477	8.7640	359.491	26.6106	3.7903	0.010258
56.	0.	2.05515	12.5108	12.4477	8.7398	359.497	26.4995	3.7605	0.010507
57.	0.	2.05034	12.5107	12.4477	8.7147	359.503	26.3995	3.7409	0.010872
58.	0.	2.04578	12.5106	12.4477	8.6866	359.510	26.3040	3.7213	0.011250
59.	0.	2.04110	12.5105	12.4477	8.6584	359.516	26.2099	3.7016	0.011644

60.	0.	2.03616	12.5105	12.4477	8.6309	359.522	26.1162	3.6821	0.012052
61.	0.	2.03095	12.5105	12.4477	8.6045	359.528	26.0226	3.6625	0.012475
62.	0.	2.02547	12.5105	12.4477	8.5791	359.534	25.9290	3.6429	0.012912
63.	0.	2.01970	12.5105	12.4477	8.5550	359.540	25.8356	3.6234	0.013363
64.	0.	2.01355	12.5106	12.4477	8.5326	359.544	25.7437	3.6038	0.013833
65.	0.	2.00697	12.5107	12.4477	8.5117	359.547	25.6405	3.5843	0.014318
66.	0.	2.00077	12.5108	12.4477	8.4940	359.548	25.5325	3.5547	0.014720
67.	0.	1.99360	12.5109	12.4477	8.4752	359.548	25.4358	3.5352	0.015246
68.	0.	1.98626	12.5110	12.4477	8.4572	359.547	25.3423	3.5158	0.015782
69.	0.	1.97864	12.5112	12.4477	8.4400	359.545	25.2373	3.4963	0.016328
70.	0.	1.97192	12.5114	12.4477	8.4238	359.549	25.1382	3.4668	0.016772
71.	0.	1.96378	12.5115	12.4477	8.4036	359.554	25.0677	3.4574	0.017438
72.	0.	1.95574	12.5117	12.4477	8.3840	359.560	25.0066	3.4481	0.018099
73.	0.	1.94774	12.5118	12.4477	8.3650	359.567	24.9493	3.4388	0.018754
74.	0.	1.93985	12.5120	12.4477	8.3463	359.577	24.8936	3.4294	0.019398
75.	0.	1.93194	12.5121	12.4477	8.3280	359.589	24.8266	3.4200	0.020031
76.	0.	1.92484	12.5123	12.4477	8.3116	359.605	24.7555	3.4006	0.020554
77.	0.	1.91710	12.5125	12.4477	8.2926	359.629	24.6856	3.3912	0.021174
78.	0.	1.91046	12.5127	12.4477	8.2741	359.661	24.6125	3.3717	0.021670
79.	0.	1.90328	12.5128	12.4477	8.2530	359.700	24.5542	3.3623	0.022266
80.	0.	1.89620	12.5130	12.4477	8.2314	359.743	24.4882	3.3529	0.022851
81.	0.	1.88997	12.5132	12.4477	8.2114	359.788	24.4187	3.3333	0.023328
82.	0.	1.88290	12.5133	12.4477	8.1896	359.834	24.3506	3.3239	0.023913
83.	0.	1.87650	12.5135	12.4477	8.1707	359.883	24.2819	3.3044	0.024396
84.	0.	1.86919	12.5137	12.4477	8.1506	359.932	24.2147	3.2950	0.024991
85.	0.	1.86257	12.5138	12.4477	8.1333	359.982	24.1471	3.2755	0.025481
86.	0.	1.85509	12.5140	12.4477	8.1151	0.032	24.0927	3.2661	0.026085
87.	0.	1.84745	12.5141	12.4477	8.0982	0.079	24.0323	3.2567	0.026688
88.	0.	1.84050	12.5143	12.4477	8.0841	0.126	23.9688	3.2372	0.027185
89.	0.	1.83271	12.5144	12.4477	8.0684	0.172	23.9055	3.2278	0.027791
90.	0.	1.82565	12.5146	12.4477	8.0553	0.218	23.8409	3.2083	0.028290
91.	0.	1.81794	12.5147	12.4477	8.0400	0.262	23.7877	3.1989	0.028896
92.	0.	1.81023	12.5148	12.4477	8.0250	0.305	23.7271	3.1895	0.029495
93.	0.	1.80317	12.5150	12.4477	8.0125	0.348	23.6519	3.1700	0.029985
94.	0.	1.79596	12.5151	12.4477	8.0004	0.391	23.5723	3.1505	0.030483
95.	0.	1.78862	12.5152	12.4477	7.9886	0.433	23.4909	3.1310	0.030990
96.	0.	1.78129	12.5153	12.4477	7.9763	0.478	23.4084	3.1115	0.031500
97.	0.	1.77389	12.5155	12.4477	7.9640	0.525	23.3255	3.0920	0.032017
98.	0.	1.76653	12.5156	12.4477	7.9515	0.573	23.2404	3.0725	0.032533
99.	0.	1.75911	12.5157	12.4477	7.9391	0.621	23.1541	3.0531	0.033053
100.	0.	1.75157	12.5158	12.4477	7.9268	0.669	23.0674	3.0336	0.033583
101.	0.	1.74396	12.5160	12.4477	7.9145	0.718	22.9800	3.0141	0.034121
102.	0.	1.73621	12.5161	12.4477	7.9026	0.767	22.8925	2.9947	0.034669
103.	0.	1.72834	12.5162	12.4477	7.8910	0.815	22.8047	2.9752	0.035228
104.	0.	1.72034	12.5163	12.4477	7.8797	0.862	22.7168	2.9558	0.035797
105.	0.	1.71227	12.5164	12.4477	7.8685	0.911	22.6286	2.9364	0.036374
106.	0.	1.70407	12.5165	12.4477	7.8576	0.959	22.5404	2.9170	0.036960
107.	0.	1.69577	12.5166	12.4477	7.8471	1.006	22.4522	2.8976	0.037556
108.	0.	1.68735	12.5167	12.4477	7.8368	1.053	22.3638	2.8782	0.038161
109.	0.	1.67882	12.5168	12.4477	7.8269	1.100	22.2753	2.8588	0.038776
110.	0.	1.67012	12.5168	12.4477	7.8172	1.146	22.1754	2.8394	0.039398
111.	0.	1.66140	12.5169	12.4477	7.8091	1.189	21.9338	2.8099	0.039892
112.	0.	1.66072	12.5172	12.4477	7.8255	1.245	21.5155	2.6690	0.039032
113.	0.	1.65671	12.5173	12.4477	7.8370	1.313	21.1872	2.5486	0.038589
114.	0.	1.64096	12.5174	12.4477	7.8226	1.372	21.0008	2.5400	0.039956
115.	0.	1.62772	12.5174	12.4477	7.8173	1.426	20.8784	2.5010	0.040961
116.	0.	1.61048	12.5173	12.4477	7.8002	1.481	20.8742	2.5127	0.042689
117.	0.	1.59380	12.5173	12.4477	7.7818	1.535	20.9451	2.5344	0.044425
118.	0.	1.57788	12.5172	12.4477	7.7620	1.590	21.0615	2.5661	0.046125
119.	0.	1.56336	12.5171	12.4477	7.7432	1.640	21.1608	2.5976	0.047644
120.	0.	1.55112	12.5170	12.4477	7.7300	1.682	21.1466	2.6088	0.048775
121.	0.	1.54280	12.5169	12.4477	7.7301	1.718	21.0268	2.5693	0.049261
122.	0.	1.53399	12.5169	12.4477	7.7304	1.753	20.8841	2.5298	0.049781
123.	0.	1.52411	12.5168	12.4477	7.7282	1.790	20.7717	2.5005	0.050470
124.	0.	1.51260	12.5167	12.4477	7.7210	1.828	20.6969	2.4914	0.051425
125.	0.	1.50156	12.5166	12.4477	7.7143	1.870	20.6779	2.4824	0.052364
126.	0.	1.48918	12.5165	12.4477	7.7002	1.919	20.8030	2.5036	0.053627

127.	0.	1.47499	12.5163	12.4477	7.6762	1.970	20.9664	2.5652	0.055215
128.	0.	1.46566	12.5162	12.4477	7.6654	2.009	21.0128	2.5761	0.056075
129.	0.	1.45787	12.5161	12.4477	7.6601	2.039	20.9560	2.5667	0.056662
130.	0.	1.45184	12.5160	12.4477	7.6628	2.059	20.7829	2.5269	0.056914
131.	0.	1.44739	12.5160	12.4477	7.6738	2.078	20.5661	2.4569	0.056876
132.	0.	1.43998	12.5159	12.4477	7.6766	2.104	20.4150	2.4173	0.057271
133.	0.	1.43011	12.5158	12.4477	7.6716	2.138	20.3537	2.4081	0.058069
134.	0.	1.41927	12.5157	12.4477	7.6610	2.178	20.3780	2.4191	0.059084
135.	0.	1.40862	12.5155	12.4477	7.6476	2.222	20.4685	2.4401	0.060146
136.	0.	1.39802	12.5154	12.4477	7.6318	2.263	20.5479	2.4712	0.061222
137.	0.	1.39020	12.5153	12.4477	7.6244	2.294	20.5534	2.4719	0.061887
138.	0.	1.38292	12.5152	12.4477	7.6197	2.314	20.4425	2.4624	0.062409
139.	0.	1.37928	12.5152	12.4477	7.6314	2.317	20.1407	2.3923	0.062285
140.	0.	1.37803	12.5152	12.4477	7.6572	2.313	19.7256	2.2717	0.061656
141.	0.	1.37409	12.5152	12.4477	7.6778	2.336	19.4749	2.1714	0.061411
142.	0.	1.35747	12.5150	12.4477	7.6595	2.385	19.4942	2.2132	0.063174
143.	0.	1.34382	12.5149	12.4477	7.6472	2.423	19.4746	2.2345	0.064507
144.	0.	1.33469	12.5149	12.4477	7.6493	2.446	19.3429	2.2051	0.065136
145.	0.	1.32665	12.5148	12.4477	7.6575	2.464	19.1441	2.1555	0.065547
146.	0.	1.31779	12.5148	12.4477	7.6661	2.484	18.9209	2.1060	0.066030
147.	0.	1.30832	12.5148	12.4477	7.6749	2.513	18.7563	2.0566	0.066608
148.	0.	1.29399	12.5147	12.4477	7.6697	2.548	18.6454	2.0579	0.067928
149.	0.	1.28243	12.5147	12.4477	7.6730	2.570	18.4403	2.0288	0.068793
150.	0.	1.27452	12.5147	12.4477	7.6902	2.581	18.1157	1.9490	0.069022
151.	0.	1.26583	12.5148	12.4477	7.7089	2.595	17.7460	1.8593	0.069277
152.	0.	1.25429	12.5149	12.4477	7.7231	2.626	17.4071	1.7799	0.069927
153.	0.	1.23755	12.5150	12.4477	7.7288	2.663	17.1230	1.7314	0.071375
154.	0.	1.21993	12.5151	12.4477	7.7343	2.713	16.9106	1.6830	0.072994
155.	0.	1.19804	12.5152	12.4477	7.7291	2.786	16.8778	1.6754	0.075405
156.	0.	1.17280	12.5152	12.4477	7.7111	2.864	16.9375	1.7184	0.078405
157.	0.	1.15425	12.5153	12.4477	7.7059	2.915	16.8654	1.7203	0.080341
158.	0.	1.14135	12.5155	12.4477	7.7157	2.948	16.6681	1.6714	0.081384
159.	0.	1.12755	12.5156	12.4477	7.7254	2.971	16.3975	1.6225	0.082525
160.	0.	1.11457	12.5158	12.4477	7.7399	2.989	16.0593	1.5535	0.083490
161.	0.	1.10069	12.5161	12.4477	7.7553	3.012	15.6897	1.4746	0.084553
162.	0.	1.08299	12.5164	12.4477	7.7665	3.022	15.2398	1.4062	0.086165
163.	0.	1.06832	12.5168	12.4477	7.7869	3.034	14.7016	1.2872	0.087197
164.	0.	1.04624	12.5173	12.4477	7.7976	3.112	14.3987	1.1896	0.089606
165.	0.	1.00331	12.5177	12.4477	7.7689	3.240	14.4500	1.2459	0.095882
166.	0.	0.97109	12.5180	12.4477	7.7548	3.338	14.4572	1.2701	0.100142
167.	0.	0.94752	12.5183	12.4477	7.7562	3.407	14.3743	1.2530	0.102956
168.	0.	0.92540	12.5187	12.4477	7.7594	3.456	14.2286	1.2355	0.105545
169.	0.	0.90640	12.5190	12.4477	7.7692	3.491	14.0237	1.1977	0.107650
170.	0.	0.88724	12.5194	12.4477	7.7789	3.540	13.8648	1.1598	0.109828
171.	0.	0.86381	12.5198	12.4477	7.7756	3.604	13.7782	1.1627	0.112730
172.	0.	0.84353	12.5201	12.4477	7.7762	3.656	13.6669	1.1551	0.115133
173.	0.	0.82669	12.5205	12.4477	7.7833	3.700	13.5320	1.1270	0.117020
174.	0.	0.80890	12.5209	12.4477	7.7866	3.724	13.3423	1.1091	0.119056
175.	0.	0.79586	12.5213	12.4477	7.8016	3.773	13.1913	1.0504	0.120399
176.	0.	0.77332	12.5217	12.4477	7.7888	3.889	13.3086	1.0733	0.123303
177.	0.	0.75096	12.5220	12.4477	7.7667	3.979	13.3686	1.1261	0.126084
178.	0.	0.74148	12.5223	12.4477	7.7756	4.009	13.2528	1.0870	0.126989
179.	0.	0.73042	12.5227	12.4477	7.7817	4.042	13.1283	1.0581	0.128130
180.	0.	0.71715	12.5230	12.4477	7.7800	4.091	13.0539	1.0496	0.129610
181.	0.	0.70358	12.5233	12.4477	7.7745	4.143	12.9982	1.0511	0.131140
182.	0.	0.69203	12.5236	12.4477	7.7727	4.176	12.8955	1.0424	0.132382
183.	0.	0.68282	12.5239	12.4477	7.7782	4.176	12.7037	1.0133	0.133285
184.	0.	0.67479	12.5242	12.4477	7.7906	4.115	12.3443	0.9640	0.133985
185.	0.	0.67119	12.5248	12.4477	7.8214	4.110	12.0605	0.8540	0.134010
186.	0.	0.64767	12.5251	12.4477	7.8021	4.224	12.1510	0.8872	0.137177
187.	0.	0.62711	12.5254	12.4477	7.7798	4.298	12.1528	0.9298	0.139757
188.	0.	0.61948	12.5258	12.4477	7.7869	4.270	11.9086	0.8805	0.140463
189.	0.	0.61200	12.5262	12.4477	7.8046	4.207	11.5333	0.8111	0.141111
190.	0.	0.60107	12.5267	12.4477	7.8191	4.126	11.0922	0.7423	0.142273
191.	0.	0.58696	12.5273	12.4477	7.8318	4.026	10.5758	0.6640	0.143970
192.	0.	0.56820	12.5281	12.4477	7.8379	3.952	10.0938	0.5766	0.146609
193.	0.	0.53659	12.5289	12.4477	7.8221	3.954	9.7955	0.5419	0.151912

194.	0.	0.50166	12.5294	12.4477	7.8013	3.964	9.5372	0.5378	0.157767
195.	0.	0.47583	12.5299	12.4477	7.8098	3.911	9.1933	0.4819	0.161896
196.	0.	0.44501	12.5305	12.4477	7.8934	3.677	8.8426	0.4172	0.167193
197.	0.	0.39257	12.5319	12.4477	8.3406	3.196	9.0911	0.3471	0.177127
198.	0.	0.25861	12.7412	12.4477	10.1717	2.534	11.0698	0.1673	0.207286
199.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

WHAFIS input: YK-108.dat
WHAFIS output: YK-108.out

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-108
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500
3000
3500
4000
4500

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-108.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-108.out

header
THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00
PART1 INPUT

IE	0.000	-6.528	1.000	1.000	9.035	11.296	12.800	56.140	0.028	0.000
OF	3.000	-6.445	0.000	9.035	0.000	0.000	0.000	0.000	0.028	0.000
OF	4.000	-6.417	0.000	9.035	0.000	0.000	0.000	0.000	0.028	0.000
OF	9.000	-6.279	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
OF	10.000	-6.252	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
OF	15.000	-6.114	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
OF	16.000	-6.086	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
OF	22.000	-5.920	0.000	9.037	0.000	0.000	0.000	0.000	0.028	0.000
OF	27.000	-5.782	0.000	9.037	0.000	0.000	0.000	0.000	0.028	0.000
OF	28.000	-5.755	0.000	9.038	0.000	0.000	0.000	0.000	0.028	0.000
OF	39.000	-5.451	0.000	9.039	0.000	0.000	0.000	0.000	0.028	0.000
OF	40.000	-5.424	0.000	9.039	0.000	0.000	0.000	0.000	0.028	0.000
OF	51.000	-5.120	0.000	9.040	0.000	0.000	0.000	0.000	0.028	0.000
OF	52.000	-5.092	0.000	9.040	0.000	0.000	0.000	0.000	0.027	0.000
OF	61.000	-4.847	0.000	9.041	0.000	0.000	0.000	0.000	0.025	0.000
OF	62.000	-4.840	0.000	9.041	0.000	0.000	0.000	0.000	0.007	0.000
OF	72.200	-4.765	0.000	9.035	0.000	0.000	0.000	0.000	0.007	0.000
OF	75.500	-4.741	0.000	9.036	0.000	0.000	0.000	0.000	0.008	0.000
OF	78.700	-4.715	0.000	9.036	0.000	0.000	0.000	0.000	0.009	0.000
OF	82.000	-4.684	0.000	9.037	0.000	0.000	0.000	0.000	0.010	0.000
OF	85.300	-4.652	0.000	9.038	0.000	0.000	0.000	0.000	0.010	0.000
OF	88.600	-4.620	0.000	9.039	0.000	0.000	0.000	0.000	0.010	0.000
OF	91.900	-4.588	0.000	9.040	0.000	0.000	0.000	0.000	0.010	0.000
OF	95.100	-4.556	0.000	9.041	0.000	0.000	0.000	0.000	0.010	0.000
OF	98.400	-4.524	0.000	9.042	0.000	0.000	0.000	0.000	0.010	0.000
OF	101.700	-4.492	0.000	9.043	0.000	0.000	0.000	0.000	0.010	0.000
OF	105.000	-4.460	0.000	9.044	0.000	0.000	0.000	0.000	0.010	0.000
OF	108.300	-4.428	0.000	9.045	0.000	0.000	0.000	0.000	0.010	0.000
OF	111.500	-4.396	0.000	9.046	0.000	0.000	0.000	0.000	0.010	0.000
OF	114.800	-4.364	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
OF	118.100	-4.332	0.000	9.048	0.000	0.000	0.000	0.000	0.010	0.000
OF	121.400	-4.300	0.000	9.049	0.000	0.000	0.000	0.000	0.010	0.000
OF	124.700	-4.268	0.000	9.050	0.000	0.000	0.000	0.000	0.010	0.000
OF	128.000	-4.236	0.000	9.051	0.000	0.000	0.000	0.000	0.010	0.000
OF	131.200	-4.204	0.000	9.052	0.000	0.000	0.000	0.000	0.010	0.000
OF	134.500	-4.172	0.000	9.053	0.000	0.000	0.000	0.000	0.010	0.000
OF	137.800	-4.140	0.000	9.054	0.000	0.000	0.000	0.000	0.010	0.000
OF	141.100	-4.108	0.000	9.055	0.000	0.000	0.000	0.000	0.010	0.000
OF	144.400	-4.076	0.000	9.056	0.000	0.000	0.000	0.000	0.011	0.000
OF	147.600	-4.038	0.000	9.057	0.000	0.000	0.000	0.000	0.016	0.000
OF	150.900	-3.971	0.000	9.058	0.000	0.000	0.000	0.000	0.021	0.000
OF	154.200	-3.902	0.000	9.059	0.000	0.000	0.000	0.000	0.021	0.000
OF	157.500	-3.833	0.000	9.060	0.000	0.000	0.000	0.000	0.021	0.000
OF	160.800	-3.764	0.000	9.061	0.000	0.000	0.000	0.000	0.021	0.000
OF	164.000	-3.695	0.000	9.063	0.000	0.000	0.000	0.000	0.021	0.000
OF	167.300	-3.626	0.000	9.064	0.000	0.000	0.000	0.000	0.021	0.000
OF	170.600	-3.558	0.000	9.065	0.000	0.000	0.000	0.000	0.021	0.000
OF	173.900	-3.489	0.000	9.066	0.000	0.000	0.000	0.000	0.021	0.000
OF	177.200	-3.420	0.000	9.067	0.000	0.000	0.000	0.000	0.021	0.000
OF	180.400	-3.351	0.000	9.068	0.000	0.000	0.000	0.000	0.021	0.000
OF	183.700	-3.282	0.000	9.069	0.000	0.000	0.000	0.000	0.021	0.000
OF	187.000	-3.214	0.000	9.070	0.000	0.000	0.000	0.000	0.021	0.000
OF	190.300	-3.145	0.000	9.072	0.000	0.000	0.000	0.000	0.021	0.000
OF	193.600	-3.076	0.000	9.073	0.000	0.000	0.000	0.000	0.021	0.000
OF	196.800	-3.007	0.000	9.074	0.000	0.000	0.000	0.000	0.021	0.000
OF	200.100	-2.938	0.000	9.076	0.000	0.000	0.000	0.000	0.021	0.000
OF	203.400	-2.869	0.000	9.077	0.000	0.000	0.000	0.000	0.021	0.000
OF	206.700	-2.800	0.000	9.079	0.000	0.000	0.000	0.000	0.021	0.000
OF	210.000	-2.732	0.000	9.080	0.000	0.000	0.000	0.000	0.021	0.000
OF	213.300	-2.663	0.000	9.082	0.000	0.000	0.000	0.000	0.021	0.000
OF	216.500	-2.592	0.000	9.083	0.000	0.000	0.000	0.000	0.022	0.000
OF	219.800	-2.519	0.000	9.085	0.000	0.000	0.000	0.000	0.022	0.000
OF	223.100	-2.445	0.000	9.087	0.000	0.000	0.000	0.000	0.022	0.000
OF	226.400	-2.371	0.000	9.088	0.000	0.000	0.000	0.000	0.022	0.000
OF	229.700	-2.297	0.000	9.090	0.000	0.000	0.000	0.000	0.018	0.000
OF	232.900	-2.257	0.000	9.092	0.000	0.000	0.000	0.000	0.012	0.000
OF	236.200	-2.222	0.000	9.094	0.000	0.000	0.000	0.000	0.011	0.000
OF	239.500	-2.187	0.000	9.096	0.000	0.000	0.000	0.000	0.011	0.000
OF	242.800	-2.152	0.000	9.098	0.000	0.000	0.000	0.000	0.012	0.000
OF	246.100	-2.110	0.000	9.101	0.000	0.000	0.000	0.000	0.014	0.000
OF	249.300	-2.063	0.000	9.102	0.000	0.000	0.000	0.000	0.014	0.000
OF	252.600	-2.017	0.000	9.104	0.000	0.000	0.000	0.000	0.014	0.000
OF	255.900	-1.970	0.000	9.106	0.000	0.000	0.000	0.000	0.014	0.000
OF	259.200	-1.923	0.000	9.108	0.000	0.000	0.000	0.000	0.014	0.000
OF	262.500	-1.877	0.000	9.110	0.000	0.000	0.000	0.000	0.014	0.000
OF	265.700	-1.830	0.000	9.111	0.000	0.000	0.000	0.000	0.014	0.000
OF	269.000	-1.783	0.000	9.113	0.000	0.000	0.000	0.000	0.014	0.000
OF	272.300	-1.737	0.000	9.115	0.000	0.000	0.000	0.000	0.014	0.000
OF	275.600	-1.690	0.000	9.117	0.000	0.000	0.000	0.000	0.014	0.000
OF	278.900	-1.643	0.000	9.118	0.000	0.000	0.000	0.000	0.014	0.000
OF	282.200	-1.597	0.000	9.120	0.000	0.000	0.000	0.000	0.014	0.000
OF	285.400	-1.550	0.000	9.122	0.000	0.000	0.000	0.000	0.014	0.000
OF	288.700	-1.503	0.000	9.124	0.000	0.000	0.000	0.000	0.014	0.000
OF	292.000	-1.457	0.000	9.126	0.000	0.000	0.000	0.000	0.014	0.000
OF	295.300	-1.410	0.000	9.128	0.000	0.000	0.000	0.000	0.014	0.000
OF	298.600	-1.363	0.000	9.130	0.000	0.000	0.000	0.000	0.014	0.000
OF	301.800	-1.316	0.000	9.132	0.000	0.000	0.000	0.000	0.014	0.000
OF	305.100	-1.269	0.000	9.133	0.000	0.000	0.000	0.000	0.017	0.000
OF	308.400	-1.205	0.000	9.135	0.000	0.000	0.000	0.000	0.020	0.000
OF	311.700	-1.138	0.000	9.136	0.000	0.000	0.000	0.000	0.020	0.000
OF	315.000	-1.072	0.000	9.138	0.000	0.000	0.000	0.000	0.021	0.000
OF	318.200	-1.005	0.000	9.140	0.000	0.000	0.000	0.000	0.021	0.000
OF	321.500	-0.938	0.000	9.142	0.000	0.000	0.000	0.000	0.020	0.000

OF	324.800	-0.872	0.000	9.143	0.000	0.000	0.000	0.000	0.020	0.000
OF	328.100	-0.805	0.000	9.145	0.000	0.000	0.000	0.000	0.020	0.000
OF	331.400	-0.738	0.000	9.147	0.000	0.000	0.000	0.000	0.021	0.000
OF	334.600	-0.671	0.000	9.149	0.000	0.000	0.000	0.000	0.021	0.000
OF	337.900	-0.605	0.000	9.150	0.000	0.000	0.000	0.000	0.020	0.000
OF	341.200	-0.538	0.000	9.152	0.000	0.000	0.000	0.000	0.020	0.000
OF	344.500	-0.471	0.000	9.154	0.000	0.000	0.000	0.000	0.020	0.000
OF	347.800	-0.405	0.000	9.156	0.000	0.000	0.000	0.000	0.021	0.000
OF	351.000	-0.338	0.000	9.158	0.000	0.000	0.000	0.000	0.021	0.000
OF	354.300	-0.271	0.000	9.160	0.000	0.000	0.000	0.000	0.020	0.000
OF	357.600	-0.204	0.000	9.162	0.000	0.000	0.000	0.000	0.020	0.000
OF	360.900	-0.138	0.000	9.164	0.000	0.000	0.000	0.000	0.021	0.000
OF	364.200	-0.068	0.000	9.166	0.000	0.000	0.000	0.000	0.081	0.000
IF	367.500	0.400	0.000	9.163	0.000	0.000	0.000	0.000	0.132	0.000
IF	370.700	0.790	0.000	9.161	0.000	0.000	0.000	0.000	0.068	0.000
IF	374.000	0.844	0.000	9.166	0.000	0.000	0.000	0.000	0.024	0.000
IF	377.300	0.951	0.000	9.169	0.000	0.000	0.000	0.000	0.014	0.000
IF	380.600	0.938	0.000	9.175	0.000	0.000	0.000	0.000	-0.014	0.000
IF	383.900	0.856	0.000	9.181	0.000	0.000	0.000	0.000	-0.027	0.000
IF	387.100	0.765	0.000	9.186	0.000	0.000	0.000	0.000	-0.028	0.000
IF	390.400	0.671	0.000	9.191	0.000	0.000	0.000	0.000	-0.021	0.000
IF	393.700	0.625	0.000	9.195	0.000	0.000	0.000	0.000	0.013	0.000
IF	397.000	0.757	0.000	9.196	0.000	0.000	0.000	0.000	0.040	0.000
IF	400.300	0.888	0.000	9.198	0.000	0.000	0.000	0.000	0.035	0.000
IF	403.500	0.986	0.000	9.200	0.000	0.000	0.000	0.000	0.024	0.000
IF	406.800	1.044	0.000	9.203	0.000	0.000	0.000	0.000	0.014	0.000
IF	410.100	1.075	0.000	9.207	0.000	0.000	0.000	0.000	-0.006	0.000
IF	413.400	1.007	0.000	9.211	0.000	0.000	0.000	0.000	-0.040	0.000
IF	416.700	0.811	0.000	9.216	0.000	0.000	0.000	0.000	-0.034	0.000
IF	419.900	0.783	0.000	9.219	0.000	0.000	0.000	0.000	0.000	0.000
IF	423.200	0.811	0.000	9.221	0.000	0.000	0.000	0.000	0.023	0.000
IF	426.500	0.933	0.000	9.222	0.000	0.000	0.000	0.000	0.054	0.000
IF	429.800	1.165	0.000	9.221	0.000	0.000	0.000	0.000	0.056	0.000
IF	433.100	1.302	0.000	9.223	0.000	0.000	0.000	0.000	0.026	0.000
IF	436.400	1.335	0.000	9.225	0.000	0.000	0.000	0.000	0.000	0.000
IF	439.600	1.305	0.000	9.229	0.000	0.000	0.000	0.000	-0.019	0.000
IF	442.900	1.210	0.000	9.232	0.000	0.000	0.000	0.000	-0.029	0.000
IF	446.200	1.116	0.000	9.236	0.000	0.000	0.000	0.000	-0.013	0.000
IF	449.500	1.125	0.000	9.238	0.000	0.000	0.000	0.000	0.008	0.000
IF	452.800	1.168	0.000	9.240	0.000	0.000	0.000	0.000	0.040	0.000
IF	456.000	1.385	0.000	9.239	0.000	0.000	0.000	0.000	0.097	0.000
IF	459.300	1.800	0.000	9.237	0.000	0.000	0.000	0.000	0.110	0.000
IF	462.600	2.113	0.000	9.236	0.000	0.000	0.000	0.000	0.026	0.000
IF	465.900	1.969	0.000	9.242	0.000	0.000	0.000	0.000	-0.031	0.000
IF	469.200	1.910	0.000	9.246	0.000	0.000	0.000	0.000	0.006	0.000
IF	472.400	2.006	0.000	9.248	0.000	0.000	0.000	0.000	0.039	0.000
IF	475.700	2.162	0.000	9.250	0.000	0.000	0.000	0.000	0.050	0.000
IF	479.000	2.336	0.000	9.251	0.000	0.000	0.000	0.000	0.052	0.000
IF	482.300	2.504	0.000	9.253	0.000	0.000	0.000	0.000	0.028	0.000
IF	485.600	2.520	0.000	9.258	0.000	0.000	0.000	0.000	0.015	0.000
IF	488.800	2.604	0.000	9.260	0.000	0.000	0.000	0.000	0.055	0.000
IF	492.100	2.881	0.000	9.261	0.000	0.000	0.000	0.000	0.084	0.000
IF	495.400	3.158	0.000	9.262	0.000	0.000	0.000	0.000	0.083	0.000
IF	498.700	3.428	0.000	9.264	0.000	0.000	0.000	0.000	0.064	0.000
IF	502.000	3.583	0.000	9.269	0.000	0.000	0.000	0.000	0.048	0.000
IF	505.200	3.738	0.000	9.274	0.000	0.000	0.000	0.000	0.033	0.000
IF	508.500	3.800	0.000	9.282	0.000	0.000	0.000	0.000	-0.012	0.000
IF	511.800	3.657	0.000	9.292	0.000	0.000	0.000	0.000	-0.021	0.000
IF	515.100	3.662	0.000	9.298	0.000	0.000	0.000	0.000	0.026	0.000
IF	518.400	3.827	0.000	9.302	0.000	0.000	0.000	0.000	0.050	0.000
IF	521.700	3.992	0.000	9.306	0.000	0.000	0.000	0.000	0.061	0.000
IF	524.900	4.222	0.000	9.309	0.000	0.000	0.000	0.000	0.072	0.000
IF	528.200	4.460	0.000	9.312	0.000	0.000	0.000	0.000	0.072	0.000
IF	531.500	4.698	0.000	9.317	0.000	0.000	0.000	0.000	0.098	0.000
IF	534.800	5.110	0.000	9.321	0.000	0.000	0.000	0.000	0.110	0.000
IF	538.100	5.423	0.000	9.329	0.000	0.000	0.000	0.000	0.021	0.000
IF	541.300	5.247	0.000	9.349	0.000	0.000	0.000	0.000	-0.035	0.000
IF	544.600	5.193	0.000	9.363	0.000	0.000	0.000	0.000	0.003	0.000
IF	547.900	5.264	0.000	9.373	0.000	0.000	0.000	0.000	0.021	0.000
IF	551.200	5.328	0.000	9.381	0.000	0.000	0.000	0.000	0.028	0.000
IF	554.500	5.448	0.000	9.388	0.000	0.000	0.000	0.000	0.043	0.000
IF	557.700	5.604	0.000	9.395	0.000	0.000	0.000	0.000	0.023	0.000
IF	561.000	5.597	0.000	9.405	0.000	0.000	0.000	0.000	0.003	0.000
IF	564.300	5.622	0.000	9.413	0.000	0.000	0.000	0.000	0.018	0.000
IF	567.600	5.717	0.000	9.419	0.000	0.000	0.000	0.000	0.024	0.000
IF	570.900	5.778	0.000	9.425	0.000	0.000	0.000	0.000	0.042	0.000
IF	574.100	5.987	0.000	9.430	0.000	0.000	0.000	0.000	0.019	0.000
IF	577.400	5.902	0.000	9.439	0.000	0.000	0.000	0.000	-0.034	0.000
IF	580.700	5.764	0.000	9.448	0.000	0.000	0.000	0.000	-0.001	0.000
IF	584.000	5.897	0.000	9.451	0.000	0.000	0.000	0.000	0.034	0.000
IF	587.300	5.986	0.000	9.455	0.000	0.000	0.000	0.000	0.017	0.000
IF	590.500	6.006	0.000	9.460	0.000	0.000	0.000	0.000	0.006	0.000
IF	593.800	6.027	0.000	9.465	0.000	0.000	0.000	0.000	0.008	0.000
IF	597.100	6.059	0.000	9.469	0.000	0.000	0.000	0.000	0.017	0.000
IF	600.400	6.141	0.000	9.472	0.000	0.000	0.000	0.000	0.037	0.000
IF	603.700	6.302	0.000	9.474	0.000	0.000	0.000	0.000	0.082	0.000
IF	607.000	6.684	0.000	9.474	0.000	0.000	0.000	0.000	0.041	0.000
IF	610.200	6.569	0.000	9.485	0.000	0.000	0.000	0.000	-0.035	0.000
IF	613.500	6.454	0.000	9.493	0.000	0.000	0.000	0.000	0.008	0.000
IF	616.800	6.621	0.000	9.496	0.000	0.000	0.000	0.000	0.058	0.000
IF	620.100	6.836	0.000	9.498	0.000	0.000	0.000	0.000	0.065	0.000
IF	623.400	7.051	0.000	9.502	0.000	0.000	0.000	0.000	0.077	0.000
IF	626.600	7.335	0.000	9.507	0.000	0.000	0.000	0.000	0.088	0.000
IF	629.900	7.622	0.000	9.516	0.000	0.000	0.000	0.000	0.062	0.000
IF	633.200	7.741	0.000	9.533	0.000	0.000	0.000	0.000	0.023	0.000
IF	636.500	7.777	0.000	9.552	0.000	0.000	0.000	0.000	0.035	0.000
IF	639.800	7.973	0.000	9.566	0.000	0.000	0.000	0.000	0.065	0.000
IF	643.000	8.201	0.000	9.583	0.000	0.000	0.000	0.000	0.077	0.000
IF	646.300	8.473	0.000	9.616	0.000	0.000	0.000	0.000	0.145	0.000
IF	649.600	9.155	0.000	9.715	0.000	0.000	0.000	0.000	0.207	0.000
IF	652.300	9.715	0.000	9.715	0.000	0.000	0.000	0.000	0.207	0.000
AS	711.900	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.952	0.000

IF	712.500	8.996	0.000	9.567	0.000	0.000	0.000	0.000	-0.122	0.000
IF	719.000	8.701	0.000	9.567	0.000	0.000	0.000	0.000	0.005	0.000
IF	724.500	9.062	0.000	9.567	0.000	0.000	0.000	0.000	0.025	0.000
IF	729.500	8.963	0.000	9.567	0.000	0.000	0.000	0.000	-0.019	0.000
IF	733.000	8.898	0.000	9.567	0.000	0.000	0.000	0.000	-0.016	0.000
IF	737.500	8.832	0.000	9.567	0.000	0.000	0.000	0.000	0.050	0.000
IF	746.400	9.567	0.000	9.567	0.000	0.000	0.000	0.000	0.083	0.000
AS	747.700	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.079	0.000
IF	757.000	8.832	0.000	9.567	0.000	0.000	0.000	0.000	-0.016	0.000
IF	764.500	9.291	0.000	9.567	0.000	0.000	0.000	0.000	0.033	0.000
IF	770.000	9.259	0.000	9.567	0.000	0.000	0.000	0.000	0.011	0.000
IF	776.000	9.423	0.000	9.567	0.000	0.000	0.000	0.000	-0.034	0.000
IF	785.500	8.734	0.000	9.567	0.000	0.000	0.000	0.000	-0.015	0.000
IF	794.000	9.160	0.000	9.567	0.000	0.000	0.000	0.000	0.003	0.000
IF	798.000	8.766	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
IF	802.500	8.963	0.000	9.567	0.000	0.000	0.000	0.000	-0.029	0.000
IF	810.500	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.054	0.000
IF	817.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.028	0.000
IF	823.500	8.766	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
IF	836.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	-0.003	0.000
IF	846.500	8.701	0.000	9.567	0.000	0.000	0.000	0.000	0.016	0.000
IF	850.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
IF	853.500	8.537	0.000	9.567	0.000	0.000	0.000	0.000	-0.033	0.000
IF	859.000	8.110	0.000	9.567	0.000	0.000	0.000	0.000	0.018	0.000
IF	868.500	8.799	0.000	9.567	0.000	0.000	0.000	0.000	0.023	0.000
IF	880.500	8.602	0.000	9.567	0.000	0.000	0.000	0.000	-0.025	0.000
IF	888.000	8.307	0.000	9.567	0.000	0.000	0.000	0.000	-0.059	0.000
IF	890.000	8.045	0.000	9.567	0.000	0.000	0.000	0.000	-0.007	0.000
IF	893.000	8.274	0.000	9.567	0.000	0.000	0.000	0.000	0.043	0.000
IF	900.000	8.471	0.000	9.567	0.000	0.000	0.000	0.000	-0.022	0.000
IF	909.500	7.913	0.000	9.567	0.000	0.000	0.000	0.000	-0.012	0.000
IF	919.000	8.241	0.000	9.567	0.000	0.000	0.000	0.000	0.011	0.000
IF	924.500	8.077	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
IF	927.000	8.241	0.000	9.567	0.000	0.000	0.000	0.000	0.015	0.000
IF	931.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
IF	935.500	8.274	0.000	9.567	0.000	0.000	0.000	0.000	-0.017	0.000
IF	944.500	7.943	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
IF	960.500	8.373	0.000	9.567	0.000	0.000	0.000	0.000	0.008	0.000
IF	972.500	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.012	0.000
IF	979.500	8.602	0.000	9.567	0.000	0.000	0.000	0.000	0.038	0.000
IF	984.500	8.635	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
IF	988.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
IF	993.000	8.438	0.000	9.567	0.000	0.000	0.000	0.000	-0.006	0.000
IF	998.500	8.340	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
IF	1004.000	8.438	0.000	9.567	0.000	0.000	0.000	0.000	-0.003	0.000
IF	1011.000	8.307	0.000	9.567	0.000	0.000	0.000	0.000	0.016	0.000
IF	1018.500	8.668	0.000	9.567	0.000	0.000	0.000	0.000	0.010	0.000
IF	1024.000	8.438	0.000	9.567	0.000	0.000	0.000	0.000	-0.025	0.000
IF	1029.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.024	0.000
IF	1035.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.024	0.000
IF	1042.500	8.734	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
IF	1050.500	8.241	0.000	9.567	0.000	0.000	0.000	0.000	-0.033	0.000
IF	1056.500	8.274	0.000	9.567	0.000	0.000	0.000	0.000	0.018	0.000
IF	1063.500	8.471	0.000	9.567	0.000	0.000	0.000	0.000	0.009	0.000
IF	1072.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	0.012	0.000
IF	1080.000	8.668	0.000	9.567	0.000	0.000	0.000	0.000	0.021	0.000
IF	1086.000	8.701	0.000	9.567	0.000	0.000	0.000	0.000	0.008	0.000
IF	1092.000	8.766	0.000	9.567	0.000	0.000	0.000	0.000	-0.039	0.000
IF	1106.000	7.913	0.000	9.567	0.000	0.000	0.000	0.000	0.014	0.000
IF	1118.500	9.150	0.000	9.567	0.000	0.000	0.000	0.000	0.056	0.000
IF	1124.000	8.921	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
IF	1137.500	9.216	0.000	9.567	0.000	0.000	0.000	0.000	-0.051	0.000
IF	1149.500	7.618	0.000	9.567	0.000	0.000	0.000	0.000	0.008	0.000
IF	1158.500	9.390	0.000	9.567	0.000	0.000	0.000	0.000	0.050	0.000
IF	1172.500	8.766	0.000	9.567	0.000	0.000	0.000	0.000	-0.025	0.000
IF	1183.500	8.763	0.000	9.567	0.000	0.000	0.000	0.000	0.049	0.000
IF	1188.900	9.567	0.000	9.567	0.000	0.000	0.000	0.000	0.149	0.000
AS	1190.100	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.147	0.000
IF	1192.000	9.288	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
IF	1198.600	9.567	0.000	9.567	0.000	0.000	0.000	0.000	0.042	0.000
AS	1199.400	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.041	0.000
IF	1207.000	9.255	0.000	9.567	0.000	0.000	0.000	0.000	-0.009	0.000
IF	1216.500	9.419	0.000	9.567	0.000	0.000	0.000	0.000	-0.029	0.000
IF	1226.500	8.698	0.000	9.567	0.000	0.000	0.000	0.000	-0.027	0.000
IF	1231.000	9.029	0.000	9.567	0.000	0.000	0.000	0.000	0.010	0.000
IF	1236.500	8.799	0.000	9.567	0.000	0.000	0.000	0.000	0.003	0.000
IF	1241.500	9.062	0.000	9.567	0.000	0.000	0.000	0.000	0.038	0.000
IF	1248.500	9.259	0.000	9.567	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1261.500	9.029	0.000	9.567	0.000	0.000	0.000	0.000	-0.008	0.000
IF	1272.500	9.062	0.000	9.567	0.000	0.000	0.000	0.000	0.014	0.000
IF	1284.500	9.357	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
IF	1299.500	9.055	0.000	9.566	0.000	0.000	0.000	0.000	0.001	0.000
IF	1306.000	9.383	0.000	9.566	0.000	0.000	0.000	0.000	0.000	0.000
IF	1328.000	9.062	0.000	9.566	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1350.000	9.314	0.000	9.566	0.000	0.000	0.000	0.000	-0.020	0.000
IF	1363.000	8.373	0.000	9.565	0.000	0.000	0.000	0.000	-0.046	0.000
IF	1374.000	8.209	0.000	9.565	0.000	0.000	0.000	0.000	0.022	0.000
IF	1379.500	8.734	0.000	9.565	0.000	0.000	0.000	0.000	0.090	0.000
IF	1386.000	9.291	0.000	9.565	0.000	0.000	0.000	0.000	-0.044	0.000
IF	1391.500	8.209	0.000	9.565	0.000	0.000	0.000	0.000	-0.045	0.000
IF	1400.000	8.668	0.000	9.564	0.000	0.000	0.000	0.000	0.039	0.000
IF	1418.500	9.259	0.000	9.564	0.000	0.000	0.000	0.000	-0.007	0.000
IF	1431.500	8.435	0.000	9.563	0.000	0.000	0.000	0.000	-0.077	0.000
IF	1436.000	7.910	0.000	9.563	0.000	0.000	0.000	0.000	-0.077	0.000
IF	1443.000	7.549	0.000	9.563	0.000	0.000	0.000	0.000	-0.030	0.000
IF	1455.500	7.320	0.000	9.563	0.000	0.000	0.000	0.000	-0.003	0.000
IF	1466.500	7.484	0.000	9.562	0.000	0.000	0.000	0.000	-0.058	0.000
IF	1480.000	5.909	0.000	9.562	0.000	0.000	0.000	0.000	-0.040	0.000
IF	1492.000	6.463	0.000	9.562	0.000	0.000	0.000	0.000	0.033	0.000
IF	1496.000	6.437	0.000	9.561	0.000	0.000	0.000	0.000	0.026	0.000
IF	1501.000	6.696	0.000	9.561	0.000	0.000	0.000	0.000	0.016	0.000
IF	1504.000	6.568	0.000	9.561	0.000	0.000	0.000	0.000	0.049	0.000

IF	1513.000	7.290	0.000	9.561	0.000	0.000	0.000	0.000	-0.017	0.000
IF	1523.500	6.240	0.000	9.561	0.000	0.000	0.000	0.000	-0.049	0.000
IF	1530.500	6.437	0.000	9.561	0.000	0.000	0.000	0.000	0.002	0.000
IF	1538.000	6.273	0.000	9.561	0.000	0.000	0.000	0.000	0.029	0.000
IF	1547.500	6.929	0.000	9.561	0.000	0.000	0.000	0.000	0.094	0.000
IF	1554.500	7.815	0.000	9.562	0.000	0.000	0.000	0.000	0.002	0.000
IF	1560.500	6.962	0.000	9.562	0.000	0.000	0.000	0.000	-0.090	0.000
IF	1568.000	6.601	0.000	9.562	0.000	0.000	0.000	0.000	0.079	0.000
IF	1573.000	7.946	0.000	9.562	0.000	0.000	0.000	0.000	0.148	0.000
IF	1581.500	8.602	0.000	9.562	0.000	0.000	0.000	0.000	0.002	0.000
IF	1592.500	7.979	0.000	9.562	0.000	0.000	0.000	0.000	-0.080	0.000
IF	1604.000	6.798	0.000	9.562	0.000	0.000	0.000	0.000	-0.071	0.000
IF	1616.500	6.273	0.000	9.562	0.000	0.000	0.000	0.000	-0.054	0.000
IF	1626.500	5.584	0.000	9.562	0.000	0.000	0.000	0.000	0.044	0.000
IF	1635.000	7.093	0.000	9.562	0.000	0.000	0.000	0.000	0.035	0.000
IF	1641.500	6.109	0.000	9.562	0.000	0.000	0.000	0.000	-0.108	0.000
IF	1648.000	5.682	0.000	9.562	0.000	0.000	0.000	0.000	0.097	0.000
IF	1653.000	7.221	0.000	9.562	0.000	0.000	0.000	0.000	0.074	0.000
IF	1662.500	6.762	0.000	9.563	0.000	0.000	0.000	0.000	-0.056	0.000
IF	1677.500	5.843	0.000	9.563	0.000	0.000	0.000	0.000	-0.039	0.000
IF	1685.000	5.876	0.000	9.563	0.000	0.000	0.000	0.000	0.024	0.000
IF	1691.000	6.171	0.000	9.563	0.000	0.000	0.000	0.000	0.039	0.000
IF	1698.500	6.401	0.000	9.563	0.000	0.000	0.000	0.000	-0.016	0.000
IF	1703.000	5.974	0.000	9.563	0.000	0.000	0.000	0.000	-0.024	0.000
IF	1708.000	6.171	0.000	9.563	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1718.000	5.909	0.000	9.563	0.000	0.000	0.000	0.000	-0.037	0.000
IF	1727.500	5.450	0.000	9.564	0.000	0.000	0.000	0.000	-0.024	0.000
IF	1735.500	5.482	0.000	9.564	0.000	0.000	0.000	0.000	0.009	0.000
IF	1741.500	5.581	0.000	9.564	0.000	0.000	0.000	0.000	0.018	0.000
IF	1746.500	5.679	0.000	9.564	0.000	0.000	0.000	0.000	-0.026	0.000
IF	1751.500	5.318	0.000	9.564	0.000	0.000	0.000	0.000	-0.033	0.000
IF	1755.500	5.384	0.000	9.565	0.000	0.000	0.000	0.000	0.040	0.000
IF	1759.000	5.617	0.000	9.565	0.000	0.000	0.000	0.000	0.006	0.000
IF	1766.500	5.453	0.000	9.565	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1778.000	5.387	0.000	9.566	0.000	0.000	0.000	0.000	0.009	0.000
IF	1785.000	5.617	0.000	9.566	0.000	0.000	0.000	0.000	0.025	0.000
IF	1790.000	5.682	0.000	9.566	0.000	0.000	0.000	0.000	-0.009	0.000
IF	1796.500	5.518	0.000	9.566	0.000	0.000	0.000	0.000	-0.033	0.000
IF	1802.000	5.289	0.000	9.566	0.000	0.000	0.000	0.000	-0.038	0.000
IF	1806.000	5.157	0.000	9.567	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1809.500	5.256	0.000	9.567	0.000	0.000	0.000	0.000	0.007	0.000
IF	1815.500	5.223	0.000	9.567	0.000	0.000	0.000	0.000	-0.034	0.000
IF	1823.000	4.797	0.000	9.567	0.000	0.000	0.000	0.000	-0.036	0.000
IF	1829.000	4.731	0.000	9.568	0.000	0.000	0.000	0.000	-0.011	0.000
IF	1835.000	4.665	0.000	9.568	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1842.500	4.567	0.000	9.568	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1850.000	4.600	0.000	9.568	0.000	0.000	0.000	0.000	0.023	0.000
IF	1856.500	4.895	0.000	9.568	0.000	0.000	0.000	0.000	0.012	0.000
IF	1861.000	4.731	0.000	9.569	0.000	0.000	0.000	0.000	-0.083	0.000
IF	1864.000	4.272	0.000	9.569	0.000	0.000	0.000	0.000	-0.037	0.000
IF	1869.000	4.436	0.000	9.569	0.000	0.000	0.000	0.000	0.019	0.000
IF	1876.000	4.501	0.000	9.569	0.000	0.000	0.000	0.000	0.017	0.000
IF	1882.500	4.665	0.000	9.569	0.000	0.000	0.000	0.000	-0.019	0.000
IF	1892.000	4.203	0.000	9.570	0.000	0.000	0.000	0.000	-0.014	0.000
IF	1897.000	4.465	0.000	9.570	0.000	0.000	0.000	0.000	0.008	0.000
IF	1904.500	4.301	0.000	9.570	0.000	0.000	0.000	0.000	0.005	0.000
IF	1911.000	4.531	0.000	9.570	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1920.000	4.236	0.000	9.571	0.000	0.000	0.000	0.000	-0.016	0.000
IF	1923.500	4.334	0.000	9.571	0.000	0.000	0.000	0.000	-0.036	0.000
IF	1931.000	3.842	0.000	9.571	0.000	0.000	0.000	0.000	-0.025	0.000
IF	1938.000	3.973	0.000	9.571	0.000	0.000	0.000	0.000	0.013	0.000
IF	1946.500	4.039	0.000	9.571	0.000	0.000	0.000	0.000	-0.062	0.000
IF	1958.000	2.726	0.000	9.571	0.000	0.000	0.000	0.000	-0.032	0.000
IF	1967.000	3.382	0.000	9.572	0.000	0.000	0.000	0.000	0.032	0.000
IF	1972.500	3.186	0.000	9.572	0.000	0.000	0.000	0.000	0.047	0.000
IF	1979.000	3.940	0.000	9.572	0.000	0.000	0.000	0.000	0.114	0.000
IF	1984.000	4.498	0.000	9.572	0.000	0.000	0.000	0.000	-0.033	0.000
IF	1990.000	3.579	0.000	9.572	0.000	0.000	0.000	0.000	-0.044	0.000
IF	2005.000	3.579	0.000	9.573	0.000	0.000	0.000	0.000	0.019	0.000
IF	2009.500	3.940	0.000	9.573	0.000	0.000	0.000	0.000	0.052	0.000
IF	2016.500	4.173	0.000	9.573	0.000	0.000	0.000	0.000	0.000	0.000
IF	2022.000	3.944	0.000	9.573	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2026.500	4.009	0.000	9.573	0.000	0.000	0.000	0.000	0.054	0.000
IF	2035.500	4.665	0.000	9.574	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2042.500	3.812	0.000	9.574	0.000	0.000	0.000	0.000	-0.039	0.000
IF	2048.000	4.173	0.000	9.574	0.000	0.000	0.000	0.000	0.089	0.000
IF	2055.000	4.928	0.000	9.574	0.000	0.000	0.000	0.000	0.022	0.000
IF	2064.500	4.534	0.000	9.575	0.000	0.000	0.000	0.000	-0.031	0.000
IF	2078.500	4.206	0.000	9.575	0.000	0.000	0.000	0.000	0.005	0.000
IF	2092.500	4.665	0.000	9.576	0.000	0.000	0.000	0.000	0.003	0.000
IF	2103.000	4.272	0.000	9.576	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2114.500	4.465	0.000	9.576	0.000	0.000	0.000	0.000	0.004	0.000
IF	2126.500	4.367	0.000	9.577	0.000	0.000	0.000	0.000	0.010	0.000
IF	2138.000	4.695	0.000	9.577	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2147.500	4.170	0.000	9.578	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2160.000	4.432	0.000	9.578	0.000	0.000	0.000	0.000	0.005	0.000
IF	2174.000	4.301	0.000	9.579	0.000	0.000	0.000	0.000	0.003	0.000
IF	2182.500	4.498	0.000	9.579	0.000	0.000	0.000	0.000	0.017	0.000
IF	2191.500	4.596	0.000	9.580	0.000	0.000	0.000	0.000	0.009	0.000
IF	2205.000	4.695	0.000	9.580	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2223.000	4.137	0.000	9.581	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2236.000	4.629	0.000	9.582	0.000	0.000	0.000	0.000	0.024	0.000
IF	2242.500	4.596	0.000	9.582	0.000	0.000	0.000	0.000	0.000	0.000
IF	2249.500	4.629	0.000	9.582	0.000	0.000	0.000	0.000	0.000	0.000
IF	2256.500	4.596	0.000	9.583	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2265.500	4.236	0.000	9.583	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2282.500	4.370	0.000	9.584	0.000	0.000	0.000	0.000	0.007	0.000
IF	2299.000	4.469	0.000	9.584	0.000	0.000	0.000	0.000	0.014	0.000
IF	2306.500	4.698	0.000	9.584	0.000	0.000	0.000	0.000	0.014	0.000
IF	2313.000	4.665	0.000	9.585	0.000	0.000	0.000	0.000	-0.039	0.000
IF	2320.000	4.173	0.000	9.585	0.000	0.000	0.000	0.000	-0.051	0.000
IF	2326.000	4.009	0.000	9.585	0.000	0.000	0.000	0.000	-0.049	0.000

IF	2334.000	3.484	0.000	9.585	0.000	0.000	0.000	0.000	0.019	0.000
IF	2345.000	4.367	0.000	9.586	0.000	0.000	0.000	0.000	0.054	0.000
IF	2353.500	4.531	0.000	9.586	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2361.000	4.268	0.000	9.586	0.000	0.000	0.000	0.000	-0.027	0.000
IF	2370.500	4.071	0.000	9.586	0.000	0.000	0.000	0.000	-0.030	0.000
IF	2379.500	3.711	0.000	9.587	0.000	0.000	0.000	0.000	-0.029	0.000
IF	2388.500	3.547	0.000	9.587	0.000	0.000	0.000	0.000	0.014	0.000
IF	2398.500	3.973	0.000	9.587	0.000	0.000	0.000	0.000	0.023	0.000
IF	2405.500	3.940	0.000	9.587	0.000	0.000	0.000	0.000	-0.005	0.000
IF	2412.500	3.908	0.000	9.588	0.000	0.000	0.000	0.000	-0.024	0.000
IF	2422.000	3.547	0.000	9.588	0.000	0.000	0.000	0.000	-0.006	0.000
IF	2428.500	3.809	0.000	9.588	0.000	0.000	0.000	0.000	-0.069	0.000
IF	2439.500	2.333	0.000	9.589	0.000	0.000	0.000	0.000	-0.043	0.000
IF	2446.000	3.055	0.000	9.589	0.000	0.000	0.000	0.000	0.061	0.000
IF	2453.500	3.186	0.000	9.589	0.000	0.000	0.000	0.000	0.027	0.000
IF	2460.500	3.448	0.000	9.589	0.000	0.000	0.000	0.000	0.026	0.000
IF	2466.000	3.514	0.000	9.589	0.000	0.000	0.000	0.000	0.059	0.000
IF	2471.000	4.071	0.000	9.589	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2478.000	3.481	0.000	9.590	0.000	0.000	0.000	0.000	-0.004	0.000
IF	2487.500	4.006	0.000	9.590	0.000	0.000	0.000	0.000	0.027	0.000
IF	2495.000	3.940	0.000	9.590	0.000	0.000	0.000	0.000	0.000	0.000
IF	2502.000	4.006	0.000	9.590	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2510.000	3.842	0.000	9.590	0.000	0.000	0.000	0.000	-0.139	0.000
IF	2518.000	1.775	0.000	9.591	0.000	0.000	0.000	0.000	-0.038	0.000
IF	2525.500	3.251	0.000	9.591	0.000	0.000	0.000	0.000	0.115	0.000
IF	2532.500	3.448	0.000	9.591	0.000	0.000	0.000	0.000	0.038	0.000
IF	2541.000	3.845	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2549.500	3.419	0.000	9.592	0.000	0.000	0.000	0.000	-0.031	0.000
IF	2557.000	3.353	0.000	9.592	0.000	0.000	0.000	0.000	0.004	0.000
IF	2565.500	3.481	0.000	9.592	0.000	0.000	0.000	0.000	0.000	0.000
IF	2575.500	3.350	0.000	9.592	0.000	0.000	0.000	0.000	0.028	0.000
IF	2586.500	4.071	0.000	9.592	0.000	0.000	0.000	0.000	0.032	0.000
IF	2593.000	3.908	0.000	9.592	0.000	0.000	0.000	0.000	-0.062	0.000
IF	2596.000	3.481	0.000	9.592	0.000	0.000	0.000	0.000	-0.036	0.000
OF	2825.000	-4.342	0.000	9.595	0.000	0.000	0.000	0.000	-0.034	0.000
OF	2826.000	-4.342	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2837.000	-4.341	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2838.000	-4.341	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2849.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2850.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2861.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2862.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2873.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2874.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2885.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2886.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2897.000	-4.338	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2898.000	-4.338	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2909.000	-4.338	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2910.000	-4.337	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2921.000	-4.337	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2922.000	-4.337	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2933.000	-4.336	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
OF	2934.000	-4.336	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2945.000	-4.336	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2946.000	-4.336	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2957.000	-4.335	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2958.000	-4.335	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2969.000	-4.335	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2970.000	-4.334	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2981.000	-4.334	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2982.000	-4.334	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2993.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	2994.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	3005.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	3006.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
OF	3017.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
OF	3018.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
OF	3066.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
OF	3067.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.020	0.000
OF	3078.000	-4.090	0.000	9.597	0.000	0.000	0.000	0.000	0.022	0.000
OF	3079.000	-4.068	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
OF	3090.000	-3.814	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
OF	3091.000	-3.791	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
OF	3102.000	-3.538	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
OF	3103.000	-3.515	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
OF	3115.000	-3.239	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
OF	3126.000	-2.986	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
OF	3135.000	-2.779	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
OF	3142.000	-2.618	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
OF	3153.000	-2.365	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
OF	3223.000	-0.754	0.000	9.600	0.000	0.000	0.000	0.000	0.071	0.000
IF	3256.000	4.948	0.000	9.600	0.000	0.000	0.000	0.000	0.161	0.000
IF	3259.500	5.111	0.000	9.600	0.000	0.000	0.000	0.000	-0.044	0.000
IF	3264.000	4.593	0.000	9.600	0.000	0.000	0.000	0.000	0.000	0.000
IF	3267.500	5.111	0.000	9.600	0.000	0.000	0.000	0.000	-0.045	0.000
IF	3273.500	4.167	0.000	9.601	0.000	0.000	0.000	0.000	-0.033	0.000
IF	3290.000	4.364	0.000	9.601	0.000	0.000	0.000	0.000	0.030	0.000
IF	3309.000	5.236	0.000	9.601	0.000	0.000	0.000	0.000	0.013	0.000
IF	3311.000	4.626	0.000	9.601	0.000	0.000	0.000	0.000	-0.095	0.000
IF	3321.000	4.101	0.000	9.602	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3330.000	4.432	0.000	9.602	0.000	0.000	0.000	0.000	0.042	0.000
IF	3334.500	4.662	0.000	9.602	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3344.500	4.367	0.000	9.602	0.000	0.000	0.000	0.000	-0.006	0.000
IF	3355.000	4.531	0.000	9.602	0.000	0.000	0.000	0.000	0.031	0.000
IF	3361.500	4.892	0.000	9.602	0.000	0.000	0.000	0.000	0.027	0.000
IF	3366.000	4.826	0.000	9.603	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3369.000	4.859	0.000	9.603	0.000	0.000	0.000	0.000	-0.075	0.000
IF	3373.000	4.301	0.000	9.603	0.000	0.000	0.000	0.000	-0.073	0.000
IF	3378.000	4.203	0.000	9.603	0.000	0.000	0.000	0.000	-0.008	0.000
IF	3389.500	4.170	0.000	9.603	0.000	0.000	0.000	0.000	0.004	0.000
IF	3394.000	4.268	0.000	9.603	0.000	0.000	0.000	0.000	-0.033	0.000

IF	3399.500	3.842	0.000	9.603	0.000	0.000	0.000	0.000	-0.059	0.000
IF	3404.000	3.678	0.000	9.604	0.000	0.000	0.000	0.000	-0.038	0.000
IF	3409.000	3.481	0.000	9.604	0.000	0.000	0.000	0.000	0.006	0.000
IF	3420.000	3.773	0.000	9.604	0.000	0.000	0.000	0.000	0.042	0.000
IF	3424.500	4.134	0.000	9.604	0.000	0.000	0.000	0.000	0.021	0.000
IF	3429.500	3.970	0.000	9.604	0.000	0.000	0.000	0.000	-0.034	0.000
IF	3438.000	3.674	0.000	9.604	0.000	0.000	0.000	0.000	0.090	0.000
IF	3447.000	5.541	0.000	9.604	0.000	0.000	0.000	0.000	0.030	0.000
IF	3461.000	4.364	0.000	9.605	0.000	0.000	0.000	0.000	-0.064	0.000
IF	3470.000	4.068	0.000	9.605	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3483.500	4.134	0.000	9.605	0.000	0.000	0.000	0.000	0.002	0.000
IF	3492.500	4.101	0.000	9.606	0.000	0.000	0.000	0.000	-0.006	0.000
IF	3500.000	4.035	0.000	9.606	0.000	0.000	0.000	0.000	0.003	0.000
IF	3504.000	4.134	0.000	9.606	0.000	0.000	0.000	0.000	-0.018	0.000
IF	3509.000	3.871	0.000	9.606	0.000	0.000	0.000	0.000	0.003	0.000
IF	3515.000	4.167	0.000	9.606	0.000	0.000	0.000	0.000	0.023	0.000
IF	3520.500	4.134	0.000	9.606	0.000	0.000	0.000	0.000	0.005	0.000
IF	3527.500	4.232	0.000	9.606	0.000	0.000	0.000	0.000	0.011	0.000
IF	3532.000	4.265	0.000	9.606	0.000	0.000	0.000	0.000	-0.012	0.000
IF	3536.000	4.134	0.000	9.606	0.000	0.000	0.000	0.000	-0.034	0.000
IF	3543.500	3.871	0.000	9.606	0.000	0.000	0.000	0.000	0.016	0.000
IF	3550.000	4.364	0.000	9.606	0.000	0.000	0.000	0.000	0.005	0.000
IF	3557.000	3.937	0.000	9.606	0.000	0.000	0.000	0.000	-0.045	0.000
IF	3565.500	3.674	0.000	9.606	0.000	0.000	0.000	0.000	0.004	0.000
IF	3574.000	4.003	0.000	9.606	0.000	0.000	0.000	0.000	0.027	0.000
IF	3584.000	4.167	0.000	9.606	0.000	0.000	0.000	0.000	0.002	0.000
IF	3591.500	4.039	0.000	9.606	0.000	0.000	0.000	0.000	0.013	0.000
IF	3596.500	4.334	0.000	9.606	0.000	0.000	0.000	0.000	0.023	0.000
IF	3607.000	4.400	0.000	9.606	0.000	0.000	0.000	0.000	-0.014	0.000
IF	3617.000	4.039	0.000	9.607	0.000	0.000	0.000	0.000	0.016	0.000
IF	3623.500	4.662	0.000	9.607	0.000	0.000	0.000	0.000	0.034	0.000
IF	3632.500	4.560	0.000	9.607	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3639.500	4.429	0.000	9.607	0.000	0.000	0.000	0.000	0.006	0.000
IF	3644.000	4.626	0.000	9.607	0.000	0.000	0.000	0.000	0.004	0.000
IF	3647.000	4.462	0.000	9.607	0.000	0.000	0.000	0.000	-0.022	0.000
IF	3653.000	4.429	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
IF	3661.000	4.462	0.000	9.608	0.000	0.000	0.000	0.000	-0.012	0.000
IF	3667.000	4.265	0.000	9.608	0.000	0.000	0.000	0.000	0.009	0.000
IF	3671.500	4.560	0.000	9.608	0.000	0.000	0.000	0.000	0.047	0.000
IF	3676.000	4.692	0.000	9.608	0.000	0.000	0.000	0.000	-0.080	0.000
IF	3683.000	3.642	0.000	9.608	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3688.500	4.528	0.000	9.608	0.000	0.000	0.000	0.000	0.116	0.000
IF	3693.500	4.856	0.000	9.608	0.000	0.000	0.000	0.000	0.027	0.000
IF	3699.500	4.823	0.000	9.608	0.000	0.000	0.000	0.000	0.006	0.000
IF	3704.000	4.921	0.000	9.608	0.000	0.000	0.000	0.000	0.000	0.000
IF	3709.000	4.823	0.000	9.609	0.000	0.000	0.000	0.000	-0.022	0.000
IF	3714.500	4.692	0.000	9.609	0.000	0.000	0.000	0.000	-0.028	0.000
IF	3719.500	4.528	0.000	9.609	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3725.000	4.560	0.000	9.609	0.000	0.000	0.000	0.000	0.030	0.000
IF	3732.500	4.921	0.000	9.609	0.000	0.000	0.000	0.000	0.066	0.000
IF	3735.000	5.216	0.000	9.609	0.000	0.000	0.000	0.000	0.019	0.000
IF	3739.500	5.052	0.000	9.609	0.000	0.000	0.000	0.000	0.015	0.000
IF	3744.000	5.348	0.000	9.609	0.000	0.000	0.000	0.000	-0.022	0.000
IF	3747.000	4.889	0.000	9.609	0.000	0.000	0.000	0.000	-0.017	0.000
IF	3753.500	5.184	0.000	9.609	0.000	0.000	0.000	0.000	0.092	0.000
IF	3760.500	6.135	0.000	9.609	0.000	0.000	0.000	0.000	0.069	0.000
IF	3764.000	5.905	0.000	9.609	0.000	0.000	0.000	0.000	-0.066	0.000
IF	3768.500	5.610	0.000	9.609	0.000	0.000	0.000	0.000	0.011	0.000
IF	3778.500	6.070	0.000	9.609	0.000	0.000	0.000	0.000	-0.017	0.000
IF	3786.000	5.315	0.000	9.609	0.000	0.000	0.000	0.000	0.010	0.000
IF	3794.500	6.234	0.000	9.609	0.000	0.000	0.000	0.000	0.038	0.000
IF	3806.000	6.070	0.000	9.609	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3810.000	6.198	0.000	9.609	0.000	0.000	0.000	0.000	0.048	0.000
IF	3815.500	6.529	0.000	9.609	0.000	0.000	0.000	0.000	0.019	0.000
IF	3824.000	6.460	0.000	9.609	0.000	0.000	0.000	0.000	-0.033	0.000
IF	3834.500	5.902	0.000	9.609	0.000	0.000	0.000	0.000	0.008	0.000
IF	3847.000	6.654	0.000	9.609	0.000	0.000	0.000	0.000	0.016	0.000
IF	3863.500	6.361	0.000	9.609	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3879.500	6.230	0.000	9.609	0.000	0.000	0.000	0.000	0.001	0.000
IF	3890.000	6.398	0.000	9.609	0.000	0.000	0.000	0.000	0.030	0.000
IF	3906.000	7.021	0.000	9.609	0.000	0.000	0.000	0.000	0.007	0.000
IF	3928.000	6.663	0.000	9.609	0.000	0.000	0.000	0.000	0.006	0.000
IF	3955.500	7.316	0.000	9.609	0.000	0.000	0.000	0.000	0.036	0.000
IF	3974.000	8.337	0.000	9.609	0.000	0.000	0.000	0.000	0.018	0.000
IF	3984.000	7.841	0.000	9.609	0.000	0.000	0.000	0.000	0.001	0.000
IF	4000.000	8.366	0.000	9.609	0.000	0.000	0.000	0.000	0.035	0.000
IF	4012.500	8.829	0.000	9.609	0.000	0.000	0.000	0.000	-0.004	0.000
IF	4027.000	8.268	0.000	9.609	0.000	0.000	0.000	0.000	-0.007	0.000
IF	4075.000	8.402	0.000	9.609	0.000	0.000	0.000	0.000	0.008	0.000
IF	4091.000	8.763	0.000	9.609	0.000	0.000	0.000	0.000	0.022	0.000
IF	4106.000	9.088	0.000	9.609	0.000	0.000	0.000	0.000	0.004	0.000
IF	4123.500	8.891	0.000	9.609	0.000	0.000	0.000	0.000	0.000	0.000
IF	4139.000	9.091	0.000	9.609	0.000	0.000	0.000	0.000	0.009	0.000
IF	4156.000	9.186	0.000	9.609	0.000	0.000	0.000	0.000	0.015	0.000
IF	4172.700	9.609	0.000	9.609	0.000	0.000	0.000	0.000	0.025	0.000
AS	4174.800	9.609	0.000	9.609	0.000	0.000	0.000	0.000	-0.004	0.000
IF	4191.000	9.550	0.000	9.609	0.000	0.000	0.000	0.000	0.000	0.000
IF	4193.100	9.609	0.000	9.609	0.000	0.000	0.000	0.000	0.028	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-6.528	1.000	1.000	9.035	11.296	12.800	56.140	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.000	-6.445	0.000	9.035	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000	-6.417	0.000	9.035	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.000	-6.279	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	10.000	-6.252	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	15.000	-6.114	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	16.000	-6.086	0.000	9.036	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	22.000	-5.920	0.000	9.037	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	27.000	-5.782	0.000	9.037	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	28.000	-5.755	0.000	9.038	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.000	-5.451	0.000	9.039	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	40.000	-5.424	0.000	9.039	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	51.000	-5.120	0.000	9.040	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.000	-5.092	0.000	9.040	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	61.000	-4.847	0.000	9.041	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.000	-4.840	0.000	9.041	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	72.200	-4.765	0.000	9.035	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.500	-4.741	0.000	9.036	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	78.700	-4.715	0.000	9.036	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-4.684	0.000	9.037	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.300	-4.652	0.000	9.038	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.600	-4.620	0.000	9.039	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.900	-4.588	0.000	9.040	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.100	-4.556	0.000	9.041	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.400	-4.524	0.000	9.042	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.700	-4.492	0.000	9.043	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-4.460	0.000	9.044	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.300	-4.428	0.000	9.045	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-4.396	0.000	9.046	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-4.364	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-4.332	0.000	9.048	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-4.300	0.000	9.049	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-4.268	0.000	9.050	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-4.236	0.000	9.051	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-4.204	0.000	9.052	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-4.172	0.000	9.053	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-4.140	0.000	9.054	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-4.108	0.000	9.055	0.000	0.000	0.000	0.000	0.010	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	144.400	-4.076	0.000	9.056	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	147.600	-4.038	0.000	9.057	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	150.900	-3.971	0.000	9.058	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	154.200	-3.902	0.000	9.059	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	157.500	-3.833	0.000	9.060	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	160.800	-3.764	0.000	9.061	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	164.000	-3.695	0.000	9.063	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	167.300	-3.626	0.000	9.064	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	170.600	-3.558	0.000	9.065	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	173.900	-3.489	0.000	9.066	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	177.200	-3.420	0.000	9.067	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	180.400	-3.351	0.000	9.068	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	183.700	-3.282	0.000	9.069	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	187.000	-3.214	0.000	9.070	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	190.300	-3.145	0.000	9.072	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	193.600	-3.076	0.000	9.073	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	196.800	-3.007	0.000	9.074	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	200.100	-2.938	0.000	9.076	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	203.400	-2.869	0.000	9.077	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	206.700	-2.800	0.000	9.079	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	210.000	-2.732	0.000	9.080	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	213.300	-2.663	0.000	9.082	0.000	0.000	0.000	0.000	0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	216.500	-2.592	0.000	9.083	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	219.800	-2.519	0.000	9.085	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	223.100	-2.445	0.000	9.087	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	226.400	-2.371	0.000	9.088	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	229.700	-2.297	0.000	9.090	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	232.900	-2.257	0.000	9.092	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	236.200	-2.222	0.000	9.094	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	239.500	-2.187	0.000	9.096	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	242.800	-2.152	0.000	9.098	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	246.100	-2.110	0.000	9.101	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	249.300	-2.063	0.000	9.102	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	252.600	-2.017	0.000	9.104	0.000	0.000	0.000	0.000	0.014	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.900	-1.970	0.000	9.106	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-1.923	0.000	9.108	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-1.877	0.000	9.110	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-1.830	0.000	9.111	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-1.783	0.000	9.113	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-1.737	0.000	9.115	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-1.690	0.000	9.117	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-1.643	0.000	9.118	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-1.597	0.000	9.120	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-1.550	0.000	9.122	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-1.503	0.000	9.124	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-1.457	0.000	9.126	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-1.410	0.000	9.128	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-1.363	0.000	9.130	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-1.316	0.000	9.132	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-1.269	0.000	9.133	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-1.205	0.000	9.135	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-1.138	0.000	9.136	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-1.072	0.000	9.138	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-1.005	0.000	9.140	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-0.938	0.000	9.142	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-0.872	0.000	9.143	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-0.805	0.000	9.145	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-0.738	0.000	9.147	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-0.671	0.000	9.149	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-0.605	0.000	9.150	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-0.538	0.000	9.152	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-0.471	0.000	9.154	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.800	-0.405	0.000	9.156	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-0.338	0.000	9.158	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-0.271	0.000	9.160	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	357.600	-0.204	0.000	9.162	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-0.138	0.000	9.164	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-0.068	0.000	9.166	0.000	0.000	0.000	0.000	0.081	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	367.500	0.400	0.000	9.163	0.000	0.000	0.000	0.000	0.132	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	370.700	0.790	0.000	9.161	0.000	0.000	0.000	0.000	0.068	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	374.000	0.844	0.000	9.166	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	377.300	0.951	0.000	9.169	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	380.600	0.938	0.000	9.175	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	383.900	0.856	0.000	9.181	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	387.100	0.765	0.000	9.186	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	390.400	0.671	0.000	9.191	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	393.700	0.625	0.000	9.195	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	397.000	0.757	0.000	9.196	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	400.300	0.888	0.000	9.198	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	403.500	0.986	0.000	9.200	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	406.800	1.044	0.000	9.203	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	410.100	1.075	0.000	9.207	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	413.400	1.007	0.000	9.211	0.000	0.000	0.000	0.000	-0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	416.700	0.811	0.000	9.216	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	419.900	0.783	0.000	9.219	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	423.200	0.811	0.000	9.221	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	426.500	0.933	0.000	9.222	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	429.800	1.165	0.000	9.221	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	433.100	1.302	0.000	9.223	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	436.400	1.335	0.000	9.225	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	439.600	1.305	0.000	9.229	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	442.900	1.210	0.000	9.232	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	446.200	1.116	0.000	9.236	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	449.500	1.125	0.000	9.238	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	452.800	1.168	0.000	9.240	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	456.000	1.385	0.000	9.239	0.000	0.000	0.000	0.000	0.097	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	459.300	1.800	0.000	9.237	0.000	0.000	0.000	0.000	0.110	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	462.600	2.113	0.000	9.236	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	465.900	1.969	0.000	9.242	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	469.200	1.910	0.000	9.246	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	472.400	2.006	0.000	9.248	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	475.700	2.162	0.000	9.250	0.000	0.000	0.000	0.000	0.050	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	479.000	2.336	0.000	9.251	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	482.300	2.504	0.000	9.253	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	485.600	2.520	0.000	9.258	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	488.800	2.604	0.000	9.260	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	492.100	2.881	0.000	9.261	0.000	0.000	0.000	0.000	0.084	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	495.400	3.158	0.000	9.262	0.000	0.000	0.000	0.000	0.083	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	498.700	3.428	0.000	9.264	0.000	0.000	0.000	0.000	0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	502.000	3.583	0.000	9.269	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	505.200	3.738	0.000	9.274	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	508.500	3.800	0.000	9.282	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	511.800	3.657	0.000	9.292	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	515.100	3.662	0.000	9.298	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	518.400	3.827	0.000	9.302	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	521.700	3.992	0.000	9.306	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	524.900	4.222	0.000	9.309	0.000	0.000	0.000	0.000	0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	528.200	4.460	0.000	9.312	0.000	0.000	0.000	0.000	0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	531.500	4.698	0.000	9.317	0.000	0.000	0.000	0.000	0.098	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	534.800	5.110	0.000	9.321	0.000	0.000	0.000	0.000	0.110	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	538.100	5.423	0.000	9.329	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	541.300	5.247	0.000	9.349	0.000	0.000	0.000	0.000	-0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	544.600	5.193	0.000	9.363	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	547.900	5.264	0.000	9.373	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	551.200	5.328	0.000	9.381	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	554.500	5.448	0.000	9.388	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	557.700	5.604	0.000	9.395	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	561.000	5.597	0.000	9.405	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	564.300	5.622	0.000	9.413	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	567.600	5.717	0.000	9.419	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	570.900	5.778	0.000	9.425	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	574.100	5.987	0.000	9.430	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	577.400	5.902	0.000	9.439	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	580.700	5.764	0.000	9.448	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	584.000	5.897	0.000	9.451	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	587.300	5.986	0.000	9.455	0.000	0.000	0.000	0.000	0.017	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	590.500	6.006	0.000	9.460	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	593.800	6.027	0.000	9.465	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	597.100	6.059	0.000	9.469	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	600.400	6.141	0.000	9.472	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	603.700	6.302	0.000	9.474	0.000	0.000	0.000	0.000	0.082	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	607.000	6.684	0.000	9.474	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	610.200	6.569	0.000	9.485	0.000	0.000	0.000	0.000	-0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	613.500	6.454	0.000	9.493	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	616.800	6.621	0.000	9.496	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	620.100	6.836	0.000	9.498	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	623.400	7.051	0.000	9.502	0.000	0.000	0.000	0.000	0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	626.600	7.335	0.000	9.507	0.000	0.000	0.000	0.000	0.088	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	629.900	7.622	0.000	9.516	0.000	0.000	0.000	0.000	0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	633.200	7.741	0.000	9.533	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	636.500	7.777	0.000	9.552	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	639.800	7.973	0.000	9.566	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	643.000	8.201	0.000	9.583	0.000	0.000	0.000	0.000	0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	646.300	8.473	0.000	9.616	0.000	0.000	0.000	0.000	0.145	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	649.600	9.155	0.000	9.715	0.000	0.000	0.000	0.000	0.207	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	652.300	9.715	0.000	9.715	0.000	0.000	0.000	0.000	0.207	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	711.900	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.952	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	712.500	8.996	0.000	9.567	0.000	0.000	0.000	0.000	-0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	719.000	8.701	0.000	9.567	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	724.500	9.062	0.000	9.567	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	729.500	8.963	0.000	9.567	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	733.000	8.898	0.000	9.567	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	737.500	8.832	0.000	9.567	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	746.400	9.567	0.000	9.567	0.000	0.000	0.000	0.000	0.083	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	747.700	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	757.000	8.832	0.000	9.567	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	764.500	9.291	0.000	9.567	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	770.000	9.259	0.000	9.567	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	776.000	9.423	0.000	9.567	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	785.500	8.734	0.000	9.567	0.000	0.000	0.000	0.000	-0.015	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	794.000	9.160	0.000	9.567	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	798.000	8.766	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	802.500	8.963	0.000	9.567	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	810.500	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	817.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	823.500	8.766	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	836.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	846.500	8.701	0.000	9.567	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	850.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	853.500	8.537	0.000	9.567	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	859.000	8.110	0.000	9.567	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	868.500	8.799	0.000	9.567	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	880.500	8.602	0.000	9.567	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	888.000	8.307	0.000	9.567	0.000	0.000	0.000	0.000	-0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	890.000	8.045	0.000	9.567	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	893.000	8.274	0.000	9.567	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	900.000	8.471	0.000	9.567	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	909.500	7.913	0.000	9.567	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	919.000	8.241	0.000	9.567	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	924.500	8.077	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	927.000	8.241	0.000	9.567	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	931.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	935.500	8.274	0.000	9.567	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	944.500	7.943	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	960.500	8.373	0.000	9.567	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	972.500	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	979.500	8.602	0.000	9.567	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	984.500	8.635	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	988.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	993.000	8.438	0.000	9.567	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	998.500	8.340	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1004.000	8.438	0.000	9.567	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1011.000	8.307	0.000	9.567	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1018.500	8.668	0.000	9.567	0.000	0.000	0.000	0.000	0.010	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1024.000	8.438	0.000	9.567	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1029.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1035.000	8.176	0.000	9.567	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1042.500	8.734	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1050.500	8.241	0.000	9.567	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1056.500	8.274	0.000	9.567	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1063.500	8.471	0.000	9.567	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1072.000	8.406	0.000	9.567	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1080.000	8.668	0.000	9.567	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1086.000	8.701	0.000	9.567	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1092.000	8.766	0.000	9.567	0.000	0.000	0.000	0.000	-0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1106.000	7.913	0.000	9.567	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1118.500	9.150	0.000	9.567	0.000	0.000	0.000	0.000	0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1124.000	8.921	0.000	9.567	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1137.500	9.216	0.000	9.567	0.000	0.000	0.000	0.000	-0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1149.500	7.618	0.000	9.567	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1158.500	9.390	0.000	9.567	0.000	0.000	0.000	0.000	0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1172.500	8.766	0.000	9.567	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1183.500	8.763	0.000	9.567	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1188.900	9.567	0.000	9.567	0.000	0.000	0.000	0.000	0.149	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1190.100	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.147	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1192.000	9.288	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1198.600	9.567	0.000	9.567	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1199.400	9.567	0.000	9.567	0.000	0.000	0.000	0.000	-0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1207.000	9.255	0.000	9.567	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1216.500	9.419	0.000	9.567	0.000	0.000	0.000	0.000	-0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1226.500	8.698	0.000	9.567	0.000	0.000	0.000	0.000	-0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1231.000	9.029	0.000	9.567	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1236.500	8.799	0.000	9.567	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1241.500	9.062	0.000	9.567	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1248.500	9.259	0.000	9.567	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1261.500	9.029	0.000	9.567	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1272.500	9.062	0.000	9.567	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1284.500	9.357	0.000	9.567	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1299.500	9.055	0.000	9.566	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1306.000	9.383	0.000	9.566	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1328.000	9.062	0.000	9.566	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1350.000	9.314	0.000	9.566	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1363.000	8.373	0.000	9.565	0.000	0.000	0.000	0.000	-0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1374.000	8.209	0.000	9.565	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1379.500	8.734	0.000	9.565	0.000	0.000	0.000	0.000	0.090	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1386.000	9.291	0.000	9.565	0.000	0.000	0.000	0.000	-0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1391.500	8.209	0.000	9.565	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1400.000	8.668	0.000	9.564	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1418.500	9.259	0.000	9.564	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1431.500	8.435	0.000	9.563	0.000	0.000	0.000	0.000	-0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1436.000	7.910	0.000	9.563	0.000	0.000	0.000	0.000	-0.077	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1443.000	7.549	0.000	9.563	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1455.500	7.320	0.000	9.563	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1466.500	7.484	0.000	9.562	0.000	0.000	0.000	0.000	-0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1480.000	5.909	0.000	9.562	0.000	0.000	0.000	0.000	-0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1492.000	6.463	0.000	9.562	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1496.000	6.437	0.000	9.561	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1501.000	6.696	0.000	9.561	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1504.000	6.568	0.000	9.561	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1513.000	7.290	0.000	9.561	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1523.500	6.240	0.000	9.561	0.000	0.000	0.000	0.000	-0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1530.500	6.437	0.000	9.561	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1538.000	6.273	0.000	9.561	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1547.500	6.929	0.000	9.561	0.000	0.000	0.000	0.000	0.094	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1554.500	7.815	0.000	9.562	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1560.500	6.962	0.000	9.562	0.000	0.000	0.000	0.000	-0.090	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1568.000	6.601	0.000	9.562	0.000	0.000	0.000	0.000	0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1573.000	7.946	0.000	9.562	0.000	0.000	0.000	0.000	0.148	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1581.500	8.602	0.000	9.562	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1592.500	7.979	0.000	9.562	0.000	0.000	0.000	0.000	-0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1604.000	6.798	0.000	9.562	0.000	0.000	0.000	0.000	-0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1616.500	6.273	0.000	9.562	0.000	0.000	0.000	0.000	-0.054	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1626.500	5.584	0.000	9.562	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1635.000	7.093	0.000	9.562	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1641.500	6.109	0.000	9.562	0.000	0.000	0.000	0.000	-0.108	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1648.000	5.682	0.000	9.562	0.000	0.000	0.000	0.000	0.097	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1653.000	7.221	0.000	9.562	0.000	0.000	0.000	0.000	0.074	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1662.500	6.762	0.000	9.563	0.000	0.000	0.000	0.000	-0.056	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1677.500	5.843	0.000	9.563	0.000	0.000	0.000	0.000	-0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1685.000	5.876	0.000	9.563	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1691.000	6.171	0.000	9.563	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1698.500	6.401	0.000	9.563	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1703.000	5.974	0.000	9.563	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1708.000	6.171	0.000	9.563	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1718.000	5.909	0.000	9.563	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1727.500	5.450	0.000	9.564	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1735.500	5.482	0.000	9.564	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1741.500	5.581	0.000	9.564	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1746.500	5.679	0.000	9.564	0.000	0.000	0.000	0.000	-0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1751.500	5.318	0.000	9.564	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1755.500	5.384	0.000	9.565	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1759.000	5.617	0.000	9.565	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1766.500	5.453	0.000	9.565	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1778.000	5.387	0.000	9.566	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1785.000	5.617	0.000	9.566	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1790.000	5.682	0.000	9.566	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1796.500	5.518	0.000	9.566	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1802.000	5.289	0.000	9.566	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1806.000	5.157	0.000	9.567	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1809.500	5.256	0.000	9.567	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1815.500	5.223	0.000	9.567	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1823.000	4.797	0.000	9.567	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1829.000	4.731	0.000	9.568	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1835.000	4.665	0.000	9.568	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1842.500	4.567	0.000	9.568	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1850.000	4.600	0.000	9.568	0.000	0.000	0.000	0.000	0.023	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1856.500	4.895	0.000	9.568	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1861.000	4.731	0.000	9.569	0.000	0.000	0.000	0.000	-0.083	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1864.000	4.272	0.000	9.569	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1869.000	4.436	0.000	9.569	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1876.000	4.501	0.000	9.569	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1882.500	4.665	0.000	9.569	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1892.000	4.203	0.000	9.570	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1897.000	4.465	0.000	9.570	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1904.500	4.301	0.000	9.570	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1911.000	4.531	0.000	9.570	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1920.000	4.236	0.000	9.571	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1923.500	4.334	0.000	9.571	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1931.000	3.842	0.000	9.571	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1938.000	3.973	0.000	9.571	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1946.500	4.039	0.000	9.571	0.000	0.000	0.000	0.000	-0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1958.000	2.726	0.000	9.571	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1967.000	3.382	0.000	9.572	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1972.500	3.186	0.000	9.572	0.000	0.000	0.000	0.000	0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1979.000	3.940	0.000	9.572	0.000	0.000	0.000	0.000	0.114	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1984.000	4.498	0.000	9.572	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1990.000	3.579	0.000	9.572	0.000	0.000	0.000	0.000	-0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2005.000	3.579	0.000	9.573	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2009.500	3.940	0.000	9.573	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2016.500	4.173	0.000	9.573	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2022.000	3.944	0.000	9.573	0.000	0.000	0.000	0.000	-0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2026.500	4.009	0.000	9.573	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2035.500	4.665	0.000	9.574	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2042.500	3.812	0.000	9.574	0.000	0.000	0.000	0.000	-0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2048.000	4.173	0.000	9.574	0.000	0.000	0.000	0.000	0.089	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2055.000	4.928	0.000	9.574	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2064.500	4.534	0.000	9.575	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2078.500	4.206	0.000	9.575	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2092.500	4.665	0.000	9.576	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2103.000	4.272	0.000	9.576	0.000	0.000	0.000	0.000	-0.009	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2114.500	4.465	0.000	9.576	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2126.500	4.367	0.000	9.577	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2138.000	4.695	0.000	9.577	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2147.500	4.170	0.000	9.578	0.000	0.000	0.000	0.000	-0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2160.000	4.432	0.000	9.578	0.000	0.000	0.000	0.000	0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2174.000	4.301	0.000	9.579	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2182.500	4.498	0.000	9.579	0.000	0.000	0.000	0.000	0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2191.500	4.596	0.000	9.580	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2205.000	4.695	0.000	9.580	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2223.000	4.137	0.000	9.581	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2236.000	4.629	0.000	9.582	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2242.500	4.596	0.000	9.582	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2249.500	4.629	0.000	9.582	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2256.500	4.596	0.000	9.583	0.000	0.000	0.000	0.000	-0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2265.500	4.236	0.000	9.583	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2282.500	4.370	0.000	9.584	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2299.000	4.469	0.000	9.584	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2306.500	4.698	0.000	9.584	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2313.000	4.665	0.000	9.585	0.000	0.000	0.000	0.000	-0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2320.000	4.173	0.000	9.585	0.000	0.000	0.000	0.000	-0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2326.000	4.009	0.000	9.585	0.000	0.000	0.000	0.000	-0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2334.000	3.484	0.000	9.585	0.000	0.000	0.000	0.000	0.019	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2345.000	4.367	0.000	9.586	0.000	0.000	0.000	0.000	0.054	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2353.500	4.531	0.000	9.586	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2361.000	4.268	0.000	9.586	0.000	0.000	0.000	0.000	-0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2370.500	4.071	0.000	9.586	0.000	0.000	0.000	0.000	-0.030	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2379.500	3.711	0.000	9.587	0.000	0.000	0.000	0.000	-0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2388.500	3.547	0.000	9.587	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2398.500	3.973	0.000	9.587	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2405.500	3.940	0.000	9.587	0.000	0.000	0.000	0.000	-0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2412.500	3.908	0.000	9.588	0.000	0.000	0.000	0.000	-0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2422.000	3.547	0.000	9.588	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2428.500	3.809	0.000	9.588	0.000	0.000	0.000	0.000	-0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2439.500	2.333	0.000	9.589	0.000	0.000	0.000	0.000	-0.043	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2446.000	3.055	0.000	9.589	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2453.500	3.186	0.000	9.589	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2460.500	3.448	0.000	9.589	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2466.000	3.514	0.000	9.589	0.000	0.000	0.000	0.000	0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2471.000	4.071	0.000	9.589	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2478.000	3.481	0.000	9.590	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2487.500	4.006	0.000	9.590	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2495.000	3.940	0.000	9.590	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2502.000	4.006	0.000	9.590	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2510.000	3.842	0.000	9.590	0.000	0.000	0.000	0.000	-0.139	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2518.000	1.775	0.000	9.591	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2525.500	3.251	0.000	9.591	0.000	0.000	0.000	0.000	0.115	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2532.500	3.448	0.000	9.591	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2541.000	3.845	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2549.500	3.419	0.000	9.592	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2557.000	3.353	0.000	9.592	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2565.500	3.481	0.000	9.592	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2575.500	3.350	0.000	9.592	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2586.500	4.071	0.000	9.592	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2593.000	3.908	0.000	9.592	0.000	0.000	0.000	0.000	-0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2596.000	3.481	0.000	9.592	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2825.000	-4.342	0.000	9.595	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2826.000	-4.342	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2837.000	-4.341	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2838.000	-4.341	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2849.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2850.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2861.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2862.000	-4.340	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2873.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2874.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2885.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2886.000	-4.339	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2897.000	-4.338	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2898.000	-4.338	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2909.000	-4.338	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2910.000	-4.337	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2921.000	-4.337	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2922.000	-4.337	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2933.000	-4.336	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2934.000	-4.336	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2945.000	-4.336	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2946.000	-4.336	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2957.000	-4.335	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2958.000	-4.335	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2969.000	-4.335	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2970.000	-4.334	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2981.000	-4.334	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2982.000	-4.334	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2993.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2994.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3005.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3006.000	-4.333	0.000	9.596	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3017.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3018.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3066.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3067.000	-4.332	0.000	9.597	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3078.000	-4.090	0.000	9.597	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3079.000	-4.068	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3090.000	-3.814	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3091.000	-3.791	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3102.000	-3.538	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3103.000	-3.515	0.000	9.597	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3115.000	-3.239	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3126.000	-2.986	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3135.000	-2.779	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3142.000	-2.618	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3153.000	-2.365	0.000	9.598	0.000	0.000	0.000	0.000	0.023	0.000

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
OF	3223.000	-0.754	0.000	9.600	0.000	0.000	0.000	0.000		0.071	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3256.000	4.948	0.000	9.600	0.000	0.000	0.000	0.000		0.161	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3259.500	5.111	0.000	9.600	0.000	0.000	0.000	0.000		-0.044	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3264.000	4.593	0.000	9.600	0.000	0.000	0.000	0.000		0.000	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3267.500	5.111	0.000	9.600	0.000	0.000	0.000	0.000		-0.045	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3273.500	4.167	0.000	9.601	0.000	0.000	0.000	0.000		-0.033	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3290.000	4.364	0.000	9.601	0.000	0.000	0.000	0.000		0.030	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3309.000	5.236	0.000	9.601	0.000	0.000	0.000	0.000		0.013	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3311.000	4.626	0.000	9.601	0.000	0.000	0.000	0.000		-0.095	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3321.000	4.101	0.000	9.602	0.000	0.000	0.000	0.000		-0.010	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3330.000	4.432	0.000	9.602	0.000	0.000	0.000	0.000		0.042	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3334.500	4.662	0.000	9.602	0.000	0.000	0.000	0.000		-0.004	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3344.500	4.367	0.000	9.602	0.000	0.000	0.000	0.000		-0.006	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3355.000	4.531	0.000	9.602	0.000	0.000	0.000	0.000		0.031	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3361.500	4.892	0.000	9.602	0.000	0.000	0.000	0.000		0.027	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3366.000	4.826	0.000	9.603	0.000	0.000	0.000	0.000		-0.004	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3369.000	4.859	0.000	9.603	0.000	0.000	0.000	0.000		-0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3373.000	4.301	0.000	9.603	0.000	0.000	0.000	0.000		-0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3378.000	4.203	0.000	9.603	0.000	0.000	0.000	0.000		-0.008	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3389.500	4.170	0.000	9.603	0.000	0.000	0.000	0.000		0.004	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3394.000	4.268	0.000	9.603	0.000	0.000	0.000	0.000		-0.033	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3399.500	3.842	0.000	9.603	0.000	0.000	0.000	0.000		-0.059	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3404.000	3.678	0.000	9.604	0.000	0.000	0.000	0.000		-0.038	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3409.000	3.481	0.000	9.604	0.000	0.000	0.000	0.000		0.006	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3420.000	3.773	0.000	9.604	0.000	0.000	0.000	0.000		0.042	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3424.500	4.134	0.000	9.604	0.000	0.000	0.000	0.000		0.021	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3429.500	3.970	0.000	9.604	0.000	0.000	0.000	0.000		-0.034	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3438.000	3.674	0.000	9.604	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3447.000	5.541	0.000	9.604	0.000	0.000	0.000	0.000		0.030	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3461.000	4.364	0.000	9.605	0.000	0.000	0.000	0.000		-0.064	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3470.000	4.068	0.000	9.605	0.000	0.000	0.000	0.000		-0.010	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3483.500	4.134	0.000	9.605	0.000	0.000	0.000	0.000		0.002	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3492.500	4.101	0.000	9.606	0.000	0.000	0.000	0.000		-0.006	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
IF	3500.000	4.035	0.000	9.606	0.000	0.000	0.000	0.000		0.003	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3504.000	4.134	0.000	9.606	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3509.000	3.871	0.000	9.606	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3515.000	4.167	0.000	9.606	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3520.500	4.134	0.000	9.606	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3527.500	4.232	0.000	9.606	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3532.000	4.265	0.000	9.606	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3536.000	4.134	0.000	9.606	0.000	0.000	0.000	0.000	-0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3543.500	3.871	0.000	9.606	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3550.000	4.364	0.000	9.606	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3557.000	3.937	0.000	9.606	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3565.500	3.674	0.000	9.606	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3574.000	4.003	0.000	9.606	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3584.000	4.167	0.000	9.606	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3591.500	4.039	0.000	9.606	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3596.500	4.334	0.000	9.606	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3607.000	4.400	0.000	9.606	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3617.000	4.039	0.000	9.607	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3623.500	4.662	0.000	9.607	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3632.500	4.560	0.000	9.607	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3639.500	4.429	0.000	9.607	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3644.000	4.626	0.000	9.607	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3647.000	4.462	0.000	9.607	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3653.000	4.429	0.000	9.607	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3661.000	4.462	0.000	9.608	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3667.000	4.265	0.000	9.608	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3671.500	4.560	0.000	9.608	0.000	0.000	0.000	0.000	0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3676.000	4.692	0.000	9.608	0.000	0.000	0.000	0.000	-0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3683.000	3.642	0.000	9.608	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3688.500	4.528	0.000	9.608	0.000	0.000	0.000	0.000	0.116	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3693.500	4.856	0.000	9.608	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3699.500	4.823	0.000	9.608	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3704.000	4.921	0.000	9.608	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3709.000	4.823	0.000	9.609	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3714.500	4.692	0.000	9.609	0.000	0.000	0.000	0.000	-0.028	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3719.500	4.528	0.000	9.609	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3725.000	4.560	0.000	9.609	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3732.500	4.921	0.000	9.609	0.000	0.000	0.000	0.000	0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3735.000	5.216	0.000	9.609	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3739.500	5.052	0.000	9.609	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3744.000	5.348	0.000	9.609	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3747.000	4.889	0.000	9.609	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3753.500	5.184	0.000	9.609	0.000	0.000	0.000	0.000	0.092	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3760.500	6.135	0.000	9.609	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3764.000	5.905	0.000	9.609	0.000	0.000	0.000	0.000	-0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3768.500	5.610	0.000	9.609	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3778.500	6.070	0.000	9.609	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3786.000	5.315	0.000	9.609	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3794.500	6.234	0.000	9.609	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3806.000	6.070	0.000	9.609	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3810.000	6.198	0.000	9.609	0.000	0.000	0.000	0.000	0.048	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3815.500	6.529	0.000	9.609	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3824.000	6.460	0.000	9.609	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3834.500	5.902	0.000	9.609	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3847.000	6.654	0.000	9.609	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3863.500	6.361	0.000	9.609	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3879.500	6.230	0.000	9.609	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3890.000	6.398	0.000	9.609	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3906.000	7.021	0.000	9.609	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3928.000	6.663	0.000	9.609	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3955.500	7.316	0.000	9.609	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3974.000	8.337	0.000	9.609	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	3984.000	7.841	0.000	9.609	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4000.000	8.366	0.000	9.609	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4012.500	8.829	0.000	9.609	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4027.000	8.268	0.000	9.609	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4075.000	8.402	0.000	9.609	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4091.000	8.763	0.000	9.609	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	4106.000	9.088	0.000	9.609	0.000	0.000	0.000	0.000	0.004	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4123.500	8.891	0.000	9.609	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4139.000	9.091	0.000	9.609	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4156.000	9.186	0.000	9.609	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4172.700	9.609	0.000	9.609	0.000	0.000	0.000	0.000	0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4174.800	9.609	0.000	9.609	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4191.000	9.550	0.000	9.609	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4193.100	9.609	0.000	9.609	0.000	0.000	0.000	0.000	0.028	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	11.30	12.80	16.94
OF	3.00	11.28	12.80	16.93
OF	4.00	11.28	12.80	16.93
OF	9.00	11.26	12.80	16.91
OF	10.00	11.25	12.80	16.91
OF	15.00	11.23	12.80	16.90
OF	16.00	11.22	12.80	16.89
OF	22.00	11.19	12.80	16.87
OF	27.00	11.17	12.80	16.85
OF	28.00	11.16	12.80	16.85
OF	39.00	11.00	12.80	16.74
OF	40.00	10.98	12.80	16.73
OF	51.00	10.76	12.80	16.57
OF	52.00	10.74	12.80	16.56
OF	61.00	10.56	12.80	16.43
OF	62.00	10.55	12.80	16.43
OF	72.20	10.49	12.80	16.38
OF	75.50	10.47	12.80	16.37
OF	78.70	10.46	12.80	16.35
OF	82.00	10.43	12.80	16.34
OF	85.30	10.41	12.80	16.33
OF	88.60	10.39	12.80	16.31
OF	91.90	10.36	12.80	16.29
OF	95.10	10.34	12.80	16.28
OF	98.40	10.32	12.80	16.26
OF	101.70	10.30	12.80	16.25
OF	105.00	10.27	12.80	16.23
OF	108.30	10.25	12.80	16.22
OF	111.50	10.23	12.80	16.20
OF	114.80	10.20	12.80	16.19
OF	118.10	10.18	12.80	16.17
OF	121.40	10.16	12.80	16.16
OF	124.70	10.13	12.80	16.14
OF	128.00	10.11	12.80	16.13
OF	131.20	10.09	12.80	16.11
OF	134.50	10.07	12.80	16.10
OF	137.80	10.04	12.80	16.08
OF	141.10	10.02	12.80	16.07
OF	144.40	10.00	12.80	16.05
OF	147.60	9.97	12.80	16.04
OF	150.90	9.92	12.80	16.00
OF	154.20	9.87	12.80	15.97
OF	157.50	9.82	12.80	15.93
OF	160.80	9.77	12.80	15.90
OF	164.00	9.72	12.80	15.87
OF	167.30	9.67	12.80	15.83
OF	170.60	9.62	12.80	15.80
OF	173.90	9.57	12.80	15.76
OF	177.20	9.52	12.80	15.73
OF	180.40	9.47	12.80	15.69
OF	183.70	9.42	12.80	15.66
OF	187.00	9.37	12.80	15.63
OF	190.30	9.32	12.80	15.59
OF	193.60	9.26	12.80	15.56
OF	196.80	9.21	12.80	15.52
OF	200.10	9.16	12.80	15.49
OF	203.40	9.11	12.80	15.46
OF	206.70	9.06	12.80	15.42
OF	210.00	9.01	12.80	15.39
OF	213.30	8.96	12.80	15.36
OF	216.50	8.91	12.80	15.32
OF	219.80	8.86	12.80	15.29
OF	223.10	8.80	12.80	15.25
OF	226.40	8.75	12.80	15.21
OF	229.70	8.70	12.80	15.18
OF	232.90	8.67	12.80	15.16
OF	236.20	8.64	12.80	15.14
OF	239.50	8.62	12.80	15.13
OF	242.80	8.59	12.80	15.11
OF	246.10	8.56	12.80	15.10
OF	249.30	8.53	12.80	15.07
OF	252.60	8.50	12.80	15.05
OF	255.90	8.46	12.80	15.03

OF	259.20	8.43	12.80	15.01
OF	262.50	8.40	12.80	14.99
OF	265.70	8.36	12.80	14.96
OF	269.00	8.33	12.80	14.94
OF	272.30	8.30	12.80	14.92
OF	275.60	8.26	12.80	14.90
OF	278.90	8.23	12.80	14.88
OF	282.20	8.19	12.80	14.86
OF	285.40	8.16	12.80	14.83
OF	288.70	8.13	12.80	14.81
OF	292.00	8.09	12.80	14.79
OF	295.30	8.06	12.80	14.77
OF	298.60	8.03	12.80	14.75
OF	301.80	7.99	12.80	14.73
OF	305.10	7.96	12.80	14.70
OF	308.40	7.91	12.80	14.67
OF	311.70	7.86	12.80	14.64
OF	315.00	7.81	12.80	14.61
OF	318.20	7.77	12.80	14.58
OF	321.50	7.72	12.80	14.54
OF	324.80	7.67	12.80	14.51
OF	328.10	7.62	12.80	14.48
OF	331.40	7.57	12.80	14.45
OF	334.60	7.52	12.80	14.41
OF	337.90	7.47	12.80	14.38
OF	341.20	7.42	12.80	14.35
OF	344.50	7.37	12.80	14.32
OF	347.80	7.33	12.80	14.28
OF	351.00	7.28	12.80	14.25
OF	354.30	7.23	12.80	14.22
OF	357.60	7.18	12.80	14.19
OF	360.90	7.13	12.80	14.16
OF	364.20	7.08	12.80	14.12
IF	367.50	6.72	12.80	13.87
IF	370.70	6.43	12.80	13.66
IF	374.00	6.39	12.80	13.64
IF	377.30	6.31	12.80	13.59
IF	380.60	6.32	12.80	13.60
IF	383.90	6.34	12.80	13.62
IF	387.10	6.36	12.80	13.64
IF	390.40	6.38	12.80	13.65
IF	393.70	6.39	12.80	13.67
IF	397.00	6.36	12.80	13.65
IF	400.30	6.34	12.80	13.64
IF	403.50	6.31	12.80	13.62
IF	406.80	6.27	12.80	13.59
IF	410.10	6.25	12.80	13.58
IF	413.40	6.26	12.80	13.59
IF	416.70	6.30	12.80	13.63
IF	419.90	6.31	12.80	13.64
IF	423.20	6.31	12.80	13.63
IF	426.50	6.28	12.80	13.62
IF	429.80	6.19	12.80	13.55
IF	433.10	6.09	12.80	13.48
IF	436.40	6.06	12.80	13.47
IF	439.60	6.07	12.80	13.48
IF	442.90	6.09	12.80	13.50
IF	446.20	6.11	12.80	13.51
IF	449.50	6.11	12.80	13.52
IF	452.80	6.11	12.80	13.51
IF	456.00	6.04	12.80	13.46
IF	459.30	5.72	12.80	13.24
IF	462.60	5.48	12.80	13.07
IF	465.90	5.51	12.80	13.10
IF	469.20	5.52	12.80	13.11
IF	472.40	5.51	12.80	13.10
IF	475.70	5.46	12.80	13.07
IF	479.00	5.32	12.80	12.98
IF	482.30	5.20	12.80	12.89
IF	485.60	5.19	12.80	12.89
IF	488.80	5.13	12.80	12.85
IF	492.10	4.92	12.80	12.70
IF	495.40	4.71	12.80	12.56
IF	498.70	4.50	12.80	12.42
IF	502.00	4.39	12.80	12.34
IF	505.20	4.27	12.80	12.27
IF	508.50	4.23	12.80	12.24
IF	511.80	4.27	12.80	12.28
IF	515.10	4.28	12.80	12.29
IF	518.40	4.23	12.80	12.26
IF	521.70	4.10	12.80	12.18
IF	524.90	3.93	12.80	12.06
IF	528.20	3.75	12.80	11.94
IF	531.50	3.57	12.80	11.82
IF	534.80	3.26	12.80	11.60
IF	538.10	3.02	12.80	11.45
IF	541.30	3.07	12.80	11.50
IF	544.60	3.09	12.80	11.52
IF	547.90	3.07	12.80	11.52
IF	551.20	3.06	12.80	11.52
IF	554.50	3.04	12.80	11.51
IF	557.70	2.94	12.80	11.45
IF	561.00	2.94	12.80	11.46
IF	564.30	2.94	12.80	11.47
IF	567.60	2.87	12.80	11.43
IF	570.90	2.83	12.80	11.40
IF	574.10	2.67	12.80	11.30
IF	577.40	2.69	12.80	11.32
IF	580.70	2.72	12.80	11.35
IF	584.00	2.70	12.80	11.34
IF	587.30	2.68	12.80	11.33
IF	590.50	2.68	12.80	11.33

IF	593.80	2.66	12.80	11.33
IF	597.10	2.64	12.80	11.32
IF	600.40	2.58	12.80	11.28
IF	603.70	2.46	12.80	11.20
IF	607.00	2.16	12.80	10.99
IF	610.20	2.19	12.80	11.02
IF	613.50	2.22	12.80	11.04
IF	616.80	2.19	12.80	11.03
IF	620.10	2.07	12.80	10.94
IF	623.40	1.90	12.80	10.83
IF	626.60	1.69	12.80	10.69
IF	629.90	1.47	12.80	10.55
IF	633.20	1.39	12.80	10.51
IF	636.50	1.38	12.80	10.52
IF	639.80	1.24	12.80	10.43
IF	643.00	1.08	12.80	10.34
IF	646.30	0.89	12.80	10.24
IF	649.60	0.44	12.80	10.02
IF	652.30	0.01	12.80	9.72
AS	711.90	0.00	0.00	9.57
IF	712.50	0.01	0.14	9.58
IF	719.00	0.05	0.27	9.61
IF	724.50	0.08	0.33	9.62
IF	729.50	0.10	0.37	9.64
IF	733.00	0.11	0.39	9.64
IF	737.50	0.13	0.42	9.66
IF	746.40	0.01	0.46	9.57
AS	747.70	0.00	0.00	9.57
IF	757.00	0.07	0.30	9.61
IF	764.50	0.09	0.36	9.63
IF	770.00	0.11	0.40	9.64
IF	776.00	0.09	0.43	9.63
IF	785.50	0.16	0.47	9.68
IF	794.00	0.17	0.50	9.69
IF	798.00	0.20	0.52	9.70
IF	802.50	0.20	0.53	9.71
IF	810.50	0.23	0.56	9.73
IF	817.00	0.24	0.58	9.74
IF	823.50	0.25	0.59	9.74
IF	836.00	0.29	0.62	9.77
IF	846.50	0.30	0.65	9.78
IF	850.00	0.31	0.66	9.79
IF	853.50	0.32	0.66	9.79
IF	859.00	0.33	0.67	9.80
IF	868.50	0.32	0.69	9.79
IF	880.50	0.36	0.71	9.82
IF	888.00	0.38	0.73	9.83
IF	890.00	0.39	0.73	9.84
IF	893.00	0.39	0.74	9.84
IF	900.00	0.39	0.75	9.84
IF	909.50	0.42	0.76	9.86
IF	919.00	0.43	0.78	9.87
IF	924.50	0.45	0.79	9.88
IF	927.00	0.44	0.79	9.88
IF	931.00	0.45	0.80	9.88
IF	935.50	0.46	0.80	9.89
IF	944.50	0.48	0.81	9.90
IF	960.50	0.48	0.84	9.90
IF	972.50	0.51	0.85	9.92
IF	979.50	0.47	0.86	9.89
IF	984.50	0.46	0.87	9.89
IF	988.00	0.49	0.87	9.91
IF	993.00	0.50	0.88	9.92
IF	998.50	0.52	0.88	9.93
IF	1004.00	0.51	0.89	9.93
IF	1011.00	0.54	0.90	9.94
IF	1018.50	0.48	0.91	9.90
IF	1024.00	0.51	0.91	9.92
IF	1029.00	0.52	0.92	9.93
IF	1035.00	0.56	0.92	9.96
IF	1042.50	0.47	0.93	9.89
IF	1050.50	0.53	0.94	9.93
IF	1056.50	0.54	0.95	9.94
IF	1063.50	0.53	0.95	9.94
IF	1072.00	0.55	0.96	9.96
IF	1080.00	0.50	0.97	9.92
IF	1086.00	0.50	0.97	9.91
IF	1092.00	0.47	0.98	9.90
IF	1106.00	0.56	0.99	9.96
IF	1118.50	0.29	1.00	9.77
IF	1124.00	0.31	1.01	9.79
IF	1137.50	0.25	1.02	9.74
IF	1149.50	0.32	1.03	9.79
IF	1158.50	0.13	1.04	9.66
IF	1172.50	0.23	1.05	9.72
IF	1183.50	0.29	1.06	9.77
IF	1188.90	0.01	1.06	9.57
AS	1190.10	0.00	0.00	9.57
IF	1192.00	0.02	0.18	9.58
IF	1198.60	0.01	0.29	9.57
AS	1199.40	0.00	0.00	9.57
IF	1207.00	0.06	0.28	9.61
IF	1216.50	0.08	0.36	9.62
IF	1226.50	0.13	0.42	9.66
IF	1231.00	0.14	0.44	9.67
IF	1236.50	0.16	0.47	9.68
IF	1241.50	0.17	0.49	9.69
IF	1248.50	0.16	0.51	9.68
IF	1261.50	0.21	0.56	9.72
IF	1272.50	0.23	0.59	9.73
IF	1284.50	0.14	0.62	9.66
IF	1299.50	0.25	0.65	9.74

IF	1306.00	0.13	0.66	9.65
IF	1328.00	0.27	0.71	9.75
IF	1350.00	0.17	0.74	9.69
IF	1363.00	0.28	0.77	9.76
IF	1374.00	0.34	0.78	9.80
IF	1379.50	0.34	0.79	9.80
IF	1386.00	0.19	0.80	9.70
IF	1391.50	0.24	0.81	9.74
IF	1400.00	0.28	0.82	9.76
IF	1418.50	0.21	0.84	9.71
IF	1431.50	0.30	0.86	9.77
IF	1436.00	0.33	0.87	9.80
IF	1443.00	0.37	0.87	9.82
IF	1455.50	0.42	0.89	9.85
IF	1466.50	0.45	0.90	9.88
IF	1480.00	0.50	0.92	9.91
IF	1492.00	0.53	0.93	9.93
IF	1496.00	0.54	0.93	9.94
IF	1501.00	0.56	0.94	9.95
IF	1504.00	0.57	0.94	9.96
IF	1513.00	0.59	0.95	9.97
IF	1523.50	0.61	0.96	9.99
IF	1530.50	0.63	0.97	10.00
IF	1538.00	0.65	0.98	10.02
IF	1547.50	0.67	0.98	10.03
IF	1554.50	0.66	0.99	10.03
IF	1560.50	0.70	1.00	10.05
IF	1568.00	0.71	1.00	10.06
IF	1573.00	0.68	1.01	10.04
IF	1581.50	0.55	1.02	9.94
IF	1592.50	0.61	1.02	9.99
IF	1604.00	0.67	1.03	10.03
IF	1616.50	0.70	1.05	10.05
IF	1626.50	0.72	1.05	10.07
IF	1635.00	0.73	1.06	10.07
IF	1641.50	0.75	1.07	10.09
IF	1648.00	0.77	1.07	10.10
IF	1653.00	0.76	1.07	10.09
IF	1662.50	0.79	1.08	10.11
IF	1677.50	0.82	1.09	10.14
IF	1685.00	0.83	1.10	10.15
IF	1691.00	0.84	1.10	10.15
IF	1698.50	0.85	1.11	10.16
IF	1703.00	0.86	1.11	10.17
IF	1708.00	0.87	1.12	10.17
IF	1718.00	0.89	1.12	10.19
IF	1727.50	0.91	1.13	10.20
IF	1735.50	0.92	1.14	10.21
IF	1741.50	0.93	1.14	10.21
IF	1746.50	0.94	1.14	10.22
IF	1751.50	0.94	1.15	10.23
IF	1755.50	0.95	1.15	10.23
IF	1759.00	0.95	1.15	10.23
IF	1766.50	0.97	1.16	10.24
IF	1778.00	0.98	1.17	10.25
IF	1785.00	0.99	1.17	10.26
IF	1790.00	1.00	1.17	10.27
IF	1796.50	1.01	1.18	10.27
IF	1802.00	1.02	1.18	10.28
IF	1806.00	1.02	1.18	10.28
IF	1809.50	1.03	1.19	10.29
IF	1815.50	1.03	1.19	10.29
IF	1823.00	1.04	1.19	10.30
IF	1829.00	1.05	1.20	10.30
IF	1835.00	1.06	1.20	10.31
IF	1842.50	1.06	1.21	10.31
IF	1850.00	1.07	1.21	10.32
IF	1856.50	1.08	1.22	10.32
IF	1861.00	1.08	1.22	10.33
IF	1864.00	1.09	1.22	10.33
IF	1869.00	1.09	1.22	10.33
IF	1876.00	1.10	1.23	10.34
IF	1882.50	1.11	1.23	10.34
IF	1892.00	1.12	1.24	10.35
IF	1897.00	1.12	1.24	10.36
IF	1904.50	1.13	1.24	10.36
IF	1911.00	1.14	1.25	10.37
IF	1920.00	1.15	1.25	10.37
IF	1923.50	1.15	1.26	10.38
IF	1931.00	1.16	1.26	10.38
IF	1938.00	1.17	1.26	10.39
IF	1946.50	1.18	1.27	10.39
IF	1958.00	1.19	1.27	10.40
IF	1967.00	1.20	1.28	10.41
IF	1972.50	1.20	1.28	10.41
IF	1979.00	1.21	1.29	10.42
IF	1984.00	1.21	1.29	10.42
IF	1990.00	1.22	1.29	10.43
IF	2005.00	1.24	1.30	10.44
IF	2009.50	1.24	1.30	10.44
IF	2016.50	1.25	1.31	10.45
IF	2022.00	1.25	1.31	10.45
IF	2026.50	1.26	1.31	10.45
IF	2035.50	1.26	1.32	10.46
IF	2042.50	1.27	1.32	10.46
IF	2048.00	1.28	1.32	10.47
IF	2055.00	1.28	1.33	10.47
IF	2064.50	1.29	1.33	10.48
IF	2078.50	1.31	1.34	10.49
IF	2092.50	1.32	1.35	10.50
IF	2103.00	1.33	1.35	10.51
IF	2114.50	1.34	1.36	10.51

IF	2126.50	1.35	1.36	10.52
IF	2138.00	1.36	1.37	10.53
IF	2147.50	1.37	1.37	10.54
IF	2160.00	1.38	1.38	10.54
IF	2174.00	1.39	1.38	10.56
IF	2182.50	1.40	1.39	10.56
IF	2191.50	1.41	1.39	10.56
IF	2205.00	1.42	1.40	10.57
IF	2223.00	1.44	1.41	10.59
IF	2236.00	1.44	1.41	10.59
IF	2242.50	1.45	1.42	10.60
IF	2249.50	1.46	1.42	10.60
IF	2256.50	1.46	1.42	10.61
IF	2265.50	1.48	1.43	10.62
IF	2282.50	1.49	1.43	10.63
IF	2299.00	1.50	1.44	10.63
IF	2306.50	1.50	1.44	10.64
IF	2313.00	1.51	1.45	10.64
IF	2320.00	1.52	1.45	10.65
IF	2326.00	1.53	1.45	10.66
IF	2334.00	1.54	1.46	10.66
IF	2345.00	1.54	1.46	10.66
IF	2353.50	1.54	1.46	10.67
IF	2361.00	1.56	1.47	10.67
IF	2370.50	1.57	1.47	10.68
IF	2379.50	1.58	1.47	10.69
IF	2388.50	1.59	1.48	10.70
IF	2398.50	1.59	1.48	10.70
IF	2405.50	1.60	1.49	10.71
IF	2412.50	1.60	1.49	10.71
IF	2422.00	1.62	1.49	10.72
IF	2428.50	1.62	1.49	10.72
IF	2439.50	1.64	1.50	10.73
IF	2446.00	1.64	1.50	10.74
IF	2453.50	1.64	1.50	10.74
IF	2460.50	1.65	1.51	10.74
IF	2466.00	1.65	1.51	10.75
IF	2471.00	1.65	1.51	10.74
IF	2478.00	1.66	1.51	10.75
IF	2487.50	1.66	1.52	10.75
IF	2495.00	1.67	1.52	10.76
IF	2502.00	1.68	1.52	10.76
IF	2510.00	1.68	1.53	10.77
IF	2518.00	1.70	1.53	10.78
IF	2525.50	1.70	1.53	10.78
IF	2532.50	1.71	1.54	10.79
IF	2541.00	1.71	1.54	10.79
IF	2549.50	1.72	1.54	10.80
IF	2557.00	1.73	1.54	10.80
IF	2565.50	1.73	1.55	10.80
IF	2575.50	1.74	1.55	10.81
IF	2586.50	1.74	1.56	10.81
IF	2593.00	1.75	1.56	10.81
IF	2596.00	1.76	1.56	10.82
	2756.30	1.89	1.62	10.92
OF	2825.00	1.94	1.64	10.95
OF	2826.00	1.94	1.64	10.95
OF	2837.00	1.95	1.64	10.96
OF	2838.00	1.95	1.64	10.96
OF	2849.00	1.96	1.65	10.97
OF	2850.00	1.96	1.65	10.97
OF	2861.00	1.97	1.65	10.97
OF	2862.00	1.97	1.65	10.97
OF	2873.00	1.98	1.66	10.98
OF	2874.00	1.98	1.66	10.98
OF	2885.00	1.98	1.66	10.98
OF	2886.00	1.99	1.66	10.98
OF	2897.00	1.99	1.66	10.99
OF	2898.00	1.99	1.66	10.99
OF	2909.00	2.00	1.67	11.00
OF	2910.00	2.00	1.67	11.00
OF	2921.00	2.01	1.67	11.00
OF	2922.00	2.01	1.67	11.00
OF	2933.00	2.02	1.68	11.01
OF	2934.00	2.02	1.68	11.01
OF	2945.00	2.03	1.68	11.02
OF	2946.00	2.03	1.68	11.02
OF	2957.00	2.04	1.68	11.02
OF	2958.00	2.04	1.68	11.02
OF	2969.00	2.05	1.69	11.03
OF	2970.00	2.05	1.69	11.03
OF	2981.00	2.05	1.69	11.03
OF	2982.00	2.05	1.69	11.03
OF	2993.00	2.06	1.69	11.04
OF	2994.00	2.06	1.69	11.04
OF	3005.00	2.07	1.70	11.05
OF	3006.00	2.07	1.70	11.05
OF	3017.00	2.08	1.70	11.05
OF	3018.00	2.08	1.70	11.05
OF	3066.00	2.11	1.72	11.08
OF	3067.00	2.11	1.72	11.08
OF	3078.00	2.12	1.72	11.08
OF	3079.00	2.12	1.72	11.08
OF	3090.00	2.13	1.72	11.09
OF	3091.00	2.13	1.72	11.09
OF	3102.00	2.14	1.73	11.09
OF	3103.00	2.14	1.73	11.09
OF	3115.00	2.15	1.73	11.10
OF	3126.00	2.16	1.74	11.11
OF	3135.00	2.16	1.74	11.11
OF	3142.00	2.17	1.74	11.11
OF	3153.00	2.17	1.74	11.12

OF	3223.00	2.22	1.76	11.15
IF	3256.00	2.07	1.77	11.05
IF	3259.50	2.05	1.77	11.03
IF	3264.00	2.11	1.78	11.07
IF	3267.50	2.05	1.78	11.04
IF	3273.50	2.15	1.78	11.11
IF	3290.00	2.14	1.78	11.10
IF	3309.00	2.05	1.79	11.03
IF	3311.00	2.11	1.79	11.08
IF	3321.00	2.17	1.79	11.12
IF	3330.00	2.14	1.79	11.10
IF	3334.50	2.12	1.79	11.08
IF	3344.50	2.16	1.80	11.11
IF	3355.00	2.14	1.80	11.10
IF	3361.50	2.10	1.80	11.07
IF	3366.00	2.11	1.80	11.08
IF	3369.00	2.11	1.80	11.08
IF	3373.00	2.18	1.80	11.13
IF	3378.00	2.20	1.81	11.14
IF	3389.50	2.21	1.81	11.15
IF	3394.00	2.20	1.81	11.14
IF	3399.50	2.23	1.81	11.17
IF	3404.00	2.24	1.81	11.17
IF	3409.00	2.25	1.81	11.18
IF	3420.00	2.25	1.82	11.18
IF	3424.50	2.23	1.82	11.16
IF	3429.50	2.24	1.82	11.17
IF	3438.00	2.26	1.82	11.19
IF	3447.00	2.04	1.82	11.03
IF	3461.00	2.16	1.83	11.12
IF	3470.00	2.18	1.83	11.13
IF	3483.50	2.18	1.83	11.13
IF	3492.50	2.19	1.84	11.14
IF	3500.00	2.20	1.84	11.14
IF	3504.00	2.19	1.84	11.14
IF	3509.00	2.21	1.84	11.15
IF	3515.00	2.20	1.84	11.14
IF	3520.50	2.20	1.84	11.15
IF	3527.50	2.20	1.85	11.15
IF	3532.00	2.20	1.85	11.15
IF	3536.00	2.21	1.85	11.15
IF	3543.50	2.23	1.85	11.16
IF	3550.00	2.21	1.85	11.15
IF	3557.00	2.23	1.85	11.17
IF	3565.50	2.25	1.85	11.18
IF	3574.00	2.24	1.86	11.17
IF	3584.00	2.23	1.86	11.17
IF	3591.50	2.24	1.86	11.18
IF	3596.50	2.23	1.86	11.17
IF	3607.00	2.23	1.87	11.17
IF	3617.00	2.26	1.87	11.19
IF	3623.50	2.20	1.87	11.15
IF	3632.50	2.22	1.87	11.16
IF	3639.50	2.24	1.87	11.17
IF	3644.00	2.22	1.87	11.16
IF	3647.00	2.24	1.88	11.18
IF	3653.00	2.25	1.88	11.18
IF	3661.00	2.25	1.88	11.18
IF	3667.00	2.28	1.88	11.20
IF	3671.50	2.24	1.88	11.18
IF	3676.00	2.22	1.88	11.16
IF	3683.00	2.33	1.88	11.24
IF	3688.50	2.25	1.89	11.18
IF	3693.50	2.21	1.89	11.16
IF	3699.50	2.22	1.89	11.16
IF	3704.00	2.21	1.89	11.16
IF	3709.00	2.22	1.89	11.16
IF	3714.50	2.24	1.89	11.18
IF	3719.50	2.27	1.89	11.19
IF	3725.00	2.26	1.89	11.19
IF	3732.50	2.23	1.90	11.17
IF	3735.00	2.20	1.90	11.15
IF	3739.50	2.21	1.90	11.16
IF	3744.00	2.17	1.90	11.13
IF	3747.00	2.20	1.90	11.15
IF	3753.50	2.19	1.90	11.14
IF	3760.50	1.95	1.90	10.97
IF	3764.00	1.96	1.90	10.98
IF	3768.50	1.99	1.90	11.00
IF	3778.50	1.96	1.91	10.98
IF	3786.00	2.04	1.91	11.04
IF	3794.50	1.92	1.91	10.95
IF	3806.00	1.93	1.91	10.96
IF	3810.00	1.93	1.91	10.96
IF	3815.50	1.82	1.92	10.88
IF	3824.00	1.82	1.92	10.88
IF	3834.50	1.88	1.92	10.93
IF	3847.00	1.77	1.92	10.85
IF	3863.50	1.78	1.93	10.86
IF	3879.50	1.81	1.93	10.87
IF	3890.00	1.79	1.93	10.87
IF	3906.00	1.62	1.94	10.74
IF	3928.00	1.64	1.94	10.76
IF	3955.50	1.48	1.95	10.64
IF	3974.00	0.90	1.95	10.24
IF	3984.00	0.92	1.95	10.25
IF	4000.00	0.88	1.96	10.22
IF	4012.50	0.57	1.96	10.01
IF	4027.00	0.59	1.96	10.02
IF	4075.00	0.71	1.97	10.11
IF	4091.00	0.62	1.98	10.04
IF	4106.00	0.39	1.98	9.88

IF	4123.50	0.45	1.98	9.93
IF	4139.00	0.39	1.99	9.88
IF	4156.00	0.32	1.99	9.83
IF	4172.70	0.01	1.99	9.61
AS	4174.80	0.00	0.00	9.61
IF	4191.00	0.04	0.36	9.64
IF	4193.10	0.01	0.37	9.61

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN 652.30 AND 711.90
BETWEEN 746.40 AND 747.70
BETWEEN 1188.90 AND 1190.10
BETWEEN 1198.60 AND 1199.40
BETWEEN 4172.70 AND 4174.80

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
9.00	1.00	9.04
22.00	1.00	9.04
28.00	1.00	9.04
39.00	1.00	9.04
51.00	1.00	9.04
61.00	1.00	9.04
72.20	1.00	9.03
75.50	1.00	9.04
82.00	1.00	9.04
85.30	1.00	9.04
88.60	1.00	9.04
91.90	1.00	9.04
95.10	1.00	9.04
98.40	1.00	9.04
101.70	1.00	9.04
105.00	1.00	9.04
108.30	1.00	9.05
111.50	1.00	9.05
114.80	1.00	9.05
118.10	1.00	9.05
121.40	1.00	9.05
124.70	1.00	9.05
128.00	1.00	9.05
131.20	1.00	9.05
134.50	1.00	9.05
137.80	1.00	9.05
141.10	1.00	9.06
144.40	1.00	9.06
147.60	1.00	9.06
150.90	1.00	9.06
154.20	1.00	9.06
157.50	1.00	9.06
160.80	1.00	9.06
164.00	1.00	9.06
167.30	1.00	9.06
170.60	1.00	9.06
173.90	1.00	9.07
177.20	1.00	9.07
180.40	1.00	9.07
183.70	1.00	9.07
187.00	1.00	9.07
190.30	1.00	9.07
193.60	1.00	9.07
196.80	1.00	9.07
200.10	1.00	9.08
203.40	1.00	9.08
206.70	1.00	9.08
210.00	1.00	9.08
213.30	1.00	9.08
216.50	1.00	9.08
219.80	1.00	9.09
223.10	1.00	9.09
226.40	1.00	9.09
229.70	1.00	9.09
232.90	1.00	9.09
236.20	1.00	9.09
239.50	1.00	9.10
242.80	1.00	9.10
246.10	1.00	9.10
249.30	1.00	9.10
252.60	1.00	9.10
255.90	1.00	9.11
259.20	1.00	9.11
262.50	1.00	9.11
265.70	1.00	9.11
269.00	1.00	9.11
272.30	1.00	9.11
275.60	1.00	9.12
278.90	1.00	9.12
282.20	1.00	9.12
285.40	1.00	9.12
288.70	1.00	9.12
292.00	1.00	9.13
295.30	1.00	9.13
298.60	1.00	9.13
301.80	1.00	9.13
305.10	1.00	9.13
308.40	1.00	9.14
311.70	1.00	9.14
315.00	1.00	9.14
318.20	1.00	9.14
321.50	1.00	9.14
324.80	1.00	9.14
328.10	1.00	9.15
331.40	1.00	9.15
334.60	1.00	9.15
337.90	1.00	9.15

341.20	1.00	9.15
344.50	1.00	9.15
347.80	1.00	9.16
351.00	1.00	9.16
354.30	1.00	9.16
357.60	1.00	9.16
360.90	1.00	9.16
364.20	1.00	9.17
367.50	1.00	9.16
370.70	1.00	9.16
374.00	1.00	9.17
377.30	1.00	9.17
380.60	1.00	9.18
383.90	1.00	9.18
387.10	1.00	9.19
390.40	1.00	9.19
393.70	1.00	9.19
397.00	1.00	9.20
400.30	1.00	9.20
403.50	1.00	9.20
406.80	1.00	9.20
410.10	1.00	9.21
413.40	1.00	9.21
416.70	1.00	9.22
419.90	1.00	9.22
423.20	1.00	9.22
426.50	1.00	9.22
429.80	1.00	9.22
433.10	1.00	9.22
436.40	1.00	9.23
439.60	1.00	9.23
442.90	1.00	9.23
446.20	1.00	9.24
449.50	1.00	9.24
452.80	1.00	9.24
456.00	1.00	9.24
459.30	1.00	9.24
462.60	1.00	9.24
465.90	1.00	9.24
469.20	1.00	9.25
472.40	1.00	9.25
475.70	1.00	9.25
479.00	1.00	9.25
482.30	1.00	9.25
485.60	1.00	9.26
488.80	1.00	9.26
492.10	1.00	9.26
495.40	1.00	9.26
498.70	1.00	9.26
502.00	1.00	9.27
505.20	1.00	9.27
508.50	1.00	9.28
511.80	1.00	9.29
515.10	1.00	9.30
518.40	1.00	9.30
521.70	1.00	9.31
524.90	1.00	9.31
528.20	1.00	9.31
531.50	1.00	9.32
534.80	1.00	9.32
538.10	1.00	9.33
541.30	1.00	9.35
544.60	1.00	9.36
547.90	1.00	9.37
551.20	1.00	9.38
554.50	1.00	9.39
557.70	1.00	9.40
561.00	1.00	9.40
564.30	1.00	9.41
567.60	1.00	9.42
570.90	1.00	9.43
574.10	1.00	9.43
577.40	1.00	9.44
580.70	1.00	9.45
584.00	1.00	9.45
587.30	1.00	9.45
590.50	1.00	9.46
593.80	1.00	9.47
597.10	1.00	9.47
600.40	1.00	9.47
603.70	1.00	9.47
610.20	1.00	9.48
613.50	1.00	9.49
616.80	1.00	9.50
620.10	1.00	9.50
623.40	1.00	9.50
626.60	1.00	9.51
629.90	1.00	9.52
633.20	1.00	9.53
636.50	1.00	9.55
639.80	1.00	9.57
643.00	1.00	9.58
646.30	1.00	9.62
649.60	1.00	9.72
711.90	1.00	9.57
1299.50	1.00	9.57
1363.00	1.00	9.56
1400.00	1.00	9.56
1431.50	1.00	9.56
1466.50	1.00	9.56
1496.00	1.00	9.56
1554.50	1.00	9.56

1662.50	1.00	9.56
1727.50	1.00	9.56
1755.50	1.00	9.56
1778.00	1.00	9.57
1806.00	1.00	9.57
1829.00	1.00	9.57
1861.00	1.00	9.57
1892.00	1.00	9.57
1920.00	1.00	9.57
1967.00	1.00	9.57
2005.00	1.00	9.57
2035.50	1.00	9.57
2064.50	1.00	9.57
2092.50	1.00	9.58
2126.50	1.00	9.58
2147.50	1.00	9.58
2174.00	1.00	9.58
2191.50	1.00	9.58
2223.00	1.00	9.58
2236.00	1.00	9.58
2256.50	1.00	9.58
2282.50	1.00	9.58
2313.00	1.00	9.59
2345.00	1.00	9.59
2379.50	1.00	9.59
2412.50	1.00	9.59
2439.50	1.00	9.59
2478.00	1.00	9.59
2518.00	1.00	9.59
2549.50	1.00	9.59
2825.00	1.00	9.60
2934.00	1.00	9.60
3017.00	1.00	9.60
3115.00	1.00	9.60
3223.00	1.00	9.60
3273.50	1.00	9.60
3321.00	1.00	9.60
3366.00	1.00	9.60
3404.00	1.00	9.60
3461.00	1.00	9.60
3492.50	1.00	9.61
3617.00	1.00	9.61
3661.00	1.00	9.61
3709.00	1.00	9.61

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
555.69	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	16.94	V22	EL=17	120
4.00	16.93	V22	EL=17	120
9.00	16.91	V22	EL=17	120
16.00	16.89	V22	EL=17	120
22.00	16.87	V22	EL=17	120
27.00	16.85	V22	EL=17	120
28.00	16.85	V22	EL=17	120
39.00	16.74	V22	EL=17	120
40.00	16.73	V22	EL=17	120
51.00	16.57	V22	EL=17	120
52.00	16.56	V22	EL=17	120
56.04	16.50	V22	EL=16	120
61.00	16.43	V22	EL=16	120
62.00	16.43	V22	EL=16	120
72.20	16.38	V22	EL=16	120
75.50	16.37	V22	EL=16	120
78.70	16.35	V22	EL=16	120
82.00	16.34	V22	EL=16	120
85.30	16.33	V22	EL=16	120
88.60	16.31	V22	EL=16	120
91.90	16.29	V22	EL=16	120
95.10	16.28	V22	EL=16	120
98.40	16.26	V22	EL=16	120
101.70	16.25	V22	EL=16	120
105.00	16.23	V22	EL=16	120
108.30	16.22	V22	EL=16	120
111.50	16.20			

114.80	16.19	V22	EL=16	120
118.10	16.17	V22	EL=16	120
121.40	16.16	V22	EL=16	120
124.70	16.14	V22	EL=16	120
128.00	16.13	V22	EL=16	120
131.20	16.11	V22	EL=16	120
134.50	16.10	V22	EL=16	120
137.80	16.08	V22	EL=16	120
141.10	16.07	V22	EL=16	120
144.40	16.05	V22	EL=16	120
147.60	16.04	V22	EL=16	120
150.90	16.00	V22	EL=16	120
154.20	15.97	V22	EL=16	120
157.50	15.93	V22	EL=16	120
160.80	15.90	V22	EL=16	120
164.00	15.87	V22	EL=16	120
167.30	15.83	V23	EL=16	130
170.60	15.80	V23	EL=16	130
173.90	15.76	V23	EL=16	130
177.20	15.73	V23	EL=16	130
180.40	15.69	V23	EL=16	130
183.70	15.66	V23	EL=16	130
187.00	15.63	V23	EL=16	130
190.30	15.59	V23	EL=16	130
193.60	15.56	V23	EL=16	130
196.80	15.52	V23	EL=16	130
199.17	15.50	V23	EL=15	130
200.10	15.49	V23	EL=15	130
203.40	15.46	V23	EL=15	130
206.70	15.42	V23	EL=15	130
210.00	15.39	V23	EL=15	130
213.30	15.36	V23	EL=15	130
216.50	15.32	V23	EL=15	130
219.80	15.29	V23	EL=15	130
223.10	15.25	V23	EL=15	130
226.40	15.21	V23	EL=15	130
229.70	15.18	V23	EL=15	130
232.90	15.16	V23	EL=15	130
236.20	15.14	V23	EL=15	130
239.50	15.13	V23	EL=15	130
242.80	15.11	V23	EL=15	130
246.10	15.10	V23	EL=15	130
249.30	15.07	V23	EL=15	130
252.60	15.05	V23	EL=15	130
255.90	15.03	V23	EL=15	130
259.20	15.01	V23	EL=15	130
262.50	14.99	V23	EL=15	130
265.70	14.96	V23	EL=15	130
269.00	14.94	V23	EL=15	130
272.30	14.92	V23	EL=15	130
275.60	14.90			

278.90	14.88	V23	EL=15	130
282.20	14.86	V23	EL=15	130
285.40	14.83	V23	EL=15	130
288.70	14.81	V23	EL=15	130
292.00	14.79	V23	EL=15	130
295.30	14.77	V23	EL=15	130
298.60	14.75	V23	EL=15	130
301.80	14.73	V23	EL=15	130
305.10	14.70	V23	EL=15	130
308.40	14.67	V23	EL=15	130
311.70	14.64	V23	EL=15	130
315.00	14.61	V23	EL=15	130
318.20	14.58	V23	EL=15	130
321.50	14.54	V23	EL=15	130
324.80	14.51	V23	EL=15	130
325.84	14.50	V23	EL=15	130
328.10	14.48	V23	EL=14	130
331.40	14.45	V23	EL=14	130
334.60	14.41	V23	EL=14	130
337.90	14.38	V23	EL=14	130
341.20	14.35	V23	EL=14	130
344.50	14.32	V23	EL=14	130
347.80	14.28	V23	EL=14	130
351.00	14.25	V23	EL=14	130
354.30	14.22	V23	EL=14	130
357.60	14.19	V23	EL=14	130
360.90	14.16	V23	EL=14	130
364.20	14.12	V23	EL=14	130
367.50	13.87	V23	EL=14	130
370.70	13.66	V23	EL=14	130
374.00	13.64	V23	EL=14	130
377.30	13.59	V23	EL=14	130
380.60	13.60	V23	EL=14	130
383.90	13.62	V23	EL=14	130
387.10	13.64	V23	EL=14	130
390.40	13.65	V23	EL=14	130
393.70	13.67	V23	EL=14	130
397.00	13.65	V23	EL=14	130
400.30	13.64	V23	EL=14	130
403.50	13.62	V23	EL=14	130
406.80	13.59	V23	EL=14	130
410.10	13.58	V23	EL=14	130
413.40	13.59	V23	EL=14	130
416.70	13.63	V23	EL=14	130
419.90	13.64	V23	EL=14	130
423.20	13.63	V23	EL=14	130
426.50	13.62	V23	EL=14	130
429.80	13.55	V23	EL=14	130
432.36	13.50	V23	EL=13	130
433.10	13.48	V23	EL=13	130
436.40	13.47			

		V23	EL=13	130
439.60	13.48	V23	EL=13	130
442.90	13.50	V23	EL=13	130
443.56	13.50	V23	EL=14	130
446.20	13.51	V23	EL=14	130
449.50	13.52	V23	EL=14	130
452.80	13.51	V23	EL=14	130
453.69	13.50	V23	EL=13	130
456.00	13.46	V23	EL=13	130
459.30	13.24	V23	EL=13	130
462.60	13.07	V23	EL=13	130
465.90	13.10	V23	EL=13	130
469.20	13.11	V23	EL=13	130
472.40	13.10	V23	EL=13	130
475.70	13.07	V23	EL=13	130
479.00	12.98	V23	EL=13	130
482.30	12.89	V23	EL=13	130
485.60	12.89	V23	EL=13	130
488.80	12.85	V23	EL=13	130
492.10	12.70	V23	EL=13	130
495.40	12.56	V23	EL=13	130
496.73	12.50	V23	EL=12	130
498.70	12.42	V23	EL=12	130
502.00	12.34	V23	EL=12	130
505.20	12.27	V23	EL=12	130
508.50	12.24	V23	EL=12	130
511.80	12.28	V23	EL=12	130
515.10	12.29	V23	EL=12	130
518.40	12.26	V23	EL=12	130
521.70	12.18	V23	EL=12	130
524.90	12.06	V23	EL=12	130
528.20	11.94	V23	EL=12	130
531.50	11.82	V23	EL=12	130
534.80	11.60	V23	EL=12	130
536.96	11.50	V23	EL=11	130
538.10	11.45	V23	EL=11	130
541.30	11.50	V23	EL=11	130
541.57	11.50	V23	EL=12	130
544.60	11.52	V23	EL=12	130
547.90	11.52	V23	EL=12	130
551.20	11.52	V23	EL=12	130
554.50	11.51	V23	EL=12	130
555.23	11.50	V23	EL=11	130
555.69	11.49	A19	EL=11	95
557.70	11.45	A19	EL=11	95
561.00	11.46	A19	EL=11	95
564.30	11.47	A19	EL=11	95
567.60	11.43	A19	EL=11	95
570.90	11.40	A19	EL=11	95
574.10	11.30	A19	EL=11	95
577.40	11.32	A19	EL=11	95
580.70	11.35			

584.00	11.34	A19	EL=11	95
587.30	11.33	A19	EL=11	95
590.50	11.33	A19	EL=11	95
593.80	11.33	A19	EL=11	95
597.10	11.32	A19	EL=11	95
600.40	11.28	A19	EL=11	95
603.70	11.20	A19	EL=11	95
607.00	10.99	A19	EL=11	95
610.20	11.02	A19	EL=11	95
613.50	11.04	A19	EL=11	95
616.80	11.03	A19	EL=11	95
620.10	10.94	A19	EL=11	95
623.40	10.83	A19	EL=11	95
626.60	10.69	A19	EL=11	95
629.90	10.55	A19	EL=11	95
633.20	10.51	A19	EL=11	95
636.50	10.52	A19	EL=11	95
637.20	10.50	A19	EL=10	95
639.80	10.43	A19	EL=10	95
643.00	10.34	A19	EL=10	95
646.30	10.24	A19	EL=10	95
649.60	10.02	A19	EL=10	95
652.30	9.72			
711.90	9.57	A19	EL=10	95
746.40	9.57			
747.70	9.57	A19	EL=10	95
1188.90	9.57			
1190.10	9.57	A19	EL=10	95
1198.60	9.57			
1199.40	9.57	A19	EL=10	95
1284.50	9.66	A19	EL=10	95
1299.50	9.74	A19	EL=10	95
1350.00	9.69	A19	EL=10	95
1363.00	9.76	A19	EL=10	95
1391.50	9.74	A19	EL=10	95
1400.00	9.76	A19	EL=10	95
1418.50	9.71	A19	EL=10	95
1431.50	9.77	A19	EL=10	95
1455.50	9.85	A19	EL=10	95
1466.50	9.88	A19	EL=10	95
1492.00	9.93	A19	EL=10	95
1496.00	9.94	A19	EL=10	95
1547.50	10.03	A19	EL=10	95
1554.50	10.03	A19	EL=10	95
1653.00	10.09	A19	EL=10	95
1662.50	10.11	A19	EL=10	95
1718.00	10.19	A19	EL=10	95
1727.50	10.20	A19	EL=10	95
1751.50	10.23	A19	EL=10	95
1755.50	10.23	A19	EL=10	95
1766.50	10.24	A19	EL=10	95
1778.00	10.25	A19	EL=10	95
1802.00	10.28			

1806.00	10.28	A19	EL=10	95
1823.00	10.30	A19	EL=10	95
1829.00	10.30	A19	EL=10	95
1856.50	10.32	A19	EL=10	95
1861.00	10.33	A19	EL=10	95
1882.50	10.34	A19	EL=10	95
1892.00	10.35	A19	EL=10	95
1911.00	10.37	A19	EL=10	95
1920.00	10.37	A19	EL=10	95
1958.00	10.40	A19	EL=10	95
1967.00	10.41	A19	EL=10	95
1990.00	10.43	A19	EL=10	95
2005.00	10.44	A19	EL=10	95
2026.50	10.45	A19	EL=10	95
2035.50	10.46	A19	EL=10	95
2055.00	10.47	A19	EL=10	95
2064.50	10.48	A19	EL=10	95
2078.50	10.49	A19	EL=10	95
2092.50	10.50	A19	EL=10	95
2095.90	10.50	A19	EL=10	95
2114.50	10.51	A19	EL=11	95
2126.50	10.52	A19	EL=11	95
2138.00	10.53	A19	EL=11	95
2147.50	10.54	A19	EL=11	95
2160.00	10.54	A19	EL=11	95
2174.00	10.56	A19	EL=11	95
2182.50	10.56	A19	EL=11	95
2191.50	10.56	A19	EL=11	95
2205.00	10.57	A19	EL=11	95
2223.00	10.59	A19	EL=11	95
2236.00	10.59	A19	EL=11	95
2249.50	10.60	A19	EL=11	95
2256.50	10.61	A19	EL=11	95
2265.50	10.62	A19	EL=11	95
2282.50	10.63	A19	EL=11	95
2306.50	10.64	A19	EL=11	95
2313.00	10.64	A19	EL=11	95
2334.00	10.66	A19	EL=11	95
2345.00	10.66	A19	EL=11	95
2370.50	10.68	A19	EL=11	95
2379.50	10.69	A19	EL=11	95
2405.50	10.71	A19	EL=11	95
2412.50	10.71	A19	EL=11	95
2428.50	10.72	A19	EL=11	95
2439.50	10.73	A19	EL=11	95
2471.00	10.74	A19	EL=11	95
2478.00	10.75	A19	EL=11	95
2510.00	10.77	A19	EL=11	95
2518.00	10.78	A19	EL=11	95
2541.00	10.79	A19	EL=11	95
2549.50	10.80	A19	EL=11	95

```
                                                    A19  EL=11      95
                    2596.00          10.82
                                                    A19  EL=11      95
                    2825.00          10.95
                                                    A19  EL=11      95
                    2933.00          11.01
                                                    A19  EL=11      95
                    2934.00          11.01
                                                    A19  EL=11      95
                    3006.00          11.05
                                                    A19  EL=11      95
                    3017.00          11.05
                                                    A19  EL=11      95
                    3103.00          11.09
                                                    A19  EL=11      95
                    3115.00          11.10
                                                    A19  EL=11      95
                    3153.00          11.12
                                                    A19  EL=11      95
                    3223.00          11.15
                                                    A19  EL=11      95
                    3267.50          11.04
                                                    A19  EL=11      95
                    3273.50          11.11
                                                    A19  EL=11      95
                    3311.00          11.08
                                                    A19  EL=11      95
                    3321.00          11.12
                                                    A19  EL=11      95
                    3361.50          11.07
                                                    A19  EL=11      95
                    3366.00          11.08
                                                    A19  EL=11      95
                    3399.50          11.17
                                                    A19  EL=11      95
                    3404.00          11.17
                                                    A19  EL=11      95
                    3447.00          11.03
                                                    A19  EL=11      95
                    3461.00          11.12
                                                    A19  EL=11      95
                    3483.50          11.13
                                                    A19  EL=11      95
                    3492.50          11.14
                                                    A19  EL=11      95
                    3607.00          11.17
                                                    A19  EL=11      95
                    3617.00          11.19
                                                    A19  EL=11      95
                    3653.00          11.18
                                                    A19  EL=11      95
                    3661.00          11.18
                                                    A19  EL=11      95
                    3704.00          11.16
                                                    A19  EL=11      95
                    3709.00          11.16
                                                    A19  EL=11      95
                    3962.02          10.50
                                                    A19  EL=10      95
                    4172.70           9.61
                    4174.80           9.61
                                                    A19  EL=10      95
                    4193.10           9.61
                          ZONE TERMINATED AT END OF TRANSECT
                          PART 7   POSTSCRIPT NOTES
                PS#  1   START(385964.2581,4805997.3955)
                PS#  2   END(384882.4587,4806777.6613)
-1.000000e+00
```

YK-108
100-year WHAFIS Output
Zero Station: -70.40931393, 43.39876003
Onshore Dir: 144.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
3500
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-108
Two Percent Run-up Elevation is 13.0 Feet-NAVD88
Run-up Height is 3.5 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
16
14
12
10
8
6
4
200
250
300
350
400
450
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-108
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-108sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-108-runup';
SWEL=9.0347;  % 100-yr still water level including wave setup.
H0=2.4638;    % significant wave height at toe of structure
Tp=12.522;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.99585;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.41366;
maxSetup=0.68007;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-108'

plotTitle =

Iterative TAW for YK-108



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                   9.44836

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                  10.12843



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          663.075738236217


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                   5.75266


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                  13.14406


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          212.427117384844


top_sta =

           332.64095522817

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

           332.64095522817

toe_sta

toe_sta =

          212.427117384844




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- The User has selected a starting point that is 0.01 feet above the elevation of SWEL-1.5H0



ans =

-!!- This may be reasonable for some cases.  However the user may want to consider:



ans =

-!!-   1) Selecting a starting point that is at or below 5.75 feet elevation, or



ans =

-!!-   2) Reducing the incident wave height to a depth limited condition.




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta

    % loop over profile segments to determine berm factor
    % re-calculate influence of depth of berm based on this run-up elevation
    % check for berm, berm width, berm height
    berm_width=0;
    rdh_sum=0;
```

```
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end


% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
   % do the foreshore calculation
   fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
   % get upper slope
   fore_toe_sta=-999;
   fore_toe_dep=-999;
   for kk=length(dep)-1:-1:1
```

```
            ddep=dep(kk+1)-dep(kk);
            dsta=sta(kk+1)-sta(kk);
            s=ddep/dsta;
            if s < 1/15
               break
            end
            fore_toe_sta=sta(kk);
            fore_toe_dep=dep(kk);
            upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
         end
         fore_Irb=upper_slope/(sqrt(fore_H0/L0));
         fore_gamma=gamma_perm*gamma_beta*gamma_rough;
         if (fore_Irb < 1.8)
            fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
         else
            fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
         end
         if berm_width >= L0
            R2_new=fore_R2
            disp ('berm is wider than one wavelength, use full shallow foreshore solution');
         else
            w2=(berm_width-0.25*L0)/(0.75*L0)
            w1=1-w2
            R2_new=w2*fore_R2 + w1*R2_new
         end
      end % end berm width check

      % convergence criterion
      R2del=abs(R2-R2_new)
      R2_all(iter)=R2_new;

      % get the new top station (for plot purposes)
      Z2=R2_new+SWEL
      top_sta=-999;
      for kk=1:length(sta)-1
         if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
            top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
            break;
         end
      end
      if top_sta==-999
         dy=Z2-dep(end);
         top_sta=sta(end)+dy/S(end);
      end
      topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
           332.64095522817
Z2 =
                 13.14406
H0 =
                   2.4638
Tp =
                   12.522
T0 =
          11.3836363636364
R2 =
                   7.3914
Z2 =
                 16.83976
top_sta =
           853.24102935843
Lslope =
          640.813911973586
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
         0.854629843592181
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 2
dh =
                 3.692757
rdh_sum =
          1.70751853192025
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 3
dh =
                3.6523775
rdh_sum =
          2.55117235854404
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 4
```

```
dh =
                  3.611998
rdh_sum =
          3.38536357933416
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
          4.20987072116057
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
          5.02447872866588
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          5.82897910678553
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
          6.62755116654938
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          7.42452286255871
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
            8.219889608945
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
           9.0136467174644
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          9.80578939607165
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          10.5963130069552
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          11.3852130680951
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          12.1724849938907
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          12.9581242245842
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          13.7421260951528
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          14.5232359682026
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 19
```

```
dh =
                 3.3798155
rdh_sum =
          15.2989203750387
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          16.0678578183687
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          16.8299785406263
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          17.5852146819812
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          18.3335003032842
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          19.0747711289892
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          19.6788755386565
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          20.2802018069415
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          20.8924261630196
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          21.5154927442284
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          22.1493402908991
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          22.7939023294304
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          23.4491067466467
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          24.1148762854152
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          24.7760334371378
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
```

```
dh =
                 2.9129265
rdh_sum =
          25.4172546007938
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          26.0382928170551
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          26.6389362920358
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          27.2190087614432
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          27.7783701115315
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          28.3169164696317
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          28.8345805451998
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
           29.331331429459
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          29.6048176138964
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          29.8752014637987
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          30.1424941412628
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          30.4067069586539
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          30.6678513780551
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          30.9259390107105
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          30.9582309149951
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 78
```

```
dh =
                -0.8961285
rdh_sum =
          30.9940627842217
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          31.0336115186145
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          31.0770526451754
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          31.1245601679345
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          31.1763064940586
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          31.2324624585753
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          31.2931972667024
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          31.3586783314902
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
           31.429071202729
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          31.5028904700443
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          31.5785432157297
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          31.6560500125799
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          31.7354313988286
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          31.8167078215817
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          31.8998996945149
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
```

```
dh =
                 -1.393176
rdh_sum =
          31.9850272807344
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          32.0721106893207
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          32.1611699929693
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          32.2522251683237
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          32.3451514820193
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
           32.439820175667
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          32.5362457265432
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          32.6344424859339
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          32.7344248040827
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          32.8362070317194
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          32.9398033920457
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
           33.044845968831
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          33.1509598172267
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          33.2581497241443
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
           33.366420463418
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 108
```

```
dh =
                 -1.585925
rdh_sum =
          33.4757767957466
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          33.5862234686356
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          33.6977652163396
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          33.8104067598047
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 126
dh =
                 -4.540023
rdh_sum =
          34.4860121429232
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    83
rB =
         0.129522781027609
rdh_mean =
         0.415494122203894
gamma_berm =
         0.924293173180865
slope =
        0.0198759833019815
Irb =
          0.32606746457757
gamma_berm =
         0.924293173180865
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.554575903908519
ans =
!!! - - Iribaren number:   0.30 is outside the valid range (0.5-10), TAW NOT VALID - - !!!
ans =
!!! - - slope: 1:50.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
         0.788582580619379
R2del =
          6.60281741938062
Z2 =
          10.2369425806194
top_sta =
          286.813999820101
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
          286.813999820101
Z2 =
          10.2369425806194
H0 =
                   2.4638
Tp =
                   12.522
T0 =
          11.3836363636364
R2 =
         0.788582580619379
Z2 =
          10.2369425806194
top_sta =
          286.813999820101
Lslope =
          74.3868824352572
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 1
```

```
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 16
```

```
dh =
                  3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 17
dh =
                   3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 18
dh =
                  3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 19
dh =
                  3.3798155
rdh_sum =
    19
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 20
dh =
                  3.3545785
rdh_sum =
    20
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 21
dh =
                   3.329341
rdh_sum =
    21
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 22
dh =
                  3.3041035
rdh_sum =
    22
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 23
dh =
                  3.2788665
rdh_sum =
    23
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 24
dh =
                  3.2536295
rdh_sum =
    24
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 28
dh =
                  2.7927855
rdh_sum =
    25
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 29
dh =
                  2.7838805
rdh_sum =
    26
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 30
dh =
                   2.818876
rdh_sum =
    27
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 31
dh =
                  2.8538715
rdh_sum =
    28
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 32
dh =
                   2.888867
rdh_sum =
    29
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 33
dh =
                   2.923863
rdh_sum =
    30
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 34
```

```
dh =
                  2.9588585
rdh_sum =
    31
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 35
dh =
                   2.993854
rdh_sum =
    32
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 36
dh =
                  2.9785435
rdh_sum =
    33
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
                  2.9129265
rdh_sum =
    34
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
                    2.84731
rdh_sum =
    35
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
                  2.7816935
rdh_sum =
    36
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
                  2.7160765
rdh_sum =
    37
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
                  2.6504595
rdh_sum =
    38
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
                  2.5848425
rdh_sum =
    39
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
                   2.519226
rdh_sum =
    40
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
                  2.4536095
rdh_sum =
    41
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 53
dh =
                   1.726356
rdh_sum =
    42
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 54
dh =
                    1.71542
rdh_sum =
    43
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 55
dh =
                   1.704484
rdh_sum =
    44
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 56
dh =
                   1.693548
rdh_sum =
    45
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 57
```

```
dh =
                  1.682612
rdh_sum =
    46
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
    47
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
           47.985012873909
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    48
rB =
         0.645275059642093
rdh_mean =
         0.999687768206437
gamma_berm =
         0.999798524610787
slope =
         0.169943629817657
Irb =
          2.78794199279831
gamma_berm =
         0.999798524610787
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.599879114766472
ans =
!!! - - Iribaren number:   2.79 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.9 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          4.93904921486272
R2del =
          4.15046663424334
Z2 =
          14.3874092148627
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          408.813558329594
Z2 =
          14.3874092148627
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          4.93904921486272
Z2 =
          14.3874092148627
top_sta =
          408.813558329594
Lslope =
           196.38644094475
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
         0.854629843592181
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
          1.70751853192025
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 3
dh =
                 3.6523775
```

```
rdh_sum =
          2.55117235854404
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
          3.38536357933416
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
          4.20987072116057
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
          5.02447872866588
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          5.82897910678553
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
          6.62755116654938
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          7.42452286255871
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
            8.219889608945
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
           9.0136467174644
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          9.80578939607165
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          10.5963130069552
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          11.3852130680951
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          12.1724849938907
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          12.9581242245842
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          13.7421260951528
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 18
dh =
                 3.4003055
```

```
rdh_sum =
          14.5232359682026
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          15.2989203750387
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          16.0678578183687
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          16.8299785406263
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          17.5852146819812
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          18.3335003032842
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          19.0747711289892
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          19.6788755386565
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          20.2802018069415
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          20.8924261630196
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          21.5154927442284
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          22.1493402908991
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          22.7939023294304
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          23.4491067466467
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          24.1148762854152
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 36
dh =
                 2.9785435
```

```
rdh_sum =
          24.7760334371378
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          25.4172546007938
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
                  2.84731
rdh_sum =
          26.0382928170551
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          26.6389362920358
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          27.2190087614432
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          27.7783701115315
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          28.3169164696317
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          28.8345805451998
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
           29.331331429459
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          29.6048176138964
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          29.8752014637987
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          30.1424941412628
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          30.4067069586539
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          30.6678513780551
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          30.9259390107105
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 77
dh =
        -0.850196999999998
```

```
rdh_sum =
          30.9972869478005
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          31.0763370219085
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          31.1634485130887
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          31.2589739144722
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          31.3632584519643
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          31.4766397745638
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          31.5994478606616
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          31.7320047507665
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          31.8746240637825
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          32.0276107156804
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          32.1878016200761
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          32.3518381290203
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          32.5197567021796
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          32.6915934932308
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          32.8673842292747
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
                -1.3767715
```

```
rdh_sum =
          33.0471643290736
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          33.2309686570662
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          33.4188315153213
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          33.6107868861832
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          33.8068683064446
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          34.0068107493371
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          34.2103422816865
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
            34.41748661834
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          34.6282670554379
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          34.8427067263342
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          35.0608286030369
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          35.2826552332953
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          35.5074305556439
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          35.7343873937061
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
           35.963533179079
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 107
dh =
                 -1.577723
```

```
rdh_sum =
          36.1948752837817
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          36.4284210200543
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          36.6641776401597
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          36.9021523361853
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          37.1423522398478
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 126
dh =
                 -4.540023
rdh_sum =
          38.1263333822086
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    83
rB =
         0.422636102577727
rdh_mean =
         0.459353414243477
gamma_berm =
         0.771503234123908
slope =
        0.0761532784953555
Irb =
          1.24930203758898
gamma_berm =
         0.771503234123908
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.462901940474345
ans =
!!! - - Iribaren number:   0.96 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:13.1 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           2.5219424210483
R2del =
          2.41710679381442
Z2 =
          11.9703024210483
top_sta =
          326.889848671777
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          326.889848671777
Z2 =
          11.9703024210483
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
           2.5219424210483
Z2 =
          11.9703024210483
top_sta =
          326.889848671777
```

```
Lslope =
          114.462731286933
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 15
dh =
                 3.4238005
```

```
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
    19
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
    20
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
    21
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
    22
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
    23
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
    24
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
    25
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
    26
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
    27
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
    28
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
    29
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 33
dh =
                  2.923863
```

```
rdh_sum =
    30
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
    31
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
    32
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
    33
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
    34
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
    35
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
    36
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
    37
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
    38
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
    39
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          39.5176640755681
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          40.0144149598273
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          40.2879011442647
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
           40.558284994167
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          40.8255776716311
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 56
dh =
                  1.693548
```

```
rdh_sum =
          41.0897904890222
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 57
dh =
                 1.682612
rdh_sum =
          41.3509349084234
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 58
dh =
                 1.671676
rdh_sum =
          41.6090225410788
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          41.8641907850563
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
            42.14469014795
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          42.4512390312671
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          42.7844708728844
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 81
dh =
                -1.033924
rdh_sum =
          43.1449314985707
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 82
dh =
               -1.0798555
rdh_sum =
          43.5330773117988
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 83
dh =
                -1.125787
rdh_sum =
          43.9492743990521
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 84
dh =
                -1.171719
rdh_sum =
           44.393797347574
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 85
dh =
                -1.217651
rdh_sum =
          44.8668277316205
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 86
dh =
               -1.2635825
rdh_sum =
          45.3684535102834
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 87
dh =
               -1.2947505
rdh_sum =
          45.8894861119588
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 88
dh =
                -1.311155
rdh_sum =
          46.4207221312532
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 89
dh =
                -1.327559
```

```
rdh_sum =
          46.9621482142789
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          47.5137470633917
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          48.0754971332639
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          48.6473729480721
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          49.2293444939223
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          49.8213772350422
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          50.4234327427536
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          51.0354684033283
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          51.6567296786553
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          52.2864683690515
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
           52.924644671178
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
           53.571215895325
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
           54.226137077194
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          54.8893609852979
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          55.5608375431604
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 104
dh =
                 -1.553117
```

```
rdh_sum =
          56.2388101902174
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          56.9215475105037
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          57.6090304278274
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          58.3012393705975
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          58.9981542738669
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          59.6997545814269
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          60.4060192479533
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          61.1169267412034
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    82
rB =
         0.716390383822343
rdh_mean =
         0.745328374892725
gamma_berm =
         0.817555696740739
slope =
         0.191531709580794
Irb =
          3.14209656852503
gamma_berm =
         0.817555696740739
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.490533418044443
ans =
!!! - - Iribaren number:   2.57 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          4.10597950258665
R2del =
          1.58403708153835
Z2 =
          13.5543395025867
top_sta =
          334.278555672762
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
          334.278555672762
Z2 =
          13.5543395025867
```

```
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          4.10597950258665
Z2 =
          13.5543395025867
top_sta =
          334.278555672762
Lslope =
          121.851438287918
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
         0.854629843592181
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
          1.70751853192025
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
          2.55117235854404
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
          3.38536357933416
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
          4.20987072116057
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
          5.02447872866588
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          5.82897910678553
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
          6.62755116654938
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          7.42452286255871
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
            8.219889608945
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
           9.0136467174644
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          9.80578939607165
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 13
dh =
                 3.4362985
```

```
rdh_sum =
          10.5963130069552
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          11.3852130680951
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          12.1724849938907
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          12.9581242245842
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          13.7421260951528
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          14.5232359682026
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          15.2989203750387
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          16.0678578183687
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          16.8299785406263
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          17.5852146819812
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          18.3335003032842
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          19.0747711289892
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          19.6788755386565
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          20.2802018069415
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          20.8924261630196
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 31
dh =
                 2.8538715
```

```
rdh_sum =
          21.5154927442284
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          22.1493402908991
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          22.7939023294304
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          23.4491067466467
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          24.1148762854152
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          24.7760334371378
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          25.4172546007938
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          26.0382928170551
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          26.6389362920358
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          27.2190087614432
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          27.7783701115315
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          28.3169164696317
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          28.8345805451998
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
           29.331331429459
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          29.6048176138964
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 54
dh =
                   1.71542
```

```
rdh_sum =
          29.8752014637987
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          30.1424941412628
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          30.4067069586539
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          30.6678513780551
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          30.9259390107105
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          31.0280507237207
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          31.1410471696547
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          31.2654062704542
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          31.4015920472012
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          31.5500537944393
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          31.7112255057645
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          31.8855256100824
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          32.0733564730845
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          32.2751036099072
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          32.4911351922629
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 87
dh =
                -1.2947505
```

```
rdh_sum =
          32.7170606665314
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          32.9482565087037
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          33.1847649031252
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          33.4266273572466
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          33.6738845351014
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
           33.926576417145
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          34.1847419638417
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          34.4484191047776
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          34.7176450675503
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          34.9924562056593
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          35.2724854338905
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          35.5573579765236
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          35.8470987329957
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          36.1417318648817
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          36.4412811402113
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 102
dh =
                -1.5279245
```

```
rdh_sum =
          36.7457699340984
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          37.0552208755417
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          37.3686158090096
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          37.6849254633857
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          38.0041570728599
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          38.3263177565478
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          38.6514145182109
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          38.9794542459803
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          39.3104437120859
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          39.6443895725894
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
    82
rB =
         0.672950612254947
rdh_mean =
         0.483468165519383
gamma_berm =
         0.652399585737098
slope =
         0.195769082315707
Irb =
          3.21161108577688
gamma_berm =
         0.652399585737098
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.391439751442259
ans =
!!! - - Iribaren number:   2.10 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.1 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.28599479467491
R2del =
         0.819984707911739
Z2 =
          12.7343547946749
```

```
top_sta =
          331.005647048839
ans =
!----------------- STARTING ITERATION 6 -----------------!
Ztoe =
                    5.75266
toe_sta =
          212.427117384844
top_sta =
          331.005647048839
Z2 =
          12.7343547946749
H0 =
                     2.4638
Tp =
                     12.522
T0 =
          11.3836363636364
R2 =
          3.28599479467491
Z2 =
          12.7343547946749
top_sta =
          331.005647048839
Lslope =
          118.578529663995
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 11
dh =
                 3.4487975
```

```
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
    19
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
    20
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
    21
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
    22
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
           22.748285621303
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          23.4895564470081
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          24.0936608566754
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 29
dh =
                 2.7838805
```

```
rdh_sum =
          24.6949871249603
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          25.3072114810385
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          25.9302780622472
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          26.5641256089179
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          27.2086876474492
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          27.8638920646655
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
           28.529661603434
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          29.1908187551566
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          29.8320399188126
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          30.4530781350739
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          31.0537216100547
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
           31.633794079462
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          32.1931554295503
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          32.7317017876506
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          33.2493658632186
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 44
dh =
                 2.4536095
```

```
rdh_sum =
          33.7461167474778
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          34.0196029319152
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          34.2899867818175
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          34.5572794592817
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          34.8214922766728
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
           35.082636696074
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          35.3407243287294
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          35.4970030423345
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          35.6695536529763
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          35.8590074971876
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          36.0659635149986
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          36.2909867201335
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          36.5346070860419
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          36.7973189237057
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
           37.079579950087
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 85
dh =
                 -1.217651
```

```
rdh_sum =
           37.381809984448
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          37.7043901206445
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          38.0409765810757
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          38.3849939939069
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
           38.736480497968
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          39.0954726209154
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          39.4620050443602
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
           39.836110826651
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          40.2178209340043
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          40.6071642291132
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
           41.004167928562
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          41.4088573648196
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          41.8207046881751
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          42.2391760289589
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
           42.664286120519
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 100
dh =
                 -1.499803
```

```
rdh_sum =
          43.0960482597126
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          43.5344747771811
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          43.9795770368751
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          44.4313649595702
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          44.8884518778111
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          45.3494463875654
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          45.8143508872703
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          46.2831675349385
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          46.7558982480258
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          47.2325447033132
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
           47.713108336804
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
           48.197590343635
ans =
!------- End Berm Factor Calculation, Iter: 6 ---------!
berm_width =
    82
rB =
         0.691524850513461
rdh_mean =
         0.587775491995549
gamma_berm =
         0.714936508724237
slope =
         0.190868655979553
Irb =
          3.13121910886174
gamma_berm =
         0.714936508724237
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
```

```
gamma =
         0.428961905234542
ans =
!!! - - Iribaren number:   2.24 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.58894343172231
R2del =
         0.302948637047396
Z2 =
          13.0373034317223
top_sta =
          332.214844241459
ans =
!----------------- STARTING ITERATION 7 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          332.214844241459
Z2 =
          13.0373034317223
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.58894343172231
Z2 =
          13.0373034317223
top_sta =
          332.214844241459
Lslope =
          119.787726856615
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
           4.8245071418264
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
          5.63911514933172
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.44361552745137
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
          7.24218758721522
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 9
dh =
                 3.4612955
```

```
rdh_sum =
          8.03915928322455
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          8.83452602961084
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.62828313813024
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.4204258167375
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.2109494276211
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
           11.999849488761
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          12.7871214145566
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
            13.57276064525
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.3567625158187
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          15.1378723888684
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          15.9135567957046
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          16.6824942390346
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.4446149612921
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
           18.199851102647
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
            18.94813672395
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 24
dh =
                 3.2536295
```

```
rdh_sum =
          19.6894075496551
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.2935119593224
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          20.8948382276074
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.5070625836855
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.1301291648943
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          22.7639767115649
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.4085387500962
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.0637431673125
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          24.7295127060811
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.3906698578036
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.0318910214597
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          26.6529292377209
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          27.2535727127017
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
           27.833645182109
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.3930065321973
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 42
dh =
                 2.5848425
```

```
rdh_sum =
          28.9315528902976
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.4492169658656
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          29.9459678501248
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.2194540345623
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.4898378844645
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          30.7571305619287
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.0213433793198
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
           31.282487798721
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.5405754313764
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          31.6727678353644
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          31.8188716672814
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          31.9794589381497
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.1550784155893
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          32.3462544151769
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 82
dh =
               -1.0798555
rdh_sum =
          32.5534859301548
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 83
dh =
                 -1.125787
```

```
rdh_sum =
          32.7772461693779
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.0179818130397
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.2761119255755
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.5520272600737
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          33.8402192692142
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.1349367086472
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.4362217064004
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
             34.7441152346
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.0586569027897
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.3798851541363
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          35.7078368510057
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.0425472628687
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
            36.38405047002
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          36.7323791521793
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.0870738968301
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 98
dh =
                -1.4716815
```

```
rdh_sum =
          37.4476680588213
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          37.8141827571687
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.1866380023701
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          38.5650531151956
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          38.9494467265095
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.3398363498764
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          39.7349845838882
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.1336454904689
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          40.5358242933452
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          40.9415260349071
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          41.3507555759476
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          41.7635175954121
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.1798165901572
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          42.5996568747194
ans =
!------- End Berm Factor Calculation, Iter: 7 ---------!
berm_width =
    82
rB =
         0.684544253003095
rdh_mean =
          0.51950801066731
gamma_berm =
         0.671081970088282
```

```
slope =
         0.192778027092338
Irb =
          3.16254253010959
gamma_berm =
         0.671081970088282
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.402649182052969
ans =
!!! - - Iribaren number:   2.12 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           3.3732492257251
R2del =
         0.215694205997213
Z2 =
          12.8216092257251
top_sta =
          331.353916689851
ans =
!----------------- STARTING ITERATION 8 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.353916689851
Z2 =
          12.8216092257251
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
           3.3732492257251
Z2 =
          12.8216092257251
top_sta =
          331.353916689851
Lslope =
          118.926799305007
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 7
dh =
                 3.4908595
```

```
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
    19
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
            19.76893744333
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.5310581655875
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 22
dh =
                 3.3041035
```

```
rdh_sum =
          21.2862943069424
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          22.0345799282454
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.7758507539505
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.3799551636178
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.9812814319028
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          24.5935057879809
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          25.2165723691897
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.8504199158604
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.4949819543916
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          27.1501863716079
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.8159559103765
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.4771130620991
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          29.1183342257551
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.7393724420163
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.3400159169971
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 40
dh =
                 2.7160765
```

```
rdh_sum =
          30.9200883864044
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.4794497364927
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
           32.017996094593
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.5356601701611
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          33.0324110544202
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.3058972388577
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.5762810887599
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.8435737662241
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          34.1077865836152
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.3689310030164
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.6270186356718
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.7757392046747
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          34.9399971366068
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          35.1204067066152
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.3175528240006
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 81
dh =
                 -1.033924
```

```
rdh_sum =
          35.5319896036051
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.7642393278771
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          36.0147918738851
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
           36.284103838344
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.5725972982741
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.8806590203917
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
           37.202201500502
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.5309003613587
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.8667953664496
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          38.2099248172081
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.5603253265775
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.9180320336697
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          39.2830781511806
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.6554949535899
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
           40.035312218293
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 96
dh =
                 -1.442388
```

```
rdh_sum =
          40.4225579954478
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.8167253755021
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          41.2173009688845
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.6243018254767
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          42.0377436640029
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.4576413269098
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.8840087799328
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
           43.316858650014
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.7548485973251
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          44.1966301925175
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.6422068326251
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          45.0915816932413
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.5447577283345
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          46.0017376700747
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
           46.462524028675
ans =
Berm Factor Calculation: Iteration 8, Profile Segment: 111
dh =
                 -1.610531
```

```
rdh_sum =
          46.9271190922445
ans =
!------- End Berm Factor Calculation, Iter: 8 ---------!
berm_width =
    82
rB =
         0.689499763545288
rdh_mean =
         0.572281940149324
gamma_berm =
         0.705088498868909
slope =
         0.191431409132897
Irb =
          3.14045112979403
gamma_berm =
         0.705088498868909
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.6
gamma =
         0.423053099321346
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           3.5408932455372
R2del =
         0.167644019812107
Z2 =
          12.9892532455372
top_sta =
          332.023055459023
ans =
!----------------- STARTING ITERATION 9 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          332.023055459023
Z2 =
          12.9892532455372
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
           3.5408932455372
Z2 =
          12.9892532455372
top_sta =
          332.023055459023
Lslope =
          119.595938074179
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 5
dh =
                 3.5716185
```

```
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
          5.81460800750531
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.61910838562496
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
          7.41768044538882
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.21465214139815
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.01001888778443
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.80377599630383
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.5959186749111
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.3864422857947
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.1753423469345
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          12.9626142727301
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.7482535034236
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.5322553739923
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
           15.313365247042
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          16.0890496538782
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 20
dh =
                 3.3545785
```

```
rdh_sum =
          16.8579870972082
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.6201078194657
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          18.3753439608206
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          19.1236295821236
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          19.8649004078287
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
           20.469004817496
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.0703310857809
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.6825554418591
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.3056220230679
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          22.9394695697385
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.5840316082698
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.2392360254861
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          24.9050055642546
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.5661627159772
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.2073838796333
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 38
dh =
                   2.84731
```

```
rdh_sum =
          26.8284220958945
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          27.4290655708753
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.0091380402826
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.5684993903709
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.1070457484712
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.6247098240392
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.1214607082984
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.3949468927358
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.6653307426381
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          30.9326234201023
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.1968362374934
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.4579806568946
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
            31.71606828955
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          31.8516999714941
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
           32.001583617091
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 79
dh =
        -0.942059999999998
```

```
rdh_sum =
          32.1663005886813
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.3464077885873
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
           32.542436405007
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.7548910068591
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          32.9842490584595
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.2309601474705
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.4954448650408
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.7780940891095
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.0732767155348
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.3751195059644
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
           34.683664231544
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          34.9989514461651
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
           35.321020275531
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.6499086172839
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          35.9856527183575
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 94
dh =
                  -1.40958
```

```
rdh_sum =
          36.3282871628803
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
           36.677845283889
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.0343589478529
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.3973586674859
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.7663678505761
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
           38.141406883544
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.5224949989264
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          38.9096507019538
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.3028917703034
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.7022348191283
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.1064197049131
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.5141781979427
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          40.9255151829108
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.3404353550105
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          41.7589432196854
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 109
dh =
                 -1.594127
```

```
rdh_sum =
          42.1810430923912
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.6067390983669
ans =
Berm Factor Calculation: Iteration 9, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.0360351724167
ans =
!------- End Berm Factor Calculation, Iter: 9 ---------!
berm_width =
    82
rB =
         0.685642015275969
rdh_mean =
         0.524829697224594
gamma_berm =
         0.674203276005779
slope =
         0.192483380285897
Irb =
          3.15770882021649
gamma_berm =
         0.674203276005779
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.404521965603467
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           3.3882526695457
R2del =
         0.152640575991503
Z2 =
          12.8366126695457
top_sta =
          331.413801831848
ans =
!----------------- STARTING ITERATION 10 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
          331.413801831848
Z2 =
          12.8366126695457
H0 =
                   2.4638
Tp =
                   12.522
T0 =
          11.3836363636364
R2 =
           3.3882526695457
Z2 =
          12.8366126695457
top_sta =
          331.413801831848
Lslope =
          118.986684447004
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 2
dh =
                 3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 3
dh =
                3.6523775
```

```
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 18
dh =
                 3.4003055
```

```
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 36
dh =
                 2.9785435
```

```
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 38
dh =
                  2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 77
dh =
        -0.850196999999998
```

```
rdh_sum =
          34.5501782248791
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          34.7130691928891
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8919872733409
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0875149127072
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.3002042651844
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5305761673561
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          35.7791195734401
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0462906898679
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3325117469033
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6381702145709
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9572213286324
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2833827390903
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.6166944445506
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9571950056047
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.3049213198206
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 92
dh =
                -1.3767715
```

```
rdh_sum =
          38.6599088350445
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          39.0221910995712
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3917997502932
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7687649511014
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
            40.15311516407
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5443469772715
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9419504298898
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3459429263232
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7563405569727
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
            42.17315855052
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5964112735048
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          43.0261117707044
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4609252265528
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8995105269536
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.3418712237781
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 107
dh =
                 -1.577723
```

```
rdh_sum =
          44.7880106505501
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.2379319222541
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6916379351539
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.1491313666262
ans =
Berm Factor Calculation: Iteration 10, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.6104146750051
ans =
!------- End Berm Factor Calculation, Iter: 10 ---------!
berm_width =
    82
rB =
         0.689152743276264
rdh_mean =
         0.568419691158599
gamma_berm =
         0.702575246217931
slope =
         0.191527106997003
Irb =
          3.14202106268441
gamma_berm =
         0.702575246217931
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421545147730759
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52850620749376
R2del =
          0.14025353794806
Z2 =
          12.9768662074938
top_sta =
           331.97361350816
ans =
!----------------- STARTING ITERATION 11 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
           331.97361350816
Z2 =
          12.9768662074938
H0 =
                   2.4638
Tp =
                   12.522
T0 =
          11.3836363636364
R2 =
          3.52850620749376
Z2 =
          12.9768662074938
top_sta =
           331.97361350816
Lslope =
          119.546496123316
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 1
dh =
                 3.700486
```

```
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 16
dh =
                 3.4175515
```

```
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 17
dh =
                 3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 18
dh =
                3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 19
dh =
                3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 20
dh =
                3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 21
dh =
                 3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 22
dh =
                3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 23
dh =
                3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 24
dh =
                3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 28
dh =
                2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 29
dh =
                2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 30
dh =
                 2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 31
dh =
                2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 32
dh =
                 2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 33
dh =
                 2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 34
dh =
                2.9588585
```

```
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 57
dh =
                  1.682612
```

```
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0379999388124
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          32.1888812692253
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3546880557463
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5359792945862
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          32.7332879295603
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9471199377176
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          33.1779538378816
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
           33.426239911306
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.6923990732485
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.9768221508079
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2738458667652
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.5775650153055
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8880212614671
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 90
dh =
                 -1.343963
```

```
rdh_sum =
          35.2052550366259
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5293053264501
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8602098720553
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          36.1980047452114
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5427243362494
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          36.8944017678677
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2530686785949
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6182529380874
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9894753473376
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3667560892788
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.7501141808942
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1395679018271
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5351347941157
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9368312252537
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.3433911272565
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 105
dh =
                 -1.561319
```

```
rdh_sum =
          40.7535404700615
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1672840452197
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5846264526087
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
           42.005572100188
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          42.4301252037638
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8582897867639
ans =
Berm Factor Calculation: Iteration 11, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.2900696800233
ans =
!------- End Berm Factor Calculation, Iter: 11 ---------!
berm_width =
    82
rB =
         0.685925582590181
rdh_mean =
         0.527927679024675
gamma_berm =
         0.676193518210301
slope =
         0.192406934158836
Irb =
          3.15645471396932
gamma_berm =
         0.676193518210301
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.405716110926181
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.39807598015199
R2del =
         0.130430227341773
Z2 =
           12.846435980152
top_sta =
          331.453010853295
ans =
!----------------- STARTING ITERATION 12 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.453010853295
Z2 =
           12.846435980152
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
```

```
R2 =
          3.39807598015199
Z2 =
           12.846435980152
top_sta =
          331.453010853295
Lslope =
          119.025893468451
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 2
dh =
                 3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 3
dh =
                3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 4
dh =
                 3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 5
dh =
                3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 6
dh =
                 3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 7
dh =
                3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 8
dh =
                 3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 9
dh =
                3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 10
dh =
                3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 11
dh =
                3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 12
dh =
                 3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 13
dh =
                3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 14
dh =
                3.4300495
```

```
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 32
dh =
                  2.888867
```

```
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 55
dh =
                  1.704484
```

```
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493711042915
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          34.7113760768893
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8893273556661
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0838057682147
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.2953621732077
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5245164432332
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          35.7717569053935
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0375394821074
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3222864698807
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6263857595336
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9438203633587
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 88
dh =
                 -1.311155
```

```
rdh_sum =
          37.2683352697709
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5999706248167
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9387651520257
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2847559283326
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6379785964959
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          38.9984669170647
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3662527564977
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7413665237858
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1238369425115
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5131628746275
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9088365896165
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3108757175017
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7192965853998
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.1341146681012
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5553445876564
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 103
dh =
                -1.5419855
```

```
rdh_sum =
          42.9829996553642
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4157499653368
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8522591798187
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2925309495508
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7365687089255
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1843756757898
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6359548512601
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0913090195493
ans =
Berm Factor Calculation: Iteration 12, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5504407478074
ans =
!------- End Berm Factor Calculation, Iter: 12 ---------!
berm_width =
    82
rB =
         0.688925725407261
rdh_mean =
         0.567688301802529
gamma_berm =
         0.702169349717263
slope =
         0.191589596242868
Irb =
           3.1430462049203
gamma_berm =
         0.702169349717263
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421301609830358
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52662050549167
R2del =
         0.128544525339685
Z2 =
          12.9749805054917
top_sta =
          331.966086867376
ans =
!----------------- STARTING ITERATION 13 -----------------!
Ztoe =
                   5.75266
```

```
toe_sta =
          212.427117384844
top_sta =
          331.966086867376
Z2 =
          12.9749805054917
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.52662050549167
Z2 =
          12.9749805054917
top_sta =
          331.966086867376
Lslope =
          119.538969482532
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 12
dh =
                  3.442548
```

```
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 30
dh =
                  2.818876
```

```
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 53
dh =
                  1.726356
```

```
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0381389456419
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          32.1891730099848
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551466262501
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366191092318
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          32.7341236693535
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9481664968867
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          33.1792262695524
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.4277533720617
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.6941687663817
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 86
dh =
                -1.2635825
```

```
rdh_sum =
          33.9788632687397
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2761686830875
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.5801749183611
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8909236229165
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          35.2084552089273
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5328086401699
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8640216333365
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          36.2021302329127
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5471687990868
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          36.8991704218747
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2581667044212
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6236851123592
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
           37.995246048303
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3728696636621
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.7565749420456
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 101
dh =
                -1.5138635
```

```
rdh_sum =
          39.1463801281824
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5423027276532
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9443590696512
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.3512821821123
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7617971500881
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1759087507359
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5936215692071
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          42.0149399984019
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          42.4398682387349
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8684102979113
ans =
Berm Factor Calculation: Iteration 13, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.3005699907123
ans =
!------- End Berm Factor Calculation, Iter: 13 ---------!
berm_width =
    82
rB =
         0.685968771146072
rdh_mean =
         0.528055731594052
gamma_berm =
          0.67626097015214
slope =
         0.192395278960775
Irb =
          3.15626350929666
gamma_berm =
          0.67626097015214
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.405756582091284
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
```

```
R2_new =
          3.39838767679335
R2del =
         0.128232828698324
Z2 =
          12.8467476767934
top_sta =
          331.454254967503
ans =
!----------------- STARTING ITERATION 14 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454254967503
Z2 =
          12.8467476767934
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.39838767679335
Z2 =
          12.8467476767934
top_sta =
          331.454254967503
Lslope =
          119.027137582659
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 10
dh =
                 3.4550465
```

```
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 28
dh =
                 2.7927855
```

```
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 43
dh =
                  2.519226
```

```
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493456004071
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
           34.711322575736
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
           34.889243302564
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0836885570384
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.2952091565765
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5243249429599
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          35.7715242231033
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 84
dh =
                 -1.171719
```

```
rdh_sum =
          36.0372629100525
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3219633019827
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260133025615
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9433968027713
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
           37.267859656177
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994420134208
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9381826031168
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2841185078017
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6372853763268
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          38.9977169758809
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3654451801084
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7405004056761
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1229113843596
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121770500544
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
           40.907789742822
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 99
dh =
                -1.4857425
```

```
rdh_sum =
          41.3097670997621
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7181254554175
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.1328802923016
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5540462404842
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          42.9816366196307
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4143216794193
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8507652334742
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2909709356412
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7349422234812
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826823180724
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
           45.634194223825
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0894807283087
ans =
Berm Factor Calculation: Iteration 14, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5485444020924
ans =
!------- End Berm Factor Calculation, Iter: 14 ---------!
berm_width =
    82
rB =
         0.688918524509208
rdh_mean =
         0.567665175635273
gamma_berm =
         0.702156530704705
slope =
         0.191591576879432
Irb =
           3.1430786974583
gamma_berm =
         0.702156530704705
```

```
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421293918422823
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52656096456957
R2del =
         0.128173287776214
Z2 =
          12.9749209645696
top_sta =
          331.965849214166
ans =
!----------------- STARTING ITERATION 15 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.965849214166
Z2 =
          12.9749209645696
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.52656096456957
Z2 =
          12.9749209645696
top_sta =
          331.965849214166
Lslope =
          119.538731829322
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 8
dh =
                  3.467545
```

```
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 23
dh =
                 3.2788665
```

```
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 41
dh =
                 2.6504595
```

```
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0381433381649
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          32.1891822287673
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551611166718
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366393267311
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 81
dh =
                -1.033924
rdh_sum =
          32.7341500777839
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 82
dh =
                -1.0798555
```

```
rdh_sum =
          32.9481995668292
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          33.1792664765981
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
           33.427801195059
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.6942246856425
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.9789277642188
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2762420793373
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.5802573856015
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8910153308385
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          35.2085563266128
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5329193360076
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8641420749409
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          36.2022605870344
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5473092315218
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
           36.899321097384
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2583277866457
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 97
dh =
                -1.4576205
```

```
rdh_sum =
          37.6238567521757
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9954283840029
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3730628325389
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.7567790803367
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1465953710202
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5425292090164
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9445969223068
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.3515315102714
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7620580300136
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1761812582354
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5939057796221
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          42.0152359865975
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          42.4401760790894
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8687300643054
ans =
Berm Factor Calculation: Iteration 15, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
           43.300901756519
ans =
!------- End Berm Factor Calculation, Iter: 15 ---------!
berm_width =
    82
```

```
rB =
         0.685970134910581
rdh_mean =
         0.528059777518524
gamma_berm =
         0.676263101914652
slope =
         0.192394910872511
Irb =
          3.15625747077243
gamma_berm =
         0.676263101914652
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.405757861148791
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.39839752819641
R2del =
          0.12816343637316
Z2 =
          12.8467575281964
top_sta =
          331.454294288654
ans =
!----------------- STARTING ITERATION 16 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454294288654
Z2 =
          12.8467575281964
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.39839752819641
Z2 =
          12.8467575281964
top_sta =
          331.454294288654
Lslope =
           119.02717690381
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 6
dh =
                  3.531239
```

```
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 21
dh =
                  3.329341
```

```
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 39
dh =
                 2.7816935
```

```
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493447944442
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          34.7113208850142
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8892406463501
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 80
dh =
        -0.987991999999998
```

```
rdh_sum =
          35.0836848529731
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.2952043209965
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5243188912281
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          35.7715168699441
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0372541698937
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3219530893046
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260015322498
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9433834174806
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2678446259036
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994253083059
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9381641934623
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2840983640865
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6372634692222
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
           38.997693276268
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3654196590953
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 95
dh =
                 -1.425984
```

```
rdh_sum =
          39.7404730346135
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1228821348569
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121458959946
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9077566603188
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3097320651524
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7180884452733
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.1328412834386
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5540052099714
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          42.9815935448017
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4142765425241
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8507180215471
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2909216358146
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7348908229877
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826288042466
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6341385841056
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 110
dh =
                 -1.602329
```

```
rdh_sum =
          46.0894229502404
ans =
Berm Factor Calculation: Iteration 16, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
           46.548484473328
ans =
!------- End Berm Factor Calculation, Iter: 16 ---------!
berm_width =
    82
rB =
         0.688918296921949
rdh_mean =
         0.567664444796683
gamma_berm =
         0.702156125610526
slope =
         0.191591639476746
Irb =
          3.14307972437341
gamma_berm =
         0.702156125610526
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421293675366316
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           3.5265590830276
R2del =
         0.128161554831192
Z2 =
          12.9749190830276
top_sta =
           331.96584170413
ans =
!----------------- STARTING ITERATION 17 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
           331.96584170413
Z2 =
          12.9749190830276
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
           3.5265590830276
Z2 =
          12.9749190830276
top_sta =
           331.96584170413
Lslope =
          119.538724319286
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 4
dh =
                  3.611998
```

```
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 19
dh =
                 3.3798155
```

```
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 37
dh =
                 2.9129265
```

```
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0381434769756
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 78
dh =
                -0.8961285
```

```
rdh_sum =
          32.1891825200955
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551615745921
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366399656361
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          32.7341509123319
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9482006118914
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          33.1792677472038
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.4278027063405
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.6942264527782
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.9789298023761
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2762443987724
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.5802599916936
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8910182289499
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
           35.208559522087
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5329228341657
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8641458810798
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 93
dh =
                 -1.393176
```

```
rdh_sum =
          36.2022647064235
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5473136694005
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          36.8993258589591
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2583328770883
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6238621762538
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9954341460865
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3730689369667
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
           38.756785531414
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1466021730173
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5425363661673
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9446044388069
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
           40.351539389414
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7620662742087
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1761898698785
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5939147610942
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 108
dh =
                 -1.585925
```

```
rdh_sum =
          42.0152453402643
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          42.4401858073014
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8687401693972
ans =
Berm Factor Calculation: Iteration 17, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.3009122408093
ans =
!------- End Berm Factor Calculation, Iter: 17 ---------!
berm_width =
    82
rB =
         0.685970178006747
rdh_mean =
         0.528059905375723
gamma_berm =
         0.676263169282064
slope =
         0.192394899240544
Irb =
          3.15625727994887
gamma_berm =
         0.676263169282064
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.405757901569238
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.39839783951841
R2del =
         0.128161243509191
Z2 =
          12.8467578395184
top_sta =
          331.454295531272
ans =
!----------------- STARTING ITERATION 18 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454295531272
Z2 =
          12.8467578395184
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.39839783951841
Z2 =
          12.8467578395184
top_sta =
          331.454295531272
Lslope =
          119.027178146428
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 2
dh =
                 3.692757
```

```
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 17
dh =
                  3.411302
```

```
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 35
dh =
                  2.993854
```

```
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 58
dh =
                  1.671676
```

```
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493447689744
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          34.7113208315845
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8892405624094
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0836847359185
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.2952041681841
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5243186999833
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
           35.771516637572
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0372538936901
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3219527665669
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260011602883
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9433829944831
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2678441509218
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994247803964
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9381636116864
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 91
dh =
                 -1.360367
```

```
rdh_sum =
          38.2840977275114
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6372627769211
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          38.9976925273206
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3654188525886
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
           39.740472169642
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1228812105236
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121449114741
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9077556148562
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
             41.309730958
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7180872756907
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
           42.132840050693
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5540039133383
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          42.9815921835648
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4142751161224
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8507165295708
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 106
dh =
                 -1.569521
```

```
rdh_sum =
          44.2909200778573
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7348891986457
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826271131197
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6341368257969
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0894211243563
ans =
Berm Factor Calculation: Iteration 18, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5484825794782
ans =
!------- End Berm Factor Calculation, Iter: 18 ---------!
berm_width =
    82
rB =
         0.688918289729786
rdh_mean =
         0.567664421700954
gamma_berm =
         0.702156112808884
slope =
         0.191591641454932
Irb =
          3.14307975682573
gamma_berm =
         0.702156112808884
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
          0.42129366768533
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52655902356779
R2del =
         0.128161184049384
Z2 =
          12.9749190235678
top_sta =
            331.9658414668
ans =
!----------------- STARTING ITERATION 19 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
            331.9658414668
Z2 =
          12.9749190235678
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.52655902356779
Z2 =
          12.9749190235678
top_sta =
            331.9658414668
```

```
Lslope =
          119.538724081956
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 15
dh =
                 3.4238005
```

```
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 33
dh =
                  2.923863
```

```
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 56
dh =
                  1.693548
```

```
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 57
dh =
                 1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 58
dh =
                 1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0381434813623
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          32.1891825293019
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551615890632
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366399858265
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 81
dh =
                -1.033924
rdh_sum =
           32.734150938705
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9482006449171
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 83
dh =
                -1.125787
rdh_sum =
           33.179267787357
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 84
dh =
                -1.171719
rdh_sum =
          33.4278027540995
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 85
dh =
                -1.217651
rdh_sum =
          33.6942265086227
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.9789298667852
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2762444720704
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 88
dh =
                -1.311155
rdh_sum =
          34.5802600740504
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 89
dh =
                -1.327559
```

```
rdh_sum =
          34.8910183205351
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          35.2085596230692
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5329229447133
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8641460013601
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
           36.202264836603
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5473138096449
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          36.8993260094327
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2583330379548
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6238623476636
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9954343281779
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3730691298768
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.7567857352788
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1466023879717
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5425365923452
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9446046763408
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 104
dh =
                 -1.553117
```

```
rdh_sum =
           40.351539638408
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7620665347389
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1761901420208
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5939150449236
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          42.0152456358557
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
           42.440186114729
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8687404887349
ans =
Berm Factor Calculation: Iteration 19, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.3009125721303
ans =
!------- End Berm Factor Calculation, Iter: 19 ---------!
berm_width =
    82
rB =
         0.685970179368656
rdh_mean =
         0.528059909416223
gamma_berm =
         0.676263171410987
slope =
         0.192394898872956
Irb =
          3.15625727391853
gamma_berm =
         0.676263171410987
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.405757902846592
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           3.3983978493567
R2del =
         0.128161174211089
Z2 =
          12.8467578493567
top_sta =
          331.454295570541
ans =
!----------------- STARTING ITERATION 20 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454295570541
Z2 =
          12.8467578493567
```

```
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
           3.3983978493567
Z2 =
          12.8467578493567
top_sta =
          331.454295570541
Lslope =
          119.027178185697
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 13
dh =
                 3.4362985
```

```
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 31
dh =
                 2.8538715
```

```
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 32
dh =
                 2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 33
dh =
                 2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 34
dh =
                2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 35
dh =
                 2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 36
dh =
                2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 37
dh =
                2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 38
dh =
                  2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 39
dh =
                2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 40
dh =
                2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 41
dh =
                2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 42
dh =
                2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 43
dh =
                 2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 44
dh =
                2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 53
dh =
                 1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 54
dh =
                  1.71542
```

```
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493447681695
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          34.7113208298961
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8892405597567
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0836847322194
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
           35.295204163355
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5243186939396
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          35.7715166302287
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0372538849616
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3219527563679
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260011485337
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 87
dh =
                -1.2947505
```

```
rdh_sum =
          36.9433829811157
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2678441359116
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994247637136
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9381635933013
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2840977073946
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6372627550432
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          38.9976925036526
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3654188271016
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7404721423075
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1228811813132
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121448803617
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9077555818178
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3097309230122
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7180872387299
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.1328400117362
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 102
dh =
                -1.5279245
```

```
rdh_sum =
          42.5540038723626
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          42.9815921405475
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4142750710457
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8507164824219
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2909200286232
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7348891473138
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826270596773
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6341367702314
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0894210666553
ans =
Berm Factor Calculation: Iteration 20, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5484825196294
ans =
!------- End Berm Factor Calculation, Iter: 20 ---------!
berm_width =
    82
rB =
         0.688918289502501
rdh_mean =
         0.567664420971091
gamma_berm =
          0.70215611240433
slope =
         0.191591641517446
Irb =
          3.14307975785128
gamma_berm =
          0.70215611240433
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421293667442598
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52655902168876
R2del =
          0.12816117233206
Z2 =
          12.9749190216888
```

```
top_sta =
            331.9658414593
ans =
!----------------- STARTING ITERATION 21 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
            331.9658414593
Z2 =
          12.9749190216888
H0 =
                   2.4638
Tp =
                   12.522
T0 =
          11.3836363636364
R2 =
          3.52655902168876
Z2 =
          12.9749190216888
top_sta =
            331.9658414593
Lslope =
          119.538724074456
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 2
dh =
                 3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 3
dh =
                3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 4
dh =
                 3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 5
dh =
                3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 6
dh =
                 3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 7
dh =
                3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 8
dh =
                 3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 9
dh =
                3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 10
dh =
                3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 11
dh =
                3.4487975
```

```
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 12
dh =
                 3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 13
dh =
                3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 14
dh =
                3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 15
dh =
                3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 16
dh =
                3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 17
dh =
                 3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 18
dh =
                3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 19
dh =
                3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 20
dh =
                3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 21
dh =
                 3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 22
dh =
                3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 23
dh =
                3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 24
dh =
                3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 28
dh =
                2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 29
dh =
                2.7838805
```

```
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 44
dh =
                 2.4536095
```

```
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0381434815009
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          32.1891825295928
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551615895205
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366399864646
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          32.7341509395385
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9482006459608
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          33.1792677886259
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.4278027556087
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 85
dh =
                 -1.217651
```

```
rdh_sum =
          33.6942265103874
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          33.9789298688207
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2762444743867
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
           34.580260076653
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8910183234293
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          35.2085596262605
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5329229482068
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8641460051611
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          36.2022648407169
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5473138140768
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          36.8993260141879
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2583330430384
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6238623530805
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9954343339323
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
           38.373069135973
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 100
dh =
                 -1.499803
```

```
rdh_sum =
          38.7567857417212
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1466023947647
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5425365994927
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9446046838473
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.3515396462766
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7620665429721
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1761901506209
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5939150538931
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          42.0152456451969
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          42.4401861244442
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8687404988265
ans =
Berm Factor Calculation: Iteration 21, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.3009125826006
ans =
!------- End Berm Factor Calculation, Iter: 21 ---------!
berm_width =
    82
rB =
         0.685970179411695
rdh_mean =
         0.528059909543909
gamma_berm =
         0.676263171478264
slope =
         0.192394898861339
Irb =
          3.15625727372796
gamma_berm =
         0.676263171478264
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
```

```
gamma =
         0.405757902886958
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.39839784966761
R2del =
         0.128161172021153
Z2 =
          12.8467578496676
top_sta =
          331.454295571782
ans =
!----------------- STARTING ITERATION 22 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454295571782
Z2 =
          12.8467578496676
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.39839784966761
Z2 =
          12.8467578496676
top_sta =
          331.454295571782
Lslope =
          119.027178186938
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 2
dh =
                 3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 3
dh =
                3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 4
dh =
                 3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 5
dh =
                3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 6
dh =
                 3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 7
dh =
                3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 8
dh =
                 3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 9
dh =
                3.4612955
```

```
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 24
dh =
                 3.2536295
```

```
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 42
dh =
                 2.5848425
```

```
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 43
dh =
                   2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 44
dh =
                  2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 53
dh =
                   1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 54
dh =
                    1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 55
dh =
                   1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 56
dh =
                   1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 57
dh =
                   1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 58
dh =
                   1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493447681441
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 78
dh =
                 -0.8961285
rdh_sum =
          34.7113208298427
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8892405596729
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0836847321025
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 81
dh =
                  -1.033924
rdh_sum =
          35.2952041632024
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 82
dh =
                 -1.0798555
rdh_sum =
          35.5243186937486
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 83
dh =
                  -1.125787
```

```
rdh_sum =
          35.7715166299966
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0372538846858
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3219527560456
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260011481622
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9433829806932
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2678441354373
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994247631863
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          37.9381635927203
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2840977067588
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6372627543518
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          38.9976925029046
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3654188262962
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7404721414437
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1228811803901
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121448793785
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 98
dh =
                -1.4716815
```

```
rdh_sum =
          40.9077555807738
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3097309219065
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7180872375619
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.1328400105051
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5540038710676
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
           42.981592139188
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4142750696212
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8507164809319
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2909200270673
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7348891456916
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826270579884
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6341367684754
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0894210648318
ans =
Berm Factor Calculation: Iteration 22, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5484825177381
ans =
!------- End Berm Factor Calculation, Iter: 22 ---------!
berm_width =
    82
rB =
         0.688918289495319
rdh_mean =
         0.567664420948026
gamma_berm =
         0.702156112391546
```

```
slope =
         0.191591641519421
Irb =
          3.14307975788369
gamma_berm =
         0.702156112391546
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421293667434928
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52655902162938
R2del =
         0.128161171961773
Z2 =
          12.9749190216294
top_sta =
          331.965841459063
ans =
!----------------- STARTING ITERATION 23 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.965841459063
Z2 =
          12.9749190216294
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.52655902162938
Z2 =
          12.9749190216294
top_sta =
          331.965841459063
Lslope =
          119.538724074219
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 7
dh =
                 3.4908595
```

```
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 22
dh =
                 3.3041035
```

```
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 40
dh =
                 2.7160765
```

```
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          32.0381434815053
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
           32.189182529602
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551615895349
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366399864847
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 81
dh =
                 -1.033924
```

```
rdh_sum =
          32.7341509395648
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9482006459938
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
           33.179267788666
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.4278027556564
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          33.6942265104432
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
           33.978929868885
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2762444744599
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.5802600767353
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8910183235208
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          35.2085596263613
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5329229483172
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          35.8641460052812
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          36.2022648408469
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5473138142169
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          36.8993260143382
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 96
dh =
                 -1.442388
```

```
rdh_sum =
          37.2583330431991
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6238623532517
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9954343341142
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3730691361657
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.7567857419248
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1466023949793
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5425365997186
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          39.9446046840845
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.3515396465253
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7620665432323
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1761901508927
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          41.5939150541765
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          42.0152456454921
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          42.4401861247513
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8687404991455
ans =
Berm Factor Calculation: Iteration 23, Profile Segment: 111
dh =
                 -1.610531
```

```
rdh_sum =
          43.3009125829315
ans =
!------- End Berm Factor Calculation, Iter: 23 ---------!
berm_width =
    82
rB =
         0.685970179413055
rdh_mean =
         0.528059909547945
gamma_berm =
          0.67626317148039
slope =
         0.192394898860972
Irb =
          3.15625727372194
gamma_berm =
          0.67626317148039
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.6
gamma =
         0.405757902888234
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.39839784967743
R2del =
         0.128161171951948
Z2 =
          12.8467578496774
top_sta =
          331.454295571821
ans =
!----------------- STARTING ITERATION 24 -----------------!
Ztoe =
                   5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454295571821
Z2 =
          12.8467578496774
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
          3.39839784967743
Z2 =
          12.8467578496774
top_sta =
          331.454295571821
Lslope =
          119.027178186977
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 1
dh =
                  3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 5
dh =
                 3.5716185
```

```
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 20
dh =
                 3.3545785
```

```
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 38
dh =
                   2.84731
```

```
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493447681433
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
           34.711320829841
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 79
dh =
        -0.942059999999998
```

```
rdh_sum =
          34.8892405596702
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0836847320988
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.2952041631976
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5243186937426
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          35.7715166299893
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0372538846771
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
          36.3219527560354
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260011481505
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9433829806799
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2678441354223
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994247631697
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
           37.938163592702
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2840977067387
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
            38.63726275433
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
           38.997692502881
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 94
dh =
                  -1.40958
```

```
rdh_sum =
          39.3654188262708
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7404721414164
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          40.1228811803609
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121448793474
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9077555807408
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3097309218715
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
           41.718087237525
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          42.1328400104662
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5540038710267
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          42.9815921391451
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4142750695762
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          43.8507164808848
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2909200270182
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7348891456404
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826270579351
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 109
dh =
                 -1.594127
```

```
rdh_sum =
          45.6341367684199
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0894210647742
ans =
Berm Factor Calculation: Iteration 24, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5484825176783
ans =
!------- End Berm Factor Calculation, Iter: 24 ---------!
berm_width =
    82
rB =
         0.688918289495091
rdh_mean =
         0.567664420947297
gamma_berm =
         0.702156112391142
slope =
         0.191591641519484
Irb =
          3.14307975788471
gamma_berm =
         0.702156112391142
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421293667434685
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           3.5265590216275
R2del =
         0.128161171950071
Z2 =
          12.9749190216275
top_sta =
          331.965841459056
ans =
!----------------- STARTING ITERATION 25 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
          331.965841459056
Z2 =
          12.9749190216275
H0 =
                    2.4638
Tp =
                    12.522
T0 =
          11.3836363636364
R2 =
           3.5265590216275
Z2 =
          12.9749190216275
top_sta =
          331.965841459056
Lslope =
          119.538724074212
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 1
dh =
                 3.700486
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 2
dh =
                 3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 3
dh =
                3.6523775
```

```
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
          6.80450037811965
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
           7.6030724378835
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
          8.40004413389283
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
          9.19541088027912
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
          9.98916798879852
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
          10.7813106674058
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
          11.5718342782893
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
          12.3607343394292
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
          13.1480062652248
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 16
dh =
                 3.4175515
rdh_sum =
          13.9336454959183
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
          14.7176473664869
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 18
dh =
                 3.4003055
```

```
rdh_sum =
          15.4987572395367
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          16.2744416463729
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          17.0433790897028
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          17.8054998119604
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          18.5607359533153
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          19.3090215746183
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          20.0502924003234
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          20.6543968099907
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          21.2557230782756
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
          21.8679474343538
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          22.4910140155625
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          23.1248615622332
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          23.7694236007645
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 34
dh =
                 2.9588585
rdh_sum =
          24.4246280179808
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          25.0903975567493
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 36
dh =
                 2.9785435
```

```
rdh_sum =
          25.7515547084719
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          26.3927758721279
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 38
dh =
                  2.84731
rdh_sum =
          27.0138140883892
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
            27.61445756337
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          28.1945300327773
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          28.7538913828656
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          29.2924377409659
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          29.8101018165339
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          30.3068527007931
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          30.5803388852305
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          30.8507227351328
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
           31.118015412597
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          31.3822282299881
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 57
dh =
                  1.682612
rdh_sum =
          31.6433726493892
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          31.9014602820446
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 77
dh =
        -0.850196999999998
```

```
rdh_sum =
          32.0381434815054
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
          32.1891825296023
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          32.3551615895354
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          32.5366399864854
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          32.7341509395656
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          32.9482006459948
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
          33.1792677886673
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          33.4278027556579
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
           33.694226510445
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
           33.978929868887
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          34.2762444744622
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          34.5802600767379
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          34.8910183235237
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 90
dh =
                 -1.343963
rdh_sum =
          35.2085596263645
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          35.5329229483207
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 92
dh =
                -1.3767715
```

```
rdh_sum =
          35.8641460052851
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
           36.202264840851
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          36.5473138142213
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
           36.899326014343
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
          37.2583330432041
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          37.6238623532571
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          37.9954343341199
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          38.3730691361718
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          38.7567857419313
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
          39.1466023949861
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          39.5425365997258
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
           39.944604684092
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          40.3515396465331
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 105
dh =
                 -1.561319
rdh_sum =
          40.7620665432405
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          41.1761901509013
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 107
dh =
                 -1.577723
```

```
rdh_sum =
          41.5939150541855
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          42.0152456455014
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
           42.440186124761
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          42.8687404991555
ans =
Berm Factor Calculation: Iteration 25, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          43.3009125829419
ans =
!------- End Berm Factor Calculation, Iter: 25 ---------!
berm_width =
    82
rB =
         0.685970179413098
rdh_mean =
         0.528059909548072
gamma_berm =
         0.676263171480457
slope =
          0.19239489886096
Irb =
          3.15625727372175
gamma_berm =
         0.676263171480457
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.405757902888274
ans =
!!! - - Iribaren number:   2.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.39839784967774
R2del =
         0.128161171949761
Z2 =
          12.8467578496777
top_sta =
          331.454295571823
ans =
!----------------- STARTING ITERATION 26 -----------------!
Ztoe =
                  5.75266
toe_sta =
          212.427117384844
top_sta =
          331.454295571823
Z2 =
          12.8467578496777
H0 =
                   2.4638
Tp =
                   12.522
T0 =
          11.3836363636364
R2 =
          3.39839784967774
Z2 =
          12.8467578496777
top_sta =
          331.454295571823
Lslope =
          119.027178186979
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 1
dh =
                  3.700486
```

```
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 2
dh =
                  3.692757
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 3
dh =
                 3.6523775
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 4
dh =
                  3.611998
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 5
dh =
                 3.5716185
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 6
dh =
                  3.531239
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 7
dh =
                 3.4908595
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 8
dh =
                  3.467545
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 9
dh =
                 3.4612955
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 10
dh =
                 3.4550465
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 11
dh =
                 3.4487975
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 12
dh =
                  3.442548
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 13
dh =
                 3.4362985
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 14
dh =
                 3.4300495
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 15
dh =
                 3.4238005
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 16
dh =
                 3.4175515
```

```
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 17
dh =
                  3.411302
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 18
dh =
                 3.4003055
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 19
dh =
                 3.3798155
rdh_sum =
          18.7756844068362
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 20
dh =
                 3.3545785
rdh_sum =
          19.5446218501661
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 21
dh =
                  3.329341
rdh_sum =
          20.3067425724237
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 22
dh =
                 3.3041035
rdh_sum =
          21.0619787137786
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 23
dh =
                 3.2788665
rdh_sum =
          21.8102643350816
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 24
dh =
                 3.2536295
rdh_sum =
          22.5515351607866
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 28
dh =
                 2.7927855
rdh_sum =
          23.1556395704539
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 29
dh =
                 2.7838805
rdh_sum =
          23.7569658387389
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 30
dh =
                  2.818876
rdh_sum =
           24.369190194817
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 31
dh =
                 2.8538715
rdh_sum =
          24.9922567760258
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 32
dh =
                  2.888867
rdh_sum =
          25.6261043226965
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 33
dh =
                  2.923863
rdh_sum =
          26.2706663612278
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 34
dh =
                 2.9588585
```

```
rdh_sum =
          26.9258707784441
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 35
dh =
                  2.993854
rdh_sum =
          27.5916403172126
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 36
dh =
                 2.9785435
rdh_sum =
          28.2527974689352
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 37
dh =
                 2.9129265
rdh_sum =
          28.8940186325912
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 38
dh =
                   2.84731
rdh_sum =
          29.5150568488525
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 39
dh =
                 2.7816935
rdh_sum =
          30.1157003238332
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 40
dh =
                 2.7160765
rdh_sum =
          30.6957727932406
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 41
dh =
                 2.6504595
rdh_sum =
          31.2551341433289
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 42
dh =
                 2.5848425
rdh_sum =
          31.7936805014291
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 43
dh =
                  2.519226
rdh_sum =
          32.3113445769972
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 44
dh =
                 2.4536095
rdh_sum =
          32.8080954612564
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 53
dh =
                  1.726356
rdh_sum =
          33.0815816456938
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 54
dh =
                   1.71542
rdh_sum =
          33.3519654955961
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 55
dh =
                  1.704484
rdh_sum =
          33.6192581730603
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 56
dh =
                  1.693548
rdh_sum =
          33.8834709904514
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 57
dh =
                  1.682612
```

```
rdh_sum =
          34.1446154098525
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 58
dh =
                  1.671676
rdh_sum =
          34.4027030425079
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 77
dh =
        -0.850196999999998
rdh_sum =
          34.5493447681432
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 78
dh =
                -0.8961285
rdh_sum =
           34.711320829841
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 79
dh =
        -0.942059999999998
rdh_sum =
          34.8892405596701
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 80
dh =
        -0.987991999999998
rdh_sum =
          35.0836847320987
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 81
dh =
                 -1.033924
rdh_sum =
          35.2952041631974
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 82
dh =
                -1.0798555
rdh_sum =
          35.5243186937424
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 83
dh =
                 -1.125787
rdh_sum =
           35.771516629989
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 84
dh =
                 -1.171719
rdh_sum =
          36.0372538846768
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 85
dh =
                 -1.217651
rdh_sum =
           36.321952756035
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 86
dh =
                -1.2635825
rdh_sum =
          36.6260011481501
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 87
dh =
                -1.2947505
rdh_sum =
          36.9433829806795
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 88
dh =
                 -1.311155
rdh_sum =
          37.2678441354218
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 89
dh =
                 -1.327559
rdh_sum =
          37.5994247631692
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 90
dh =
                 -1.343963
```

```
rdh_sum =
          37.9381635927014
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 91
dh =
                 -1.360367
rdh_sum =
          38.2840977067381
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 92
dh =
                -1.3767715
rdh_sum =
          38.6372627543293
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 93
dh =
                 -1.393176
rdh_sum =
          38.9976925028803
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 94
dh =
                  -1.40958
rdh_sum =
          39.3654188262699
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 95
dh =
                 -1.425984
rdh_sum =
          39.7404721414155
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 96
dh =
                 -1.442388
rdh_sum =
            40.12288118036
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 97
dh =
                -1.4576205
rdh_sum =
          40.5121448793464
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 98
dh =
                -1.4716815
rdh_sum =
          40.9077555807397
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 99
dh =
                -1.4857425
rdh_sum =
          41.3097309218704
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 100
dh =
                 -1.499803
rdh_sum =
          41.7180872375238
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 101
dh =
                -1.5138635
rdh_sum =
           42.132840010465
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 102
dh =
                -1.5279245
rdh_sum =
          42.5540038710254
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 103
dh =
                -1.5419855
rdh_sum =
          42.9815921391437
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 104
dh =
                 -1.553117
rdh_sum =
          43.4142750695748
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 105
dh =
                 -1.561319
```

```
rdh_sum =
          43.8507164808834
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 106
dh =
                 -1.569521
rdh_sum =
          44.2909200270166
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 107
dh =
                 -1.577723
rdh_sum =
          44.7348891456388
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 108
dh =
                 -1.585925
rdh_sum =
          45.1826270579334
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 109
dh =
                 -1.594127
rdh_sum =
          45.6341367684182
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 110
dh =
                 -1.602329
rdh_sum =
          46.0894210647724
ans =
Berm Factor Calculation: Iteration 26, Profile Segment: 111
dh =
                 -1.610531
rdh_sum =
          46.5484825176765
ans =
!------- End Berm Factor Calculation, Iter: 26 ---------!
berm_width =
    82
rB =
         0.688918289495085
rdh_mean =
         0.567664420947274
gamma_berm =
         0.702156112391129
slope =
         0.191591641519486
Irb =
          3.14307975788475
gamma_berm =
         0.702156112391129
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.421293667434677
ans =
!!! - - Iribaren number:   2.21 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          3.52655902162744
R2del =
         0.128161171949702
Z2 =
          12.9749190216274
top_sta =
          331.965841459056
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          12.9749190216274
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-108

Station locations shifted by: -0.99 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-108

Incident significant wave height: 7.06 feet

Peak wave period: 12.80 seconds

Mean wave height: 4.42 feet

Local Depth below SWEL: 15.56 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 15.56
    Period, T = 10.88
    Waveheight, H = 4.42
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*10.88*10.88/6.28 = 606.15
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 606.15/10.88 = 55.71
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/10.88 = 0.58
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.58*0.58*15.56/32.17 = 0.16
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 21.77
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(55.71/21.77) = 1.60
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 4.42/1.60 = 2.76
```

Deepwater mean wave height: 2.76 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-108

RUNUP2 SWEL:
9.00
9.00
9.00
9.00

9.00
9.00
9.00
9.00
9.00

RUNUP2 deepwater mean wave heights:
2.62
2.62
2.62
2.76
2.76
2.76
2.90
2.90
2.90

RUNUP2 mean wave periods:
10.34
10.88
11.42
10.34
10.88
11.42
10.34
10.88
11.42

RUNUP2 runup above SWEL:
0.85
0.83
0.80
0.75
0.86
0.89
0.84
0.84
0.85

RUNUP2 Mean runup height above SWEL: 0.83 feet

RUNUP2 2-percent runup height above SWEL: 1.84 feet

RUNUP2 2-percent runup elevation: 10.84 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 7.06 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 4.41 feet

Peak wave period: 12.80 seconds

Average beach Slope: 1:34.13 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     4.41
Wave Period,                        T  =    12.80
Beach Slope,                        S  =    0.029

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 5.1,  4.3,   3.9,    3.2,    2.1]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 4.31 feet

ACES Beach 2-percent runup elevation: 13.31 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-108                                                   1
5.00
  -6.53 -367.0 0.6
  -4.85 -306.0 0.6
  -4.05 -220.0 0.6
  -2.29 -137.0 0.6
  -1.27 -62.0  0.6
  -0.01 -0.0   0.6
  0.89  1.0    0.6
  1.35  87.5   0.6
  2.14  95.0   0.6
  2.53  121.0  0.6
  3.85  140.5  0.6
  4.01  155.0  0.6
  5.45  170.5  0.6
  6.08  208.5  0.6
  6.08  229.5  0.6
  7.06  256.5  0.6
  8.41  279.0  0.6
  10.28 288.0  0.6
  11.06 323.0  0.6
1 14.11 337.5  0.6
 9.0   2.62  10.34
 9.0   2.62  10.88
 9.0   2.62  11.42
 9.0   2.76  10.34
 9.0   2.76  10.88
 9.0   2.76  11.42
 9.0   2.90  10.34
 9.0   2.90  10.88
 9.0   2.90  11.42
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-367.0	-6.5		
			.00	.60
2	-306.0	-4.8		
			107.50	.60
3	-220.0	-4.0		
			47.16	.60
4	-137.0	-2.3		
			73.53	.60
5	-62.0	-1.3		
			49.21	.60
6	.0	.0		
			1.11	.60
7	1.0	.9		
			188.04	.60
8	87.5	1.4		
			9.49	.60
9	95.0	2.2		
			66.67	.60
10	121.0	2.5		
			14.77	.60
11	140.5	3.9		
			90.63	.60
12	155.0	4.0		
			10.76	.60
13	170.5	5.5		
			60.32	.60
14	208.5	6.1		
			FLAT	.60
15	229.5	6.1		
			27.55	.60
16	256.5	7.1		
			16.67	.60
17	279.0	8.4		
			4.81	.60
18	288.0	10.3		
			44.87	.60
19	323.0	11.1		
			4.75	.60
20	337.5	14.1		

LAST SLOPE 5.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.00	2.62	10.34	11	17	.85	4.90
9.00	2.62	10.88	11	17	.83	5.02
9.00	2.62	11.42	11	17	.80	5.14
9.00	2.76	10.34	11	17	.75	5.10
9.00	2.76	10.88	10	17	.86	5.22
9.00	2.76	11.42	9	17	.89	6.56
9.00	2.90	10.34	10	17	.84	5.30
9.00	2.90	10.88	9	17	.84	6.63
9.00	2.90	11.42	9	17	.85	6.80

Runup2 2% runup elevation for Transect: YK-108
Ground
Swel
2% Runup
Two Percent Run-up Elevation is 10.8 Feet-NAVD88
Run-up Height is 1.8 Feet
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-400
-300
-200
-100
0
100
200
300
400

Transect Number: YK-109
Latitude
Longitude
43.425
43.42
43.415
43.41
43.405
43.4
43.395
43.39
-70.43
-70.42
-70.41
-70.4
-70.39
-70.38
Clock Farm Corner
Timber Island

Elevation profile
Elevation (ft)
Station (ft)
40
30
20
10
0
-10
-20
-30
-40
-3000
-2000
-1000
0
1000
2000
3000
4000
5000
6000
7000

DATA LOG FOR TRANSECT ID: YK-109

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -389 ft
LON: -70.4054 deg E
LAT: 43.3996 deg N
Bottom ELEV: -5.5998 ft-NAVD88
TWL: 9.0102 ft-NAVD88
HS: 7.5613 ft
TP: 13.8098 sec
Wave Direction bin: 135 deg CCW from East (90 deg sector)
Transect Direction: 115.4883 deg CCW from East

TAW/RUNUP input

toe sta: 25.5 ft
toe elev: 0.49869 ft-NAVD88
top sta: 329 ft
top elev: 12.3753 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-109: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-400
-200
0
200
400
600
800
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-109zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-109.swn
swan output name:     2_swan/swanfiles/YK-109.dat

Boundary Conditions:
    TWL- 2.7463 meters
    HS-  2.3047 meters
    PER- 13.8098 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.8081 feet
SWAN output at toe:
    SETUP- 0.19397 feet
    HS-    5.2103 feet
    PER-   13.7882 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.8081 feet
SWAN output at toe:
    SETUP- 0.19397 feet
    HS-    5.2103 feet
    PER-   13.7882 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-109
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-3000
-2000
-1000
0
1000
2000
3000
4000
5000
6000

```
                    Execution started at 20200401.174326


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      204       0.   204     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      204   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-109zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   2.3047     13.8098     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      204  204    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-109.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             205 MYC              1
                     : MCGRD           206
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in   6.90 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.50 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in   9.86 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  28.58 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  97.05 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  99.02 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  99.02 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in  99.51 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	2.31612	13.7283	13.8874	12.4860	0.000	31.5057	4.4500	0.000000
1.	0.	2.31849	13.7338	13.8874	12.2452	0.000	31.4036	4.4402	0.000177
2.	0.	2.32117	13.7389	13.8874	12.0298	0.000	31.2962	4.4203	0.000266
3.	0.	2.32189	13.7434	13.8874	11.8424	0.000	31.1846	4.4105	0.000465
4.	0.	2.32307	13.7474	13.8874	11.6777	0.000	31.0782	4.3906	0.000581
5.	0.	2.32254	13.7508	13.8874	11.5331	0.000	30.9791	4.3808	0.000813
6.	0.	2.32220	13.7538	13.8874	11.4066	0.000	30.8611	4.3610	0.000963
7.	0.	2.32151	13.7564	13.8874	11.2943	0.000	30.7592	4.3411	0.001124
8.	0.	2.31935	13.7587	13.8874	11.1941	0.000	30.6602	4.3314	0.001395
9.	0.	2.31785	13.7607	13.8874	11.1049	0.000	30.5609	4.3116	0.001573
10.	0.	2.31495	13.7625	13.8874	11.0243	0.000	30.4615	4.3019	0.001862
11.	0.	2.31277	13.7641	13.8874	10.9522	0.000	30.3613	4.2821	0.002057
12.	0.	2.30978	13.7654	13.8874	10.8860	0.000	30.2952	4.2724	0.002355
13.	0.	2.30571	13.7666	13.8874	10.8255	0.000	30.2410	4.2728	0.002755
14.	0.	2.30345	13.7677	13.8874	10.7575	0.000	30.1798	4.2631	0.003060
15.	0.	2.30123	13.7685	13.8874	10.6901	0.000	30.1154	4.2534	0.003373
16.	0.	2.29884	13.7691	13.8874	10.6260	0.000	30.0491	4.2437	0.003693
17.	0.	2.29621	13.7695	13.8874	10.5658	0.000	29.9813	4.2340	0.004020
18.	0.	2.29333	13.7698	13.8874	10.5095	0.000	29.9124	4.2244	0.004352
19.	0.	2.28998	13.7699	13.8874	10.4568	0.000	29.8258	4.2147	0.004693
20.	0.	2.28731	13.7700	13.8874	10.4082	0.000	29.7324	4.1949	0.004940
21.	0.	2.28360	13.7699	13.8874	10.3616	0.000	29.6536	4.1853	0.005296
22.	0.	2.27974	13.7697	13.8874	10.3179	0.000	29.5799	4.1757	0.005659
23.	0.	2.27523	13.7694	13.8874	10.2797	359.995	29.5132	4.1661	0.006053
24.	0.	2.27050	13.7690	13.8874	10.2432	359.989	29.4282	4.1564	0.006444
25.	0.	2.26666	13.7686	13.8874	10.2087	359.986	29.3357	4.1367	0.006730
26.	0.	2.26197	13.7681	13.8874	10.1746	359.984	29.2571	4.1271	0.007119
27.	0.	2.25727	13.7676	13.8874	10.1422	359.983	29.1829	4.1175	0.007508
28.	0.	2.25252	13.7670	13.8874	10.1113	359.982	29.1102	4.1079	0.007896
29.	0.	2.24885	13.7664	13.8874	10.0632	359.962	29.0366	4.0983	0.008340
30.	0.	2.24649	13.7658	13.8874	10.0111	359.949	28.9565	4.0787	0.008690
31.	0.	2.24384	13.7654	13.8874	9.9546	359.948	28.8880	4.0691	0.009122
32.	0.	2.24043	13.7650	13.8874	9.9035	359.949	28.8297	4.0596	0.009586
33.	0.	2.23316	13.7647	13.8874	9.8760	359.949	28.7930	4.0502	0.010222
34.	0.	2.22486	13.7646	13.8874	9.8544	359.943	28.7295	4.0409	0.010879
35.	0.	2.22043	13.7644	13.8874	9.8182	359.942	28.6633	4.0213	0.011294
36.	0.	2.21345	13.7644	13.8874	9.7858	359.901	28.6174	4.0219	0.011949
37.	0.	2.20752	13.7644	13.8874	9.7556	359.855	28.5746	4.0125	0.012487
38.	0.	2.20092	13.7644	13.8874	9.7251	359.811	28.5494	4.0131	0.013114
39.	0.	2.19434	13.7645	13.8874	9.6965	359.763	28.5268	4.0137	0.013729
40.	0.	2.18786	13.7646	13.8874	9.6692	359.719	28.5062	4.0143	0.014329
41.	0.	2.18127	13.7647	13.8874	9.6430	359.676	28.4695	4.0149	0.014915
42.	0.	2.17550	13.7648	13.8874	9.6194	359.636	28.4271	4.0054	0.015393
43.	0.	2.16907	13.7650	13.8874	9.5951	359.598	28.4000	4.0060	0.015962
44.	0.	2.16391	13.7652	13.8874	9.5652	359.589	28.3762	4.0065	0.016467
45.	0.	2.15952	13.7654	13.8874	9.5310	359.579	28.3546	4.0069	0.016948
46.	0.	2.15569	13.7656	13.8874	9.4931	359.580	28.3349	4.0074	0.017418
47.	0.	2.15176	13.7659	13.8874	9.4556	359.585	28.2997	4.0079	0.017882
48.	0.	2.14849	13.7661	13.8874	9.4210	359.590	28.2587	3.9982	0.018249
49.	0.	2.14440	13.7665	13.8874	9.3865	359.596	28.2321	3.9987	0.018712
50.	0.	2.14024	13.7668	13.8874	9.3537	359.601	28.2102	3.9992	0.019172
51.	0.	2.13601	13.7671	13.8874	9.3226	359.605	28.1899	3.9996	0.019626
52.	0.	2.13155	13.7675	13.8874	9.2930	359.610	28.1544	4.0001	0.020076
53.	0.	2.12773	13.7678	13.8874	9.2664	359.614	28.1138	3.9904	0.020430
54.	0.	2.12315	13.7682	13.8874	9.2395	359.619	28.0880	3.9909	0.020877
55.	0.	2.11846	13.7686	13.8874	9.2146	359.621	28.0687	3.9913	0.021325
56.	0.	2.11361	13.7690	13.8874	9.1917	359.622	28.0526	3.9918	0.021772
57.	0.	2.10871	13.7693	13.8874	9.1702	359.621	28.0374	3.9922	0.022215
58.	0.	2.10363	13.7697	13.8874	9.1497	359.618	28.0073	3.9927	0.022651
59.	0.	2.09916	13.7701	13.8874	9.1307	359.620	27.9415	3.9830	0.022983

60.	0.	2.09500	13.7705	13.8874	9.1136	359.622	27.8353	3.9632	0.023225
61.	0.	2.09117	13.7709	13.8874	9.0986	359.626	27.7009	3.9334	0.023383
62.	0.	2.08716	13.7714	13.8874	9.0840	359.629	27.5722	3.9036	0.023558
63.	0.	2.08222	13.7718	13.8874	9.0679	359.632	27.4517	3.8838	0.023843
64.	0.	2.07786	13.7722	13.8874	9.0541	359.636	27.3333	3.8540	0.024048
65.	0.	2.07252	13.7726	13.8874	9.0388	359.638	27.2167	3.8344	0.024363
66.	0.	2.06776	13.7731	13.8874	9.0258	359.641	27.0994	3.8046	0.024595
67.	0.	2.06203	13.7735	13.8874	9.0112	359.644	26.9827	3.7849	0.024939
68.	0.	2.05676	13.7740	13.8874	8.9989	359.647	26.8527	3.7552	0.025198
69.	0.	2.05153	13.7744	13.8874	8.9851	359.650	26.7309	3.7255	0.025475
70.	0.	2.04540	13.7749	13.8874	8.9690	359.653	26.6128	3.7059	0.025868
71.	0.	2.03988	13.7753	13.8874	8.9553	359.657	26.4945	3.6762	0.026175
72.	0.	2.03337	13.7757	13.8874	8.9398	359.660	26.3773	3.6566	0.026600
73.	0.	2.02754	13.7762	13.8874	8.9262	359.665	26.2585	3.6269	0.026932
74.	0.	2.02090	13.7766	13.8874	8.9099	359.673	26.1397	3.6074	0.027373
75.	0.	2.01484	13.7771	13.8874	8.8954	359.686	26.0081	3.5777	0.027720
76.	0.	2.00877	13.7775	13.8874	8.8803	359.704	25.8839	3.5481	0.028078
77.	0.	2.00179	13.7779	13.8874	8.8630	359.722	25.7621	3.5286	0.028555
78.	0.	1.99550	13.7784	13.8874	8.8478	359.745	25.6420	3.4989	0.028936
79.	0.	1.98820	13.7788	13.8874	8.8309	359.768	25.5232	3.4794	0.029441
80.	0.	1.98142	13.7792	13.8874	8.8164	359.793	25.3911	3.4499	0.029852
81.	0.	1.97434	13.7796	13.8874	8.8023	359.818	25.2544	3.4203	0.030283
82.	0.	1.96709	13.7800	13.8874	8.7885	359.843	25.1284	3.3907	0.030737
83.	0.	1.95892	13.7804	13.8874	8.7731	359.868	25.0192	3.3713	0.031322
84.	0.	1.95078	13.7808	13.8874	8.7582	359.894	24.9281	3.3519	0.031917
85.	0.	1.94179	13.7812	13.8874	8.7417	359.918	24.8442	3.3426	0.032628
86.	0.	1.93365	13.7815	13.8874	8.7280	359.943	24.7618	3.3232	0.033224
87.	0.	1.92464	13.7819	13.8874	8.7126	359.967	24.6812	3.3139	0.033935
88.	0.	1.91647	13.7822	13.8874	8.6999	359.992	24.6003	3.2945	0.034529
89.	0.	1.90746	13.7825	13.8874	8.6854	0.017	24.5205	3.2852	0.035235
90.	0.	1.89942	13.7828	13.8874	8.6729	0.045	24.4397	3.2658	0.035818
91.	0.	1.89065	13.7831	13.8874	8.6580	0.074	24.3583	3.2565	0.036505
92.	0.	1.88276	13.7833	13.8874	8.6449	0.107	24.2638	3.2371	0.037068
93.	0.	1.87496	13.7836	13.8874	8.6315	0.142	24.1763	3.2176	0.037632
94.	0.	1.86632	13.7839	13.8874	8.6161	0.176	24.0928	3.2083	0.038312
95.	0.	1.85849	13.7841	13.8874	8.6031	0.212	23.9973	3.1889	0.038873
96.	0.	1.85062	13.7843	13.8874	8.5905	0.248	23.9108	3.1694	0.039442
97.	0.	1.84185	13.7845	13.8874	8.5763	0.282	23.8292	3.1601	0.040132
98.	0.	1.83390	13.7848	13.8874	8.5643	0.319	23.7371	3.1407	0.040702
99.	0.	1.82592	13.7850	13.8874	8.5527	0.356	23.6543	3.1213	0.041280
100.	0.	1.81705	13.7851	13.8874	8.5395	0.392	23.5757	3.1120	0.041979
101.	0.	1.80897	13.7853	13.8874	8.5286	0.429	23.4858	3.0926	0.042558
102.	0.	1.80087	13.7855	13.8874	8.5182	0.466	23.4044	3.0731	0.043145
103.	0.	1.79185	13.7857	13.8874	8.5061	0.500	23.3268	3.0639	0.043853
104.	0.	1.78366	13.7858	13.8874	8.4963	0.536	23.2383	3.0444	0.044440
105.	0.	1.77544	13.7860	13.8874	8.4870	0.571	23.1581	3.0250	0.045036
106.	0.	1.76632	13.7861	13.8874	8.4759	0.605	23.0816	3.0158	0.045753
107.	0.	1.75811	13.7863	13.8874	8.4672	0.640	23.0057	2.9963	0.046348
108.	0.	1.74905	13.7864	13.8874	8.4562	0.674	22.9311	2.9871	0.047065
109.	0.	1.74084	13.7865	13.8874	8.4473	0.709	22.8446	2.9677	0.047658
110.	0.	1.73260	13.7867	13.8874	8.4386	0.744	22.7658	2.9483	0.048261
111.	0.	1.72350	13.7868	13.8874	8.4276	0.775	22.6908	2.9390	0.048986
112.	0.	1.71519	13.7869	13.8874	8.4188	0.807	22.5928	2.9196	0.049587
113.	0.	1.70757	13.7870	13.8874	8.4123	0.839	22.4859	2.8901	0.050080
114.	0.	1.69888	13.7871	13.8874	8.4040	0.869	22.3885	2.8707	0.050717
115.	0.	1.69003	13.7872	13.8874	8.3960	0.899	22.2824	2.8514	0.051362
116.	0.	1.68190	13.7873	13.8874	8.3905	0.930	22.1720	2.8219	0.051900
117.	0.	1.67268	13.7874	13.8874	8.3834	0.960	22.0733	2.8026	0.052585
118.	0.	1.66334	13.7875	13.8874	8.3768	0.991	21.9781	2.7833	0.053282
119.	0.	1.65400	13.7876	13.8874	8.3706	1.021	21.8960	2.7640	0.053988
120.	0.	1.64384	13.7877	13.8874	8.3626	1.049	21.8313	2.7548	0.054820
121.	0.	1.63383	13.7878	13.8874	8.3552	1.077	21.7726	2.7456	0.055638
122.	0.	1.62405	13.7879	13.8874	8.3482	1.105	21.7283	2.7364	0.056442
123.	0.	1.61361	13.7880	13.8874	8.3393	1.131	21.6904	2.7373	0.057345
124.	0.	1.60416	13.7880	13.8874	8.3329	1.157	21.6181	2.7281	0.058095
125.	0.	1.59630	13.7881	13.8874	8.3312	1.183	21.5083	2.6986	0.058598
126.	0.	1.58809	13.7882	13.8874	8.3296	1.209	21.3737	2.6691	0.059121

127.	0.	1.58028	13.7883	13.8874	8.3303	1.235	21.2044	2.6295	0.059549
128.	0.	1.57283	13.7884	13.8874	8.3332	1.263	21.0205	2.5799	0.059899
129.	0.	1.56389	13.7885	13.8874	8.3339	1.290	20.8559	2.5404	0.060447
130.	0.	1.55367	13.7886	13.8874	8.3328	1.318	20.7226	2.5112	0.061183
131.	0.	1.54239	13.7886	13.8874	8.3297	1.345	20.6133	2.4921	0.062079
132.	0.	1.53107	13.7887	13.8874	8.3267	1.372	20.4993	2.4730	0.062979
133.	0.	1.52043	13.7888	13.8874	8.3264	1.399	20.3454	2.4437	0.063750
134.	0.	1.51113	13.7889	13.8874	8.3310	1.428	20.1499	2.3943	0.064288
135.	0.	1.50099	13.7890	13.8874	8.3360	1.458	19.9389	2.3449	0.064907
136.	0.	1.49037	13.7891	13.8874	8.3409	1.492	19.7856	2.2956	0.065620
137.	0.	1.47475	13.7892	13.8874	8.3335	1.522	19.7085	2.2971	0.067115
138.	0.	1.46078	13.7893	13.8874	8.3289	1.552	19.6551	2.2884	0.068401
139.	0.	1.44626	13.7894	13.8874	8.3222	1.579	19.5870	2.2898	0.069768
140.	0.	1.43480	13.7895	13.8874	8.3233	1.603	19.4476	2.2607	0.070661
141.	0.	1.42480	13.7896	13.8874	8.3295	1.629	19.2583	2.2113	0.071305
142.	0.	1.41402	13.7897	13.8874	8.3358	1.657	19.0660	2.1620	0.072038
143.	0.	1.40166	13.7898	13.8874	8.3394	1.687	18.9091	2.1230	0.073014
144.	0.	1.38704	13.7899	13.8874	8.3379	1.716	18.7906	2.1043	0.074344
145.	0.	1.37265	13.7900	13.8874	8.3367	1.748	18.6982	2.0857	0.075666
146.	0.	1.35752	13.7901	13.8874	8.3332	1.778	18.6163	2.0771	0.077112
147.	0.	1.34383	13.7902	13.8874	8.3327	1.809	18.5371	2.0584	0.078363
148.	0.	1.32934	13.7903	13.8874	8.3298	1.836	18.4479	2.0497	0.079734
149.	0.	1.31703	13.7904	13.8874	8.3325	1.863	18.3151	2.0208	0.080774
150.	0.	1.30541	13.7905	13.8874	8.3378	1.891	18.1531	1.9817	0.081696
151.	0.	1.29339	13.7907	13.8874	8.3431	1.923	18.0184	1.9427	0.082689
152.	0.	1.27797	13.7908	13.8874	8.3407	1.950	17.8959	1.9342	0.084185
153.	0.	1.26582	13.7909	13.8874	8.3463	1.980	17.7472	1.8952	0.085197
154.	0.	1.25237	13.7910	13.8874	8.3493	2.015	17.6433	1.8664	0.086427
155.	0.	1.23594	13.7911	13.8874	8.3447	2.049	17.5852	1.8681	0.088122
156.	0.	1.22135	13.7913	13.8874	8.3429	2.081	17.5145	1.8596	0.089560
157.	0.	1.20812	13.7914	13.8874	8.3441	2.109	17.3989	1.8408	0.090790
158.	0.	1.19687	13.7915	13.8874	8.3510	2.135	17.2380	1.8017	0.091718
159.	0.	1.18521	13.7917	13.8874	8.3576	2.168	17.1014	1.7627	0.092720
160.	0.	1.17017	13.7918	13.8874	8.3561	2.204	17.0317	1.7542	0.094246
161.	0.	1.15468	13.7919	13.8874	8.3522	2.239	16.9721	1.7559	0.095851
162.	0.	1.14202	13.7921	13.8874	8.3540	2.273	16.8998	1.7371	0.097062
163.	0.	1.12854	13.7922	13.8874	8.3533	2.305	16.8254	1.7284	0.098396
164.	0.	1.11643	13.7923	13.8874	8.3556	2.335	16.7206	1.7095	0.099533
165.	0.	1.10532	13.7925	13.8874	8.3607	2.363	16.5763	1.6805	0.100518
166.	0.	1.09492	13.7927	13.8874	8.3685	2.392	16.4162	1.6414	0.101397
167.	0.	1.08285	13.7929	13.8874	8.3737	2.421	16.2648	1.6125	0.102512
168.	0.	1.07079	13.7930	13.8874	8.3790	2.469	16.2254	1.5837	0.103683
169.	0.	1.05137	13.7932	13.8874	8.3626	2.494	16.0875	1.6259	0.105863
170.	0.	1.04992	13.7934	13.8874	8.3942	2.527	15.8739	1.5055	0.105464
171.	0.	1.03098	13.7936	13.8874	8.3830	2.563	15.7352	1.5276	0.107606
172.	0.	1.02140	13.7939	13.8874	8.3989	2.584	15.5409	1.4684	0.108361
173.	0.	1.00718	13.7941	13.8874	8.4054	2.596	15.2837	1.4398	0.109765
174.	0.	0.99855	13.7944	13.8874	8.4278	2.584	14.8010	1.3502	0.110239
175.	0.	0.99496	13.7949	13.8874	8.4639	2.614	14.2460	1.1898	0.109786
176.	0.	0.97398	13.7954	13.8874	8.4741	2.646	13.7909	1.1122	0.112241
177.	0.	0.94776	13.7960	13.8874	8.4789	2.688	13.3770	1.0457	0.115691
178.	0.	0.91863	13.7966	13.8874	8.4818	2.739	12.9876	0.9798	0.119774
179.	0.	0.88562	13.7973	13.8874	8.4810	2.806	12.6722	0.9247	0.124721
180.	0.	0.84773	13.7980	13.8874	8.4721	2.894	12.4917	0.9007	0.130703
181.	0.	0.80838	13.7986	13.8874	8.4570	2.939	12.2203	0.9068	0.136818
182.	0.	0.78750	13.7993	13.8874	8.4718	3.000	11.8791	0.7996	0.139616
183.	0.	0.74780	13.7999	13.8874	8.4568	3.074	11.6682	0.7961	0.146145
184.	0.	0.71479	13.8005	13.8874	8.4512	3.133	11.4509	0.7713	0.151321
185.	0.	0.68505	13.8011	13.8874	8.4484	3.186	11.2284	0.7359	0.155931
186.	0.	0.65528	13.8016	13.8874	8.4370	3.305	11.2035	0.7106	0.160649
187.	0.	0.61829	13.8020	13.8874	8.4029	3.481	11.4523	0.7664	0.166442
188.	0.	0.59307	13.8023	13.8874	8.3785	3.596	11.5394	0.7999	0.169938
189.	0.	0.58004	13.8026	13.8874	8.3740	3.670	11.5161	0.7716	0.171553
190.	0.	0.56273	13.8029	13.8874	8.3591	3.702	11.3928	0.7838	0.173770
191.	0.	0.55515	13.8032	13.8874	8.3692	3.673	11.0849	0.7246	0.174550
192.	0.	0.54477	13.8036	13.8874	8.3785	3.636	10.7240	0.6658	0.175769
193.	0.	0.52964	13.8042	13.8874	8.3864	3.626	10.4058	0.6178	0.177807

194.	0.	0.50966	13.8048	13.8874	8.3868	3.652	10.1996	0.5907	0.180722
195.	0.	0.48735	13.8055	13.8874	8.3789	3.689	10.0381	0.5840	0.184016
196.	0.	0.46906	13.8063	13.8874	8.3827	3.707	9.8369	0.5566	0.186624
197.	0.	0.45115	13.8072	13.8874	8.4002	3.708	9.6157	0.5192	0.189208
198.	0.	0.43132	13.8084	13.8874	8.4277	3.657	9.3332	0.4822	0.192173
199.	0.	0.41290	13.8099	13.8874	8.4617	3.551	8.9480	0.4150	0.195037
200.	0.	0.37480	13.8107	13.8874	8.8204	3.077	8.7439	0.3518	0.201770
201.	0.	0.33169	13.8118	13.8874	9.1964	2.570	8.9370	0.2901	0.210132
202.	0.	0.17481	17.2475	17.2856	11.6726	1.066	11.3832	0.1063	0.246310
203.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
204.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

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WHAFIS input:  YK-109.dat
WHAFIS output: YK-109.out
```

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-109
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
1000
2000
3000
4000
5000
6000
Transect Profile
SWAN 1-D points
TSWL

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-109.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-109.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-5.600	1.000	1.000	9.010	12.098	13.810	56.140	0.015	0.000
OF	3.300	-5.549	0.000	9.011	0.000	0.000	0.000	0.000	0.015	0.000
OF	6.600	-5.497	0.000	9.011	0.000	0.000	0.000	0.000	0.016	0.000
OF	9.800	-5.446	0.000	9.012	0.000	0.000	0.000	0.000	0.016	0.000
OF	13.100	-5.395	0.000	9.012	0.000	0.000	0.000	0.000	0.015	0.000
OF	16.400	-5.344	0.000	9.013	0.000	0.000	0.000	0.000	0.015	0.000
OF	19.700	-5.293	0.000	9.013	0.000	0.000	0.000	0.000	0.015	0.000
OF	23.000	-5.241	0.000	9.014	0.000	0.000	0.000	0.000	0.016	0.000
OF	26.200	-5.190	0.000	9.015	0.000	0.000	0.000	0.000	0.016	0.000
OF	29.500	-5.139	0.000	9.015	0.000	0.000	0.000	0.000	0.015	0.000
OF	32.800	-5.088	0.000	9.016	0.000	0.000	0.000	0.000	0.014	0.000
OF	36.100	-5.044	0.000	9.017	0.000	0.000	0.000	0.000	0.011	0.000
OF	39.400	-5.015	0.000	9.018	0.000	0.000	0.000	0.000	0.009	0.000
OF	42.700	-4.985	0.000	9.019	0.000	0.000	0.000	0.000	0.009	0.000
OF	45.900	-4.956	0.000	9.020	0.000	0.000	0.000	0.000	0.009	0.000
OF	49.200	-4.926	0.000	9.021	0.000	0.000	0.000	0.000	0.009	0.000
OF	52.500	-4.897	0.000	9.022	0.000	0.000	0.000	0.000	0.009	0.000
OF	55.800	-4.866	0.000	9.023	0.000	0.000	0.000	0.000	0.010	0.000
OF	59.100	-4.827	0.000	9.024	0.000	0.000	0.000	0.000	0.012	0.000
OF	62.300	-4.788	0.000	9.026	0.000	0.000	0.000	0.000	0.012	0.000
OF	65.600	-4.749	0.000	9.026	0.000	0.000	0.000	0.000	0.012	0.000
OF	68.900	-4.710	0.000	9.028	0.000	0.000	0.000	0.000	0.012	0.000
OF	72.200	-4.670	0.000	9.029	0.000	0.000	0.000	0.000	0.012	0.000
OF	75.500	-4.631	0.000	9.030	0.000	0.000	0.000	0.000	0.012	0.000
OF	78.700	-4.592	0.000	9.031	0.000	0.000	0.000	0.000	0.012	0.000
OF	82.000	-4.553	0.000	9.032	0.000	0.000	0.000	0.000	0.012	0.000
OF	85.300	-4.514	0.000	9.034	0.000	0.000	0.000	0.000	0.012	0.000
OF	88.600	-4.475	0.000	9.035	0.000	0.000	0.000	0.000	0.012	0.000
OF	91.900	-4.435	0.000	9.036	0.000	0.000	0.000	0.000	0.012	0.000
OF	95.100	-4.396	0.000	9.038	0.000	0.000	0.000	0.000	0.012	0.000
OF	98.400	-4.357	0.000	9.039	0.000	0.000	0.000	0.000	0.012	0.000
OF	101.700	-4.318	0.000	9.040	0.000	0.000	0.000	0.000	0.012	0.000
OF	105.000	-4.279	0.000	9.042	0.000	0.000	0.000	0.000	0.012	0.000
OF	108.300	-4.240	0.000	9.044	0.000	0.000	0.000	0.000	0.012	0.000
OF	111.500	-4.200	0.000	9.046	0.000	0.000	0.000	0.000	0.012	0.000
OF	114.800	-4.161	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
OF	118.100	-4.133	0.000	9.049	0.000	0.000	0.000	0.000	0.005	0.000
OF	121.400	-4.127	0.000	9.051	0.000	0.000	0.000	0.000	0.002	0.000
OF	124.700	-4.121	0.000	9.053	0.000	0.000	0.000	0.000	0.002	0.000
OF	128.000	-4.115	0.000	9.055	0.000	0.000	0.000	0.000	0.002	0.000
OF	131.200	-4.109	0.000	9.057	0.000	0.000	0.000	0.000	0.002	0.000
OF	134.500	-4.102	0.000	9.059	0.000	0.000	0.000	0.000	0.002	0.000
OF	137.800	-4.096	0.000	9.061	0.000	0.000	0.000	0.000	0.002	0.000
OF	141.100	-4.090	0.000	9.063	0.000	0.000	0.000	0.000	0.002	0.000
OF	144.400	-4.084	0.000	9.064	0.000	0.000	0.000	0.000	0.002	0.000
OF	147.600	-4.078	0.000	9.066	0.000	0.000	0.000	0.000	0.002	0.000
OF	150.900	-4.072	0.000	9.067	0.000	0.000	0.000	0.000	0.002	0.000
OF	154.200	-4.066	0.000	9.069	0.000	0.000	0.000	0.000	0.002	0.000
OF	157.500	-4.060	0.000	9.070	0.000	0.000	0.000	0.000	0.002	0.000
OF	160.800	-4.054	0.000	9.072	0.000	0.000	0.000	0.000	0.002	0.000
OF	164.000	-4.048	0.000	9.073	0.000	0.000	0.000	0.000	0.002	0.000
OF	167.300	-4.042	0.000	9.075	0.000	0.000	0.000	0.000	0.002	0.000
OF	170.600	-4.036	0.000	9.076	0.000	0.000	0.000	0.000	0.002	0.000
OF	173.900	-4.030	0.000	9.077	0.000	0.000	0.000	0.000	0.002	0.000
OF	177.200	-4.024	0.000	9.079	0.000	0.000	0.000	0.000	0.002	0.000
OF	180.400	-4.018	0.000	9.080	0.000	0.000	0.000	0.000	0.002	0.000
OF	183.700	-4.012	0.000	9.082	0.000	0.000	0.000	0.000	0.002	0.000
OF	187.000	-4.006	0.000	9.083	0.000	0.000	0.000	0.000	0.001	0.000
OF	190.300	-4.007	0.000	9.085	0.000	0.000	0.000	0.000	0.003	0.000
OF	193.600	-3.987	0.000	9.086	0.000	0.000	0.000	0.000	0.016	0.000
OF	196.800	-3.902	0.000	9.086	0.000	0.000	0.000	0.000	0.026	0.000
OF	200.100	-3.818	0.000	9.087	0.000	0.000	0.000	0.000	0.026	0.000
OF	203.400	-3.733	0.000	9.087	0.000	0.000	0.000	0.000	0.026	0.000
OF	206.700	-3.649	0.000	9.088	0.000	0.000	0.000	0.000	0.026	0.000
OF	210.000	-3.564	0.000	9.089	0.000	0.000	0.000	0.000	0.026	0.000
OF	213.300	-3.480	0.000	9.090	0.000	0.000	0.000	0.000	0.026	0.000
OF	216.500	-3.395	0.000	9.091	0.000	0.000	0.000	0.000	0.026	0.000
OF	219.800	-3.311	0.000	9.092	0.000	0.000	0.000	0.000	0.026	0.000
OF	223.100	-3.226	0.000	9.093	0.000	0.000	0.000	0.000	0.026	0.000
OF	226.400	-3.141	0.000	9.094	0.000	0.000	0.000	0.000	0.026	0.000
OF	229.700	-3.057	0.000	9.095	0.000	0.000	0.000	0.000	0.026	0.000
OF	232.900	-2.972	0.000	9.096	0.000	0.000	0.000	0.000	0.026	0.000
OF	236.200	-2.888	0.000	9.097	0.000	0.000	0.000	0.000	0.026	0.000
OF	239.500	-2.803	0.000	9.099	0.000	0.000	0.000	0.000	0.026	0.000
OF	242.800	-2.719	0.000	9.100	0.000	0.000	0.000	0.000	0.026	0.000
OF	246.100	-2.634	0.000	9.101	0.000	0.000	0.000	0.000	0.026	0.000
OF	249.300	-2.550	0.000	9.102	0.000	0.000	0.000	0.000	0.026	0.000
OF	252.600	-2.465	0.000	9.104	0.000	0.000	0.000	0.000	0.026	0.000
OF	255.900	-2.381	0.000	9.105	0.000	0.000	0.000	0.000	0.026	0.000
OF	259.200	-2.296	0.000	9.107	0.000	0.000	0.000	0.000	0.026	0.000
OF	262.500	-2.208	0.000	9.108	0.000	0.000	0.000	0.000	0.029	0.000
OF	265.700	-2.108	0.000	9.110	0.000	0.000	0.000	0.000	0.031	0.000
OF	269.000	-2.007	0.000	9.111	0.000	0.000	0.000	0.000	0.024	0.000
OF	272.300	-1.947	0.000	9.113	0.000	0.000	0.000	0.000	0.017	0.000
OF	275.600	-1.897	0.000	9.115	0.000	0.000	0.000	0.000	0.015	0.000
OF	278.900	-1.847	0.000	9.117	0.000	0.000	0.000	0.000	0.015	0.000
OF	282.200	-1.797	0.000	9.119	0.000	0.000	0.000	0.000	0.015	0.000
OF	285.400	-1.747	0.000	9.122	0.000	0.000	0.000	0.000	0.015	0.000
OF	288.700	-1.696	0.000	9.123	0.000	0.000	0.000	0.000	0.015	0.000
OF	292.000	-1.646	0.000	9.126	0.000	0.000	0.000	0.000	0.015	0.000
OF	295.300	-1.596	0.000	9.128	0.000	0.000	0.000	0.000	0.016	0.000
OF	298.600	-1.543	0.000	9.130	0.000	0.000	0.000	0.000	0.017	0.000
OF	301.800	-1.489	0.000	9.132	0.000	0.000	0.000	0.000	0.017	0.000

OF	305.100	-1.434	0.000	9.134	0.000	0.000	0.000	0.000	0.016	0.000
OF	308.400	-1.380	0.000	9.136	0.000	0.000	0.000	0.000	0.016	0.000
OF	311.700	-1.326	0.000	9.138	0.000	0.000	0.000	0.000	0.016	0.000
OF	315.000	-1.271	0.000	9.140	0.000	0.000	0.000	0.000	0.017	0.000
OF	318.200	-1.217	0.000	9.142	0.000	0.000	0.000	0.000	0.017	0.000
OF	321.500	-1.163	0.000	9.144	0.000	0.000	0.000	0.000	0.016	0.000
OF	324.800	-1.108	0.000	9.146	0.000	0.000	0.000	0.000	0.016	0.000
OF	328.100	-1.054	0.000	9.148	0.000	0.000	0.000	0.000	0.016	0.000
OF	331.400	-1.000	0.000	9.150	0.000	0.000	0.000	0.000	0.017	0.000
OF	334.600	-0.945	0.000	9.152	0.000	0.000	0.000	0.000	0.017	0.000
OF	337.900	-0.891	0.000	9.154	0.000	0.000	0.000	0.000	0.016	0.000
OF	341.200	-0.837	0.000	9.156	0.000	0.000	0.000	0.000	0.016	0.000
OF	344.500	-0.782	0.000	9.158	0.000	0.000	0.000	0.000	0.016	0.000
OF	347.800	-0.728	0.000	9.160	0.000	0.000	0.000	0.000	0.017	0.000
OF	351.000	-0.674	0.000	9.162	0.000	0.000	0.000	0.000	0.017	0.000
OF	354.300	-0.619	0.000	9.165	0.000	0.000	0.000	0.000	0.016	0.000
OF	357.600	-0.565	0.000	9.167	0.000	0.000	0.000	0.000	0.016	0.000
OF	360.900	-0.511	0.000	9.168	0.000	0.000	0.000	0.000	0.016	0.000
OF	364.200	-0.456	0.000	9.171	0.000	0.000	0.000	0.000	0.017	0.000
OF	367.500	-0.397	0.000	9.173	0.000	0.000	0.000	0.000	0.021	0.000
OF	370.700	-0.320	0.000	9.175	0.000	0.000	0.000	0.000	0.024	0.000
OF	374.000	-0.243	0.000	9.177	0.000	0.000	0.000	0.000	0.023	0.000
OF	377.300	-0.166	0.000	9.179	0.000	0.000	0.000	0.000	0.023	0.000
OF	380.600	-0.089	0.000	9.181	0.000	0.000	0.000	0.000	0.023	0.000
OF	383.900	-0.012	0.000	9.183	0.000	0.000	0.000	0.000	0.023	0.000
IF	387.100	0.063	0.000	9.185	0.000	0.000	0.000	0.000	0.020	0.000
IF	390.400	0.119	0.000	9.187	0.000	0.000	0.000	0.000	0.013	0.000
IF	393.700	0.151	0.000	9.190	0.000	0.000	0.000	0.000	0.010	0.000
IF	397.000	0.184	0.000	9.193	0.000	0.000	0.000	0.000	0.009	0.000
IF	400.300	0.209	0.000	9.195	0.000	0.000	0.000	0.000	0.006	0.000
IF	403.500	0.223	0.000	9.198	0.000	0.000	0.000	0.000	0.006	0.000
IF	406.800	0.247	0.000	9.201	0.000	0.000	0.000	0.000	0.020	0.000
IF	410.100	0.354	0.000	9.202	0.000	0.000	0.000	0.000	0.033	0.000
IF	413.400	0.462	0.000	9.204	0.000	0.000	0.000	0.000	0.036	0.000
IF	416.700	0.593	0.000	9.206	0.000	0.000	0.000	0.000	0.042	0.000
IF	419.900	0.737	0.000	9.207	0.000	0.000	0.000	0.000	0.044	0.000
IF	423.200	0.880	0.000	9.208	0.000	0.000	0.000	0.000	0.037	0.000
IF	426.500	0.983	0.000	9.211	0.000	0.000	0.000	0.000	0.024	0.000
IF	429.800	1.037	0.000	9.214	0.000	0.000	0.000	0.000	0.016	0.000
IF	433.100	1.090	0.000	9.217	0.000	0.000	0.000	0.000	0.023	0.000
IF	436.400	1.191	0.000	9.219	0.000	0.000	0.000	0.000	0.041	0.000
IF	439.600	1.357	0.000	9.221	0.000	0.000	0.000	0.000	0.051	0.000
IF	442.900	1.523	0.000	9.223	0.000	0.000	0.000	0.000	0.049	0.000
IF	446.200	1.681	0.000	9.226	0.000	0.000	0.000	0.000	0.027	0.000
IF	449.500	1.699	0.000	9.230	0.000	0.000	0.000	0.000	0.005	0.000
IF	452.800	1.717	0.000	9.235	0.000	0.000	0.000	0.000	0.005	0.000
IF	456.000	1.735	0.000	9.239	0.000	0.000	0.000	0.000	0.015	0.000
IF	459.300	1.814	0.000	9.242	0.000	0.000	0.000	0.000	0.038	0.000
IF	462.600	1.987	0.000	9.244	0.000	0.000	0.000	0.000	0.052	0.000
IF	465.900	2.159	0.000	9.247	0.000	0.000	0.000	0.000	0.046	0.000
IF	469.200	2.290	0.000	9.250	0.000	0.000	0.000	0.000	0.029	0.000
IF	472.400	2.347	0.000	9.254	0.000	0.000	0.000	0.000	0.017	0.000
IF	475.700	2.404	0.000	9.258	0.000	0.000	0.000	0.000	0.016	0.000
IF	479.000	2.455	0.000	9.263	0.000	0.000	0.000	0.000	0.015	0.000
IF	482.300	2.500	0.000	9.267	0.000	0.000	0.000	0.000	0.014	0.000
IF	485.600	2.546	0.000	9.272	0.000	0.000	0.000	0.000	0.022	0.000
IF	488.800	2.646	0.000	9.275	0.000	0.000	0.000	0.000	0.038	0.000
IF	492.100	2.790	0.000	9.278	0.000	0.000	0.000	0.000	0.039	0.000
IF	495.400	2.906	0.000	9.281	0.000	0.000	0.000	0.000	0.024	0.000
IF	498.700	2.949	0.000	9.286	0.000	0.000	0.000	0.000	0.023	0.000
IF	502.000	3.056	0.000	9.290	0.000	0.000	0.000	0.000	0.033	0.000
IF	505.200	3.161	0.000	9.294	0.000	0.000	0.000	0.000	0.020	0.000
IF	508.500	3.184	0.000	9.299	0.000	0.000	0.000	0.000	0.007	0.000
IF	511.800	3.207	0.000	9.304	0.000	0.000	0.000	0.000	0.012	0.000
IF	515.100	3.264	0.000	9.308	0.000	0.000	0.000	0.000	0.028	0.000
IF	518.400	3.391	0.000	9.311	0.000	0.000	0.000	0.000	0.038	0.000
IF	521.700	3.517	0.000	9.314	0.000	0.000	0.000	0.000	0.026	0.000
IF	524.900	3.562	0.000	9.319	0.000	0.000	0.000	0.000	0.009	0.000
IF	528.200	3.579	0.000	9.325	0.000	0.000	0.000	0.000	0.009	0.000
IF	531.500	3.619	0.000	9.329	0.000	0.000	0.000	0.000	0.013	0.000
IF	534.800	3.667	0.000	9.333	0.000	0.000	0.000	0.000	0.015	0.000
IF	538.100	3.716	0.000	9.337	0.000	0.000	0.000	0.000	0.025	0.000
IF	541.300	3.830	0.000	9.340	0.000	0.000	0.000	0.000	0.035	0.000
IF	544.600	3.944	0.000	9.343	0.000	0.000	0.000	0.000	0.034	0.000
IF	547.900	4.055	0.000	9.347	0.000	0.000	0.000	0.000	0.033	0.000
IF	551.200	4.163	0.000	9.350	0.000	0.000	0.000	0.000	-0.007	0.000
IF	554.500	4.011	0.000	9.358	0.000	0.000	0.000	0.000	0.037	0.000
IF	557.700	4.404	0.000	9.356	0.000	0.000	0.000	0.000	0.054	0.000
IF	561.000	4.361	0.000	9.363	0.000	0.000	0.000	0.000	0.024	0.000
IF	564.300	4.564	0.000	9.366	0.000	0.000	0.000	0.000	0.044	0.000
IF	567.600	4.654	0.000	9.370	0.000	0.000	0.000	0.000	0.059	0.000
IF	570.900	4.955	0.000	9.372	0.000	0.000	0.000	0.000	0.125	0.000
IF	574.100	5.463	0.000	9.370	0.000	0.000	0.000	0.000	0.119	0.000
IF	577.400	5.726	0.000	9.378	0.000	0.000	0.000	0.000	0.075	0.000
IF	580.700	5.958	0.000	9.390	0.000	0.000	0.000	0.000	0.068	0.000
IF	584.000	6.174	0.000	9.403	0.000	0.000	0.000	0.000	0.065	0.000
IF	587.300	6.389	0.000	9.419	0.000	0.000	0.000	0.000	0.049	0.000
IF	590.500	6.492	0.000	9.439	0.000	0.000	0.000	0.000	0.013	0.000
IF	593.800	6.471	0.000	9.459	0.000	0.000	0.000	0.000	0.053	0.000
IF	597.100	6.844	0.000	9.468	0.000	0.000	0.000	0.000	0.063	0.000
IF	600.400	6.883	0.000	9.490	0.000	0.000	0.000	0.000	0.020	0.000
IF	603.700	6.976	0.000	9.507	0.000	0.000	0.000	0.000	0.034	0.000
IF	607.000	7.105	0.000	9.522	0.000	0.000	0.000	0.000	0.033	0.000
IF	610.200	7.191	0.000	9.537	0.000	0.000	0.000	0.000	-0.010	0.000
IF	613.500	7.042	0.000	9.556	0.000	0.000	0.000	0.000	-0.037	0.000
IF	616.800	6.949	0.000	9.568	0.000	0.000	0.000	0.000	0.000	0.000
IF	620.100	7.040	0.000	9.573	0.000	0.000	0.000	0.000	0.009	0.000
IF	623.400	7.006	0.000	9.580	0.000	0.000	0.000	0.000	0.025	0.000
IF	626.600	7.201	0.000	9.583	0.000	0.000	0.000	0.000	0.061	0.000
IF	629.900	7.404	0.000	9.587	0.000	0.000	0.000	0.000	0.057	0.000
IF	633.200	7.576	0.000	9.594	0.000	0.000	0.000	0.000	0.037	0.000
IF	636.500	7.651	0.000	9.603	0.000	0.000	0.000	0.000	0.020	0.000

IF	639.800	7.707	0.000	9.614	0.000	0.000	0.000	0.000	0.024	0.000
IF	643.000	7.809	0.000	9.623	0.000	0.000	0.000	0.000	0.031	0.000
IF	646.300	7.911	0.000	9.631	0.000	0.000	0.000	0.000	0.038	0.000
IF	649.600	8.058	0.000	9.641	0.000	0.000	0.000	0.000	0.058	0.000
IF	652.900	8.292	0.000	9.650	0.000	0.000	0.000	0.000	0.071	0.000
IF	656.200	8.526	0.000	9.672	0.000	0.000	0.000	0.000	0.072	0.000
IF	659.400	8.760	0.000	9.700	0.000	0.000	0.000	0.000	0.146	0.000
IF	662.700	9.475	0.000	9.818	0.000	0.000	0.000	0.000	0.225	0.000
IF	664.100	9.818	0.000	9.818	0.000	0.000	0.000	0.000	0.245	0.000
AS	1068.200	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.052	0.000
IF	1071.500	9.026	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
IF	1073.900	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.071	0.000
AS	1088.100	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.180	0.000
IF	1088.500	9.124	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
IF	1093.000	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.016	0.000
AS	1149.900	9.150	0.000	9.150	0.000	0.000	0.000	0.000	-0.046	0.000
IF	1154.000	8.960	0.000	9.150	0.000	0.000	0.000	0.000	-0.033	0.000
IF	1186.000	7.943	0.000	9.150	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1214.500	8.861	0.000	9.150	0.000	0.000	0.000	0.000	0.006	0.000
IF	1225.500	8.179	0.000	9.150	0.000	0.000	0.000	0.000	-0.033	0.000
IF	1240.500	8.012	0.000	9.150	0.000	0.000	0.000	0.000	-0.022	0.000
IF	1257.500	7.487	0.000	9.151	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1272.000	7.884	0.000	9.151	0.000	0.000	0.000	0.000	0.006	0.000
IF	1284.000	7.654	0.000	9.151	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1299.500	7.552	0.000	9.151	0.000	0.000	0.000	0.000	-0.001	0.000
IF	1310.500	7.618	0.000	9.151	0.000	0.000	0.000	0.000	0.023	0.000
IF	1317.000	7.950	0.000	9.151	0.000	0.000	0.000	0.000	0.036	0.000
IF	1322.500	8.045	0.000	9.151	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1336.500	7.651	0.000	9.151	0.000	0.000	0.000	0.000	-0.020	0.000
IF	1353.500	7.424	0.000	9.150	0.000	0.000	0.000	0.000	-0.001	0.000
IF	1382.500	7.585	0.000	9.150	0.000	0.000	0.000	0.000	0.005	0.000
IF	1395.000	7.618	0.000	9.150	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1405.000	7.487	0.000	9.150	0.000	0.000	0.000	0.000	-0.010	0.000
IF	1415.500	7.421	0.000	9.150	0.000	0.000	0.000	0.000	0.086	0.000
IF	1424.000	9.127	0.000	9.149	0.000	0.000	0.000	0.000	0.040	0.000
IF	1428.500	7.946	0.000	9.149	0.000	0.000	0.000	0.000	-0.061	0.000
IF	1437.000	8.340	0.000	9.149	0.000	0.000	0.000	0.000	-0.020	0.000
IF	1448.500	7.552	0.000	9.149	0.000	0.000	0.000	0.000	-0.043	0.000
IF	1457.500	7.454	0.000	9.149	0.000	0.000	0.000	0.000	0.014	0.000
IF	1465.000	7.782	0.000	9.149	0.000	0.000	0.000	0.000	0.000	0.000
IF	1470.000	7.454	0.000	9.149	0.000	0.000	0.000	0.000	0.082	0.000
IF	1481.000	9.094	0.000	9.149	0.000	0.000	0.000	0.000	-0.011	0.000
IF	1497.500	7.159	0.000	9.149	0.000	0.000	0.000	0.000	-0.098	0.000
IF	1508.500	6.404	0.000	9.149	0.000	0.000	0.000	0.000	-0.041	0.000
IF	1517.500	6.339	0.000	9.149	0.000	0.000	0.000	0.000	-0.009	0.000
IF	1524.000	6.273	0.000	9.149	0.000	0.000	0.000	0.000	0.016	0.000
IF	1530.000	6.535	0.000	9.149	0.000	0.000	0.000	0.000	0.030	0.000
IF	1535.000	6.601	0.000	9.149	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1542.000	6.470	0.000	9.149	0.000	0.000	0.000	0.000	-0.022	0.000
IF	1550.000	6.273	0.000	9.149	0.000	0.000	0.000	0.000	-0.013	0.000
IF	1559.500	6.240	0.000	9.149	0.000	0.000	0.000	0.000	-0.005	0.000
IF	1571.000	6.174	0.000	9.149	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1577.000	5.978	0.000	9.150	0.000	0.000	0.000	0.000	-0.013	0.000
IF	1581.500	6.043	0.000	9.150	0.000	0.000	0.000	0.000	-0.009	0.000
IF	1587.500	5.879	0.000	9.150	0.000	0.000	0.000	0.000	-0.006	0.000
IF	1592.000	5.978	0.000	9.150	0.000	0.000	0.000	0.000	-0.050	0.000
IF	1598.000	5.354	0.000	9.150	0.000	0.000	0.000	0.000	-0.060	0.000
IF	1604.000	5.256	0.000	9.150	0.000	0.000	0.000	0.000	-0.026	0.000
IF	1610.500	5.026	0.000	9.151	0.000	0.000	0.000	0.000	-0.014	0.000
IF	1618.000	5.059	0.000	9.151	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1624.000	4.993	0.000	9.151	0.000	0.000	0.000	0.000	-0.008	0.000
IF	1631.000	4.961	0.000	9.151	0.000	0.000	0.000	0.000	0.027	0.000
IF	1636.000	5.321	0.000	9.151	0.000	0.000	0.000	0.000	0.041	0.000
IF	1639.000	5.289	0.000	9.151	0.000	0.000	0.000	0.000	-0.021	0.000
IF	1651.500	4.993	0.000	9.151	0.000	0.000	0.000	0.000	-0.043	0.000
IF	1664.000	4.206	0.000	9.151	0.000	0.000	0.000	0.000	0.095	0.000
IF	1677.000	7.424	0.000	9.151	0.000	0.000	0.000	0.000	0.143	0.000
IF	1690.000	7.913	0.000	9.151	0.000	0.000	0.000	0.000	0.062	0.000
IF	1696.500	8.639	0.000	9.151	0.000	0.000	0.000	0.000	0.070	0.000
IF	1707.700	9.151	0.000	9.151	0.000	0.000	0.000	0.000	0.046	0.000
AS	1819.100	9.158	0.000	9.158	0.000	0.000	0.000	0.000	-0.011	0.000
IF	1822.000	9.127	0.000	9.158	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1846.000	8.832	0.000	9.158	0.000	0.000	0.000	0.000	-0.010	0.000
IF	1866.000	8.665	0.000	9.158	0.000	0.000	0.000	0.000	-0.017	0.000
IF	1880.000	8.241	0.000	9.158	0.000	0.000	0.000	0.000	0.000	0.000
IF	1896.500	8.668	0.000	9.158	0.000	0.000	0.000	0.000	0.000	0.000
IF	1919.500	8.238	0.000	9.158	0.000	0.000	0.000	0.000	0.013	0.000
IF	1933.200	9.158	0.000	9.158	0.000	0.000	0.000	0.000	0.067	0.000
AS	2022.600	9.159	0.000	9.159	0.000	0.000	0.000	0.000	-0.110	0.000
IF	2031.000	8.238	0.000	9.159	0.000	0.000	0.000	0.000	-0.054	0.000
IF	2036.000	8.435	0.000	9.159	0.000	0.000	0.000	0.000	-0.166	0.000
IF	2037.500	7.159	0.000	9.159	0.000	0.000	0.000	0.000	-0.096	0.000
IF	2049.000	7.192	0.000	9.159	0.000	0.000	0.000	0.000	-0.030	0.000
IF	2079.000	5.909	0.000	9.160	0.000	0.000	0.000	0.000	0.036	0.000
IF	2096.500	8.894	0.000	9.160	0.000	0.000	0.000	0.000	0.017	0.000
IF	2106.500	6.368	0.000	9.160	0.000	0.000	0.000	0.000	-0.114	0.000
IF	2117.000	6.565	0.000	9.160	0.000	0.000	0.000	0.000	0.100	0.000
IF	2126.500	8.369	0.000	9.160	0.000	0.000	0.000	0.000	0.076	0.000
IF	2140.000	8.304	0.000	9.160	0.000	0.000	0.000	0.000	-0.090	0.000
IF	2149.000	6.339	0.000	9.160	0.000	0.000	0.000	0.000	-0.080	0.000
IF	2162.500	6.499	0.000	9.160	0.000	0.000	0.000	0.000	0.000	0.000
IF	2178.500	6.335	0.000	9.160	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2189.000	6.270	0.000	9.160	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2200.000	6.139	0.000	9.160	0.000	0.000	0.000	0.000	0.029	0.000
IF	2212.500	6.959	0.000	9.160	0.000	0.000	0.000	0.000	0.093	0.000
IF	2222.000	8.179	0.000	9.160	0.000	0.000	0.000	0.000	0.078	0.000
IF	2226.000	8.012	0.000	9.160	0.000	0.000	0.000	0.000	-0.043	0.000
IF	2239.000	7.451	0.000	9.160	0.000	0.000	0.000	0.000	0.027	0.000
IF	2254.500	8.796	0.000	9.160	0.000	0.000	0.000	0.000	0.051	0.000
IF	2264.000	8.730	0.000	9.160	0.000	0.000	0.000	0.000	-0.028	0.000
IF	2280.000	8.074	0.000	9.160	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2291.500	8.041	0.000	9.160	0.000	0.000	0.000	0.000	0.010	0.000

IF	2302.000	8.304	0.000	9.160	0.000	0.000	0.000	0.000	0.057	0.000
IF	2311.200	9.160	0.000	9.160	0.000	0.000	0.000	0.000	0.093	0.000
AS	2367.500	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.137	0.000
IF	2368.000	9.127	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
IF	2369.400	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.049	0.000
AS	2520.400	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.124	0.000
IF	2526.000	8.504	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
IF	2528.900	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.239	0.000
AS	2596.500	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.046	0.000
IF	2599.000	9.062	0.000	9.177	0.000	0.000	0.000	0.000	0.000	0.000
IF	2600.800	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.064	0.000
AS	2627.100	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.043	0.000
IF	2627.500	9.160	0.000	9.177	0.000	0.000	0.000	0.000	0.000	0.000
IF	2628.000	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.034	0.000
AS	2641.800	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.069	0.000
IF	2643.000	9.094	0.000	9.177	0.000	0.000	0.000	0.000	-0.022	0.000
IF	2647.000	9.062	0.000	9.177	0.000	0.000	0.000	0.000	-0.031	0.000
IF	2652.500	8.796	0.000	9.177	0.000	0.000	0.000	0.000	-0.022	0.000
IF	2659.000	8.799	0.000	9.177	0.000	0.000	0.000	0.000	-0.021	0.000
IF	2668.000	8.471	0.000	9.177	0.000	0.000	0.000	0.000	-0.023	0.000
IF	2677.500	8.369	0.000	9.177	0.000	0.000	0.000	0.000	-0.010	0.000
IF	2688.000	8.271	0.000	9.177	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2697.000	8.304	0.000	9.177	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2704.500	8.074	0.000	9.177	0.000	0.000	0.000	0.000	-0.038	0.000
IF	2717.500	7.516	0.000	9.177	0.000	0.000	0.000	0.000	-0.041	0.000
IF	2728.000	7.123	0.000	9.177	0.000	0.000	0.000	0.000	0.037	0.000
IF	2729.000	7.943	0.000	9.177	0.000	0.000	0.000	0.000	0.055	0.000
IF	2737.500	7.648	0.000	9.177	0.000	0.000	0.000	0.000	0.004	0.000
IF	2747.500	8.009	0.000	9.177	0.000	0.000	0.000	0.000	0.002	0.000
IF	2755.000	7.680	0.000	9.177	0.000	0.000	0.000	0.000	-0.024	0.000
IF	2766.500	7.549	0.000	9.177	0.000	0.000	0.000	0.000	0.018	0.000
IF	2780.000	8.140	0.000	9.177	0.000	0.000	0.000	0.000	0.032	0.000
IF	2793.000	8.402	0.000	9.177	0.000	0.000	0.000	0.000	0.008	0.000
IF	2801.500	8.304	0.000	9.177	0.000	0.000	0.000	0.000	0.004	0.000
IF	2809.500	8.468	0.000	9.177	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2819.500	8.271	0.000	9.177	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2829.500	8.238	0.000	9.177	0.000	0.000	0.000	0.000	-0.008	0.000
IF	2836.500	8.140	0.000	9.177	0.000	0.000	0.000	0.000	0.023	0.000
IF	2845.500	8.599	0.000	9.177	0.000	0.000	0.000	0.000	0.012	0.000
IF	2861.000	8.435	0.000	9.177	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2870.000	8.369	0.000	9.177	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2875.000	8.271	0.000	9.177	0.000	0.000	0.000	0.000	0.004	0.000
IF	2885.000	8.435	0.000	9.177	0.000	0.000	0.000	0.000	-0.010	0.000
IF	2894.000	8.074	0.000	9.177	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2904.000	8.304	0.000	9.177	0.000	0.000	0.000	0.000	0.036	0.000
IF	2916.000	8.861	0.000	9.177	0.000	0.000	0.000	0.000	0.043	0.000
IF	2924.100	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.039	0.000
AS	2935.500	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2937.000	9.157	0.000	9.177	0.000	0.000	0.000	0.000	-0.014	0.000
IF	2944.000	9.058	0.000	9.177	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2952.000	9.124	0.000	9.177	0.000	0.000	0.000	0.000	0.013	0.000
IF	2953.200	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.044	0.000
AS	5037.500	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.147	0.000
IF	5055.500	6.549	0.000	9.196	0.000	0.000	0.000	0.000	-0.090	0.000
IF	5069.000	6.348	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
IF	5079.000	6.549	0.000	9.196	0.000	0.000	0.000	0.000	0.016	0.000
IF	5091.500	6.713	0.000	9.196	0.000	0.000	0.000	0.000	0.013	0.000
IF	5102.000	6.844	0.000	9.196	0.000	0.000	0.000	0.000	-0.012	0.000
IF	5113.000	6.447	0.000	9.196	0.000	0.000	0.000	0.000	-0.010	0.000
IF	5135.000	6.512	0.000	9.196	0.000	0.000	0.000	0.000	0.012	0.000
IF	5159.000	7.008	0.000	9.196	0.000	0.000	0.000	0.000	0.020	0.000
IF	5175.500	7.303	0.000	9.196	0.000	0.000	0.000	0.000	0.006	0.000
IF	5185.500	7.169	0.000	9.196	0.000	0.000	0.000	0.000	-0.038	0.000
IF	5193.500	6.614	0.000	9.196	0.000	0.000	0.000	0.000	-0.036	0.000
IF	5199.000	6.676	0.000	9.196	0.000	0.000	0.000	0.000	0.003	0.000
IF	5205.000	6.647	0.000	9.196	0.000	0.000	0.000	0.000	0.054	0.000
IF	5218.500	7.726	0.000	9.196	0.000	0.000	0.000	0.000	0.134	0.000
IF	5224.000	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.267	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-5.600	1.000	1.000	9.010	12.098	13.810	56.140	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.300	-5.549	0.000	9.011	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	6.600	-5.497	0.000	9.011	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.800	-5.446	0.000	9.012	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	13.100	-5.395	0.000	9.012	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.400	-5.344	0.000	9.013	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.700	-5.293	0.000	9.013	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-5.241	0.000	9.014	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.200	-5.190	0.000	9.015	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	29.500	-5.139	0.000	9.015	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES

OF	32.800	-5.088	0.000	9.016	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	36.100	-5.044	0.000	9.017	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.400	-5.015	0.000	9.018	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	42.700	-4.985	0.000	9.019	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.900	-4.956	0.000	9.020	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.200	-4.926	0.000	9.021	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.500	-4.897	0.000	9.022	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	55.800	-4.866	0.000	9.023	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	59.100	-4.827	0.000	9.024	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.300	-4.788	0.000	9.026	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	65.600	-4.749	0.000	9.026	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	68.900	-4.710	0.000	9.028	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	72.200	-4.670	0.000	9.029	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.500	-4.631	0.000	9.030	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	78.700	-4.592	0.000	9.031	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-4.553	0.000	9.032	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.300	-4.514	0.000	9.034	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.600	-4.475	0.000	9.035	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.900	-4.435	0.000	9.036	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.100	-4.396	0.000	9.038	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.400	-4.357	0.000	9.039	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.700	-4.318	0.000	9.040	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-4.279	0.000	9.042	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	108.300	-4.240	0.000	9.044	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-4.200	0.000	9.046	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-4.161	0.000	9.047	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-4.133	0.000	9.049	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-4.127	0.000	9.051	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-4.121	0.000	9.053	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-4.115	0.000	9.055	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-4.109	0.000	9.057	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-4.102	0.000	9.059	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-4.096	0.000	9.061	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-4.090	0.000	9.063	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	144.400	-4.084	0.000	9.064	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.600	-4.078	0.000	9.066	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.900	-4.072	0.000	9.067	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.200	-4.066	0.000	9.069	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.500	-4.060	0.000	9.070	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.800	-4.054	0.000	9.072	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-4.048	0.000	9.073	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.300	-4.042	0.000	9.075	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.600	-4.036	0.000	9.076	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.900	-4.030	0.000	9.077	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.200	-4.024	0.000	9.079	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.400	-4.018	0.000	9.080	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.700	-4.012	0.000	9.082	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	187.000	-4.006	0.000	9.083	0.000	0.000	0.000	0.000	0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	190.300	-4.007	0.000	9.085	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.600	-3.987	0.000	9.086	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	196.800	-3.902	0.000	9.086	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.100	-3.818	0.000	9.087	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	203.400	-3.733	0.000	9.087	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.700	-3.649	0.000	9.088	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	210.000	-3.564	0.000	9.089	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	213.300	-3.480	0.000	9.090	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	216.500	-3.395	0.000	9.091	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	219.800	-3.311	0.000	9.092	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	223.100	-3.226	0.000	9.093	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	226.400	-3.141	0.000	9.094	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.700	-3.057	0.000	9.095	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	232.900	-2.972	0.000	9.096	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	236.200	-2.888	0.000	9.097	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	239.500	-2.803	0.000	9.099	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	242.800	-2.719	0.000	9.100	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	246.100	-2.634	0.000	9.101	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.300	-2.550	0.000	9.102	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	252.600	-2.465	0.000	9.104	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	255.900	-2.381	0.000	9.105	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.200	-2.296	0.000	9.107	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.500	-2.208	0.000	9.108	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.700	-2.108	0.000	9.110	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-2.007	0.000	9.111	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.300	-1.947	0.000	9.113	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.600	-1.897	0.000	9.115	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.900	-1.847	0.000	9.117	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.200	-1.797	0.000	9.119	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.400	-1.747	0.000	9.122	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.700	-1.696	0.000	9.123	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	292.000	-1.646	0.000	9.126	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.300	-1.596	0.000	9.128	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.600	-1.543	0.000	9.130	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	301.800	-1.489	0.000	9.132	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	305.100	-1.434	0.000	9.134	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	308.400	-1.380	0.000	9.136	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	311.700	-1.326	0.000	9.138	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	315.000	-1.271	0.000	9.140	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.200	-1.217	0.000	9.142	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	321.500	-1.163	0.000	9.144	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	324.800	-1.108	0.000	9.146	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	328.100	-1.054	0.000	9.148	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	331.400	-1.000	0.000	9.150	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	334.600	-0.945	0.000	9.152	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.900	-0.891	0.000	9.154	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	341.200	-0.837	0.000	9.156	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	344.500	-0.782	0.000	9.158	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	347.800	-0.728	0.000	9.160	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000	-0.674	0.000	9.162	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	354.300	-0.619	0.000	9.165	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	357.600	-0.565	0.000	9.167	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	360.900	-0.511	0.000	9.168	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.200	-0.456	0.000	9.171	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	367.500	-0.397	0.000	9.173	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.700	-0.320	0.000	9.175	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	374.000	-0.243	0.000	9.177	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.300	-0.166	0.000	9.179	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	380.600	-0.089	0.000	9.181	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	383.900	-0.012	0.000	9.183	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	387.100	0.063	0.000	9.185	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	390.400	0.119	0.000	9.187	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	393.700	0.151	0.000	9.190	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	397.000	0.184	0.000	9.193	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	400.300	0.209	0.000	9.195	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	403.500	0.223	0.000	9.198	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	406.800	0.247	0.000	9.201	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	410.100	0.354	0.000	9.202	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	413.400	0.462	0.000	9.204	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	416.700	0.593	0.000	9.206	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	419.900	0.737	0.000	9.207	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	423.200	0.880	0.000	9.208	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	426.500	0.983	0.000	9.211	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	429.800	1.037	0.000	9.214	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	433.100	1.090	0.000	9.217	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	436.400	1.191	0.000	9.219	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	439.600	1.357	0.000	9.221	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	442.900	1.523	0.000	9.223	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	446.200	1.681	0.000	9.226	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	449.500	1.699	0.000	9.230	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	452.800	1.717	0.000	9.235	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	456.000	1.735	0.000	9.239	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	459.300	1.814	0.000	9.242	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	462.600	1.987	0.000	9.244	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	465.900	2.159	0.000	9.247	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	469.200	2.290	0.000	9.250	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	472.400	2.347	0.000	9.254	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	475.700	2.404	0.000	9.258	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	479.000	2.455	0.000	9.263	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	482.300	2.500	0.000	9.267	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	485.600	2.546	0.000	9.272	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	488.800	2.646	0.000	9.275	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	492.100	2.790	0.000	9.278	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	495.400	2.906	0.000	9.281	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	498.700	2.949	0.000	9.286	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	502.000	3.056	0.000	9.290	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	505.200	3.161	0.000	9.294	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	508.500	3.184	0.000	9.299	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	511.800	3.207	0.000	9.304	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	515.100	3.264	0.000	9.308	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	518.400	3.391	0.000	9.311	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	521.700	3.517	0.000	9.314	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	524.900	3.562	0.000	9.319	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	528.200	3.579	0.000	9.325	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	531.500	3.619	0.000	9.329	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	534.800	3.667	0.000	9.333	0.000	0.000	0.000	0.000	0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	538.100	3.716	0.000	9.337	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	541.300	3.830	0.000	9.340	0.000	0.000	0.000	0.000	0.035	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	544.600	3.944	0.000	9.343	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	547.900	4.055	0.000	9.347	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	551.200	4.163	0.000	9.350	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	554.500	4.011	0.000	9.358	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	557.700	4.404	0.000	9.356	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	561.000	4.361	0.000	9.363	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	564.300	4.564	0.000	9.366	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	567.600	4.654	0.000	9.370	0.000	0.000	0.000	0.000	0.059	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	570.900	4.955	0.000	9.372	0.000	0.000	0.000	0.000	0.125	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	574.100	5.463	0.000	9.370	0.000	0.000	0.000	0.000	0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	577.400	5.726	0.000	9.378	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	580.700	5.958	0.000	9.390	0.000	0.000	0.000	0.000	0.068	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	584.000	6.174	0.000	9.403	0.000	0.000	0.000	0.000	0.065	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	587.300	6.389	0.000	9.419	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	590.500	6.492	0.000	9.439	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	593.800	6.471	0.000	9.459	0.000	0.000	0.000	0.000	0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	597.100	6.844	0.000	9.468	0.000	0.000	0.000	0.000	0.063	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	600.400	6.883	0.000	9.490	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	603.700	6.976	0.000	9.507	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	607.000	7.105	0.000	9.522	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	610.200	7.191	0.000	9.537	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	613.500	7.042	0.000	9.556	0.000	0.000	0.000	0.000	-0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	616.800	6.949	0.000	9.568	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	620.100	7.040	0.000	9.573	0.000	0.000	0.000	0.000	0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	623.400	7.006	0.000	9.580	0.000	0.000	0.000	0.000	0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	626.600	7.201	0.000	9.583	0.000	0.000	0.000	0.000	0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	629.900	7.404	0.000	9.587	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	633.200	7.576	0.000	9.594	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	636.500	7.651	0.000	9.603	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	639.800	7.707	0.000	9.614	0.000	0.000	0.000	0.000	0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	643.000	7.809	0.000	9.623	0.000	0.000	0.000	0.000	0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	646.300	7.911	0.000	9.631	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	649.600	8.058	0.000	9.641	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	652.900	8.292	0.000	9.650	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	656.200	8.526	0.000	9.672	0.000	0.000	0.000	0.000	0.072	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	659.400	8.760	0.000	9.700	0.000	0.000	0.000	0.000	0.146	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	662.700	9.475	0.000	9.818	0.000	0.000	0.000	0.000	0.225	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	664.100	9.818	0.000	9.818	0.000	0.000	0.000	0.000	0.245	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1068.200	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1071.500	9.026	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1073.900	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1088.100	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.180	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1088.500	9.124	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1093.000	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1149.900	9.150	0.000	9.150	0.000	0.000	0.000	0.000	-0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1154.000	8.960	0.000	9.150	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1186.000	7.943	0.000	9.150	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1214.500	8.861	0.000	9.150	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	1225.500	8.179	0.000	9.150	0.000	0.000	0.000	0.000	-0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1240.500	8.012	0.000	9.150	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1257.500	7.487	0.000	9.151	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1272.000	7.884	0.000	9.151	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1284.000	7.654	0.000	9.151	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1299.500	7.552	0.000	9.151	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1310.500	7.618	0.000	9.151	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1317.000	7.950	0.000	9.151	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1322.500	8.045	0.000	9.151	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1336.500	7.651	0.000	9.151	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1353.500	7.424	0.000	9.150	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1382.500	7.585	0.000	9.150	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1395.000	7.618	0.000	9.150	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1405.000	7.487	0.000	9.150	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1415.500	7.421	0.000	9.150	0.000	0.000	0.000	0.000	0.086	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1424.000	9.127	0.000	9.149	0.000	0.000	0.000	0.000	0.040	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1428.500	7.946	0.000	9.149	0.000	0.000	0.000	0.000	-0.061	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1437.000	8.340	0.000	9.149	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1448.500	7.552	0.000	9.149	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1457.500	7.454	0.000	9.149	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1465.000	7.782	0.000	9.149	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1470.000	7.454	0.000	9.149	0.000	0.000	0.000	0.000	0.082	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1481.000	9.094	0.000	9.149	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1497.500	7.159	0.000	9.149	0.000	0.000	0.000	0.000	-0.098	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1508.500	6.404	0.000	9.149	0.000	0.000	0.000	0.000	-0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1517.500	6.339	0.000	9.149	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1524.000	6.273	0.000	9.149	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1530.000	6.535	0.000	9.149	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1535.000	6.601	0.000	9.149	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1542.000	6.470	0.000	9.149	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1550.000	6.273	0.000	9.149	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1559.500	6.240	0.000	9.149	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1571.000	6.174	0.000	9.149	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1577.000	5.978	0.000	9.150	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	1581.500	6.043	0.000	9.150	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1587.500	5.879	0.000	9.150	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1592.000	5.978	0.000	9.150	0.000	0.000	0.000	0.000	-0.050	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1598.000	5.354	0.000	9.150	0.000	0.000	0.000	0.000	-0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1604.000	5.256	0.000	9.150	0.000	0.000	0.000	0.000	-0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1610.500	5.026	0.000	9.151	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1618.000	5.059	0.000	9.151	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1624.000	4.993	0.000	9.151	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1631.000	4.961	0.000	9.151	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1636.000	5.321	0.000	9.151	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1639.000	5.289	0.000	9.151	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1651.500	4.993	0.000	9.151	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1664.000	4.206	0.000	9.151	0.000	0.000	0.000	0.000	0.095	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1677.000	7.424	0.000	9.151	0.000	0.000	0.000	0.000	0.143	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1690.000	7.913	0.000	9.151	0.000	0.000	0.000	0.000	0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1696.500	8.639	0.000	9.151	0.000	0.000	0.000	0.000	0.070	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1707.700	9.151	0.000	9.151	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	1819.100	9.158	0.000	9.158	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1822.000	9.127	0.000	9.158	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1846.000	8.832	0.000	9.158	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1866.000	8.665	0.000	9.158	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1880.000	8.241	0.000	9.158	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1896.500	8.668	0.000	9.158	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1919.500	8.238	0.000	9.158	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1933.200	9.158	0.000	9.158	0.000	0.000	0.000	0.000	0.067	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2022.600	9.159	0.000	9.159	0.000	0.000	0.000	0.000	-0.110	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2031.000	8.238	0.000	9.159	0.000	0.000	0.000	0.000	-0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2036.000	8.435	0.000	9.159	0.000	0.000	0.000	0.000	-0.166	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2037.500	7.159	0.000	9.159	0.000	0.000	0.000	0.000	-0.096	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2049.000	7.192	0.000	9.159	0.000	0.000	0.000	0.000	-0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2079.000	5.909	0.000	9.160	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2096.500	8.894	0.000	9.160	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2106.500	6.368	0.000	9.160	0.000	0.000	0.000	0.000	-0.114	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2117.000	6.565	0.000	9.160	0.000	0.000	0.000	0.000	0.100	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	2126.500	8.369	0.000	9.160	0.000	0.000	0.000	0.000	0.076	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2140.000	8.304	0.000	9.160	0.000	0.000	0.000	0.000	-0.090	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2149.000	6.339	0.000	9.160	0.000	0.000	0.000	0.000	-0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2162.500	6.499	0.000	9.160	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2178.500	6.335	0.000	9.160	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2189.000	6.270	0.000	9.160	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2200.000	6.139	0.000	9.160	0.000	0.000	0.000	0.000	0.029	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2212.500	6.959	0.000	9.160	0.000	0.000	0.000	0.000	0.093	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2222.000	8.179	0.000	9.160	0.000	0.000	0.000	0.000	0.078	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2226.000	8.012	0.000	9.160	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2239.000	7.451	0.000	9.160	0.000	0.000	0.000	0.000	0.027	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2254.500	8.796	0.000	9.160	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2264.000	8.730	0.000	9.160	0.000	0.000	0.000	0.000	-0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2280.000	8.074	0.000	9.160	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2291.500	8.041	0.000	9.160	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2302.000	8.304	0.000	9.160	0.000	0.000	0.000	0.000	0.057	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2311.200	9.160	0.000	9.160	0.000	0.000	0.000	0.000	0.093	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2367.500	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.137	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2368.000	9.127	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2369.400	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.049	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2520.400	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.124	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2526.000	8.504	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2528.900	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.239	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2596.500	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2599.000	9.062	0.000	9.177	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2600.800	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.064	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2627.100	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2627.500	9.160	0.000	9.177	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2628.000	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.034	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2641.800	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2643.000	9.094	0.000	9.177	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2647.000	9.062	0.000	9.177	0.000	0.000	0.000	0.000	-0.031	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2652.500	8.796	0.000	9.177	0.000	0.000	0.000	0.000	-0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2659.000	8.799	0.000	9.177	0.000	0.000	0.000	0.000	-0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	2668.000	8.471	0.000	9.177	0.000	0.000	0.000	0.000	-0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2677.500	8.369	0.000	9.177	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2688.000	8.271	0.000	9.177	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2697.000	8.304	0.000	9.177	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2704.500	8.074	0.000	9.177	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2717.500	7.516	0.000	9.177	0.000	0.000	0.000	0.000	-0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2728.000	7.123	0.000	9.177	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2729.000	7.943	0.000	9.177	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2737.500	7.648	0.000	9.177	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2747.500	8.009	0.000	9.177	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2755.000	7.680	0.000	9.177	0.000	0.000	0.000	0.000	-0.024	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2766.500	7.549	0.000	9.177	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2780.000	8.140	0.000	9.177	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2793.000	8.402	0.000	9.177	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2801.500	8.304	0.000	9.177	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2809.500	8.468	0.000	9.177	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2819.500	8.271	0.000	9.177	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2829.500	8.238	0.000	9.177	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2836.500	8.140	0.000	9.177	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2845.500	8.599	0.000	9.177	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2861.000	8.435	0.000	9.177	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2870.000	8.369	0.000	9.177	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2875.000	8.271	0.000	9.177	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2885.000	8.435	0.000	9.177	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2894.000	8.074	0.000	9.177	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2904.000	8.304	0.000	9.177	0.000	0.000	0.000	0.000	0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2916.000	8.861	0.000	9.177	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2924.100	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	2935.500	9.177	0.000	9.177	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2937.000	9.157	0.000	9.177	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2944.000	9.058	0.000	9.177	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2952.000	9.124	0.000	9.177	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	2953.200	9.177	0.000	9.177	0.000	0.000	0.000	0.000	0.044	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	5037.500	9.196	0.000	9.196	0.000	0.000	0.000	0.000	-0.147	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	5055.500	6.549	0.000	9.196	0.000	0.000	0.000	0.000	-0.090	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5069.000	6.348	0.000	9.196	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5079.000	6.549	0.000	9.196	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5091.500	6.713	0.000	9.196	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5102.000	6.844	0.000	9.196	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5113.000	6.447	0.000	9.196	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5135.000	6.512	0.000	9.196	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5159.000	7.008	0.000	9.196	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5175.500	7.303	0.000	9.196	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5185.500	7.169	0.000	9.196	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5193.500	6.614	0.000	9.196	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5199.000	6.676	0.000	9.196	0.000	0.000	0.000	0.000	0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5205.000	6.647	0.000	9.196	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5218.500	7.726	0.000	9.196	0.000	0.000	0.000	0.000	0.134	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	5224.000	9.196	0.000	9.196	0.000	0.000	0.000	0.000	0.267	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

	LOCATION	CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	11.13	13.81	16.80
OF	3.30	11.10	13.81	16.78
OF	6.60	11.06	13.81	16.75
OF	9.80	11.02	13.81	16.73
OF	13.10	10.98	13.81	16.70
OF	16.40	10.94	13.81	16.67
OF	19.70	10.91	13.81	16.65
OF	23.00	10.87	13.81	16.62
OF	26.20	10.83	13.81	16.60
OF	29.50	10.79	13.81	16.57
OF	32.80	10.76	13.81	16.55
OF	36.10	10.72	13.81	16.52
OF	39.40	10.70	13.81	16.51
OF	42.70	10.68	13.81	16.50
OF	45.90	10.66	13.81	16.48
OF	49.20	10.64	13.81	16.47
OF	52.50	10.62	13.81	16.45
OF	55.80	10.60	13.81	16.44
OF	59.10	10.57	13.81	16.42
OF	62.30	10.54	13.81	16.40
OF	65.60	10.51	13.81	16.38
OF	68.90	10.48	13.81	16.37
OF	72.20	10.45	13.81	16.35
OF	75.50	10.43	13.81	16.33
OF	78.70	10.40	13.81	16.31
OF	82.00	10.37	13.81	16.29
OF	85.30	10.34	13.81	16.27
OF	88.60	10.31	13.81	16.25
OF	91.90	10.28	13.81	16.23
OF	95.10	10.26	13.81	16.22
OF	98.40	10.23	13.81	16.20
OF	101.70	10.20	13.81	16.18
OF	105.00	10.17	13.81	16.16
OF	108.30	10.14	13.81	16.14
OF	111.50	10.12	13.81	16.13
OF	114.80	10.09	13.81	16.11
OF	118.10	10.07	13.81	16.10
OF	121.40	10.06	13.81	16.10
OF	124.70	10.06	13.81	16.10
OF	128.00	10.06	13.81	16.10
OF	131.20	10.06	13.81	16.10
OF	134.50	10.05	13.81	16.10
OF	137.80	10.05	13.81	16.10
OF	141.10	10.05	13.81	16.10
OF	144.40	10.04	13.81	16.09
OF	147.60	10.04	13.81	16.09
OF	150.90	10.04	13.81	16.09
OF	154.20	10.03	13.81	16.09
OF	157.50	10.03	13.81	16.09
OF	160.80	10.03	13.81	16.09
OF	164.00	10.02	13.81	16.09

OF	167.30	10.02	13.81	16.09
OF	170.60	10.02	13.81	16.09
OF	173.90	10.01	13.81	16.09
OF	177.20	10.01	13.81	16.08
OF	180.40	10.00	13.81	16.08
OF	183.70	10.00	13.81	16.08
OF	187.00	10.00	13.81	16.08
OF	190.30	10.00	13.81	16.09
OF	193.60	9.99	13.81	16.08
OF	196.80	9.92	13.81	16.03
OF	200.10	9.86	13.81	15.99
OF	203.40	9.80	13.81	15.94
OF	206.70	9.73	13.81	15.90
OF	210.00	9.67	13.81	15.86
OF	213.30	9.61	13.81	15.82
OF	216.50	9.55	13.81	15.77
OF	219.80	9.48	13.81	15.73
OF	223.10	9.42	13.81	15.69
OF	226.40	9.36	13.81	15.64
OF	229.70	9.30	13.81	15.60
OF	232.90	9.23	13.81	15.56
OF	236.20	9.17	13.81	15.52
OF	239.50	9.11	13.81	15.47
OF	242.80	9.05	13.81	15.43
OF	246.10	8.98	13.81	15.39
OF	249.30	8.92	13.81	15.35
OF	252.60	8.86	13.81	15.30
OF	255.90	8.80	13.81	15.26
OF	259.20	8.73	13.81	15.22
OF	262.50	8.67	13.81	15.18
OF	265.70	8.59	13.81	15.13
OF	269.00	8.52	13.81	15.07
OF	272.30	8.48	13.81	15.05
OF	275.60	8.44	13.81	15.02
OF	278.90	8.40	13.81	15.00
OF	282.20	8.37	13.81	14.98
OF	285.40	8.33	13.81	14.95
OF	288.70	8.29	13.81	14.93
OF	292.00	8.26	13.81	14.91
OF	295.30	8.22	13.81	14.88
OF	298.60	8.18	13.81	14.86
OF	301.80	8.14	13.81	14.83
OF	305.10	8.10	13.81	14.81
OF	308.40	8.07	13.81	14.78
OF	311.70	8.03	13.81	14.76
OF	315.00	7.99	13.81	14.73
OF	318.20	7.95	13.81	14.70
OF	321.50	7.91	13.81	14.68
OF	324.80	7.87	13.81	14.65
OF	328.10	7.83	13.81	14.63
OF	331.40	7.79	13.81	14.60
OF	334.60	7.75	13.81	14.58
OF	337.90	7.71	13.81	14.55
OF	341.20	7.67	13.81	14.53
OF	344.50	7.63	13.81	14.50
OF	347.80	7.59	13.81	14.47
OF	351.00	7.55	13.81	14.45
OF	354.30	7.51	13.81	14.42
OF	357.60	7.47	13.81	14.40
OF	360.90	7.43	13.81	14.37
OF	364.20	7.39	13.81	14.35
OF	367.50	7.35	13.81	14.32
OF	370.70	7.29	13.81	14.28
OF	374.00	7.24	13.81	14.24
OF	377.30	7.18	13.81	14.21
OF	380.60	7.12	13.81	14.17
OF	383.90	7.07	13.81	14.13
IF	387.10	7.01	13.81	14.09
IF	390.40	6.97	13.81	14.07
IF	393.70	6.95	13.81	14.05
IF	397.00	6.93	13.81	14.04
IF	400.30	6.91	13.81	14.03
IF	403.50	6.90	13.81	14.03
IF	406.80	6.88	13.81	14.02
IF	410.10	6.80	13.81	13.96
IF	413.40	6.72	13.81	13.91
IF	416.70	6.63	13.81	13.84
IF	419.90	6.52	13.81	13.77
IF	423.20	6.41	13.81	13.69
IF	426.50	6.33	13.81	13.64
IF	429.80	6.29	13.81	13.62
IF	433.10	6.26	13.81	13.60
IF	436.40	6.18	13.81	13.55
IF	439.60	6.06	13.81	13.46
IF	442.90	5.93	13.81	13.38
IF	446.20	5.81	13.81	13.30
IF	449.50	5.80	13.81	13.29
IF	452.80	5.79	13.81	13.29
IF	456.00	5.78	13.81	13.29
IF	459.30	5.73	13.81	13.25
IF	462.60	5.59	13.81	13.16
IF	465.90	5.47	13.81	13.07
IF	469.20	5.37	13.81	13.01
IF	472.40	5.33	13.81	12.98
IF	475.70	5.29	13.81	12.96
IF	479.00	5.25	13.81	12.94
IF	482.30	5.22	13.81	12.92
IF	485.60	5.19	13.81	12.90
IF	488.80	5.12	13.81	12.86
IF	492.10	5.01	13.81	12.78
IF	495.40	4.92	13.81	12.73
IF	498.70	4.89	13.81	12.71

IF	502.00	4.81	13.81	12.66
IF	505.20	4.74	13.81	12.61
IF	508.50	4.72	13.81	12.61
IF	511.80	4.71	13.81	12.60
IF	515.10	4.67	13.81	12.58
IF	518.40	4.57	13.81	12.51
IF	521.70	4.48	13.81	12.45
IF	524.90	4.45	13.81	12.43
IF	528.20	4.44	13.81	12.43
IF	531.50	4.41	13.81	12.42
IF	534.80	4.38	13.81	12.40
IF	538.10	4.34	13.81	12.38
IF	541.30	4.26	13.81	12.32
IF	544.60	4.17	13.81	12.27
IF	547.90	4.09	13.81	12.21
IF	551.20	4.01	13.81	12.16
IF	554.50	4.05	13.81	12.19
IF	557.70	3.83	13.81	12.04
IF	561.00	3.85	13.81	12.05
IF	564.30	3.72	13.81	11.97
IF	567.60	3.65	13.81	11.93
IF	570.90	3.42	13.81	11.77
IF	574.10	3.03	13.81	11.49
IF	577.40	2.83	13.81	11.36
IF	580.70	2.66	13.81	11.25
IF	584.00	2.51	13.81	11.16
IF	587.30	2.35	13.81	11.07
IF	590.50	2.29	13.81	11.04
IF	593.80	2.30	13.81	11.07
IF	597.10	2.04	13.81	10.89
IF	600.40	2.02	13.81	10.91
IF	603.70	1.97	13.81	10.88
IF	607.00	1.88	13.81	10.84
IF	610.20	1.82	13.81	10.81
IF	613.50	1.85	13.81	10.85
IF	616.80	1.87	13.81	10.88
IF	620.10	1.86	13.81	10.88
IF	623.40	1.87	13.81	10.89
IF	626.60	1.84	13.81	10.87
IF	629.90	1.70	13.81	10.77
IF	633.20	1.57	13.81	10.69
IF	636.50	1.52	13.81	10.67
IF	639.80	1.48	13.81	10.65
IF	643.00	1.41	13.81	10.61
IF	646.30	1.34	13.81	10.57
IF	649.60	1.23	13.81	10.50
IF	652.90	1.06	13.81	10.39
IF	656.20	0.89	13.81	10.30
IF	659.40	0.73	13.81	10.21
IF	662.70	0.27	13.81	10.01
IF	664.10	0.01	13.81	9.82
AS	1068.20	0.00	0.00	9.20
IF	1071.50	0.03	0.22	9.22
IF	1073.90	0.01	0.26	9.20
AS	1088.10	0.00	0.00	9.20
IF	1088.50	0.01	0.13	9.21
IF	1093.00	0.01	0.24	9.20
AS	1149.90	0.00	0.00	9.15
IF	1154.00	0.04	0.23	9.18
IF	1186.00	0.16	0.46	9.26
IF	1214.50	0.17	0.56	9.27
IF	1225.50	0.26	0.59	9.33
IF	1240.50	0.29	0.63	9.35
IF	1257.50	0.33	0.67	9.38
IF	1272.00	0.35	0.70	9.40
IF	1284.00	0.38	0.72	9.41
IF	1299.50	0.40	0.74	9.43
IF	1310.50	0.42	0.76	9.45
IF	1317.00	0.42	0.77	9.45
IF	1322.50	0.42	0.78	9.45
IF	1336.50	0.46	0.80	9.47
IF	1353.50	0.49	0.82	9.49
IF	1382.50	0.53	0.86	9.52
IF	1395.00	0.54	0.88	9.53
IF	1405.00	0.56	0.89	9.54
IF	1415.50	0.58	0.90	9.55
IF	1424.00	0.02	0.91	9.16
IF	1428.50	0.12	0.91	9.23
IF	1437.00	0.20	0.92	9.29
IF	1448.50	0.29	0.93	9.35
IF	1457.50	0.33	0.94	9.38
IF	1465.00	0.36	0.95	9.40
IF	1470.00	0.39	0.96	9.42
IF	1481.00	0.04	0.97	9.18
IF	1497.50	0.24	0.98	9.32
IF	1508.50	0.31	0.99	9.36
IF	1517.50	0.35	1.00	9.39
IF	1524.00	0.38	1.01	9.41
IF	1530.00	0.40	1.01	9.43
IF	1535.00	0.42	1.02	9.44
IF	1542.00	0.44	1.02	9.46
IF	1550.00	0.47	1.03	9.48
IF	1559.50	0.50	1.04	9.50
IF	1571.00	0.53	1.05	9.52
IF	1577.00	0.55	1.05	9.54
IF	1581.50	0.56	1.06	9.54
IF	1587.50	0.58	1.06	9.56
IF	1592.00	0.59	1.06	9.56
IF	1598.00	0.61	1.07	9.58
IF	1604.00	0.62	1.07	9.59
IF	1610.50	0.64	1.08	9.60
IF	1618.00	0.66	1.09	9.61

IF	1624.00	0.67	1.09	9.62
IF	1631.00	0.68	1.10	9.63
IF	1636.00	0.69	1.10	9.64
IF	1639.00	0.70	1.10	9.64
IF	1651.50	0.73	1.11	9.66
IF	1664.00	0.75	1.12	9.68
IF	1677.00	0.73	1.13	9.66
IF	1690.00	0.70	1.14	9.64
IF	1696.50	0.35	1.14	9.40
IF	1707.70	0.01	1.15	9.16
AS	1819.10	0.00	0.00	9.16
IF	1822.00	0.02	0.21	9.17
IF	1846.00	0.12	0.42	9.24
IF	1866.00	0.18	0.51	9.28
IF	1880.00	0.22	0.55	9.31
IF	1896.50	0.23	0.60	9.32
IF	1919.50	0.30	0.65	9.37
IF	1933.20	0.01	0.68	9.16
AS	2022.60	0.00	0.00	9.16
IF	2031.00	0.06	0.29	9.20
IF	2036.00	0.08	0.34	9.22
IF	2037.50	0.09	0.35	9.22
IF	2049.00	0.13	0.42	9.25
IF	2079.00	0.21	0.54	9.31
IF	2096.50	0.16	0.59	9.27
IF	2106.50	0.25	0.61	9.34
IF	2117.00	0.30	0.64	9.37
IF	2126.50	0.30	0.66	9.37
IF	2140.00	0.33	0.69	9.39
IF	2149.00	0.36	0.70	9.41
IF	2162.50	0.39	0.73	9.43
IF	2178.50	0.42	0.75	9.45
IF	2189.00	0.44	0.77	9.46
IF	2200.00	0.45	0.79	9.48
IF	2212.50	0.47	0.81	9.49
IF	2222.00	0.44	0.82	9.47
IF	2226.00	0.46	0.82	9.49
IF	2239.00	0.51	0.84	9.52
IF	2254.50	0.24	0.86	9.33
IF	2264.00	0.28	0.87	9.36
IF	2280.00	0.37	0.89	9.42
IF	2291.50	0.41	0.90	9.45
IF	2302.00	0.43	0.92	9.46
IF	2311.20	0.01	0.92	9.17
AS	2367.50	0.00	0.00	9.20
IF	2368.00	0.01	0.13	9.21
IF	2369.40	0.01	0.18	9.20
AS	2520.40	0.00	0.00	9.20
IF	2526.00	0.05	0.25	9.23
IF	2528.90	0.01	0.29	9.20
AS	2596.50	0.00	0.00	9.18
IF	2599.00	0.03	0.20	9.20
IF	2600.80	0.01	0.23	9.18
AS	2627.10	0.00	0.00	9.18
IF	2627.50	0.01	0.13	9.18
IF	2628.00	0.01	0.15	9.18
AS	2641.80	0.00	0.00	9.18
IF	2643.00	0.02	0.16	9.19
IF	2647.00	0.04	0.25	9.21
IF	2652.50	0.07	0.31	9.23
IF	2659.00	0.10	0.36	9.24
IF	2668.00	0.13	0.42	9.27
IF	2677.50	0.16	0.46	9.29
IF	2688.00	0.19	0.50	9.31
IF	2697.00	0.21	0.53	9.32
IF	2704.50	0.23	0.56	9.34
IF	2717.50	0.26	0.59	9.36
IF	2728.00	0.28	0.62	9.37
IF	2729.00	0.28	0.62	9.37
IF	2737.50	0.30	0.64	9.39
IF	2747.50	0.32	0.66	9.40
IF	2755.00	0.34	0.68	9.41
IF	2766.50	0.36	0.70	9.43
IF	2780.00	0.37	0.72	9.44
IF	2793.00	0.36	0.75	9.43
IF	2801.50	0.38	0.76	9.45
IF	2809.50	0.36	0.77	9.43
IF	2819.50	0.41	0.79	9.46
IF	2829.50	0.42	0.80	9.47
IF	2836.50	0.44	0.81	9.49
IF	2845.50	0.34	0.82	9.41
IF	2861.00	0.40	0.84	9.45
IF	2870.00	0.43	0.86	9.48
IF	2875.00	0.45	0.86	9.49
IF	2885.00	0.41	0.87	9.47
IF	2894.00	0.47	0.88	9.51
IF	2904.00	0.46	0.90	9.50
IF	2916.00	0.22	0.91	9.33
IF	2924.10	0.01	0.92	9.18
AS	2935.50	0.00	0.00	9.18
IF	2937.00	0.01	0.17	9.19
IF	2944.00	0.05	0.29	9.22
IF	2952.00	0.04	0.36	9.20
IF	2953.20	0.01	0.37	9.18
AS	5037.50	0.00	0.00	9.20
IF	5055.50	0.10	0.37	9.27
IF	5069.00	0.14	0.44	9.30
IF	5079.00	0.17	0.49	9.32
IF	5091.50	0.21	0.53	9.34
IF	5102.00	0.23	0.56	9.36
IF	5113.00	0.26	0.59	9.38
IF	5135.00	0.31	0.65	9.41

IF	5159.00	0.35	0.69	9.44
IF	5175.50	0.38	0.72	9.46
IF	5185.50	0.40	0.74	9.48
IF	5193.50	0.42	0.75	9.49
IF	5199.00	0.43	0.76	9.49
IF	5205.00	0.44	0.77	9.50
IF	5218.50	0.45	0.79	9.51
IF	5224.00	0.01	0.80	9.20

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN	664.10	AND	1068.20
BETWEEN	1073.90	AND	1088.10
BETWEEN	1093.00	AND	1149.90
BETWEEN	1707.70	AND	1819.10
BETWEEN	1933.20	AND	2022.60
BETWEEN	2311.20	AND	2367.50
BETWEEN	2369.40	AND	2520.40
BETWEEN	2528.90	AND	2596.50
BETWEEN	2600.80	AND	2627.10
BETWEEN	2628.00	AND	2641.80
BETWEEN	2924.10	AND	2935.50
BETWEEN	2953.20	AND	5037.50

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
3.30	1.00	9.01
9.80	1.00	9.01
16.40	1.00	9.01
23.00	1.00	9.01
26.20	1.00	9.02
32.80	1.00	9.02
36.10	1.00	9.02
39.40	1.00	9.02
42.70	1.00	9.02
45.90	1.00	9.02
49.20	1.00	9.02
52.50	1.00	9.02
55.80	1.00	9.02
59.10	1.00	9.02
62.30	1.00	9.03
68.90	1.00	9.03
72.20	1.00	9.03
75.50	1.00	9.03
78.70	1.00	9.03
82.00	1.00	9.03
85.30	1.00	9.03
88.60	1.00	9.03
91.90	1.00	9.04
95.10	1.00	9.04
98.40	1.00	9.04
101.70	1.00	9.04
105.00	1.00	9.04
108.30	1.00	9.04
111.50	1.00	9.05
114.80	1.00	9.05
118.10	1.00	9.05
121.40	1.00	9.05
124.70	1.00	9.05
128.00	1.00	9.06
131.20	1.00	9.06
134.50	1.00	9.06
137.80	1.00	9.06
141.10	1.00	9.06
144.40	1.00	9.06
147.60	1.00	9.07
150.90	1.00	9.07
154.20	1.00	9.07
157.50	1.00	9.07
160.80	1.00	9.07
164.00	1.00	9.07
167.30	1.00	9.07
170.60	1.00	9.08
173.90	1.00	9.08
177.20	1.00	9.08
180.40	1.00	9.08
183.70	1.00	9.08
187.00	1.00	9.08
190.30	1.00	9.09
193.60	1.00	9.09
200.10	1.00	9.09
206.70	1.00	9.09
210.00	1.00	9.09
213.30	1.00	9.09
216.50	1.00	9.09
219.80	1.00	9.09
223.10	1.00	9.09
226.40	1.00	9.09
229.70	1.00	9.10
232.90	1.00	9.10
236.20	1.00	9.10
239.50	1.00	9.10
242.80	1.00	9.10
246.10	1.00	9.10
249.30	1.00	9.10
252.60	1.00	9.10
255.90	1.00	9.10
259.20	1.00	9.11
262.50	1.00	9.11
265.70	1.00	9.11
269.00	1.00	9.11
272.30	1.00	9.11
275.60	1.00	9.11
278.90	1.00	9.12
282.20	1.00	9.12

285.40	1.00	9.12
288.70	1.00	9.12
292.00	1.00	9.13
295.30	1.00	9.13
298.60	1.00	9.13
301.80	1.00	9.13
305.10	1.00	9.13
308.40	1.00	9.14
311.70	1.00	9.14
315.00	1.00	9.14
318.20	1.00	9.14
321.50	1.00	9.14
324.80	1.00	9.15
328.10	1.00	9.15
331.40	1.00	9.15
334.60	1.00	9.15
337.90	1.00	9.15
341.20	1.00	9.16
344.50	1.00	9.16
347.80	1.00	9.16
351.00	1.00	9.16
354.30	1.00	9.16
357.60	1.00	9.17
360.90	1.00	9.17
364.20	1.00	9.17
367.50	1.00	9.17
370.70	1.00	9.18
374.00	1.00	9.18
377.30	1.00	9.18
380.60	1.00	9.18
383.90	1.00	9.18
387.10	1.00	9.19
390.40	1.00	9.19
393.70	1.00	9.19
397.00	1.00	9.19
400.30	1.00	9.19
403.50	1.00	9.20
406.80	1.00	9.20
410.10	1.00	9.20
413.40	1.00	9.20
416.70	1.00	9.21
419.90	1.00	9.21
423.20	1.00	9.21
426.50	1.00	9.21
429.80	1.00	9.21
433.10	1.00	9.22
436.40	1.00	9.22
439.60	1.00	9.22
442.90	1.00	9.22
446.20	1.00	9.23
449.50	1.00	9.23
452.80	1.00	9.23
456.00	1.00	9.24
459.30	1.00	9.24
462.60	1.00	9.24
465.90	1.00	9.25
469.20	1.00	9.25
472.40	1.00	9.25
475.70	1.00	9.26
479.00	1.00	9.26
482.30	1.00	9.27
485.60	1.00	9.27
488.80	1.00	9.27
492.10	1.00	9.28
495.40	1.00	9.28
498.70	1.00	9.29
502.00	1.00	9.29
505.20	1.00	9.29
508.50	1.00	9.30
511.80	1.00	9.30
515.10	1.00	9.31
518.40	1.00	9.31
521.70	1.00	9.31
524.90	1.00	9.32
528.20	1.00	9.32
531.50	1.00	9.33
534.80	1.00	9.33
538.10	1.00	9.34
541.30	1.00	9.34
544.60	1.00	9.34
547.90	1.00	9.35
551.20	1.00	9.35
554.50	1.00	9.36
557.70	1.00	9.36
561.00	1.00	9.36
564.30	1.00	9.37
567.60	1.00	9.37
570.90	1.00	9.37
574.10	1.00	9.37
577.40	1.00	9.38
580.70	1.00	9.39
584.00	1.00	9.40
587.30	1.00	9.42
590.50	1.00	9.44
593.80	1.00	9.46
597.10	1.00	9.47
600.40	1.00	9.49
603.70	1.00	9.51
607.00	1.00	9.52
610.20	1.00	9.54
613.50	1.00	9.56
616.80	1.00	9.57

620.10	1.00	9.57
623.40	1.00	9.58
626.60	1.00	9.58
629.90	1.00	9.59
633.20	1.00	9.59
636.50	1.00	9.60
639.80	1.00	9.61
643.00	1.00	9.62
646.30	1.00	9.63
649.60	1.00	9.64
652.90	1.00	9.65
656.20	1.00	9.67
659.40	1.00	9.70
662.70	1.00	9.82
1068.20	1.00	9.20
1149.90	1.00	9.15
1257.50	1.00	9.15
1353.50	1.00	9.15
1424.00	1.00	9.15
1577.00	1.00	9.15
1610.50	1.00	9.15
1819.10	1.00	9.16
2022.60	1.00	9.16
2079.00	1.00	9.16
2367.50	1.00	9.20
2596.50	1.00	9.18
5037.50	1.00	9.20

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
574.58	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	16.80	V22	EL=17	120
3.30	16.78	V22	EL=17	120
6.60	16.75	V22	EL=17	120
9.80	16.73	V22	EL=17	120
13.10	16.70	V22	EL=17	120
16.40	16.67	V22	EL=17	120
19.70	16.65	V22	EL=17	120
23.00	16.62	V22	EL=17	120
26.20	16.60	V22	EL=17	120
29.50	16.57	V22	EL=17	120
32.80	16.55	V22	EL=17	120
36.10	16.52	V22	EL=17	120
39.40	16.51	V22	EL=17	120
41.78	16.50	V22	EL=16	120
42.70	16.50	V22	EL=16	120
45.90	16.48	V22	EL=16	120
49.20	16.47	V22	EL=16	120
52.50	16.45	V22	EL=16	120
55.80	16.44	V22	EL=16	120
59.10	16.42	V22	EL=16	120
62.30	16.40	V22	EL=16	120
65.60	16.38	V22	EL=16	120
68.90	16.37	V22	EL=16	120
72.20	16.35	V22	EL=16	120
75.50	16.33	V22	EL=16	120
78.70	16.31	V22	EL=16	120
82.00	16.29	V22	EL=16	120
85.30	16.27	V22	EL=16	120
88.60	16.25	V22	EL=16	120
91.90	16.23	V22	EL=16	120
95.10	16.22	V22	EL=16	120
98.40	16.20	V22	EL=16	120
101.70	16.18	V22	EL=16	120
105.00	16.16	V22	EL=16	120
108.30	16.14	V22	EL=16	120

111.50	16.13	V22	EL=16	120
114.80	16.11	V22	EL=16	120
118.10	16.10	V22	EL=16	120
121.40	16.10	V22	EL=16	120
124.70	16.10	V22	EL=16	120
128.00	16.10	V22	EL=16	120
131.20	16.10	V22	EL=16	120
134.50	16.10	V22	EL=16	120
137.80	16.10	V22	EL=16	120
141.10	16.10	V22	EL=16	120
144.40	16.09	V23	EL=16	130
147.60	16.09	V23	EL=16	130
150.90	16.09	V23	EL=16	130
154.20	16.09	V23	EL=16	130
157.50	16.09	V23	EL=16	130
160.80	16.09	V23	EL=16	130
164.00	16.09	V23	EL=16	130
167.30	16.09	V23	EL=16	130
170.60	16.09	V23	EL=16	130
173.90	16.09	V23	EL=16	130
177.20	16.08	V23	EL=16	130
180.40	16.08	V23	EL=16	130
183.70	16.08	V23	EL=16	130
187.00	16.08	V23	EL=16	130
190.30	16.09	V23	EL=16	130
193.60	16.08	V23	EL=16	130
196.80	16.03	V23	EL=16	130
200.10	15.99	V23	EL=16	130
203.40	15.94	V23	EL=16	130
206.70	15.90	V23	EL=16	130
210.00	15.86	V23	EL=16	130
213.30	15.82	V23	EL=16	130
216.50	15.77	V23	EL=16	130
219.80	15.73	V23	EL=16	130
223.10	15.69	V23	EL=16	130
226.40	15.64	V23	EL=16	130
229.70	15.60	V23	EL=16	130
232.90	15.56	V23	EL=16	130
236.20	15.52	V23	EL=16	130
237.51	15.50	V23	EL=15	130
239.50	15.47	V23	EL=15	130
242.80	15.43	V23	EL=15	130
246.10	15.39	V23	EL=15	130
249.30	15.35	V23	EL=15	130
252.60	15.30	V23	EL=15	130
255.90	15.26	V23	EL=15	130
259.20	15.22	V23	EL=15	130
262.50	15.18	V23	EL=15	130
265.70	15.13	V23	EL=15	130
269.00	15.07	V23	EL=15	130
272.30	15.05	V23	EL=15	130

275.60	15.02	V23	EL=15	130
278.90	15.00	V23	EL=15	130
282.20	14.98	V23	EL=15	130
285.40	14.95	V23	EL=15	130
288.70	14.93	V23	EL=15	130
292.00	14.91	V23	EL=15	130
295.30	14.88	V23	EL=15	130
298.60	14.86	V23	EL=15	130
301.80	14.83	V23	EL=15	130
305.10	14.81	V23	EL=15	130
308.40	14.78	V23	EL=15	130
311.70	14.76	V23	EL=15	130
315.00	14.73	V23	EL=15	130
318.20	14.70	V23	EL=15	130
321.50	14.68	V23	EL=15	130
324.80	14.65	V23	EL=15	130
328.10	14.63	V23	EL=15	130
331.40	14.60	V23	EL=15	130
334.60	14.58	V23	EL=15	130
337.90	14.55	V23	EL=15	130
341.20	14.53	V23	EL=15	130
344.44	14.50	V23	EL=14	130
344.50	14.50	V23	EL=14	130
347.80	14.47	V23	EL=14	130
351.00	14.45	V23	EL=14	130
354.30	14.42	V23	EL=14	130
357.60	14.40	V23	EL=14	130
360.90	14.37	V23	EL=14	130
364.20	14.35	V23	EL=14	130
367.50	14.32	V23	EL=14	130
370.70	14.28	V23	EL=14	130
374.00	14.24	V23	EL=14	130
377.30	14.21	V23	EL=14	130
380.60	14.17	V23	EL=14	130
383.90	14.13	V23	EL=14	130
387.10	14.09	V23	EL=14	130
390.40	14.07	V23	EL=14	130
393.70	14.05	V23	EL=14	130
397.00	14.04	V23	EL=14	130
400.30	14.03	V23	EL=14	130
403.50	14.03	V23	EL=14	130
406.80	14.02	V23	EL=14	130
410.10	13.96	V23	EL=14	130
413.40	13.91	V23	EL=14	130
416.70	13.84	V23	EL=14	130
419.90	13.77	V23	EL=14	130
423.20	13.69	V23	EL=14	130
426.50	13.64	V23	EL=14	130
429.80	13.62	V23	EL=14	130
433.10	13.60	V23	EL=14	130
436.40	13.55	V23	EL=14	130

438.13	13.50	V23	EL=13	130
439.60	13.46	V23	EL=13	130
442.90	13.38	V23	EL=13	130
446.20	13.30	V23	EL=13	130
449.50	13.29	V23	EL=13	130
452.80	13.29	V23	EL=13	130
456.00	13.29	V23	EL=13	130
459.30	13.25	V23	EL=13	130
462.60	13.16	V23	EL=13	130
465.90	13.07	V23	EL=13	130
469.20	13.01	V23	EL=13	130
472.40	12.98	V23	EL=13	130
475.70	12.96	V23	EL=13	130
479.00	12.94	V23	EL=13	130
482.30	12.92	V23	EL=13	130
485.60	12.90	V23	EL=13	130
488.80	12.86	V23	EL=13	130
492.10	12.78	V23	EL=13	130
495.40	12.73	V23	EL=13	130
498.70	12.71	V23	EL=13	130
502.00	12.66	V23	EL=13	130
505.20	12.61	V23	EL=13	130
508.50	12.61	V23	EL=13	130
511.80	12.60	V23	EL=13	130
515.10	12.58	V23	EL=13	130
518.40	12.51	V23	EL=13	130
519.07	12.50	V23	EL=13	130
521.70	12.45	V23	EL=12	130
524.90	12.43	V23	EL=12	130
528.20	12.43	V23	EL=12	130
531.50	12.42	V23	EL=12	130
534.80	12.40	V23	EL=12	130
538.10	12.38	V23	EL=12	130
541.30	12.32	V23	EL=12	130
544.60	12.27	V23	EL=12	130
547.90	12.21	V23	EL=12	130
551.20	12.16	V23	EL=12	130
554.50	12.19	V23	EL=12	130
557.70	12.04	V23	EL=12	130
561.00	12.05	V23	EL=12	130
564.30	11.97	V23	EL=12	130
567.60	11.93	V23	EL=12	130
570.90	11.77	V23	EL=12	130
573.98	11.50	V23	EL=11	130
574.10	11.49	V23	EL=11	130
574.58	11.47	A17	EL=11	85
577.40	11.36	A17	EL=11	85
580.70	11.25	A17	EL=11	85
584.00	11.16	A17	EL=11	85
587.30	11.07	A17	EL=11	85
590.50	11.04	A17	EL=11	85

593.80	11.07			
		A17	EL=11	85
597.10	10.89			
		A17	EL=11	85
600.40	10.91			
		A17	EL=11	85
603.70	10.88			
		A17	EL=11	85
607.00	10.84			
		A17	EL=11	85
610.20	10.81			
		A17	EL=11	85
613.50	10.85			
		A17	EL=11	85
616.80	10.88			
		A17	EL=11	85
620.10	10.88			
		A17	EL=11	85
623.40	10.89			
		A17	EL=11	85
626.60	10.87			
		A17	EL=11	85
629.90	10.77			
		A17	EL=11	85
633.20	10.69			
		A17	EL=11	85
636.50	10.67			
		A17	EL=11	85
639.80	10.65			
		A17	EL=11	85
643.00	10.61			
		A17	EL=11	85
646.30	10.57			
		A17	EL=11	85
649.60	10.50			
		A17	EL=11	85
649.69	10.50			
		A17	EL=10	85
652.90	10.39			
		A17	EL=10	85
656.20	10.30			
		A17	EL=10	85
659.40	10.21			
		A17	EL=10	85
662.70	10.01			
		A17	EL=10	85
664.10	9.82			
1068.20	9.20			
		A17	EL= 9	85
1073.90	9.20			
1088.10	9.20			
		A17	EL= 9	85
1093.00	9.20			
1149.90	9.15			
		A17	EL= 9	85
1240.50	9.35			
		A17	EL= 9	85
1257.50	9.38			
		A17	EL= 9	85
1336.50	9.47			
		A17	EL= 9	85
1353.50	9.49			
		A17	EL= 9	85
1360.08	9.50			
		A17	EL=10	85
1415.50	9.55			
		A17	EL=10	85
1416.67	9.50			
		A17	EL= 9	85
1424.00	9.16			
		A17	EL= 9	85
1559.96	9.50			
		A17	EL=10	85
1571.00	9.52			
		A17	EL=10	85
1577.00	9.54			
		A17	EL=10	85
1604.00	9.59			
		A17	EL=10	85
1610.50	9.60			
		A17	EL=10	85
1693.76	9.50			
		A17	EL= 9	85
1707.70	9.16			
1819.10	9.16			
		A17	EL= 9	85
1933.20	9.16			
2022.60	9.16			
		A17	EL= 9	85
2049.00	9.25			
		A17	EL= 9	85
2079.00	9.31			
		A17	EL= 9	85
2231.90	9.50			
		A17	EL=10	85
2240.46	9.50			
		A17	EL= 9	85
2311.20	9.17			
2367.50	9.20			
		A17	EL= 9	85
2369.40	9.20			
2520.40	9.20			

```
                                                    A17  EL= 9      85
                    2528.90           9.20
                    2596.50           9.18
                                                    A17  EL= 9      85
                    2600.80           9.18
                    2627.10           9.18
                                                    A17  EL= 9      85
                    2628.00           9.18
                    2641.80           9.18
                                                    A17  EL= 9      85
                    2892.58           9.50
                                                    A17  EL=10      85
                    2904.10           9.50
                                                    A17  EL= 9      85
                    2924.10           9.18
                    2935.50           9.18
                                                    A17  EL= 9      85
                    2953.20           9.18
                    5037.50           9.20
                                                    A17  EL= 9      85
                    5203.28           9.50
                                                    A17  EL=10      85
                    5218.73           9.50
                                                    A17  EL= 9      85
                    5224.00           9.20
                          ZONE TERMINATED AT END OF TRANSECT
                          PART 7   POSTSCRIPT NOTES
            PS#  1   START(386190.0292,4806153.2539)
            PS#  2   END(385540.2958,4808129.6323)
-1.000000e+00
```

YK-109
100-year WHAFIS Output
Zero Station: -70.40590765, 43.40062212
Onshore Dir: 108.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-109
Two Percent Run-up Elevation is 16.5 Feet-NAVD88
Run-up Height is 7.2 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
0
2
4
6
8
10
12
14
16
18
50
100
150
200
250
300
350
400
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-109
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-109sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-109-runup';
SWEL=9.0102;  % 100-yr still water level including wave setup.
H0=5.2103;    % significant wave height at toe of structure
Tp=13.7882;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.61088;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.19397;
maxSetup=0.8081;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-109'

plotTitle =

Iterative TAW for YK-109



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                    9.20417

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                   10.01227



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          803.953420258207


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                   1.38872


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                  17.01962


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          51.2594075418113

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          361.488926197972


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          361.488926197972

toe_sta

toe_sta =

          51.2594075418113




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 250.9 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.26 feet


ans =

-!!-       SWEL is adjusted to 9.27 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
    21
    22
    23
    24
    25
    26
    27
    28




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
```

```
% incident spectral peak wave period
Tp
% incident spectral mean wave period
T0

R2=R2_new
Z2=R2+SWEL
% determine slope for this iteration
top_sta=-999;
for kk=1:length(sta)-1
   if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
      top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
      break;
   end
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

% get the length of the slope (not accounting for berm)
Lslope=top_sta-toe_sta

% loop over profile segments to determine berm factor
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
```

```
    islope=1/slope;
    if (slope < 1/8 | slope > 1)
       sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
       TAW_VALID=0;
    else
       sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
    end
    if TAW_VALID == 0
       TAW_ALWAYS_VALID=0;
    end

    if (Irb*gamma_berm < 1.8)
       R2_new=gamma*H0*1.77*Irb
    else
       R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
    end


    % check to see if we need to evaluate a shallow foreshore
    if berm_width > 0.25 * L0;
       disp ('!   Berm_width is greater than 1/4 wave length')
       disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
       % do the foreshore calculation
       fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
       % get upper slope
       fore_toe_sta=-999;
       fore_toe_dep=-999;
       for kk=length(dep)-1:-1:1
          ddep=dep(kk+1)-dep(kk);
          dsta=sta(kk+1)-sta(kk);
          s=ddep/dsta;
          if s < 1/15
             break
          end
          fore_toe_sta=sta(kk);
          fore_toe_dep=dep(kk);
          upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
       end
       fore_Irb=upper_slope/(sqrt(fore_H0/L0));
       fore_gamma=gamma_perm*gamma_beta*gamma_rough;
       if (fore_Irb < 1.8)
          fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
       else
          fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
       end
       if berm_width >= L0
          R2_new=fore_R2
          disp ('berm is wider than one wavelength, use full shallow foreshore solution');
       else
          w2=(berm_width-0.25*L0)/(0.75*L0)
          w1=1-w2
          R2_new=w2*fore_R2 + w1*R2_new
       end
    end % end berm width check
    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;
    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                  1.38872
toe_sta =
         51.2594075418113
top_sta =
         361.488926197972
Z2 =
                 17.01962
H0 =
                   5.2103
Tp =
                  13.7882
T0 =
         12.5347272727273
R2 =
                  15.6309
```

```
Z2 =
          24.8993453256456
top_sta =
          416.611174016409
Lslope =
          365.351766474598
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 1
dh =
          7.76611882564563
rdh_sum =
         0.848255617431113
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 2
dh =
          7.71541532564563
rdh_sum =
          1.69098654792369
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 3
dh =
          7.66471132564563
rdh_sum =
          2.52811265393303
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 4
dh =
          7.61400732564563
rdh_sum =
           3.3595551616345
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 5
dh =
          7.58592132564563
rdh_sum =
          4.18781598962189
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 6
dh =
          7.58045332564563
rdh_sum =
          5.01545463942327
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 7
dh =
          7.57498532564563
rdh_sum =
          5.84247022067872
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 8
dh =
          7.56951732564563
rdh_sum =
          6.66886184472152
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 9
dh =
          7.56404932564563
rdh_sum =
          7.49462862458054
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 10
dh =
          7.55858132564563
rdh_sum =
          8.31976967498268
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 11
dh =
          7.55311282564563
rdh_sum =
          9.14428405501672
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 12
dh =
          7.54764432564563
rdh_sum =
          9.96817088265169
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 13
dh =
          7.54217632564563
rdh_sum =
          10.7914293350618
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 14
dh =
          7.53670832564563
rdh_sum =
          11.6140585337903
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 15
dh =
          7.53124032564563
rdh_sum =
          12.4360576020906
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 16
dh =
          7.52577232564563
rdh_sum =
          13.2574256649283
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 17
dh =
          7.49679182564563
rdh_sum =
          14.0754348482489
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 18
dh =
          7.44429832564563
rdh_sum =
          14.8872983329729
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 19
dh =
          7.39180482564563
rdh_sum =
           15.692938013876
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 20
dh =
          7.33931132564563
rdh_sum =
          16.4922773444658
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 21
dh =
          7.28681782564563
rdh_sum =
          17.2852413561528
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 22
dh =
          7.23432432564563
rdh_sum =
           18.071756677026
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 23
dh =
          7.18183082564563
rdh_sum =
          18.8517515502285
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 24
dh =
          7.12933782564563
rdh_sum =
          19.6251559150329
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 25
dh =
          7.07684432564563
rdh_sum =
          20.3919012357362
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 26
dh =
          7.02435082564563
rdh_sum =
          21.1519207068156
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 27
dh =
          6.98947032564563
rdh_sum =
          21.9074349174411
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 28
dh =
          6.97220282564563
rdh_sum =
          22.6607083236397
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 29
dh =
          6.95493532564563
rdh_sum =
          23.4117340616669
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 30
dh =
          6.93766732564563
rdh_sum =
           24.160505263312
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 31
dh =
          6.92039982564563
rdh_sum =
          24.9070152520235
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 32
dh =
          6.90313232564563
rdh_sum =
          25.6512573473466
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 33
dh =
          6.88586482564563
rdh_sum =
          26.3932249302866
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 34
dh =
          6.86859732564563
rdh_sum =
          27.1329114434886
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 35
dh =
          6.85132982564563
rdh_sum =
          27.8703103914149
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 36
dh =
          6.83492582564563
rdh_sum =
           28.605530208927
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 37
dh =
          6.82024832564563
rdh_sum =
          29.3387953685961
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 38
dh =
          6.80643432564563
rdh_sum =
          30.0702166930533
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 39
dh =
          6.79261982564563
rdh_sum =
          30.7997901015478
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
          6.77880532564563
rdh_sum =
          31.5275116120467
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
          6.76499132564563
rdh_sum =
          32.2533773418801
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
          6.75117732564563
rdh_sum =
          32.9773833736096
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
dh =
          6.73736332564563
rdh_sum =
          33.6995258220515
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
          6.72354932564563
rdh_sum =
          34.4198008343446
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
          6.70973532564563
rdh_sum =
          35.1382045900163
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
          6.68095632564563
rdh_sum =
           35.852697788433
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
          6.63721182564563
rdh_sum =
          36.5612160567695
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
          6.59346732564563
rdh_sum =
          37.2637231291401
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 49
dh =
          6.54972282564563
rdh_sum =
          37.9601837851373
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 50
dh =
          6.50597782564563
rdh_sum =
          38.6505637862654
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 51
dh =
          6.46223332564563
rdh_sum =
          39.3348300905878
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 52
dh =
          6.41848882564563
rdh_sum =
          40.0129506501654
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 53
dh =
          6.38239932564563
rdh_sum =
           40.685977561138
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 54
dh =
          6.36162082564563
rdh_sum =
           41.356062478056
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 55
dh =
          6.34849782564563
rdh_sum =
          42.0242858846649
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 56
dh =
          6.33537432564563
rdh_sum =
          42.6906450767993
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 57
dh =
          6.32225082564563
rdh_sum =
          43.3551374503503
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
          6.30256582564563
rdh_sum =
          44.0168248129168
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 59
dh =
          6.26975732564563
rdh_sum =
          44.6738245276504
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 60
dh =
          6.23038732564563
rdh_sum =
          45.3251788594287
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 61
dh =
          6.19101732564563
rdh_sum =
          45.9708664859469
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 62
dh =
          6.15164732564563
rdh_sum =
          46.6108668832074
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 63
dh =
          6.12039282564563
rdh_sum =
          47.2463383003591
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 64
dh =
          6.10536982564563
rdh_sum =
          47.8796284822891
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 65
dh =
          6.09846282564563
rdh_sum =
           48.511914895596
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 66
dh =
          6.09155582564563
rdh_sum =
          49.1431969666819
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 67
dh =
          6.08464882564563
rdh_sum =
          49.7734741263038
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 68
dh =
          6.07774182564563
rdh_sum =
          50.4027458095758
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 69
dh =
          6.07083482564563
rdh_sum =
          51.0310114559721
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 70
dh =
          6.06392782564563
rdh_sum =
           51.658270509329
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 71
dh =
          6.05702082564563
rdh_sum =
          52.2845224178473
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 72
dh =
          6.05011382564563
rdh_sum =
          52.9097666340949
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 73
dh =
          6.02736132564563
rdh_sum =
          53.5316875718993
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 74
dh =
          5.98876332564563
rdh_sum =
          54.1479577667726
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 75
dh =
          5.95016532564563
rdh_sum =
          54.7585614750199
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 76
dh =
          5.91156732564563
rdh_sum =
          55.3634837202232
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 77
dh =
          5.87296932564563
rdh_sum =
          55.9627102952693
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 78
dh =
          5.83437082564563
rdh_sum =
          56.5562276902341
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 79
dh =
          5.79577232564563
rdh_sum =
          57.1440232419627
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 80
dh =
          5.75717432564563
rdh_sum =
          57.7260851364406
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 81
dh =
          5.72696382564563
rdh_sum =
          58.3036515289516
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 82
dh =
          5.71352882564563
rdh_sum =
          58.8792166244575
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 83
dh =
          5.70848182564563
rdh_sum =
          59.4540295894656
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 84
dh =
          5.70343432564563
rdh_sum =
          60.0280901762341
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 85
dh =
          5.69838682564563
rdh_sum =
          60.6013982132672
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 86
dh =
          5.69333932564563
rdh_sum =
          61.1739535308118
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 87
dh =
          5.68829182564563
rdh_sum =
          61.7457559608578
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 88
dh =
          5.67847732564563
rdh_sum =
           62.316093981034
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 89
dh =
          5.66389582564563
rdh_sum =
          62.8842551796871
```

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ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
          5.64931432564563
rdh_sum =
          63.4502382396087
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
          5.63473282564563
rdh_sum =
          64.0140418856828
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
          5.62015132564563
rdh_sum =
          64.5756648849101
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
dh =
          5.60556982564563
rdh_sum =
          65.1351060464325
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
          5.59098832564563
rdh_sum =
          65.6923642215553
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 95
dh =
          5.57640682564563
rdh_sum =
          66.2474383037701
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 96
dh =
          5.56182532564563
rdh_sum =
          66.8003272287756
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 97
dh =
          5.53716532564563
rdh_sum =
           67.349518347071
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 98
dh =
          5.50242732564563
rdh_sum =
          67.8934958810016
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 99
dh =
          5.46768882564563
rdh_sum =
          68.4322549320602
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 100
dh =
          5.43295032564563
rdh_sum =
          68.9657912491122
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 101
dh =
          5.39821232564563
rdh_sum =
          69.4941012291069
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
          5.36347382564563
rdh_sum =
          70.0171816917753
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
          5.32873532564563
rdh_sum =
          70.5350301056271
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 104
dh =
          5.29399732564563
rdh_sum =
           71.047644588375
```

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ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 105
dh =
          5.25974132564563
rdh_sum =
          71.5550964048885
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 106
dh =
          5.22645032564563
rdh_sum =
          72.0575302222905
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 107
dh =
          5.19364232564563
rdh_sum =
          72.5550186016048
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 108
dh =
          5.16083382564563
rdh_sum =
          73.0475617131806
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 109
dh =
          5.12802532564563
rdh_sum =
          73.5351602865434
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 110
dh =
          5.11708932564563
rdh_sum =
          74.0211109513435
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
          5.14989782564563
rdh_sum =
          74.5120058036855
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 112
dh =
          5.20457832564563
rdh_sum =
           75.011142658953
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 113
dh =
          5.21512382564563
rdh_sum =
          75.5118691358874
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 117
dh =
          4.84505282564563
rdh_sum =
          75.9569225315907
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 118
dh =
          4.86965932564563
rdh_sum =
          76.4056641094895
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 119
dh =
          4.89426532564563
rdh_sum =
          76.8580966153833
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 120
dh =
          4.91887182564563
rdh_sum =
          77.3142227419547
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 124
dh =
          4.63179832564563
rdh_sum =
          77.7274605031275
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 125
dh =
          4.62359632564563
rdh_sum =
          78.1394809224232
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 126
dh =
          4.61539432564563
rdh_sum =
          78.5502845377831
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 127
dh =
          4.60719232564563
rdh_sum =
          78.9598718945882
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 140
dh =
          3.25794682564563
rdh_sum =
           79.182275633657
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 141
dh =
          3.19232982564563
rdh_sum =
          79.3965076068413
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 142
dh =
          3.12671282564563
rdh_sum =
          79.6026796409093
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 143
dh =
          3.06109582564563
rdh_sum =
          79.8009067166457
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 144
dh =
          2.99547932564563
rdh_sum =
          79.9913069830396
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 145
dh =
          2.92986282564563
rdh_sum =
          80.1740015908386
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 146
dh =
          2.86424582564563
rdh_sum =
           80.349114648833
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 147
dh =
          2.79862882564563
rdh_sum =
          80.5167732918083
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 148
dh =
          2.76910132564563
rdh_sum =
          80.6811197215741
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 149
dh =
          2.77566282564563
rdh_sum =
          80.8461998906477
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 150
dh =
          2.78222432564563
rdh_sum =
          81.0120151096002
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 151
dh =
          2.78878632564563
rdh_sum =
          81.1785667422881
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 152
dh =
          2.79534832564563
rdh_sum =
          81.3458560937231
```

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ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 155
dh =
          2.43177132564563
rdh_sum =
            81.47431353211
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 156
dh =
          2.41984082564563
rdh_sum =
          81.6015698950754
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 157
dh =
          2.40791032564563
rdh_sum =
          81.7276300047683
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 158
dh =
          2.39598032564563
rdh_sum =
          81.8524987486434
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 159
dh =
          2.38404982564563
rdh_sum =
           81.976180929705
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 160
dh =
          2.36598832564563
rdh_sum =
          82.0980760506278
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 161
dh =
          2.33566582564563
rdh_sum =
           82.216996206662
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 162
dh =
          2.29921232564563
rdh_sum =
          82.3323820581369
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 163
dh =
          2.26275832564563
rdh_sum =
          82.4442800104416
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 164
dh =
          2.22630432564563
rdh_sum =
          82.5527369390318
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 165
dh =
          2.18464282564563
rdh_sum =
          82.6573192202618
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 166
dh =
          2.13777382564563
rdh_sum =
          82.7576171318566
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 167
dh =
          2.09090482564563
rdh_sum =
          82.8537104758807
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 168
dh =
          2.06710982564563
rdh_sum =
          82.9477000071846
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 169
dh =
          2.08946282564563
rdh_sum =
          83.0436652653811
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 170
dh =
          2.13488982564563
rdh_sum =
          83.1437021436228
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 171
dh =
          2.18031682564563
rdh_sum =
          83.2478856580707
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 172
dh =
          2.22574382564563
rdh_sum =
          83.3562900471524
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 173
dh =
          2.27117082564563
rdh_sum =
          83.4689887576381
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 174
dh =
          2.31659782564563
rdh_sum =
          83.5860544308647
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 175
dh =
          2.32700832564563
rdh_sum =
          83.7041310260816
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 176
dh =
          2.30240182564563
rdh_sum =
           83.819824263379
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 177
dh =
          2.27779532564563
rdh_sum =
          83.9331552917301
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 178
dh =
          2.25318932564563
rdh_sum =
          84.0441454374541
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 180
dh =
          2.11621432564563
rdh_sum =
          84.1424993069838
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 181
dh =
          2.19495432564563
rdh_sum =
          84.2480348039705
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 182
dh =
          2.23760532564563
rdh_sum =
          84.3575534359086
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 183
dh =
          2.20807782564563
rdh_sum =
          84.4643076075868
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 184
dh =
          2.14246082564563
rdh_sum =
          84.5650303881152
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 185
dh =
          2.07684382564563
rdh_sum =
          84.6598780226891
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 186
dh =
          2.01122732564563
rdh_sum =
          84.7490090985171
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 187
dh =
          1.94561082564563
rdh_sum =
          84.8325843944113
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 188
dh =
          1.88655532564563
rdh_sum =
          84.9112986996486
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 189
dh =
          1.83406182564563
rdh_sum =
          84.9858042039234
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 190
dh =
          1.78156832564563
rdh_sum =
          85.0562074709875
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 191
dh =
          1.72907482564563
rdh_sum =
          85.1226160919853
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 192
dh =
          1.67658182564563
rdh_sum =
          85.1851386950022
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 193
dh =
          1.64377332564563
rdh_sum =
          85.2452880865953
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 194
dh =
          1.63064982564563
rdh_sum =
          85.3045002225038
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 195
dh =
          1.61752632564563
rdh_sum =
          85.3627820026147
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 196
dh =
          1.60440282564563
rdh_sum =
          85.4201403413781
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 197
dh =
          1.59127982564563
rdh_sum =
          85.4765822024862
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 198
dh =
          1.56917732564563
rdh_sum =
          85.5314961812989
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 199
dh =
          1.53809532564563
rdh_sum =
          85.5842950025976
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 200
dh =
          1.50701382564563
rdh_sum =
          85.6350179667766
```

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ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 201
dh =
          1.47593232564563
rdh_sum =
          85.6837045221589
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 202
dh =
          1.44485082564563
rdh_sum =
          85.7303942958719
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 203
dh =
          1.41376932564563
rdh_sum =
          85.7751270903689
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 204
dh =
          1.38268732564563
rdh_sum =
          85.8179428494174
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 205
dh =
          1.35160582564563
rdh_sum =
           85.858881746785
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 206
dh =
          1.32052432564563
rdh_sum =
          85.8979840898746
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 207
dh =
          1.27938232564563
rdh_sum =
          85.9347176837212
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 230
dh =
         -2.22269667435437
rdh_sum =
          85.9837855061443
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 231
dh =
         -2.16036067435437
rdh_sum =
          86.0301824792242
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 232
dh =
         -2.09802467435437
rdh_sum =
          86.0739798028252
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 233
dh =
         -2.03568867435437
rdh_sum =
          86.1152490848663
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 234
dh =
         -1.97335267435437
rdh_sum =
          86.1540623300808
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 235
dh =
         -1.91101667435437
rdh_sum =
          86.1904919287141
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 236
dh =
         -1.84868067435437
rdh_sum =
          86.2246106451611
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 237
dh =
         -1.78634467435437
rdh_sum =
          86.2564916065446
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 238
dh =
         -1.72400867435437
rdh_sum =
           86.286208291237
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 239
dh =
         -1.66167267435437
rdh_sum =
          86.3138345173268
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 240
dh =
         -1.62359767435437
rdh_sum =
          86.3402203406954
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 241
dh =
         -1.60978367435437
rdh_sum =
          86.3661629862386
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 242
dh =
         -1.59596967435437
rdh_sum =
          86.3916661082255
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 243
dh =
         -1.58215567435437
rdh_sum =
          86.4167333643137
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 244
dh =
         -1.56834167435437
rdh_sum =
          86.4413684155204
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 245
dh =
         -1.55452767435437
rdh_sum =
          86.4655749261945
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 246
dh =
         -1.54071367435437
rdh_sum =
          86.4893565639885
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 247
dh =
         -1.52689967435437
rdh_sum =
          86.5127169998297
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 248
dh =
         -1.51308567435437
rdh_sum =
          86.5356599078924
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 249
dh =
         -1.49543417435437
rdh_sum =
          86.5580746519191
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 250
dh =
         -1.47010817435437
rdh_sum =
          86.5797420982635
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 251
dh =
         -1.44094517435437
rdh_sum =
          86.6005643814635
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 252
dh =
         -1.41178217435437
rdh_sum =
          86.6205579638301
```

```
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 253
dh =
         -1.38261917435437
rdh_sum =
          86.6397393361451
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 254
dh =
         -1.35345617435437
rdh_sum =
          86.6581250170936
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 255
dh =
         -1.32429317435437
rdh_sum =
          86.6757315526972
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 256
dh =
         -1.29513017435437
rdh_sum =
          86.6925755157452
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 257
dh =
         -1.26596717435437
rdh_sum =
          86.7086735052255
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 258
dh =
         -1.23680417435437
rdh_sum =
           86.724042145754
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 259
dh =
         -1.20764117435437
rdh_sum =
          86.7386980870036
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 260
dh =
         -1.17847817435437
rdh_sum =
          86.7526580031323
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 261
dh =
         -1.14931517435437
rdh_sum =
          86.7659385922104
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 262
dh =
         -1.12015217435437
rdh_sum =
          86.7785565756465
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
   219
rB =
         0.599422310485056
rdh_mean =
         0.396249116783774
gamma_berm =
         0.638098250625137
slope =
         0.160644629661688
Irb =
          1.99549337517634
gamma_berm =
         0.638098250625137
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.382858950375082
ans =
!!! - - Iribaren number:   1.27 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:6.2 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          7.04571530897157
```

```
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
                6.63775593
upper_slope =
         0.142949999999999
upper_slope =
         0.142950011159322
upper_slope =
         0.142950022072332
upper_slope =
         0.142950032747096
upper_slope =
         0.142950043191332
upper_slope =
         0.142950053412426
upper_slope =
         0.142950063417456
upper_slope =
         0.142950073213199
upper_slope =
         0.142950072455386
upper_slope =
         0.142950081957829
upper_slope =
         0.142950091267547
upper_slope =
         0.142950100390343
upper_slope =
         0.142950109331792
upper_slope =
         0.142950118097247
w2 =
        0.0298717885582036
w1 =
         0.970128211441796
R2_new =
          7.16652805111859
R2del =
          8.46437194888141
Z2 =
          16.4349733767642
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                    1.38872
toe_sta =
          51.2594075418113
top_sta =
          357.399058249488
Z2 =
          16.4349733767642
H0 =
                     5.2103
Tp =
                    13.7882
T0 =
          12.5347272727273
R2 =
          7.16652805111859
Z2 =
          16.4349733767642
top_sta =
          357.399058249488
Lslope =
          306.139650707676
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 1
dh =
          7.76611882564563
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 2
dh =
          7.71541532564563
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 3
dh =
          7.66471132564563
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 4
dh =
          7.61400732564563
rdh_sum =
     4
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 5
dh =
          7.58592132564563
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 6
dh =
          7.58045332564563
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 7
dh =
          7.57498532564563
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 8
dh =
          7.56951732564563
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 9
dh =
          7.56404932564563
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 10
dh =
          7.55858132564563
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 11
dh =
          7.55311282564563
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 12
dh =
          7.54764432564563
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 13
dh =
          7.54217632564563
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 14
dh =
          7.53670832564563
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 15
dh =
          7.53124032564563
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 16
dh =
          7.52577232564563
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 17
dh =
          7.49679182564563
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 18
dh =
          7.44429832564563
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 19
dh =
          7.39180482564563
rdh_sum =
    19
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 20
dh =
          7.33931132564563
rdh_sum =
    20
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 21
dh =
          7.28681782564563
rdh_sum =
    21
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 22
dh =
          7.23432432564563
rdh_sum =
    22
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 23
dh =
          7.18183082564563
rdh_sum =
    23
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 24
dh =
          7.12933782564563
rdh_sum =
          23.7734043648044
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 25
dh =
          7.07684432564563
rdh_sum =
          24.5401496855077
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 26
dh =
          7.02435082564563
rdh_sum =
          25.3001691565871
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 27
dh =
          6.98947032564563
rdh_sum =
          26.0556833672126
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 28
dh =
          6.97220282564563
rdh_sum =
          26.8089567734112
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 29
dh =
          6.95493532564563
rdh_sum =
          27.5599825114384
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 30
dh =
          6.93766732564563
rdh_sum =
          28.3087537130835
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 31
dh =
          6.92039982564563
rdh_sum =
           29.055263701795
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 32
dh =
          6.90313232564563
rdh_sum =
          29.7995057971181
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 33
dh =
          6.88586482564563
rdh_sum =
          30.5414733800581
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 34
dh =
          6.86859732564563
rdh_sum =
          31.2811598932601
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 35
dh =
          6.85132982564563
rdh_sum =
          32.0185588411864
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 36
dh =
          6.83492582564563
rdh_sum =
          32.7537786586985
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 37
dh =
          6.82024832564563
rdh_sum =
          33.4870438183676
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 38
dh =
          6.80643432564563
rdh_sum =
          34.2184651428248
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 39
dh =
          6.79261982564563
rdh_sum =
          34.9480385513193
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
          6.77880532564563
rdh_sum =
          35.6757600618182
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
          6.76499132564563
rdh_sum =
          36.4016257916515
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
          6.75117732564563
rdh_sum =
           37.125631823381
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
          6.73736332564563
rdh_sum =
           37.847774271823
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
          6.72354932564563
rdh_sum =
          38.5680492841161
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
dh =
          6.70973532564563
rdh_sum =
          39.2864530397878
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
          6.68095632564563
rdh_sum =
          40.0009462382045
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
          6.63721182564563
rdh_sum =
           40.709464506541
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 48
dh =
          6.59346732564563
rdh_sum =
          41.4119715789115
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 49
dh =
          6.54972282564563
rdh_sum =
          42.1084322349088
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 50
dh =
          6.50597782564563
rdh_sum =
          42.7988122360369
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 51
dh =
          6.46223332564563
rdh_sum =
          43.4830785403593
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 52
dh =
          6.41848882564563
rdh_sum =
          44.1611990999369
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 53
dh =
          6.38239932564563
rdh_sum =
          44.8342260109095
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 54
dh =
          6.36162082564563
rdh_sum =
          45.5043109278275
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 55
dh =
          6.34849782564563
rdh_sum =
          46.1725343344364
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 56
dh =
          6.33537432564563
rdh_sum =
          46.8388935265708
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 57
dh =
          6.32225082564563
rdh_sum =
          47.5033859001218
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
          6.30256582564563
rdh_sum =
          48.1650732626883
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 59
dh =
          6.26975732564563
rdh_sum =
          48.8220729774218
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 60
dh =
          6.23038732564563
rdh_sum =
          49.4734273092001
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 61
dh =
          6.19101732564563
rdh_sum =
          50.1191149357184
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 62
dh =
          6.15164732564563
rdh_sum =
          50.7591153329789
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 63
dh =
          6.12039282564563
rdh_sum =
          51.3945867501306
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 64
dh =
          6.10536982564563
rdh_sum =
          52.0278769320606
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 65
dh =
          6.09846282564563
rdh_sum =
          52.6601633453675
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 66
dh =
          6.09155582564563
rdh_sum =
          53.2914454164534
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 67
dh =
          6.08464882564563
rdh_sum =
          53.9217225760753
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 68
dh =
          6.07774182564563
rdh_sum =
          54.5509942593473
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 69
dh =
          6.07083482564563
rdh_sum =
          55.1792599057436
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 70
dh =
          6.06392782564563
rdh_sum =
          55.8065189591005
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 71
dh =
          6.05702082564563
rdh_sum =
          56.4327708676188
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 72
dh =
          6.05011382564563
rdh_sum =
          57.0580150838663
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 73
dh =
          6.02736132564563
rdh_sum =
          57.6799360216708
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 74
dh =
          5.98876332564563
rdh_sum =
          58.2962062165441
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 75
dh =
          5.95016532564563
rdh_sum =
          58.9068099247914
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 76
dh =
          5.91156732564563
rdh_sum =
          59.5117321699947
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 77
dh =
          5.87296932564563
rdh_sum =
          60.1109587450408
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 78
dh =
          5.83437082564563
rdh_sum =
          60.7044761400056
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 79
dh =
          5.79577232564563
rdh_sum =
          61.2922716917342
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 80
dh =
          5.75717432564563
rdh_sum =
          61.8743335862121
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 81
dh =
          5.72696382564563
rdh_sum =
          62.4518999787231
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 82
dh =
          5.71352882564563
rdh_sum =
           63.027465074229
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 83
dh =
          5.70848182564563
rdh_sum =
          63.6022780392371
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 84
dh =
          5.70343432564563
rdh_sum =
          64.1763386260056
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 85
dh =
          5.69838682564563
rdh_sum =
          64.7496466630387
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 86
dh =
          5.69333932564563
rdh_sum =
          65.3222019805833
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 87
dh =
          5.68829182564563
rdh_sum =
          65.8940044106293
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 88
dh =
          5.67847732564563
rdh_sum =
          66.4643424308055
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 89
dh =
          5.66389582564563
rdh_sum =
          67.0325036294586
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 90
dh =
          5.64931432564563
rdh_sum =
          67.5984866893802
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 91
dh =
          5.63473282564563
rdh_sum =
          68.1622903354543
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 92
dh =
          5.62015132564563
rdh_sum =
          68.7239133346816
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 93
dh =
          5.60556982564563
rdh_sum =
           69.283354496204
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 94
dh =
          5.59098832564563
rdh_sum =
          69.8406126713268
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 95
dh =
          5.57640682564563
rdh_sum =
          70.3956867535416
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 96
dh =
          5.56182532564563
rdh_sum =
          70.9485756785471
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 97
dh =
          5.53716532564563
rdh_sum =
          71.4977667968424
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 98
dh =
          5.50242732564563
rdh_sum =
          72.0417443307731
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 99
dh =
          5.46768882564563
rdh_sum =
          72.5805033818317
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 100
dh =
          5.43295032564563
rdh_sum =
          73.1140396988837
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 101
dh =
          5.39821232564563
rdh_sum =
          73.6423496788784
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 102
dh =
          5.36347382564563
rdh_sum =
          74.1654301415468
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 103
dh =
          5.32873532564563
rdh_sum =
          74.6832785553986
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 104
dh =
          5.29399732564563
rdh_sum =
          75.1958930381465
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 105
dh =
          5.25974132564563
rdh_sum =
            75.70334485466
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 106
dh =
          5.22645032564563
rdh_sum =
          76.2057786720619
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 107
dh =
          5.19364232564563
rdh_sum =
          76.7032670513763
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 108
dh =
          5.16083382564563
rdh_sum =
          77.1958101629521
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 109
dh =
          5.12802532564563
rdh_sum =
          77.6834087363148
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 110
dh =
          5.11708932564563
rdh_sum =
           78.169359401115
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 111
dh =
          5.14989782564563
rdh_sum =
           78.660254253457
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 112
dh =
          5.20457832564563
rdh_sum =
          79.1593911087245
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 113
dh =
          5.21512382564563
rdh_sum =
          79.6601175856588
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 117
dh =
          4.84505282564563
rdh_sum =
          80.1051709813622
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 118
dh =
          4.86965932564563
rdh_sum =
           80.553912559261
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 119
dh =
          4.89426532564563
rdh_sum =
          81.0063450651548
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 120
dh =
          4.91887182564563
rdh_sum =
          81.4624711917262
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 124
dh =
          4.63179832564563
rdh_sum =
           81.875708952899
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 125
dh =
          4.62359632564563
rdh_sum =
          82.2877293721947
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 126
dh =
          4.61539432564563
rdh_sum =
          82.6985329875546
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 127
dh =
          4.60719232564563
rdh_sum =
          83.1081203443597
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 140
dh =
          3.25794682564563
rdh_sum =
          83.3305240834285
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 141
dh =
          3.19232982564563
rdh_sum =
          83.5447560566128
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 142
dh =
          3.12671282564563
rdh_sum =
          83.7509280906808
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 143
dh =
          3.06109582564563
rdh_sum =
          83.9491551664172
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 144
dh =
          2.99547932564563
rdh_sum =
          84.1395554328111
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 145
dh =
          2.92986282564563
rdh_sum =
          84.3222500406101
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 146
dh =
          2.86424582564563
rdh_sum =
          84.4973630986045
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 147
dh =
          2.79862882564563
rdh_sum =
          84.6650217415798
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 148
dh =
          2.76910132564563
rdh_sum =
          84.8293681713456
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 149
dh =
          2.77566282564563
rdh_sum =
          84.9944483404192
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 150
dh =
          2.78222432564563
rdh_sum =
          85.1602635593717
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 151
dh =
          2.78878632564563
rdh_sum =
          85.3268151920595
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 152
dh =
          2.79534832564563
rdh_sum =
          85.4941045434945
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 155
dh =
          2.43177132564563
rdh_sum =
          85.6225619818814
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 156
dh =
          2.41984082564563
rdh_sum =
          85.7498183448469
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 157
dh =
          2.40791032564563
rdh_sum =
          85.8758784545398
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 158
dh =
          2.39598032564563
rdh_sum =
          86.0007471984149
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 159
dh =
          2.38404982564563
rdh_sum =
          86.1244293794765
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 160
dh =
          2.36598832564563
rdh_sum =
          86.2463245003993
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 161
dh =
          2.33566582564563
rdh_sum =
          86.3652446564335
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 162
dh =
          2.29921232564563
rdh_sum =
          86.4806305079084
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 163
dh =
          2.26275832564563
rdh_sum =
          86.5925284602131
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 164
dh =
          2.22630432564563
rdh_sum =
          86.7009853888033
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 165
dh =
          2.18464282564563
rdh_sum =
          86.8055676700333
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 166
dh =
          2.13777382564563
rdh_sum =
          86.9058655816281
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 167
dh =
          2.09090482564563
rdh_sum =
          87.0019589256522
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 168
dh =
          2.06710982564563
rdh_sum =
          87.0959484569561
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 169
dh =
          2.08946282564563
rdh_sum =
          87.1919137151526
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 170
dh =
          2.13488982564563
rdh_sum =
          87.2919505933943
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 171
dh =
          2.18031682564563
rdh_sum =
          87.3961341078422
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 172
dh =
          2.22574382564563
rdh_sum =
          87.5045384969239
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 173
dh =
          2.27117082564563
rdh_sum =
          87.6172372074096
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 174
dh =
          2.31659782564563
rdh_sum =
          87.7343028806362
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 175
dh =
          2.32700832564563
rdh_sum =
          87.8523794758531
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 176
dh =
          2.30240182564563
rdh_sum =
          87.9680727131505
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 177
dh =
          2.27779532564563
rdh_sum =
          88.0814037415016
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 178
dh =
          2.25318932564563
rdh_sum =
          88.1923938872256
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 180
dh =
          2.11621432564563
rdh_sum =
          88.2907477567553
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 181
dh =
          2.19495432564563
rdh_sum =
           88.396283253742
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 182
dh =
          2.23760532564563
rdh_sum =
          88.5058018856801
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 183
dh =
          2.20807782564563
rdh_sum =
          88.6125560573583
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 184
dh =
          2.14246082564563
rdh_sum =
          88.7132788378867
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 185
dh =
          2.07684382564563
rdh_sum =
          88.8081264724606
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 186
dh =
          2.01122732564563
rdh_sum =
          88.8972575482886
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 187
dh =
          1.94561082564563
rdh_sum =
          88.9808328441828
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 188
dh =
          1.88655532564563
rdh_sum =
          89.0595471494201
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 189
dh =
          1.83406182564563
rdh_sum =
          89.1340526536949
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 190
dh =
          1.78156832564563
rdh_sum =
           89.204455920759
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 191
dh =
          1.72907482564563
rdh_sum =
          89.2708645417568
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 192
dh =
          1.67658182564563
rdh_sum =
          89.3333871447736
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 193
dh =
          1.64377332564563
rdh_sum =
          89.3935365363668
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 194
dh =
          1.63064982564563
rdh_sum =
          89.4527486722753
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 195
dh =
          1.61752632564563
rdh_sum =
          89.5110304523861
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 196
dh =
          1.60440282564563
rdh_sum =
          89.5683887911496
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 197
dh =
          1.59127982564563
rdh_sum =
          89.6248306522577
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 198
dh =
          1.56917732564563
rdh_sum =
          89.6797446310704
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 199
dh =
          1.53809532564563
rdh_sum =
           89.732543452369
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 200
dh =
          1.50701382564563
rdh_sum =
          89.7832664165481
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 201
dh =
          1.47593232564563
rdh_sum =
          89.8319529719303
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 202
dh =
          1.44485082564563
rdh_sum =
          89.8786427456434
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 203
dh =
          1.41376932564563
rdh_sum =
          89.9233755401404
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 204
dh =
          1.38268732564563
rdh_sum =
          89.9661912991889
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 205
dh =
          1.35160582564563
rdh_sum =
          90.0071301965565
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 206
dh =
          1.32052432564563
rdh_sum =
          90.0462325396461
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 207
dh =
          1.27938232564563
rdh_sum =
          90.0829661334927
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 230
dh =
         -2.22269667435437
rdh_sum =
          90.3021186487666
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 231
dh =
         -2.16036067435437
rdh_sum =
          90.5100733224362
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 232
dh =
         -2.09802467435437
rdh_sum =
          90.7070482177608
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 233
dh =
         -2.03568867435437
rdh_sum =
          90.8932695963373
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 234
dh =
         -1.97335267435437
rdh_sum =
          91.0689717491566
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 235
dh =
         -1.91101667435437
rdh_sum =
          91.2343968216635
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 236
dh =
         -1.84868067435437
rdh_sum =
           91.389794632953
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 237
dh =
         -1.78634467435437
rdh_sum =
          91.5354224892364
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 238
dh =
         -1.72400867435437
rdh_sum =
          91.6715449917164
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 239
dh =
         -1.66167267435437
rdh_sum =
           91.798433839016
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 240
dh =
         -1.62359767435437
rdh_sum =
          91.9198193644708
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 241
dh =
         -1.60978367435437
rdh_sum =
          92.0392342243335
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 242
dh =
         -1.59596967435437
rdh_sum =
          92.1566923749204
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 243
dh =
         -1.58215567435437
rdh_sum =
          92.2722078443018
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 244
dh =
         -1.56834167435437
rdh_sum =
          92.3857947317873
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 245
dh =
         -1.55452767435437
rdh_sum =
           92.497467207409
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 246
dh =
         -1.54071367435437
rdh_sum =
          92.6072395114018
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 247
dh =
         -1.52689967435437
rdh_sum =
           92.715125953681
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 248
dh =
         -1.51308567435437
rdh_sum =
          92.8211409133179
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 249
dh =
         -1.49543417435437
rdh_sum =
          92.9247855310674
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 250
dh =
         -1.47010817435437
rdh_sum =
          93.0250707195188
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 251
dh =
         -1.44094517435437
rdh_sum =
          93.1215485652906
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 252
dh =
         -1.41178217435437
rdh_sum =
          93.2142850172389
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 253
dh =
         -1.38261917435437
rdh_sum =
          93.3033466356868
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 254
dh =
         -1.35345617435437
rdh_sum =
           93.388800581547
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 255
dh =
         -1.32429317435437
rdh_sum =
          93.4707146053449
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 256
dh =
         -1.29513017435437
rdh_sum =
          93.5491570361462
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 257
dh =
         -1.26596717435437
rdh_sum =
          93.6241967703897
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 258
dh =
         -1.23680417435437
rdh_sum =
          93.6959032606272
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 259
dh =
         -1.20764117435437
rdh_sum =
          93.7643465041727
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 260
dh =
         -1.17847817435437
rdh_sum =
          93.8295970316627
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 261
dh =
         -1.14931517435437
rdh_sum =
          93.8917258955289
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 262
dh =
         -1.12015217435437
rdh_sum =
           93.950804658386
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
   219
rB =
         0.715359802278982
rdh_mean =
          0.42899910802916
gamma_berm =
         0.591528914818617
gamma_berm =
                       0.6
slope =
          0.17266827735217
Irb =
          2.14484856596198
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
                      0.36
ans =
!!! - - Iribaren number:   1.29 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          7.12090401671524
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
                 6.63775593
upper_slope =
         0.142949999999999
upper_slope =
         0.142950032895755
upper_slope =
         0.142950063696177
upper_slope =
         0.142950092595283
upper_slope =
         0.142950119763855
upper_slope =
         0.142950145352816
upper_slope =
         0.142950169496034
upper_slope =
         0.142950192312667
upper_slope =
         0.142950187170488
upper_slope =
         0.142950208338442
upper_slope =
         0.142950228431855
upper_slope =
         0.142950247530522
```

```
upper_slope =
         0.142950265706527
upper_slope =
         0.142950283025154
w2 =
        0.0298717885582036
w1 =
         0.970128211441796
R2_new =
          7.23947111989603
R2del =
        0.0729430687774446
Z2 =
          16.5079164455417
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                    1.38872
toe_sta =
          51.2594075418113
top_sta =
          357.909328055556
Z2 =
          16.5079164455417
H0 =
                     5.2103
Tp =
                    13.7882
T0 =
          12.5347272727273
R2 =
          7.23947111989603
Z2 =
          16.5079164455417
top_sta =
          357.909328055556
Lslope =
          306.649920513744
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 1
dh =
          7.76611882564563
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 2
dh =
          7.71541532564563
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 3
dh =
          7.66471132564563
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 4
dh =
          7.61400732564563
rdh_sum =
     4
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 5
dh =
          7.58592132564563
rdh_sum =
     5
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 6
dh =
          7.58045332564563
rdh_sum =
     6
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 7
dh =
          7.57498532564563
rdh_sum =
     7
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 8
dh =
          7.56951732564563
rdh_sum =
     8
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 9
dh =
          7.56404932564563
```

```
rdh_sum =
     9
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 10
dh =
          7.55858132564563
rdh_sum =
    10
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 11
dh =
          7.55311282564563
rdh_sum =
    11
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 12
dh =
          7.54764432564563
rdh_sum =
    12
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 13
dh =
          7.54217632564563
rdh_sum =
    13
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 14
dh =
          7.53670832564563
rdh_sum =
    14
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 15
dh =
          7.53124032564563
rdh_sum =
    15
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 16
dh =
          7.52577232564563
rdh_sum =
    16
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 17
dh =
          7.49679182564563
rdh_sum =
    17
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 18
dh =
          7.44429832564563
rdh_sum =
    18
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 19
dh =
          7.39180482564563
rdh_sum =
    19
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 20
dh =
          7.33931132564563
rdh_sum =
    20
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 21
dh =
          7.28681782564563
rdh_sum =
    21
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 22
dh =
          7.23432432564563
rdh_sum =
          21.7865153208732
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 23
dh =
          7.18183082564563
rdh_sum =
          22.5665101940757
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 24
dh =
          7.12933782564563
```

```
rdh_sum =
          23.3399145588801
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 25
dh =
          7.07684432564563
rdh_sum =
          24.1066598795834
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 26
dh =
          7.02435082564563
rdh_sum =
          24.8666793506628
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 27
dh =
          6.98947032564563
rdh_sum =
          25.6221935612883
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 28
dh =
          6.97220282564563
rdh_sum =
          26.3754669674869
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 29
dh =
          6.95493532564563
rdh_sum =
          27.1264927055141
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 30
dh =
          6.93766732564563
rdh_sum =
          27.8752639071592
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 31
dh =
          6.92039982564563
rdh_sum =
          28.6217738958707
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 32
dh =
          6.90313232564563
rdh_sum =
          29.3660159911938
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 33
dh =
          6.88586482564563
rdh_sum =
          30.1079835741338
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 34
dh =
          6.86859732564563
rdh_sum =
          30.8476700873358
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 35
dh =
          6.85132982564563
rdh_sum =
          31.5850690352621
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 36
dh =
          6.83492582564563
rdh_sum =
          32.3202888527742
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 37
dh =
          6.82024832564563
rdh_sum =
          33.0535540124433
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 38
dh =
          6.80643432564563
rdh_sum =
          33.7849753369005
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 39
dh =
          6.79261982564563
```

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rdh_sum =
           34.514548745395
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
          6.77880532564563
rdh_sum =
          35.2422702558939
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
          6.76499132564563
rdh_sum =
          35.9681359857273
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
          6.75117732564563
rdh_sum =
          36.6921420174568
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
          6.73736332564563
rdh_sum =
          37.4142844658987
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
          6.72354932564563
rdh_sum =
          38.1345594781918
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
          6.70973532564563
rdh_sum =
          38.8529632338635
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
          6.68095632564563
rdh_sum =
          39.5674564322802
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
dh =
          6.63721182564563
rdh_sum =
          40.2759747006167
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
          6.59346732564563
rdh_sum =
          40.9784817729873
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 49
dh =
          6.54972282564563
rdh_sum =
          41.6749424289845
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 50
dh =
          6.50597782564563
rdh_sum =
          42.3653224301126
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 51
dh =
          6.46223332564563
rdh_sum =
           43.049588734435
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 52
dh =
          6.41848882564563
rdh_sum =
          43.7277092940126
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 53
dh =
          6.38239932564563
rdh_sum =
          44.4007362049852
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 54
dh =
          6.36162082564563
```

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rdh_sum =
          45.0708211219032
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 55
dh =
          6.34849782564563
rdh_sum =
          45.7390445285121
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 56
dh =
          6.33537432564563
rdh_sum =
          46.4054037206465
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 57
dh =
          6.32225082564563
rdh_sum =
          47.0698960941975
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
          6.30256582564563
rdh_sum =
           47.731583456764
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 59
dh =
          6.26975732564563
rdh_sum =
          48.3885831714976
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 60
dh =
          6.23038732564563
rdh_sum =
          49.0399375032759
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 61
dh =
          6.19101732564563
rdh_sum =
          49.6856251297941
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 62
dh =
          6.15164732564563
rdh_sum =
          50.3256255270546
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 63
dh =
          6.12039282564563
rdh_sum =
          50.9610969442063
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 64
dh =
          6.10536982564563
rdh_sum =
          51.5943871261363
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 65
dh =
          6.09846282564563
rdh_sum =
          52.2266735394432
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 66
dh =
          6.09155582564563
rdh_sum =
          52.8579556105291
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 67
dh =
          6.08464882564563
rdh_sum =
           53.488232770151
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 68
dh =
          6.07774182564563
rdh_sum =
           54.117504453423
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 69
dh =
          6.07083482564563
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rdh_sum =
          54.7457700998193
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 70
dh =
          6.06392782564563
rdh_sum =
          55.3730291531762
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 71
dh =
          6.05702082564563
rdh_sum =
          55.9992810616945
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 72
dh =
          6.05011382564563
rdh_sum =
          56.6245252779421
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 73
dh =
          6.02736132564563
rdh_sum =
          57.2464462157465
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 74
dh =
          5.98876332564563
rdh_sum =
          57.8627164106198
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 75
dh =
          5.95016532564563
rdh_sum =
          58.4733201188671
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 76
dh =
          5.91156732564563
rdh_sum =
          59.0782423640704
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 77
dh =
          5.87296932564563
rdh_sum =
          59.6774689391165
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 78
dh =
          5.83437082564563
rdh_sum =
          60.2709863340813
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 79
dh =
          5.79577232564563
rdh_sum =
          60.8587818858099
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 80
dh =
          5.75717432564563
rdh_sum =
          61.4408437802878
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 81
dh =
          5.72696382564563
rdh_sum =
          62.0184101727988
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 82
dh =
          5.71352882564563
rdh_sum =
          62.5939752683047
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 83
dh =
          5.70848182564563
rdh_sum =
          63.1687882333128
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 84
dh =
          5.70343432564563
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rdh_sum =
          63.7428488200813
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 85
dh =
          5.69838682564563
rdh_sum =
          64.3161568571144
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 86
dh =
          5.69333932564563
rdh_sum =
           64.888712174659
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 87
dh =
          5.68829182564563
rdh_sum =
           65.460514604705
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 88
dh =
          5.67847732564563
rdh_sum =
          66.0308526248812
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 89
dh =
          5.66389582564563
rdh_sum =
          66.5990138235343
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
          5.64931432564563
rdh_sum =
          67.1649968834559
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
          5.63473282564563
rdh_sum =
            67.72880052953
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
          5.62015132564563
rdh_sum =
          68.2904235287573
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
          5.60556982564563
rdh_sum =
          68.8498646902797
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
          5.59098832564563
rdh_sum =
          69.4071228654025
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 95
dh =
          5.57640682564563
rdh_sum =
          69.9621969476173
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 96
dh =
          5.56182532564563
rdh_sum =
          70.5150858726228
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 97
dh =
          5.53716532564563
rdh_sum =
          71.0642769909181
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 98
dh =
          5.50242732564563
rdh_sum =
          71.6082545248488
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 99
dh =
          5.46768882564563
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rdh_sum =
          72.1470135759074
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 100
dh =
          5.43295032564563
rdh_sum =
          72.6805498929594
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 101
dh =
          5.39821232564563
rdh_sum =
          73.2088598729541
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
          5.36347382564563
rdh_sum =
          73.7319403356225
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
          5.32873532564563
rdh_sum =
          74.2497887494743
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 104
dh =
          5.29399732564563
rdh_sum =
          74.7624032322222
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 105
dh =
          5.25974132564563
rdh_sum =
          75.2698550487357
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 106
dh =
          5.22645032564563
rdh_sum =
          75.7722888661376
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 107
dh =
          5.19364232564563
rdh_sum =
           76.269777245452
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 108
dh =
          5.16083382564563
rdh_sum =
          76.7623203570278
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 109
dh =
          5.12802532564563
rdh_sum =
          77.2499189303906
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 110
dh =
          5.11708932564563
rdh_sum =
          77.7358695951907
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
          5.14989782564563
rdh_sum =
          78.2267644475327
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 112
dh =
          5.20457832564563
rdh_sum =
          78.7259013028002
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 113
dh =
          5.21512382564563
rdh_sum =
          79.2266277797345
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 117
dh =
          4.84505282564563
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rdh_sum =
          79.6716811754379
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 118
dh =
          4.86965932564563
rdh_sum =
          80.1204227533367
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 119
dh =
          4.89426532564563
rdh_sum =
          80.5728552592305
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 120
dh =
          4.91887182564563
rdh_sum =
          81.0289813858019
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 124
dh =
          4.63179832564563
rdh_sum =
          81.4422191469747
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 125
dh =
          4.62359632564563
rdh_sum =
          81.8542395662704
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 126
dh =
          4.61539432564563
rdh_sum =
          82.2650431816303
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 127
dh =
          4.60719232564563
rdh_sum =
          82.6746305384354
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 140
dh =
          3.25794682564563
rdh_sum =
          82.8970342775042
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 141
dh =
          3.19232982564563
rdh_sum =
          83.1112662506885
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 142
dh =
          3.12671282564563
rdh_sum =
          83.3174382847565
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 143
dh =
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rdh_sum =
          83.5156653604929
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 144
dh =
          2.99547932564563
rdh_sum =
          83.7060656268868
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 145
dh =
          2.92986282564563
rdh_sum =
          83.8887602346858
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 146
dh =
          2.86424582564563
rdh_sum =
          84.0638732926802
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 147
dh =
          2.79862882564563
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rdh_sum =
          84.2315319356555
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 148
dh =
          2.76910132564563
rdh_sum =
          84.3958783654213
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 149
dh =
          2.77566282564563
rdh_sum =
          84.5609585344949
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 150
dh =
          2.78222432564563
rdh_sum =
          84.7267737534474
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 151
dh =
          2.78878632564563
rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 152
dh =
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 155
dh =
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 156
dh =
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rdh_sum =
          85.3163285389226
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 157
dh =
          2.40791032564563
rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 158
dh =
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 159
dh =
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 160
dh =
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 161
dh =
          2.33566582564563
rdh_sum =
          85.9317548505092
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 162
dh =
          2.29921232564563
rdh_sum =
          86.0471407019841
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 163
dh =
          2.26275832564563
rdh_sum =
          86.1590386542888
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 164
dh =
          2.22630432564563
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 165
dh =
          2.18464282564563
rdh_sum =
           86.372077864109
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 166
dh =
          2.13777382564563
rdh_sum =
          86.4723757757038
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 167
dh =
          2.09090482564563
rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 168
dh =
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rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 169
dh =
          2.08946282564563
rdh_sum =
          86.7584239092283
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 170
dh =
          2.13488982564563
rdh_sum =
            86.85846078747
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 171
dh =
          2.18031682564563
rdh_sum =
          86.9626443019179
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 172
dh =
          2.22574382564563
rdh_sum =
          87.0710486909996
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 173
dh =
          2.27117082564563
rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 174
dh =
          2.31659782564563
rdh_sum =
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ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 175
dh =
          2.32700832564563
rdh_sum =
          87.4188896699288
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 176
dh =
          2.30240182564563
rdh_sum =
          87.5345829072262
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 177
dh =
          2.27779532564563
rdh_sum =
          87.6479139355773
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 178
dh =
          2.25318932564563
rdh_sum =
          87.7589040813013
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 180
dh =
          2.11621432564563
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rdh_sum =
           87.857257950831
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 181
dh =
          2.19495432564563
rdh_sum =
          87.9627934478177
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 182
dh =
          2.23760532564563
rdh_sum =
          88.0723120797558
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 183
dh =
          2.20807782564563
rdh_sum =
           88.179066251434
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 184
dh =
          2.14246082564563
rdh_sum =
          88.2797890319624
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 185
dh =
          2.07684382564563
rdh_sum =
          88.3746366665363
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 186
dh =
          2.01122732564563
rdh_sum =
          88.4637677423643
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 187
dh =
          1.94561082564563
rdh_sum =
          88.5473430382585
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 188
dh =
          1.88655532564563
rdh_sum =
          88.6260573434958
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 189
dh =
          1.83406182564563
rdh_sum =
          88.7005628477706
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 190
dh =
          1.78156832564563
rdh_sum =
          88.7709661148347
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 191
dh =
          1.72907482564563
rdh_sum =
          88.8373747358325
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 192
dh =
          1.67658182564563
rdh_sum =
          88.8998973388493
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 193
dh =
          1.64377332564563
rdh_sum =
          88.9600467304425
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 194
dh =
          1.63064982564563
rdh_sum =
           89.019258866351
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 195
dh =
          1.61752632564563
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rdh_sum =
          89.0775406464618
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 196
dh =
          1.60440282564563
rdh_sum =
          89.1348989852253
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 197
dh =
          1.59127982564563
rdh_sum =
          89.1913408463334
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 198
dh =
          1.56917732564563
rdh_sum =
          89.2462548251461
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 199
dh =
          1.53809532564563
rdh_sum =
          89.2990536464447
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 200
dh =
          1.50701382564563
rdh_sum =
          89.3497766106238
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 201
dh =
          1.47593232564563
rdh_sum =
          89.3984631660061
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 202
dh =
          1.44485082564563
rdh_sum =
          89.4451529397191
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 203
dh =
          1.41376932564563
rdh_sum =
          89.4898857342161
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 204
dh =
          1.38268732564563
rdh_sum =
          89.5327014932646
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 205
dh =
          1.35160582564563
rdh_sum =
          89.5736403906322
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 206
dh =
          1.32052432564563
rdh_sum =
          89.6127427337218
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 207
dh =
          1.27938232564563
rdh_sum =
          89.6494763275684
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 230
dh =
         -2.22269667435437
rdh_sum =
           89.864581241822
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 231
dh =
         -2.16036067435437
rdh_sum =
          90.0686766619864
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 232
dh =
         -2.09802467435437
```

```
rdh_sum =
          90.2619791032649
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 233
dh =
         -2.03568867435437
rdh_sum =
          90.4447129781502
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 234
dh =
         -1.97335267435437
rdh_sum =
          90.6171104322198
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 235
dh =
         -1.91101667435437
rdh_sum =
          90.7794111742744
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 236
dh =
         -1.84868067435437
rdh_sum =
          90.9318623009406
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 237
dh =
         -1.78634467435437
rdh_sum =
          91.0747181158696
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 238
dh =
         -1.72400867435437
rdh_sum =
          91.2082399436611
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 239
dh =
         -1.66167267435437
rdh_sum =
          91.3326959386508
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 240
dh =
         -1.62359767435437
rdh_sum =
          91.4517492625477
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 241
dh =
         -1.60978367435437
rdh_sum =
          91.5688680756012
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 242
dh =
         -1.59596967435437
rdh_sum =
          91.6840661368142
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 243
dh =
         -1.58215567435437
rdh_sum =
          91.7973572742128
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 244
dh =
         -1.56834167435437
rdh_sum =
          91.9087553843491
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 245
dh =
         -1.55452767435437
rdh_sum =
          92.0182744318018
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 246
dh =
         -1.54071367435437
rdh_sum =
          92.1259284486748
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 247
dh =
         -1.52689967435437
```

```
rdh_sum =
          92.2317315340926
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 248
dh =
         -1.51308567435437
rdh_sum =
          92.3356978536937
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 249
dh =
         -1.49543417435437
rdh_sum =
          92.4373378777191
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 250
dh =
         -1.47010817435437
rdh_sum =
           92.535681042143
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 251
dh =
         -1.44094517435437
rdh_sum =
          92.6302879791299
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 252
dh =
         -1.41178217435437
rdh_sum =
          92.7212236149184
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 253
dh =
         -1.38261917435437
rdh_sum =
          92.8085534637293
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 254
dh =
         -1.35345617435437
rdh_sum =
          92.8923436172723
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 255
dh =
         -1.32429317435437
rdh_sum =
          92.9726607341619
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 256
dh =
         -1.29513017435437
rdh_sum =
           93.049572029241
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 257
dh =
         -1.26596717435437
rdh_sum =
          93.1231452628161
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 258
dh =
         -1.23680417435437
rdh_sum =
          93.1934487298054
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 259
dh =
         -1.20764117435437
rdh_sum =
          93.2605512488005
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 260
dh =
         -1.17847817435437
rdh_sum =
           93.324522151045
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 261
dh =
         -1.14931517435437
rdh_sum =
          93.3854312693304
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 262
dh =
         -1.12015217435437
```

```
rdh_sum =
          93.4433489268122
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
   219
rB =
         0.714169433447429
rdh_mean =
         0.426681958569919
gamma_berm =
         0.590553779166689
gamma_berm =
                       0.6
slope =
         0.172495267045574
Irb =
           2.1426994687816
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
                      0.36
ans =
!!! - - Iribaren number:   1.29 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:5.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          7.11376900728523
!   Berm_width is greater than 1/4 wave length
!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on berm
fore_H0 =
                6.63775593
upper_slope =
         0.142949999999999
upper_slope =
         0.142950032352692
upper_slope =
         0.142950062677596
upper_slope =
         0.142950091159563
upper_slope =
         0.142950117961641
upper_slope =
         0.142950143228193
upper_slope =
         0.142950167087503
upper_slope =
         0.142950189653953
upper_slope =
         0.142950184651122
upper_slope =
         0.142950205606223
upper_slope =
         0.142950225511188
upper_slope =
         0.142950244443027
upper_slope =
         0.142950262471399
upper_slope =
         0.142950279659471
w2 =
        0.0298717885582036
w1 =
         0.970128211441796
R2_new =
          7.23254923815925
R2del =
       0.00692188173678421
Z2 =
          16.5009945638049
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          16.5009945638049
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-109

Station locations shifted by: -4.62 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-109

Incident significant wave height: 7.56 feet

Peak wave period: 13.81 seconds

Mean wave height: 4.73 feet

Local Depth below SWEL: 14.61 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 14.61
    Period, T = 11.74
    Waveheight, H = 4.73
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*11.74*11.74/6.28 = 705.57
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 705.57/11.74 = 60.11
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/11.74 = 0.54
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.54*0.54*14.61/32.17 = 0.13
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 21.21
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(60.11/21.21) = 1.68
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 4.73/1.68 = 2.81
```

Deepwater mean wave height: 2.81 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-109

RUNUP2 SWEL:
9.00
9.00
9.00
9.00

9.00
9.00
9.00
9.00
9.00

RUNUP2 deepwater mean wave heights:
2.67
2.67
2.67
2.81
2.81
2.81
2.95
2.95
2.95

RUNUP2 mean wave periods:
11.15
11.74
12.33
11.15
11.74
12.33
11.15
11.74
12.33

RUNUP2 runup above SWEL:
0.81
0.83
0.85
0.80
0.83
0.84
0.81
0.82
0.84

RUNUP2 Mean runup height above SWEL: 0.83 feet

RUNUP2 2-percent runup height above SWEL: 1.82 feet

RUNUP2 2-percent runup elevation: 10.82 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 7.56 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 4.49 feet

Peak wave period: 13.81 seconds

Average beach Slope: 1:39.94 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     4.49
Wave Period,                        T  =    13.81
Beach Slope,                        S  =    0.025

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 4.8,  4.1,   3.8,    3.1,    2.0]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 4.12 feet

ACES Beach 2-percent runup elevation: 13.12 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-109                                                    1
17.0
  -5.60 -384.4 0.6
  -5.05 -349.4 0.6
  -4.14 -267.4 0.6
  -4.00 -191.4 0.6
  -1.98 -114.4 0.6
  0.24  22.1   0.6
  1.68  61.6   0.6
  2.57  102.6  0.6
  3.16  120.1  0.6
  3.71  153.6  0.6
  4.67  184.6  0.6
  5.52  190.1  0.6
  6.50  204.6  0.6
  7.22  225.1  0.6
  7.22  239.1  0.6
  7.98  264.1  0.6
  8.80  275.6  0.6
  11.52 286.6  0.6
  11.52 319.6  0.6
1 12.38 333.6  0.6
 9.0   2.67  11.15
 9.0   2.67  11.74
 9.0   2.67  12.33
 9.0   2.81  11.15
 9.0   2.81  11.74
 9.0   2.81  12.33
 9.0   2.95  11.15
 9.0   2.95  11.74
 9.0   2.95  12.33
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-384.4	-5.6		
			.00	.60
2	-349.4	-5.0		
			90.11	.60
3	-267.4	-4.1		
			542.86	.60
4	-191.4	-4.0		
			38.12	.60
5	-114.4	-2.0		
			61.49	.60
6	22.1	.3		
			27.43	.60
7	61.6	1.7		
			46.07	.60
8	102.6	2.6		
			29.66	.60
9	120.1	3.2		
			60.91	.60
10	153.6	3.7		
			32.29	.60
11	184.6	4.7		
			6.47	.60
12	190.1	5.5		
			14.80	.60
13	204.6	6.5		
			28.47	.60
14	225.1	7.2		
			FLAT	.60
15	239.1	7.2		
			32.89	.60
16	264.1	8.0		
			14.02	.60
17	275.6	8.8		
			4.04	.60
18	286.6	11.5		
			FLAT	.60
19	319.6	11.5		
			16.28	.60
20	333.6	12.4		

LAST SLOPE 17.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.00	2.67	11.15	8	17	.81	6.02
9.00	2.67	11.74	7	17	.83	6.46
9.00	2.67	12.33	7	17	.85	6.64
9.00	2.81	11.15	7	17	.80	6.52
9.00	2.81	11.74	7	17	.83	6.70
9.00	2.81	12.33	7	17	.84	6.89
9.00	2.95	11.15	7	17	.81	6.76
9.00	2.95	11.74	7	17	.82	6.95
9.00	2.95	12.33	7	17	.84	7.13

Runup2 2% runup elevation for Transect: YK-109
Ground
Swel
2% Runup
Two Percent Run-up Elevation is 10.8 Feet NAVD88
Run-up Height is 1.8 Feet
Elevation (ft)
Station (ft)
15
10
5
0
-5
-400
-300
-200
-100
0
100
200
300
400

Transect Number: YK-110
43.42
43.415
43.41
43.405
43.4
43.395
43.39
43.385
Latitude
k Farm Corner
Timber Island
-70.43
-70.42
-70.41
-70.4
-70.39
-70.38
Longitude

Elevation profile
40
30
20
10
0
-10
-20
-30
-40
Elevation (ft)
-3000
-2000
-1000
0
1000
2000
3000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-110

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -188 ft
LON: -70.4025 deg E
LAT: 43.4003 deg N
Bottom ELEV: -3.5212 ft-NAVD88
TWL: 9.0222 ft-NAVD88
HS: 7.1059 ft
TP: 15.2303 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 75.288 deg CCW from East

TAW/RUNUP input

toe sta: 267.5 ft
toe elev: 3.1562 ft-NAVD88
top sta: 307.5 ft
top elev: 13.622 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE

transectYK-110: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-200
-100
0
100
200
300
400
500
600
700
800
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

```
_____________________________________________________
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-110zmeters_xmeters.grd
swan file name:       2_swan/swanfiles/YK-110.swn
swan output name:     2_swan/swanfiles/YK-110.dat

Boundary Conditions:
    TWL- 2.75 meters
    HS-  2.1659 meters
    PER- 15.2303 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.69584 feet
SWAN output at toe:
    SETUP- 0.28621 feet
    HS-    3.8292 feet
    PER-   15.3192 seconds

PART 2 COMPLETE___________________________________________


SWAN maximum additional wave setup: 0.69584 feet
SWAN output at toe:
    SETUP- 0.28621 feet
    HS-    3.8292 feet
    PER-   15.3192 seconds

PART 2 COMPLETE___________________________________________
```

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-110
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-2500
-2000
-1500
-1000
-500
0
500
1000
1500
2000

```
                    Execution started at 20200401.174327


                    ---------------------------------------
                                   SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'

    '100-year Wind and Wave conditions'

 ! -- SET commands ----------------------------------------------------

  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4

  SET LEVEL 0

  SET CARTESIAN

 ! -- MODE commands ---------------------------------------------------

  MODE STATIONARY ONED

 !-- COORDINATES commands---------------------------------------------

 COORDINATES CART

 !

 !  --  computational (CGRID) grid commands -------------------------------------

 !                                   xlenc=length of grid in meters

 !  mxc = number of mesh cells (one less than number of grid points)

 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &

 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]

  CGRID REGULAR   0      0       0      147       0.   147     0    &
         CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157

 ! -- READgrid ---- not used in 1-D mode -------------------------------------

 ! -- INPgrid commands  -----------------------------------------------------

 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]

 !

  INPGRID BOTTOM REGULAR    0       0        0      147   0      1       1

 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]

  READ    BOTTOM   -1. '../gridfiles/YK-110zmeters_xmeters.grd'    1      0       FREE

 !-------------------------------------------------------------------------

 ! -- WIND [vel] [dir]

 WIND      25.1  0

 ! -- BOUnd SHAPespec

 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER

 ! -- BOUndspec

 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1

 BOUN SIDE W CCW CONSTANT PAR   2.1659     15.2303     0  2

 !-- BOUndnest1  - optional for boundary from parent run

 !-- BOUndnest2

 !-- BOUndnest3

 !-- INITial -- usest to specify initial values

 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T -------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      147  147    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-110.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
-----------------------------------------------------------------
                  COMPUTATIONAL PART OF SWAN
-----------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             148 MYC              1
                     : MCGRD           149
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in   4.06 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.68 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in   5.41 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  33.79 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  96.63 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)


STOP
```

```
%
%
% Run:1     Table:curve             SWAN version:41.20A
%
%       Xp            Yp            Hsig          TPsmoo        RTpeak        Tm_10         Dir           Dspr          Depth         Setup
%       [m]           [m]           [m]           [sec]         [sec]         [sec]         [degr]        [degr]        [m]           [m]
%
```

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	2.17540	15.2310	15.4936	13.7744	0.000	31.5057	3.8200	0.000000
1.	0.	2.17488	15.2404	15.4936	13.4702	0.000	31.4101	3.8103	0.000337
2.	0.	2.17364	15.2490	15.4936	13.2022	360.000	31.3096	3.8007	0.000685
3.	0.	2.17143	15.2563	15.4936	12.9707	360.000	31.1778	3.7911	0.001051
4.	0.	2.16966	15.2626	15.4936	12.7729	360.000	31.0407	3.7713	0.001319
5.	0.	2.16603	15.2678	15.4936	12.6032	360.000	30.9119	3.7617	0.001729
6.	0.	2.16279	15.2722	15.4936	12.4570	360.000	30.7640	3.7420	0.002041
7.	0.	2.15898	15.2760	15.4936	12.3295	360.000	30.6138	3.7224	0.002373
8.	0.	2.15471	15.2792	15.4936	12.2176	360.000	30.4601	3.7027	0.002720
9.	0.	2.15008	15.2819	15.4936	12.1185	360.000	30.3051	3.6831	0.003080
10.	0.	2.14590	15.2842	15.4936	12.0161	360.000	30.1547	3.6635	0.003457
11.	0.	2.14163	15.2860	15.4936	11.9183	0.000	30.0053	3.6439	0.003850
12.	0.	2.13683	15.2874	15.4936	11.8275	0.000	29.8354	3.6243	0.004262
13.	0.	2.13281	15.2884	15.4936	11.7440	0.000	29.6578	3.5946	0.004570
14.	0.	2.12744	15.2890	15.4936	11.6660	0.000	29.4979	3.5750	0.005022
15.	0.	2.12184	15.2894	15.4936	11.5938	0.000	29.3440	3.5555	0.005489
16.	0.	2.11575	15.2894	15.4936	11.5271	0.000	29.1725	3.5360	0.005973
17.	0.	2.11048	15.2893	15.4936	11.4659	0.000	28.9952	3.5063	0.006350
18.	0.	2.10372	15.2889	15.4936	11.4093	359.999	28.8387	3.4869	0.006889
19.	0.	2.09664	15.2883	15.4936	11.3564	359.997	28.6685	3.4674	0.007438
20.	0.	2.09050	15.2876	15.4936	11.3075	359.996	28.4934	3.4379	0.007870
21.	0.	2.08315	15.2868	15.4936	11.2604	359.996	28.3364	3.4184	0.008450
22.	0.	2.07569	15.2858	15.4936	11.2162	359.996	28.1860	3.3990	0.009040
23.	0.	2.07011	15.2848	15.4936	11.1388	359.996	28.0286	3.3797	0.009650
24.	0.	2.06572	15.2841	15.4936	11.0566	359.996	27.8740	3.3502	0.010164
25.	0.	2.05567	15.2836	15.4936	11.0047	359.968	27.7735	3.3311	0.011136
26.	0.	2.04255	15.2833	15.4936	10.9758	359.951	27.6704	3.3123	0.012287
27.	0.	2.03294	15.2831	15.4936	10.9226	359.943	27.5340	3.2932	0.013183
28.	0.	2.02333	15.2832	15.4936	10.8794	359.877	27.3914	3.2640	0.014006
29.	0.	2.01275	15.2835	15.4936	10.8352	359.809	27.2616	3.2450	0.014955
30.	0.	2.00200	15.2838	15.4936	10.7929	359.743	27.1191	3.2259	0.015898
31.	0.	1.99213	15.2843	15.4936	10.7545	359.676	26.9678	3.1967	0.016713
32.	0.	1.98130	15.2849	15.4936	10.7161	359.614	26.8487	3.1777	0.017672
33.	0.	1.96945	15.2855	15.4936	10.6781	359.557	26.7409	3.1688	0.018757
34.	0.	1.96028	15.2862	15.4936	10.6322	359.543	26.6170	3.1496	0.019583
35.	0.	1.95257	15.2870	15.4936	10.5703	359.543	26.5065	3.1304	0.020384
36.	0.	1.94389	15.2878	15.4936	10.5056	359.547	26.4007	3.1213	0.021323
37.	0.	1.93597	15.2888	15.4936	10.4453	359.552	26.2791	3.1021	0.022128
38.	0.	1.92756	15.2899	15.4936	10.3892	359.558	26.1528	3.0830	0.022954
39.	0.	1.91827	15.2911	15.4936	10.3415	359.555	26.0470	3.0638	0.023839
40.	0.	1.90739	15.2924	15.4936	10.2976	359.544	25.9470	3.0549	0.024883
41.	0.	1.89740	15.2937	15.4936	10.2582	359.531	25.8293	3.0358	0.025781
42.	0.	1.88718	15.2950	15.4936	10.2214	359.517	25.7049	3.0167	0.026683
43.	0.	1.87681	15.2963	15.4936	10.1867	359.505	25.5786	2.9976	0.027590
44.	0.	1.86664	15.2976	15.4936	10.1525	359.496	25.4653	2.9785	0.028488
45.	0.	1.85617	15.2989	15.4936	10.1127	359.504	25.3534	2.9695	0.029465
46.	0.	1.84692	15.3001	15.4936	10.0749	359.522	25.2274	2.9503	0.030280
47.	0.	1.83759	15.3014	15.4936	10.0382	359.544	25.0982	2.9311	0.031097
48.	0.	1.82812	15.3025	15.4936	10.0033	359.570	24.9698	2.9119	0.031922
49.	0.	1.81898	15.3037	15.4936	9.9654	359.597	24.8571	2.8928	0.032756
50.	0.	1.80868	15.3048	15.4936	9.9270	359.622	24.7510	2.8837	0.033738
51.	0.	1.79933	15.3058	15.4936	9.8921	359.649	24.6320	2.8646	0.034578
52.	0.	1.78977	15.3068	15.4936	9.8591	359.677	24.5096	2.8454	0.035429
53.	0.	1.78004	15.3077	15.4936	9.8276	359.707	24.3863	2.8263	0.036288
54.	0.	1.77034	15.3086	15.4936	9.7972	359.739	24.2788	2.8072	0.037153
55.	0.	1.76007	15.3095	15.4936	9.7663	359.770	24.2460	2.7982	0.038159
56.	0.	1.74644	15.3102	15.4936	9.7315	359.798	24.1530	2.8195	0.039531
57.	0.	1.74115	15.3110	15.4936	9.7120	359.838	23.9735	2.7598	0.039759
58.	0.	1.73155	15.3117	15.4936	9.6848	359.877	23.8602	2.7406	0.040600
59.	0.	1.71998	15.3123	15.4936	9.6554	359.914	23.7871	2.7417	0.041724

60.	0.	1.70930	15.3128	15.4936	9.6285	359.955	23.6336	2.7327	0.042661
61.	0.	1.70484	15.3134	15.4936	9.6108	0.006	23.6006	2.6729	0.042908
62.	0.	1.68628	15.3138	15.4936	9.5706	0.034	23.7975	2.7551	0.045148
63.	0.	1.67425	15.3142	15.4936	9.5448	0.062	23.7787	2.7764	0.046357
64.	0.	1.67004	15.3146	15.4936	9.5328	0.105	23.5709	2.7164	0.046440
65.	0.	1.66428	15.3150	15.4936	9.5187	0.152	23.3832	2.6667	0.046719
66.	0.	1.65415	15.3153	15.4936	9.4986	0.192	23.2855	2.6576	0.047620
67.	0.	1.64319	15.3156	15.4936	9.4779	0.230	23.2189	2.6586	0.048649
68.	0.	1.63350	15.3158	15.4936	9.4594	0.271	23.1307	2.6495	0.049503
69.	0.	1.62491	15.3161	15.4936	9.4428	0.315	23.0199	2.6302	0.050203
70.	0.	1.61617	15.3163	15.4936	9.4269	0.359	22.9018	2.6109	0.050912
71.	0.	1.60738	15.3165	15.4936	9.4119	0.403	22.7973	2.5916	0.051634
72.	0.	1.59754	15.3167	15.4936	9.3960	0.444	22.7147	2.5825	0.052505
73.	0.	1.58792	15.3168	15.4936	9.3810	0.485	22.6554	2.5734	0.053365
74.	0.	1.57750	15.3169	15.4936	9.3652	0.524	22.6215	2.5743	0.054347
75.	0.	1.56755	15.3170	15.4936	9.3505	0.561	22.6173	2.5753	0.055293
76.	0.	1.55717	15.3171	15.4936	9.3351	0.597	22.6665	2.5863	0.056333
77.	0.	1.54629	15.3172	15.4936	9.3189	0.629	22.7140	2.6074	0.057437
78.	0.	1.53760	15.3173	15.4936	9.3054	0.664	22.6542	2.6082	0.058207
79.	0.	1.53271	15.3173	15.4936	9.2975	0.703	22.4782	2.5684	0.058441
80.	0.	1.52820	15.3174	15.4936	9.2906	0.745	22.2477	2.5186	0.058581
81.	0.	1.52309	15.3175	15.4936	9.2836	0.788	22.0337	2.4688	0.058788
82.	0.	1.51543	15.3176	15.4936	9.2737	0.830	21.8888	2.4394	0.059353
83.	0.	1.50569	15.3176	15.4936	9.2611	0.870	21.8271	2.4302	0.060239
84.	0.	1.49439	15.3176	15.4936	9.2460	0.908	21.8577	2.4414	0.061386
85.	0.	1.48279	15.3176	15.4936	9.2301	0.945	21.9209	2.4626	0.062594
86.	0.	1.47244	15.3176	15.4936	9.2168	0.977	21.8837	2.4736	0.063578
87.	0.	1.46748	15.3177	15.4936	9.2132	1.018	21.8099	2.4339	0.063872
88.	0.	1.45733	15.3176	15.4936	9.2007	1.054	21.7974	2.4449	0.064851
89.	0.	1.44842	15.3176	15.4936	9.1909	1.087	21.7505	2.4457	0.065652
90.	0.	1.44180	15.3176	15.4936	9.1854	1.123	21.7068	2.4262	0.066177
91.	0.	1.43252	15.3176	15.4936	9.1747	1.159	21.7467	2.4371	0.067085
92.	0.	1.42285	15.3176	15.4936	9.1625	1.194	21.8158	2.4581	0.068061
93.	0.	1.41481	15.3176	15.4936	9.1531	1.229	21.8942	2.4689	0.068850
94.	0.	1.40619	15.3176	15.4936	9.1418	1.262	21.9561	2.4897	0.069704
95.	0.	1.39952	15.3175	15.4936	9.1348	1.289	21.9197	2.4903	0.070269
96.	0.	1.39559	15.3175	15.4936	9.1339	1.317	21.8165	2.4605	0.070469
97.	0.	1.39034	15.3175	15.4936	9.1312	1.344	21.6926	2.4408	0.070808
98.	0.	1.38592	15.3175	15.4936	9.1302	1.373	21.5605	2.4110	0.071042
99.	0.	1.38030	15.3175	15.4936	9.1271	1.404	21.4429	2.3914	0.071423
100.	0.	1.37463	15.3175	15.4936	9.1242	1.436	21.3457	2.3718	0.071823
101.	0.	1.36783	15.3175	15.4936	9.1196	1.468	21.2566	2.3624	0.072359
102.	0.	1.36206	15.3175	15.4936	9.1171	1.502	21.1690	2.3428	0.072773
103.	0.	1.35545	15.3175	15.4936	9.1131	1.539	21.1517	2.3333	0.073329
104.	0.	1.34633	15.3175	15.4936	9.1030	1.577	21.2033	2.3542	0.074233
105.	0.	1.33869	15.3175	15.4936	9.0956	1.615	21.2561	2.3650	0.074962
106.	0.	1.33156	15.3175	15.4936	9.0886	1.652	21.3312	2.3756	0.075649
107.	0.	1.32377	15.3175	15.4936	9.0792	1.687	21.3721	2.3964	0.076399
108.	0.	1.31860	15.3175	15.4936	9.0767	1.710	21.2826	2.3868	0.076771
109.	0.	1.31688	15.3175	15.4936	9.0822	1.733	21.0985	2.3367	0.076686
110.	0.	1.31378	15.3175	15.4936	9.0853	1.760	20.9309	2.2968	0.076759
111.	0.	1.30859	15.3175	15.4936	9.0848	1.793	20.8496	2.2771	0.077121
112.	0.	1.30030	15.3175	15.4936	9.0774	1.821	20.7528	2.2878	0.077846
113.	0.	1.29780	15.3176	15.4936	9.0833	1.851	20.5820	2.2378	0.077836
114.	0.	1.29306	15.3176	15.4936	9.0849	1.887	20.4828	2.2081	0.078125
115.	0.	1.28439	15.3176	15.4936	9.0778	1.927	20.4643	2.2189	0.078936
116.	0.	1.27712	15.3176	15.4936	9.0738	1.967	20.4718	2.2196	0.079593
117.	0.	1.26920	15.3177	15.4936	9.0674	2.007	20.4894	2.2303	0.080337
118.	0.	1.26262	15.3177	15.4936	9.0638	2.046	20.5097	2.2309	0.080926
119.	0.	1.25539	15.3177	15.4936	9.0577	2.085	20.5320	2.2416	0.081601
120.	0.	1.24916	15.3177	15.4936	9.0539	2.115	20.4856	2.2421	0.082123
121.	0.	1.24561	15.3178	15.4936	9.0574	2.140	20.3663	2.2123	0.082292
122.	0.	1.24184	15.3179	15.4936	9.0608	2.170	20.2545	2.1825	0.082485
123.	0.	1.23600	15.3179	15.4936	9.0594	2.201	20.1778	2.1729	0.082941
124.	0.	1.23020	15.3180	15.4936	9.0582	2.235	20.1127	2.1634	0.083400
125.	0.	1.22442	15.3180	15.4936	9.0571	2.269	20.0517	2.1539	0.083858
126.	0.	1.21873	15.3181	15.4936	9.0561	2.305	20.0084	2.1443	0.084316

127.	0.	1.21230	15.3181	15.4936	9.0527	2.345	20.0088	2.1449	0.084887
128.	0.	1.20521	15.3182	15.4936	9.0468	2.386	20.0247	2.1555	0.085547
129.	0.	1.19942	15.3182	15.4936	9.0435	2.426	20.0452	2.1561	0.086061
130.	0.	1.19280	15.3183	15.4936	9.0375	2.462	20.0310	2.1667	0.086659
131.	0.	1.18893	15.3183	15.4936	9.0393	2.488	19.9405	2.1469	0.086902
132.	0.	1.18599	15.3184	15.4936	9.0439	2.522	19.8859	2.1170	0.087049
133.	0.	1.17859	15.3185	15.4936	9.0350	2.567	19.9265	2.1378	0.087769
134.	0.	1.17248	15.3185	15.4936	9.0291	2.608	19.9564	2.1483	0.088335
135.	0.	1.16740	15.3186	15.4936	9.0261	2.643	19.9456	2.1488	0.088766
136.	0.	1.16279	15.3187	15.4936	9.0254	2.653	19.7792	2.1391	0.089068
137.	0.	1.16487	15.3188	15.4936	9.0449	2.647	19.4162	2.0485	0.088488
138.	0.	1.16697	15.3190	15.4936	9.0638	2.651	18.9716	1.9478	0.087814
139.	0.	1.16714	15.3192	15.4936	9.0825	2.650	18.4068	1.8472	0.087238
140.	0.	1.17052	15.3195	15.4936	9.1129	2.666	17.7376	1.6961	0.086055
141.	0.	1.16832	15.3198	15.4936	9.1384	2.717	17.2498	1.5656	0.085571
142.	0.	1.14864	15.3202	15.4936	9.1379	2.754	16.8556	1.5477	0.087684
143.	0.	1.13904	15.3207	15.4936	9.1586	2.779	16.2487	1.4381	0.088138
144.	0.	1.13126	15.3214	15.4936	9.1855	2.789	15.3038	1.2780	0.088023
145.	0.	1.12446	15.3226	15.4936	9.2566	2.566	13.8513	1.0370	0.087006
146.	0.	1.00077	15.3188	15.4936	10.2241	1.620	12.7048	0.6698	0.109758
147.	0.	0.61656	15.4673	15.4936	12.3589	359.370	14.9678	0.3921	0.212092

PART 3: WHAFIS

```
WHAFIS input:  YK-110.dat
WHAFIS output: YK-110.out
```

PART 3 COMPLETE

WHAFIS Elevation, and Total stillWater Level, transect: YK-110
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
200
400
600
800
1000
1200
1400
1600
1800
2000
Transect Profile
SWAN 1-D points
TSWL

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:20 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-110.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-110.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-3.521	1.000	1.000	9.022	11.370	15.230	56.140	0.012	0.000
OF	1.000	-3.509	0.000	9.022	0.000	0.000	0.000	0.000	0.012	0.000
OF	2.000	-3.497	0.000	9.022	0.000	0.000	0.000	0.000	0.012	0.000
OF	3.300	-3.481	0.000	9.023	0.000	0.000	0.000	0.000	0.012	0.000
OF	6.600	-3.441	0.000	9.024	0.000	0.000	0.000	0.000	0.012	0.000
OF	9.800	-3.400	0.000	9.026	0.000	0.000	0.000	0.000	0.012	0.000
OF	13.100	-3.360	0.000	9.027	0.000	0.000	0.000	0.000	0.012	0.000
OF	16.400	-3.318	0.000	9.028	0.000	0.000	0.000	0.000	0.016	0.000
OF	19.700	-3.253	0.000	9.029	0.000	0.000	0.000	0.000	0.020	0.000
OF	23.000	-3.184	0.000	9.030	0.000	0.000	0.000	0.000	0.021	0.000
OF	26.200	-3.116	0.000	9.031	0.000	0.000	0.000	0.000	0.021	0.000
OF	29.500	-3.047	0.000	9.032	0.000	0.000	0.000	0.000	0.021	0.000
OF	32.800	-2.978	0.000	9.034	0.000	0.000	0.000	0.000	0.021	0.000
OF	36.100	-2.910	0.000	9.035	0.000	0.000	0.000	0.000	0.021	0.000
OF	39.400	-2.841	0.000	9.036	0.000	0.000	0.000	0.000	0.021	0.000
OF	42.700	-2.770	0.000	9.037	0.000	0.000	0.000	0.000	0.022	0.000
OF	45.900	-2.695	0.000	9.039	0.000	0.000	0.000	0.000	0.023	0.000
OF	49.200	-2.621	0.000	9.040	0.000	0.000	0.000	0.000	0.023	0.000
OF	52.500	-2.546	0.000	9.042	0.000	0.000	0.000	0.000	0.023	0.000
OF	55.800	-2.471	0.000	9.043	0.000	0.000	0.000	0.000	0.023	0.000
OF	59.100	-2.396	0.000	9.045	0.000	0.000	0.000	0.000	0.023	0.000
OF	62.300	-2.322	0.000	9.047	0.000	0.000	0.000	0.000	0.023	0.000
OF	65.600	-2.247	0.000	9.048	0.000	0.000	0.000	0.000	0.023	0.000
OF	68.900	-2.172	0.000	9.050	0.000	0.000	0.000	0.000	0.023	0.000
OF	72.200	-2.097	0.000	9.052	0.000	0.000	0.000	0.000	0.023	0.000
OF	75.500	-2.022	0.000	9.054	0.000	0.000	0.000	0.000	0.023	0.000
OF	78.700	-1.947	0.000	9.056	0.000	0.000	0.000	0.000	0.023	0.000
OF	82.000	-1.872	0.000	9.059	0.000	0.000	0.000	0.000	0.023	0.000
OF	85.300	-1.798	0.000	9.062	0.000	0.000	0.000	0.000	0.023	0.000
OF	88.600	-1.723	0.000	9.066	0.000	0.000	0.000	0.000	0.023	0.000
OF	91.900	-1.648	0.000	9.068	0.000	0.000	0.000	0.000	0.023	0.000
OF	95.100	-1.573	0.000	9.071	0.000	0.000	0.000	0.000	0.023	0.000
OF	98.400	-1.498	0.000	9.074	0.000	0.000	0.000	0.000	0.023	0.000
OF	101.700	-1.424	0.000	9.077	0.000	0.000	0.000	0.000	0.021	0.000
OF	105.000	-1.359	0.000	9.080	0.000	0.000	0.000	0.000	0.018	0.000
OF	108.300	-1.304	0.000	9.084	0.000	0.000	0.000	0.000	0.017	0.000
OF	111.500	-1.249	0.000	9.087	0.000	0.000	0.000	0.000	0.017	0.000
OF	114.800	-1.194	0.000	9.089	0.000	0.000	0.000	0.000	0.017	0.000
OF	118.100	-1.140	0.000	9.092	0.000	0.000	0.000	0.000	0.017	0.000
OF	121.400	-1.083	0.000	9.095	0.000	0.000	0.000	0.000	0.018	0.000
OF	124.700	-1.024	0.000	9.097	0.000	0.000	0.000	0.000	0.018	0.000
OF	128.000	-0.965	0.000	9.100	0.000	0.000	0.000	0.000	0.018	0.000
OF	131.200	-0.906	0.000	9.104	0.000	0.000	0.000	0.000	0.018	0.000
OF	134.500	-0.847	0.000	9.107	0.000	0.000	0.000	0.000	0.018	0.000
OF	137.800	-0.789	0.000	9.110	0.000	0.000	0.000	0.000	0.018	0.000
OF	141.100	-0.730	0.000	9.113	0.000	0.000	0.000	0.000	0.018	0.000
OF	144.400	-0.671	0.000	9.116	0.000	0.000	0.000	0.000	0.018	0.000
OF	147.600	-0.612	0.000	9.119	0.000	0.000	0.000	0.000	0.018	0.000
OF	150.900	-0.553	0.000	9.122	0.000	0.000	0.000	0.000	0.018	0.000
OF	154.200	-0.494	0.000	9.124	0.000	0.000	0.000	0.000	0.018	0.000
OF	157.500	-0.435	0.000	9.127	0.000	0.000	0.000	0.000	0.018	0.000
OF	160.800	-0.376	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
OF	164.000	-0.317	0.000	9.133	0.000	0.000	0.000	0.000	0.018	0.000
OF	167.300	-0.259	0.000	9.136	0.000	0.000	0.000	0.000	0.018	0.000
OF	170.600	-0.200	0.000	9.139	0.000	0.000	0.000	0.000	0.018	0.000
OF	173.900	-0.141	0.000	9.141	0.000	0.000	0.000	0.000	0.018	0.000
OF	177.200	-0.082	0.000	9.144	0.000	0.000	0.000	0.000	0.018	0.000
OF	180.400	-0.023	0.000	9.147	0.000	0.000	0.000	0.000	-0.002	0.000
OF	183.700	-0.092	0.000	9.152	0.000	0.000	0.000	0.000	0.016	0.000
IF	187.000	0.085	0.000	9.153	0.000	0.000	0.000	0.000	0.037	0.000
IF	190.300	0.153	0.000	9.155	0.000	0.000	0.000	0.000	0.012	0.000
IF	193.600	0.164	0.000	9.159	0.000	0.000	0.000	0.000	0.005	0.000
IF	196.800	0.187	0.000	9.162	0.000	0.000	0.000	0.000	0.033	0.000
IF	200.100	0.379	0.000	9.163	0.000	0.000	0.000	0.000	-0.010	0.000
IF	203.400	0.124	0.000	9.170	0.000	0.000	0.000	0.000	-0.047	0.000
IF	206.700	0.071	0.000	9.174	0.000	0.000	0.000	0.000	0.021	0.000
IF	210.000	0.259	0.000	9.175	0.000	0.000	0.000	0.000	0.055	0.000
IF	213.300	0.434	0.000	9.175	0.000	0.000	0.000	0.000	0.030	0.000
IF	216.500	0.452	0.000	9.179	0.000	0.000	0.000	0.000	0.006	0.000
IF	219.800	0.472	0.000	9.182	0.000	0.000	0.000	0.000	0.007	0.000
IF	223.100	0.496	0.000	9.185	0.000	0.000	0.000	0.000	0.012	0.000
IF	226.400	0.553	0.000	9.187	0.000	0.000	0.000	0.000	0.018	0.000
IF	229.700	0.614	0.000	9.189	0.000	0.000	0.000	0.000	0.019	0.000
IF	232.900	0.673	0.000	9.192	0.000	0.000	0.000	0.000	0.018	0.000
IF	236.200	0.730	0.000	9.194	0.000	0.000	0.000	0.000	0.014	0.000
IF	239.500	0.762	0.000	9.197	0.000	0.000	0.000	0.000	0.005	0.000
IF	242.800	0.763	0.000	9.200	0.000	0.000	0.000	0.000	0.000	0.000
IF	246.100	0.764	0.000	9.204	0.000	0.000	0.000	0.000	-0.007	0.000
IF	249.300	0.716	0.000	9.207	0.000	0.000	0.000	0.000	-0.018	0.000
IF	252.600	0.649	0.000	9.211	0.000	0.000	0.000	0.000	-0.011	0.000
IF	255.900	0.642	0.000	9.213	0.000	0.000	0.000	0.000	0.021	0.000
IF	259.200	0.791	0.000	9.214	0.000	0.000	0.000	0.000	0.046	0.000
IF	262.500	0.946	0.000	9.214	0.000	0.000	0.000	0.000	0.051	0.000
IF	265.700	1.119	0.000	9.215	0.000	0.000	0.000	0.000	0.043	0.000
IF	269.000	1.229	0.000	9.217	0.000	0.000	0.000	0.000	0.019	0.000
IF	272.300	1.244	0.000	9.220	0.000	0.000	0.000	0.000	-0.001	0.000
IF	275.600	1.226	0.000	9.224	0.000	0.000	0.000	0.000	-0.013	0.000
IF	278.900	1.155	0.000	9.228	0.000	0.000	0.000	0.000	-0.015	0.000
IF	282.200	1.128	0.000	9.231	0.000	0.000	0.000	0.000	0.014	0.000
IF	285.400	1.244	0.000	9.232	0.000	0.000	0.000	0.000	0.011	0.000
IF	288.700	1.201	0.000	9.235	0.000	0.000	0.000	0.000	-0.003	0.000
IF	292.000	1.226	0.000	9.238	0.000	0.000	0.000	0.000	0.011	0.000
IF	295.300	1.272	0.000	9.239	0.000	0.000	0.000	0.000	0.004	0.000

IF	298.600	1.253	0.000	9.242	0.000	0.000	0.000	0.000	-0.012	0.000
IF	301.800	1.194	0.000	9.245	0.000	0.000	0.000	0.000	-0.017	0.000
IF	305.100	1.143	0.000	9.248	0.000	0.000	0.000	0.000	-0.015	0.000
IF	308.400	1.092	0.000	9.251	0.000	0.000	0.000	0.000	-0.008	0.000
IF	311.700	1.091	0.000	9.253	0.000	0.000	0.000	0.000	0.013	0.000
IF	315.000	1.177	0.000	9.253	0.000	0.000	0.000	0.000	0.026	0.000
IF	318.200	1.263	0.000	9.255	0.000	0.000	0.000	0.000	0.026	0.000
IF	321.500	1.349	0.000	9.255	0.000	0.000	0.000	0.000	0.023	0.000
IF	324.800	1.417	0.000	9.257	0.000	0.000	0.000	0.000	0.019	0.000
IF	328.100	1.471	0.000	9.258	0.000	0.000	0.000	0.000	0.016	0.000
IF	331.400	1.525	0.000	9.260	0.000	0.000	0.000	0.000	0.017	0.000
IF	334.600	1.579	0.000	9.261	0.000	0.000	0.000	0.000	0.012	0.000
IF	337.900	1.604	0.000	9.263	0.000	0.000	0.000	0.000	-0.003	0.000
IF	341.200	1.557	0.000	9.266	0.000	0.000	0.000	0.000	-0.014	0.000
IF	344.500	1.510	0.000	9.268	0.000	0.000	0.000	0.000	-0.014	0.000
IF	347.800	1.463	0.000	9.270	0.000	0.000	0.000	0.000	-0.014	0.000
IF	351.000	1.416	0.000	9.273	0.000	0.000	0.000	0.000	-0.002	0.000
IF	354.300	1.449	0.000	9.274	0.000	0.000	0.000	0.000	0.028	0.000
IF	357.600	1.600	0.000	9.274	0.000	0.000	0.000	0.000	0.046	0.000
IF	360.900	1.750	0.000	9.274	0.000	0.000	0.000	0.000	0.030	0.000
IF	364.200	1.794	0.000	9.275	0.000	0.000	0.000	0.000	0.005	0.000
IF	367.500	1.781	0.000	9.278	0.000	0.000	0.000	0.000	0.022	0.000
IF	370.700	1.934	0.000	9.278	0.000	0.000	0.000	0.000	0.039	0.000
IF	374.000	2.035	0.000	9.278	0.000	0.000	0.000	0.000	0.013	0.000
IF	377.300	2.017	0.000	9.281	0.000	0.000	0.000	0.000	-0.005	0.000
IF	380.600	1.999	0.000	9.283	0.000	0.000	0.000	0.000	-0.005	0.000
IF	383.900	1.981	0.000	9.286	0.000	0.000	0.000	0.000	-0.006	0.000
IF	387.100	1.957	0.000	9.288	0.000	0.000	0.000	0.000	-0.008	0.000
IF	390.400	1.931	0.000	9.290	0.000	0.000	0.000	0.000	-0.004	0.000
IF	393.700	1.932	0.000	9.292	0.000	0.000	0.000	0.000	0.017	0.000
IF	397.000	2.040	0.000	9.292	0.000	0.000	0.000	0.000	0.032	0.000
IF	400.300	2.142	0.000	9.293	0.000	0.000	0.000	0.000	0.022	0.000
IF	403.500	2.181	0.000	9.294	0.000	0.000	0.000	0.000	0.011	0.000
IF	406.800	2.214	0.000	9.296	0.000	0.000	0.000	0.000	0.008	0.000
IF	410.100	2.237	0.000	9.297	0.000	0.000	0.000	0.000	0.007	0.000
IF	413.400	2.259	0.000	9.299	0.000	0.000	0.000	0.000	0.004	0.000
IF	416.700	2.262	0.000	9.301	0.000	0.000	0.000	0.000	-0.002	0.000
IF	419.900	2.245	0.000	9.303	0.000	0.000	0.000	0.000	-0.005	0.000
IF	423.200	2.229	0.000	9.305	0.000	0.000	0.000	0.000	-0.005	0.000
IF	426.500	2.212	0.000	9.307	0.000	0.000	0.000	0.000	0.005	0.000
IF	429.800	2.259	0.000	9.307	0.000	0.000	0.000	0.000	0.022	0.000
IF	433.100	2.358	0.000	9.308	0.000	0.000	0.000	0.000	0.007	0.000
IF	436.400	2.304	0.000	9.310	0.000	0.000	0.000	0.000	-0.015	0.000
IF	439.600	2.260	0.000	9.312	0.000	0.000	0.000	0.000	-0.009	0.000
IF	442.900	2.247	0.000	9.313	0.000	0.000	0.000	0.000	0.006	0.000
IF	446.200	2.301	0.000	9.314	0.000	0.000	0.000	0.000	0.054	0.000
IF	449.500	2.603	0.000	9.312	0.000	0.000	0.000	0.000	0.091	0.000
IF	452.800	2.904	0.000	9.310	0.000	0.000	0.000	0.000	0.098	0.000
IF	456.000	3.240	0.000	9.308	0.000	0.000	0.000	0.000	0.131	0.000
IF	459.300	3.753	0.000	9.305	0.000	0.000	0.000	0.000	0.143	0.000
IF	462.600	4.181	0.000	9.303	0.000	0.000	0.000	0.000	0.071	0.000
IF	465.900	4.224	0.000	9.310	0.000	0.000	0.000	0.000	0.062	0.000
IF	469.200	4.588	0.000	9.311	0.000	0.000	0.000	0.000	0.138	0.000
IF	472.400	5.119	0.000	9.311	0.000	0.000	0.000	0.000	0.205	0.000
IF	475.700	5.921	0.000	9.308	0.000	0.000	0.000	0.000	0.312	0.000
IF	479.000	7.178	0.000	9.382	0.000	0.000	0.000	0.000	0.381	0.000
IF	482.300	8.436	0.000	9.718	0.000	0.000	0.000	0.000	0.383	0.000
IF	484.000	9.094	0.000	9.718	0.000	0.000	0.000	0.000	0.141	0.000
IF	490.000	9.521	0.000	9.718	0.000	0.000	0.000	0.000	0.099	0.000
IF	490.300	9.718	0.000	9.718	0.000	0.000	0.000	0.000	0.657	0.000
AS	622.200	9.157	0.000	9.157	0.000	0.000	0.000	0.000	-0.119	0.000
IF	623.000	9.062	0.000	9.157	0.000	0.000	0.000	0.000	-0.032	0.000
IF	634.500	8.766	0.000	9.157	0.000	0.000	0.000	0.000	0.002	0.000
IF	642.500	9.094	0.000	9.157	0.000	0.000	0.000	0.000	0.004	0.000
IF	651.500	8.832	0.000	9.157	0.000	0.000	0.000	0.000	-0.015	0.000
IF	662.500	8.799	0.000	9.157	0.000	0.000	0.000	0.000	0.016	0.000
IF	671.200	9.157	0.000	9.157	0.000	0.000	0.000	0.000	0.041	0.000
AS	843.300	9.157	0.000	9.157	0.000	0.000	0.000	0.000	-0.038	0.000
IF	844.000	9.131	0.000	9.157	0.000	0.000	0.000	0.000	0.000	0.000
IF	846.000	9.157	0.000	9.157	0.000	0.000	0.000	0.000	0.013	0.000
AS	852.400	9.157	0.000	9.157	0.000	0.000	0.000	0.000	-0.085	0.000
IF	858.500	8.639	0.000	9.157	0.000	0.000	0.000	0.000	-0.091	0.000
IF	863.500	8.143	0.000	9.157	0.000	0.000	0.000	0.000	-0.019	0.000
IF	875.500	8.310	0.000	9.157	0.000	0.000	0.000	0.000	0.054	0.000
IF	882.400	9.157	0.000	9.157	0.000	0.000	0.000	0.000	0.123	0.000
AS	923.600	9.122	0.000	9.122	0.000	0.000	0.000	0.000	-0.036	0.000
IF	928.000	8.963	0.000	9.122	0.000	0.000	0.000	0.000	-0.045	0.000
IF	936.500	8.537	0.000	9.122	0.000	0.000	0.000	0.000	-0.066	0.000
IF	942.000	8.045	0.000	9.122	0.000	0.000	0.000	0.000	-0.060	0.000
IF	947.500	7.881	0.000	9.122	0.000	0.000	0.000	0.000	-0.009	0.000
IF	956.500	7.913	0.000	9.122	0.000	0.000	0.000	0.000	-0.053	0.000
IF	966.000	6.896	0.000	9.122	0.000	0.000	0.000	0.000	-0.121	0.000
IF	976.000	5.551	0.000	9.122	0.000	0.000	0.000	0.000	-0.018	0.000
IF	986.000	6.535	0.000	9.122	0.000	0.000	0.000	0.000	0.081	0.000
IF	993.000	6.929	0.000	9.122	0.000	0.000	0.000	0.000	-0.045	0.000
IF	1008.500	5.518	0.000	9.122	0.000	0.000	0.000	0.000	-0.020	0.000
IF	1023.500	6.306	0.000	9.122	0.000	0.000	0.000	0.000	-0.025	0.000
IF	1032.500	4.928	0.000	9.122	0.000	0.000	0.000	0.000	-0.362	0.000
OF	1041.000	-0.034	0.000	9.122	0.000	0.000	0.000	0.000	-0.535	0.000
OF	1042.000	-0.153	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1043.000	-0.272	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1044.000	-0.391	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1045.000	-0.510	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1046.000	-0.629	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1047.000	-0.748	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1048.000	-0.867	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1049.000	-0.986	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1050.000	-1.105	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1051.000	-1.224	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1052.000	-1.343	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1053.000	-1.462	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1054.000	-1.581	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000

OF	1055.000	-1.700	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1056.000	-1.819	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1057.000	-1.938	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1058.000	-2.057	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1059.000	-2.176	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1060.000	-2.295	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1061.000	-2.414	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1062.000	-2.533	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1063.000	-2.652	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1064.000	-2.771	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1065.000	-2.890	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1066.000	-3.009	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1067.000	-3.128	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1068.000	-3.247	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1069.000	-3.366	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1070.000	-3.485	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1071.000	-3.604	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1072.000	-3.723	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1073.000	-3.842	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1074.000	-3.961	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1075.000	-4.081	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1076.000	-4.199	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1077.000	-4.318	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1078.000	-4.437	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1079.000	-4.556	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1080.000	-4.675	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1081.000	-4.794	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1082.000	-4.914	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1083.000	-5.032	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1084.000	-5.152	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1085.000	-5.270	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1086.000	-5.390	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1087.000	-5.509	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1088.000	-5.628	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1089.000	-5.747	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
OF	1090.000	-5.865	0.000	9.121	0.000	0.000	0.000	0.000	-0.092	0.000
OF	1091.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	-0.032	0.000
OF	1092.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1093.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1094.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1095.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1096.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1097.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1098.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1099.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1100.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1101.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1102.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1103.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1104.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1105.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1106.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1107.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1108.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1109.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1110.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1111.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1112.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1113.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1114.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1115.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1116.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1117.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1118.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1119.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1120.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1121.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1122.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1123.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1124.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1125.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1126.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1127.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1128.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1129.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1130.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1131.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1132.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1133.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1134.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1135.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1136.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1137.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1138.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1139.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1140.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1141.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1142.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1143.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1144.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1145.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1146.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1147.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1148.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1149.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1150.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1151.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1152.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1153.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1154.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1155.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1156.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000

OF	1157.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1158.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1159.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1160.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1161.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1162.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1163.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1164.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1165.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1166.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1167.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1168.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1169.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1170.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1171.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1172.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1173.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1174.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1175.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1176.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1177.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1178.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1179.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1180.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1181.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1182.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1183.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1184.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1185.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1186.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1187.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1188.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1189.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1190.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
OF	1191.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.054	0.000
OF	1192.000	-5.812	0.000	9.121	0.000	0.000	0.000	0.000	0.115	0.000
OF	1193.000	-5.691	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
OF	1194.000	-5.570	0.000	9.121	0.000	0.000	0.000	0.000	0.122	0.000
OF	1195.000	-5.448	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
OF	1196.000	-5.327	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
OF	1197.000	-5.206	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
OF	1198.000	-5.084	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1199.000	-4.963	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
OF	1200.000	-4.841	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1201.000	-4.720	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1202.000	-4.599	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1203.000	-4.478	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1204.000	-4.356	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
OF	1205.000	-4.235	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1206.000	-4.114	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1207.000	-3.992	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1208.000	-3.871	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1209.000	-3.750	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
OF	1210.000	-3.628	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1211.000	-3.507	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1212.000	-3.386	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1213.000	-3.264	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1214.000	-3.143	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
OF	1215.000	-3.022	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1216.000	-2.901	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1217.000	-2.779	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1218.000	-2.658	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1219.000	-2.536	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1220.000	-2.415	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1221.000	-2.294	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1222.000	-2.173	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1223.000	-2.051	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1224.000	-1.930	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1225.000	-1.809	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1226.000	-1.688	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1227.000	-1.567	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1228.000	-1.446	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1229.000	-1.324	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1230.000	-1.203	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1231.000	-1.082	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1232.000	-0.960	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1233.000	-0.839	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1234.000	-0.718	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1235.000	-0.597	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1236.000	-0.475	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1237.000	-0.354	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1238.000	-0.233	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
OF	1239.000	-0.112	0.000	9.120	0.000	0.000	0.000	0.000	2.646	0.000
IF	1240.000	5.059	0.000	9.120	0.000	0.000	0.000	0.000	0.628	0.000
IF	1246.500	4.600	0.000	9.120	0.000	0.000	0.000	0.000	-0.004	0.000
IF	1258.000	4.993	0.000	9.120	0.000	0.000	0.000	0.000	0.000	0.000
IF	1267.500	4.600	0.000	9.120	0.000	0.000	0.000	0.000	-0.002	0.000
IF	1277.500	4.961	0.000	9.120	0.000	0.000	0.000	0.000	0.022	0.000
IF	1286.500	5.026	0.000	9.120	0.000	0.000	0.000	0.000	0.010	0.000
IF	1293.500	5.125	0.000	9.119	0.000	0.000	0.000	0.000	0.042	0.000
IF	1302.000	5.682	0.000	9.119	0.000	0.000	0.000	0.000	0.058	0.000
IF	1315.500	6.404	0.000	9.119	0.000	0.000	0.000	0.000	0.079	0.000
IF	1329.500	7.848	0.000	9.119	0.000	0.000	0.000	0.000	0.098	0.000
IF	1339.500	8.766	0.000	9.119	0.000	0.000	0.000	0.000	0.091	0.000
IF	1343.500	9.119	0.000	9.119	0.000	0.000	0.000	0.000	0.088	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-3.521	1.000	1.000	9.022	11.370	15.230	56.140	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES

OF	1.000	-3.509	0.000	9.022	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	2.000	-3.497	0.000	9.022	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	3.300	-3.481	0.000	9.023	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	6.600	-3.441	0.000	9.024	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	9.800	-3.400	0.000	9.026	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	13.100	-3.360	0.000	9.027	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	16.400	-3.318	0.000	9.028	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	19.700	-3.253	0.000	9.029	0.000	0.000	0.000	0.000	0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	23.000	-3.184	0.000	9.030	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	26.200	-3.116	0.000	9.031	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	29.500	-3.047	0.000	9.032	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	32.800	-2.978	0.000	9.034	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	36.100	-2.910	0.000	9.035	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.400	-2.841	0.000	9.036	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	42.700	-2.770	0.000	9.037	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	45.900	-2.695	0.000	9.039	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.200	-2.621	0.000	9.040	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	52.500	-2.546	0.000	9.042	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	55.800	-2.471	0.000	9.043	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	59.100	-2.396	0.000	9.045	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.300	-2.322	0.000	9.047	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	65.600	-2.247	0.000	9.048	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	68.900	-2.172	0.000	9.050	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	72.200	-2.097	0.000	9.052	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.500	-2.022	0.000	9.054	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	78.700	-1.947	0.000	9.056	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	82.000	-1.872	0.000	9.059	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	85.300	-1.798	0.000	9.062	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	88.600	-1.723	0.000	9.066	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.900	-1.648	0.000	9.068	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.100	-1.573	0.000	9.071	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	98.400	-1.498	0.000	9.074	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	101.700	-1.424	0.000	9.077	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-1.359	0.000	9.080	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	108.300	-1.304	0.000	9.084	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	111.500	-1.249	0.000	9.087	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	114.800	-1.194	0.000	9.089	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	118.100	-1.140	0.000	9.092	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.400	-1.083	0.000	9.095	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	124.700	-1.024	0.000	9.097	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	128.000	-0.965	0.000	9.100	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	131.200	-0.906	0.000	9.104	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	134.500	-0.847	0.000	9.107	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	137.800	-0.789	0.000	9.110	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	141.100	-0.730	0.000	9.113	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	144.400	-0.671	0.000	9.116	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.600	-0.612	0.000	9.119	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	150.900	-0.553	0.000	9.122	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	154.200	-0.494	0.000	9.124	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	157.500	-0.435	0.000	9.127	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.800	-0.376	0.000	9.130	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000	-0.317	0.000	9.133	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	167.300	-0.259	0.000	9.136	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	170.600	-0.200	0.000	9.139	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.900	-0.141	0.000	9.141	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	177.200	-0.082	0.000	9.144	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	180.400	-0.023	0.000	9.147	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.700	-0.092	0.000	9.152	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	187.000	0.085	0.000	9.153	0.000	0.000	0.000	0.000	0.037	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	190.300	0.153	0.000	9.155	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	193.600	0.164	0.000	9.159	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	196.800	0.187	0.000	9.162	0.000	0.000	0.000	0.000	0.033	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	200.100	0.379	0.000	9.163	0.000	0.000	0.000	0.000	-0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	203.400	0.124	0.000	9.170	0.000	0.000	0.000	0.000	-0.047	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	206.700	0.071	0.000	9.174	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	210.000	0.259	0.000	9.175	0.000	0.000	0.000	0.000	0.055	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	213.300	0.434	0.000	9.175	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	216.500	0.452	0.000	9.179	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	219.800	0.472	0.000	9.182	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	223.100	0.496	0.000	9.185	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	226.400	0.553	0.000	9.187	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	229.700	0.614	0.000	9.189	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	232.900	0.673	0.000	9.192	0.000	0.000	0.000	0.000	0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	236.200	0.730	0.000	9.194	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	239.500	0.762	0.000	9.197	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	242.800	0.763	0.000	9.200	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	246.100	0.764	0.000	9.204	0.000	0.000	0.000	0.000	-0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	249.300	0.716	0.000	9.207	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	252.600	0.649	0.000	9.211	0.000	0.000	0.000	0.000	-0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	255.900	0.642	0.000	9.213	0.000	0.000	0.000	0.000	0.021	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	259.200	0.791	0.000	9.214	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	262.500	0.946	0.000	9.214	0.000	0.000	0.000	0.000	0.051	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	265.700	1.119	0.000	9.215	0.000	0.000	0.000	0.000	0.043	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	269.000	1.229	0.000	9.217	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	272.300	1.244	0.000	9.220	0.000	0.000	0.000	0.000	-0.001	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	275.600	1.226	0.000	9.224	0.000	0.000	0.000	0.000	-0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	278.900	1.155	0.000	9.228	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	282.200	1.128	0.000	9.231	0.000	0.000	0.000	0.000	0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	285.400	1.244	0.000	9.232	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	288.700	1.201	0.000	9.235	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	292.000	1.226	0.000	9.238	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	295.300	1.272	0.000	9.239	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	298.600	1.253	0.000	9.242	0.000	0.000	0.000	0.000	-0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	301.800	1.194	0.000	9.245	0.000	0.000	0.000	0.000	-0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	305.100	1.143	0.000	9.248	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	308.400	1.092	0.000	9.251	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	311.700	1.091	0.000	9.253	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	315.000	1.177	0.000	9.253	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	318.200	1.263	0.000	9.255	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	321.500	1.349	0.000	9.255	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	324.800	1.417	0.000	9.257	0.000	0.000	0.000	0.000	0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	328.100	1.471	0.000	9.258	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	331.400	1.525	0.000	9.260	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	334.600	1.579	0.000	9.261	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	337.900	1.604	0.000	9.263	0.000	0.000	0.000	0.000	-0.003	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	341.200	1.557	0.000	9.266	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	344.500	1.510	0.000	9.268	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	347.800	1.463	0.000	9.270	0.000	0.000	0.000	0.000	-0.014	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	351.000	1.416	0.000	9.273	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	354.300	1.449	0.000	9.274	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	357.600	1.600	0.000	9.274	0.000	0.000	0.000	0.000	0.046	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	360.900	1.750	0.000	9.274	0.000	0.000	0.000	0.000	0.030	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	364.200	1.794	0.000	9.275	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	367.500	1.781	0.000	9.278	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	370.700	1.934	0.000	9.278	0.000	0.000	0.000	0.000	0.039	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	374.000	2.035	0.000	9.278	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	377.300	2.017	0.000	9.281	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	380.600	1.999	0.000	9.283	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	383.900	1.981	0.000	9.286	0.000	0.000	0.000	0.000	-0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	387.100	1.957	0.000	9.288	0.000	0.000	0.000	0.000	-0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	390.400	1.931	0.000	9.290	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	393.700	1.932	0.000	9.292	0.000	0.000	0.000	0.000	0.017	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	397.000	2.040	0.000	9.292	0.000	0.000	0.000	0.000	0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	400.300	2.142	0.000	9.293	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	403.500	2.181	0.000	9.294	0.000	0.000	0.000	0.000	0.011	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	406.800	2.214	0.000	9.296	0.000	0.000	0.000	0.000	0.008	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	410.100	2.237	0.000	9.297	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	413.400	2.259	0.000	9.299	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	416.700	2.262	0.000	9.301	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	419.900	2.245	0.000	9.303	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	423.200	2.229	0.000	9.305	0.000	0.000	0.000	0.000	-0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	426.500	2.212	0.000	9.307	0.000	0.000	0.000	0.000	0.005	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	429.800	2.259	0.000	9.307	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	433.100	2.358	0.000	9.308	0.000	0.000	0.000	0.000	0.007	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	436.400	2.304	0.000	9.310	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	439.600	2.260	0.000	9.312	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	442.900	2.247	0.000	9.313	0.000	0.000	0.000	0.000	0.006	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	446.200	2.301	0.000	9.314	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	449.500	2.603	0.000	9.312	0.000	0.000	0.000	0.000	0.091	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	452.800	2.904	0.000	9.310	0.000	0.000	0.000	0.000	0.098	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	456.000	3.240	0.000	9.308	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	459.300	3.753	0.000	9.305	0.000	0.000	0.000	0.000	0.143	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	462.600	4.181	0.000	9.303	0.000	0.000	0.000	0.000	0.071	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	465.900	4.224	0.000	9.310	0.000	0.000	0.000	0.000	0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	469.200	4.588	0.000	9.311	0.000	0.000	0.000	0.000	0.138	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	472.400	5.119	0.000	9.311	0.000	0.000	0.000	0.000	0.205	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	475.700	5.921	0.000	9.308	0.000	0.000	0.000	0.000	0.312	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	479.000	7.178	0.000	9.382	0.000	0.000	0.000	0.000	0.381	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	482.300	8.436	0.000	9.718	0.000	0.000	0.000	0.000	0.383	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	484.000	9.094	0.000	9.718	0.000	0.000	0.000	0.000	0.141	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	490.000	9.521	0.000	9.718	0.000	0.000	0.000	0.000	0.099	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	490.300	9.718	0.000	9.718	0.000	0.000	0.000	0.000	0.657	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	622.200	9.157	0.000	9.157	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	623.000	9.062	0.000	9.157	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	634.500	8.766	0.000	9.157	0.000	0.000	0.000	0.000	0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	642.500	9.094	0.000	9.157	0.000	0.000	0.000	0.000	0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	651.500	8.832	0.000	9.157	0.000	0.000	0.000	0.000	-0.015	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	662.500	8.799	0.000	9.157	0.000	0.000	0.000	0.000	0.016	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	671.200	9.157	0.000	9.157	0.000	0.000	0.000	0.000	0.041	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	843.300	9.157	0.000	9.157	0.000	0.000	0.000	0.000	-0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	844.000	9.131	0.000	9.157	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	846.000	9.157	0.000	9.157	0.000	0.000	0.000	0.000	0.013	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	852.400	9.157	0.000	9.157	0.000	0.000	0.000	0.000	-0.085	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	858.500	8.639	0.000	9.157	0.000	0.000	0.000	0.000	-0.091	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	863.500	8.143	0.000	9.157	0.000	0.000	0.000	0.000	-0.019	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	875.500	8.310	0.000	9.157	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	882.400	9.157	0.000	9.157	0.000	0.000	0.000	0.000	0.123	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
AS	923.600	9.122	0.000	9.122	0.000	0.000	0.000	0.000	-0.036	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	928.000	8.963	0.000	9.122	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	936.500	8.537	0.000	9.122	0.000	0.000	0.000	0.000	-0.066	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

IF	942.000	8.045	0.000	9.122	0.000	0.000	0.000	0.000	-0.060	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	947.500	7.881	0.000	9.122	0.000	0.000	0.000	0.000	-0.009	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	956.500	7.913	0.000	9.122	0.000	0.000	0.000	0.000	-0.053	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	966.000	6.896	0.000	9.122	0.000	0.000	0.000	0.000	-0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	976.000	5.551	0.000	9.122	0.000	0.000	0.000	0.000	-0.018	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	986.000	6.535	0.000	9.122	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	993.000	6.929	0.000	9.122	0.000	0.000	0.000	0.000	-0.045	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1008.500	5.518	0.000	9.122	0.000	0.000	0.000	0.000	-0.020	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1023.500	6.306	0.000	9.122	0.000	0.000	0.000	0.000	-0.025	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1032.500	4.928	0.000	9.122	0.000	0.000	0.000	0.000	-0.362	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1041.000	-0.034	0.000	9.122	0.000	0.000	0.000	0.000	-0.535	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1042.000	-0.153	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1043.000	-0.272	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1044.000	-0.391	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1045.000	-0.510	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1046.000	-0.629	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1047.000	-0.748	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1048.000	-0.867	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1049.000	-0.986	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1050.000	-1.105	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1051.000	-1.224	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1052.000	-1.343	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1053.000	-1.462	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1054.000	-1.581	0.000	9.122	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1055.000	-1.700	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1056.000	-1.819	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1057.000	-1.938	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1058.000	-2.057	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1059.000	-2.176	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1060.000	-2.295	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1061.000	-2.414	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1062.000	-2.533	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1063.000	-2.652	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1064.000	-2.771	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1065.000	-2.890	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1066.000	-3.009	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1067.000	-3.128	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1068.000	-3.247	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1069.000	-3.366	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1070.000	-3.485	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1071.000	-3.604	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1072.000	-3.723	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1073.000	-3.842	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1074.000	-3.961	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1075.000	-4.081	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1076.000	-4.199	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1077.000	-4.318	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1078.000	-4.437	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1079.000	-4.556	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1080.000	-4.675	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1081.000	-4.794	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1082.000	-4.914	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1083.000	-5.032	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1084.000	-5.152	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1085.000	-5.270	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1086.000	-5.390	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1087.000	-5.509	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1088.000	-5.628	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1089.000	-5.747	0.000	9.121	0.000	0.000	0.000	0.000	-0.119	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1090.000	-5.865	0.000	9.121	0.000	0.000	0.000	0.000	-0.092	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1091.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	-0.032	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1092.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1093.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1094.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1095.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1096.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1097.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1098.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1099.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1100.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1101.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1102.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1103.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1104.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1105.000	-5.930	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1106.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1107.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1108.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1109.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1110.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1111.000	-5.929	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1112.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1113.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1114.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1115.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1116.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1117.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1118.000	-5.928	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1119.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1120.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1121.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1122.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1123.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1124.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1125.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1126.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1127.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1128.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1129.000	-5.927	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1130.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1131.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1132.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1133.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1134.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1135.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1136.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1137.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1138.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1139.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1140.000	-5.926	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1141.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1142.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1143.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1144.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1145.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1146.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1147.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1148.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1149.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1150.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1151.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1152.000	-5.925	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1153.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1154.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1155.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1156.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1157.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1158.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1159.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1160.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1161.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1162.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1163.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1164.000	-5.924	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1165.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1166.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1167.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1168.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1169.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1170.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1171.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1172.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1173.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1174.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1175.000	-5.923	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1176.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1177.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1178.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1179.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1180.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1181.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1182.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1183.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1184.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1185.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1186.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1187.000	-5.922	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1188.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1189.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1190.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1191.000	-5.921	0.000	9.121	0.000	0.000	0.000	0.000	0.054	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1192.000	-5.812	0.000	9.121	0.000	0.000	0.000	0.000	0.115	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1193.000	-5.691	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1194.000	-5.570	0.000	9.121	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1195.000	-5.448	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1196.000	-5.327	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1197.000	-5.206	0.000	9.121	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1198.000	-5.084	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1199.000	-4.963	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1200.000	-4.841	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1201.000	-4.720	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1202.000	-4.599	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1203.000	-4.478	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1204.000	-4.356	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1205.000	-4.235	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1206.000	-4.114	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1207.000	-3.992	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1208.000	-3.871	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1209.000	-3.750	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1210.000	-3.628	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1211.000	-3.507	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1212.000	-3.386	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1213.000	-3.264	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1214.000	-3.143	0.000	9.120	0.000	0.000	0.000	0.000	0.122	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1215.000	-3.022	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1216.000	-2.901	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1217.000	-2.779	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1218.000	-2.658	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1219.000	-2.536	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1220.000	-2.415	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1221.000	-2.294	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1222.000	-2.173	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1223.000	-2.051	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1224.000	-1.930	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1225.000	-1.809	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1226.000	-1.688	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1227.000	-1.567	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1228.000	-1.446	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1229.000	-1.324	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1230.000	-1.203	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1231.000	-1.082	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1232.000	-0.960	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1233.000	-0.839	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1234.000	-0.718	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES

OF	1235.000	-0.597	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1236.000	-0.475	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1237.000	-0.354	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1238.000	-0.233	0.000	9.120	0.000	0.000	0.000	0.000	0.121	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	1239.000	-0.112	0.000	9.120	0.000	0.000	0.000	0.000	2.646	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1240.000	5.059	0.000	9.120	0.000	0.000	0.000	0.000	0.628	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1246.500	4.600	0.000	9.120	0.000	0.000	0.000	0.000	-0.004	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1258.000	4.993	0.000	9.120	0.000	0.000	0.000	0.000	0.000	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1267.500	4.600	0.000	9.120	0.000	0.000	0.000	0.000	-0.002	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1277.500	4.961	0.000	9.120	0.000	0.000	0.000	0.000	0.022	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1286.500	5.026	0.000	9.120	0.000	0.000	0.000	0.000	0.010	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1293.500	5.125	0.000	9.119	0.000	0.000	0.000	0.000	0.042	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1302.000	5.682	0.000	9.119	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1315.500	6.404	0.000	9.119	0.000	0.000	0.000	0.000	0.079	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1329.500	7.848	0.000	9.119	0.000	0.000	0.000	0.000	0.098	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1339.500	8.766	0.000	9.119	0.000	0.000	0.000	0.000	0.091	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	1343.500	9.119	0.000	9.119	0.000	0.000	0.000	0.000	0.088	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

	LOCATION	CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	9.62	15.23	15.76
OF	1.00	9.61	15.23	15.75
OF	2.00	9.61	15.23	15.75
OF	3.30	9.59	15.23	15.74
OF	6.60	9.56	15.23	15.72
OF	9.80	9.53	15.23	15.70
OF	13.10	9.51	15.23	15.68
OF	16.40	9.47	15.23	15.66
OF	19.70	9.43	15.23	15.63
OF	23.00	9.37	15.23	15.59
OF	26.20	9.32	15.23	15.56
OF	29.50	9.27	15.23	15.52
OF	32.80	9.22	15.23	15.49
OF	36.10	9.17	15.23	15.46
OF	39.40	9.12	15.23	15.42
OF	42.70	9.07	15.23	15.38
OF	45.90	9.01	15.23	15.35
OF	49.20	8.96	15.23	15.31
OF	52.50	8.90	15.23	15.27
OF	55.80	8.85	15.23	15.23
OF	59.10	8.79	15.23	15.20
OF	62.30	8.74	15.23	15.16
OF	65.60	8.68	15.23	15.12
OF	68.90	8.62	15.23	15.09
OF	72.20	8.57	15.23	15.05
OF	75.50	8.51	15.23	15.01
OF	78.70	8.46	15.23	14.98
OF	82.00	8.40	15.23	14.94
OF	85.30	8.35	15.23	14.91
OF	88.60	8.30	15.23	14.87
OF	91.90	8.24	15.23	14.84
OF	95.10	8.19	15.23	14.80
OF	98.40	8.13	15.23	14.77
OF	101.70	8.08	15.23	14.73
OF	105.00	8.03	15.23	14.70
OF	108.30	7.99	15.23	14.68
OF	111.50	7.95	15.23	14.65
OF	114.80	7.91	15.23	14.63
OF	118.10	7.87	15.23	14.60
OF	121.40	7.83	15.23	14.58
OF	124.70	7.79	15.23	14.55
OF	128.00	7.75	15.23	14.52
OF	131.20	7.71	15.23	14.50
OF	134.50	7.66	15.23	14.47
OF	137.80	7.62	15.23	14.44

OF	141.10	7.58	15.23	14.42
OF	144.40	7.54	15.23	14.39
OF	147.60	7.49	15.23	14.36
OF	150.90	7.45	15.23	14.34
OF	154.20	7.41	15.23	14.31
OF	157.50	7.36	15.23	14.28
OF	160.80	7.32	15.23	14.26
OF	164.00	7.28	15.23	14.23
OF	167.30	7.24	15.23	14.20
OF	170.60	7.20	15.23	14.18
OF	173.90	7.15	15.23	14.15
OF	177.20	7.11	15.23	14.12
OF	180.40	7.07	15.23	14.09
OF	183.70	7.08	15.23	14.11
IF	187.00	6.99	15.23	14.05
IF	190.30	6.94	15.23	14.01
IF	193.60	6.93	15.23	14.01
IF	196.80	6.92	15.23	14.00
IF	200.10	6.77	15.23	13.90
IF	203.40	6.85	15.23	13.96
IF	206.70	6.86	15.23	13.98
IF	210.00	6.81	15.23	13.95
IF	213.30	6.74	15.23	13.89
IF	216.50	6.73	15.23	13.89
IF	219.80	6.72	15.23	13.88
IF	223.10	6.70	15.23	13.88
IF	226.40	6.66	15.23	13.85
IF	229.70	6.61	15.23	13.82
IF	232.90	6.57	15.23	13.79
IF	236.20	6.53	15.23	13.76
IF	239.50	6.51	15.23	13.75
IF	242.80	6.51	15.23	13.76
IF	246.10	6.51	15.23	13.76
IF	249.30	6.53	15.23	13.78
IF	252.60	6.55	15.23	13.79
IF	255.90	6.55	15.23	13.80
IF	259.20	6.50	15.23	13.76
IF	262.50	6.38	15.23	13.68
IF	265.70	6.25	15.23	13.59
IF	269.00	6.17	15.23	13.53
IF	272.30	6.16	15.23	13.53
IF	275.60	6.16	15.23	13.54
IF	278.90	6.19	15.23	13.56
IF	282.20	6.20	15.23	13.57
IF	285.40	6.17	15.23	13.55
IF	288.70	6.18	15.23	13.56
IF	292.00	6.18	15.23	13.56
IF	295.30	6.15	15.23	13.54
IF	298.60	6.16	15.23	13.55
IF	301.80	6.18	15.23	13.57
IF	305.10	6.19	15.23	13.58
IF	308.40	6.21	15.23	13.60
IF	311.70	6.21	15.23	13.60
IF	315.00	6.19	15.23	13.59
IF	318.20	6.17	15.23	13.57
IF	321.50	6.10	15.23	13.53
IF	324.80	6.05	15.23	13.49
IF	328.10	6.01	15.23	13.47
IF	331.40	5.97	15.23	13.44
IF	334.60	5.93	15.23	13.41
IF	337.90	5.91	15.23	13.40
IF	341.20	5.93	15.23	13.42
IF	344.50	5.94	15.23	13.43
IF	347.80	5.96	15.23	13.44
IF	351.00	5.97	15.23	13.45
IF	354.30	5.97	15.23	13.45
IF	357.60	5.93	15.23	13.42
IF	360.90	5.81	15.23	13.34
IF	364.20	5.78	15.23	13.32
IF	367.50	5.78	15.23	13.33
IF	370.70	5.67	15.23	13.25
IF	374.00	5.60	15.23	13.19
IF	377.30	5.60	15.23	13.20
IF	380.60	5.61	15.23	13.21
IF	383.90	5.62	15.23	13.22
IF	387.10	5.63	15.23	13.23
IF	390.40	5.63	15.23	13.23
IF	393.70	5.64	15.23	13.24
IF	397.00	5.60	15.23	13.21
IF	400.30	5.53	15.23	13.16
IF	403.50	5.50	15.23	13.14
IF	406.80	5.47	15.23	13.13
IF	410.10	5.46	15.23	13.12
IF	413.40	5.44	15.23	13.11
IF	416.70	5.44	15.23	13.11
IF	419.90	5.45	15.23	13.12
IF	423.20	5.45	15.23	13.12
IF	426.50	5.46	15.23	13.13
IF	429.80	5.45	15.23	13.12
IF	433.10	5.37	15.23	13.07
IF	436.40	5.39	15.23	13.08
IF	439.60	5.40	15.23	13.09
IF	442.90	5.41	15.23	13.10
IF	446.20	5.39	15.23	13.09
IF	449.50	5.19	15.23	12.94
IF	452.80	4.95	15.23	12.78
IF	456.00	4.70	15.23	12.59
IF	459.30	4.30	15.23	12.31
IF	462.60	3.97	15.23	12.08
IF	465.90	3.94	15.23	12.07
IF	469.20	3.66	15.23	11.87
IF	472.40	3.25	15.23	11.59

IF	475.70	2.63	15.23	11.15
IF	479.00	1.71	15.23	10.58
IF	482.30	1.00	15.23	10.42
IF	484.00	0.49	15.23	10.06
IF	490.00	0.15	15.23	9.83
IF	490.30	0.01	15.23	9.72
AS	622.20	0.00	0.00	9.16
IF	623.00	0.02	0.15	9.17
IF	634.50	0.08	0.33	9.21
IF	642.50	0.04	0.38	9.19
IF	651.50	0.13	0.43	9.25
IF	662.50	0.15	0.48	9.27
IF	671.20	0.01	0.51	9.16
AS	843.30	0.00	0.00	9.16
IF	844.00	0.01	0.14	9.17
IF	846.00	0.01	0.20	9.16
AS	852.40	0.00	0.00	9.16
IF	858.50	0.05	0.26	9.19
IF	863.50	0.07	0.32	9.21
IF	875.50	0.12	0.40	9.24
IF	882.40	0.01	0.44	9.16
AS	923.60	0.00	0.00	9.12
IF	928.00	0.04	0.24	9.15
IF	936.50	0.08	0.33	9.18
IF	942.00	0.10	0.37	9.19
IF	947.50	0.12	0.41	9.21
IF	956.50	0.15	0.45	9.23
IF	966.00	0.18	0.49	9.25
IF	976.00	0.20	0.53	9.26
IF	986.00	0.23	0.56	9.28
IF	993.00	0.24	0.58	9.29
IF	1008.50	0.28	0.62	9.32
IF	1023.50	0.31	0.65	9.34
IF	1032.50	0.33	0.67	9.35
OF	1041.00	0.35	0.69	9.36
OF	1042.00	0.35	0.69	9.37
OF	1043.00	0.35	0.69	9.37
OF	1044.00	0.35	0.69	9.37
OF	1045.00	0.35	0.69	9.37
OF	1046.00	0.36	0.70	9.37
OF	1047.00	0.36	0.70	9.37
OF	1048.00	0.36	0.70	9.37
OF	1049.00	0.36	0.70	9.37
OF	1050.00	0.36	0.70	9.38
OF	1051.00	0.36	0.71	9.38
OF	1052.00	0.37	0.71	9.38
OF	1053.00	0.37	0.71	9.38
OF	1054.00	0.37	0.71	9.38
OF	1055.00	0.37	0.71	9.38
OF	1056.00	0.37	0.72	9.38
OF	1057.00	0.38	0.72	9.38
OF	1058.00	0.38	0.72	9.39
OF	1059.00	0.38	0.72	9.39
OF	1060.00	0.38	0.72	9.39
OF	1061.00	0.38	0.72	9.39
OF	1062.00	0.39	0.73	9.39
OF	1063.00	0.39	0.73	9.39
OF	1064.00	0.39	0.73	9.39
OF	1065.00	0.39	0.73	9.39
OF	1066.00	0.39	0.73	9.40
OF	1067.00	0.39	0.73	9.40
OF	1068.00	0.40	0.74	9.40
OF	1069.00	0.40	0.74	9.40
OF	1070.00	0.40	0.74	9.40
OF	1071.00	0.40	0.74	9.40
OF	1072.00	0.40	0.74	9.40
OF	1073.00	0.41	0.74	9.40
OF	1074.00	0.41	0.75	9.41
OF	1075.00	0.41	0.75	9.41
OF	1076.00	0.41	0.75	9.41
OF	1077.00	0.41	0.75	9.41
OF	1078.00	0.41	0.75	9.41
OF	1079.00	0.42	0.75	9.41
OF	1080.00	0.42	0.76	9.41
OF	1081.00	0.42	0.76	9.41
OF	1082.00	0.42	0.76	9.42
OF	1083.00	0.42	0.76	9.42
OF	1084.00	0.43	0.76	9.42
OF	1085.00	0.43	0.76	9.42
OF	1086.00	0.43	0.77	9.42
OF	1087.00	0.43	0.77	9.42
OF	1088.00	0.43	0.77	9.42
OF	1089.00	0.43	0.77	9.42
OF	1090.00	0.44	0.77	9.43
OF	1091.00	0.44	0.77	9.43
OF	1092.00	0.44	0.77	9.43
OF	1093.00	0.44	0.78	9.43
OF	1094.00	0.44	0.78	9.43
OF	1095.00	0.44	0.78	9.43
OF	1096.00	0.45	0.78	9.43
OF	1097.00	0.45	0.78	9.43
OF	1098.00	0.45	0.78	9.44
OF	1099.00	0.45	0.79	9.44
OF	1100.00	0.45	0.79	9.44
OF	1101.00	0.45	0.79	9.44
OF	1102.00	0.46	0.79	9.44
OF	1103.00	0.46	0.79	9.44
OF	1104.00	0.46	0.79	9.44
OF	1105.00	0.46	0.79	9.44
OF	1106.00	0.46	0.80	9.45
OF	1107.00	0.46	0.80	9.45
OF	1108.00	0.47	0.80	9.45

OF	1109.00	0.47	0.80	9.45
OF	1110.00	0.47	0.80	9.45
OF	1111.00	0.47	0.80	9.45
OF	1112.00	0.47	0.80	9.45
OF	1113.00	0.48	0.81	9.45
OF	1114.00	0.48	0.81	9.45
OF	1115.00	0.48	0.81	9.46
OF	1116.00	0.48	0.81	9.46
OF	1117.00	0.48	0.81	9.46
OF	1118.00	0.48	0.81	9.46
OF	1119.00	0.48	0.81	9.46
OF	1120.00	0.49	0.82	9.46
OF	1121.00	0.49	0.82	9.46
OF	1122.00	0.49	0.82	9.46
OF	1123.00	0.49	0.82	9.47
OF	1124.00	0.49	0.82	9.47
OF	1125.00	0.49	0.82	9.47
OF	1126.00	0.50	0.82	9.47
OF	1127.00	0.50	0.82	9.47
OF	1128.00	0.50	0.83	9.47
OF	1129.00	0.50	0.83	9.47
OF	1130.00	0.50	0.83	9.47
OF	1131.00	0.50	0.83	9.47
OF	1132.00	0.51	0.83	9.48
OF	1133.00	0.51	0.83	9.48
OF	1134.00	0.51	0.83	9.48
OF	1135.00	0.51	0.84	9.48
OF	1136.00	0.51	0.84	9.48
OF	1137.00	0.51	0.84	9.48
OF	1138.00	0.52	0.84	9.48
OF	1139.00	0.52	0.84	9.48
OF	1140.00	0.52	0.84	9.48
OF	1141.00	0.52	0.84	9.49
OF	1142.00	0.52	0.84	9.49
OF	1143.00	0.52	0.85	9.49
OF	1144.00	0.53	0.85	9.49
OF	1145.00	0.53	0.85	9.49
OF	1146.00	0.53	0.85	9.49
OF	1147.00	0.53	0.85	9.49
OF	1148.00	0.53	0.85	9.49
OF	1149.00	0.53	0.85	9.49
OF	1150.00	0.53	0.85	9.50
OF	1151.00	0.54	0.86	9.50
OF	1152.00	0.54	0.86	9.50
OF	1153.00	0.54	0.86	9.50
OF	1154.00	0.54	0.86	9.50
OF	1155.00	0.54	0.86	9.50
OF	1156.00	0.54	0.86	9.50
OF	1157.00	0.55	0.86	9.50
OF	1158.00	0.55	0.86	9.50
OF	1159.00	0.55	0.87	9.51
OF	1160.00	0.55	0.87	9.51
OF	1161.00	0.55	0.87	9.51
OF	1162.00	0.55	0.87	9.51
OF	1163.00	0.56	0.87	9.51
OF	1164.00	0.56	0.87	9.51
OF	1165.00	0.56	0.87	9.51
OF	1166.00	0.56	0.87	9.51
OF	1167.00	0.56	0.88	9.51
OF	1168.00	0.56	0.88	9.51
OF	1169.00	0.56	0.88	9.52
OF	1170.00	0.57	0.88	9.52
OF	1171.00	0.57	0.88	9.52
OF	1172.00	0.57	0.88	9.52
OF	1173.00	0.57	0.88	9.52
OF	1174.00	0.57	0.88	9.52
OF	1175.00	0.57	0.89	9.52
OF	1176.00	0.58	0.89	9.52
OF	1177.00	0.58	0.89	9.52
OF	1178.00	0.58	0.89	9.53
OF	1179.00	0.58	0.89	9.53
OF	1180.00	0.58	0.89	9.53
OF	1181.00	0.58	0.89	9.53
OF	1182.00	0.58	0.89	9.53
OF	1183.00	0.59	0.89	9.53
OF	1184.00	0.59	0.90	9.53
OF	1185.00	0.59	0.90	9.53
OF	1186.00	0.59	0.90	9.53
OF	1187.00	0.59	0.90	9.54
OF	1188.00	0.59	0.90	9.54
OF	1189.00	0.59	0.90	9.54
OF	1190.00	0.60	0.90	9.54
OF	1191.00	0.60	0.90	9.54
OF	1192.00	0.60	0.90	9.54
OF	1193.00	0.60	0.91	9.54
OF	1194.00	0.60	0.91	9.54
OF	1195.00	0.60	0.91	9.54
OF	1196.00	0.60	0.91	9.54
OF	1197.00	0.61	0.91	9.55
OF	1198.00	0.61	0.91	9.55
OF	1199.00	0.61	0.91	9.55
OF	1200.00	0.61	0.91	9.55
OF	1201.00	0.61	0.91	9.55
OF	1202.00	0.61	0.92	9.55
OF	1203.00	0.62	0.92	9.55
OF	1204.00	0.62	0.92	9.55
OF	1205.00	0.62	0.92	9.55
OF	1206.00	0.62	0.92	9.55
OF	1207.00	0.62	0.92	9.55
OF	1208.00	0.62	0.92	9.56
OF	1209.00	0.62	0.92	9.56
OF	1210.00	0.63	0.92	9.56

OF	1211.00	0.63	0.93	9.56
OF	1212.00	0.63	0.93	9.56
OF	1213.00	0.63	0.93	9.56
OF	1214.00	0.63	0.93	9.56
OF	1215.00	0.63	0.93	9.56
OF	1216.00	0.63	0.93	9.56
OF	1217.00	0.64	0.93	9.56
OF	1218.00	0.64	0.93	9.57
OF	1219.00	0.64	0.93	9.57
OF	1220.00	0.64	0.93	9.57
OF	1221.00	0.64	0.94	9.57
OF	1222.00	0.64	0.94	9.57
OF	1223.00	0.64	0.94	9.57
OF	1224.00	0.65	0.94	9.57
OF	1225.00	0.65	0.94	9.57
OF	1226.00	0.65	0.94	9.57
OF	1227.00	0.65	0.94	9.57
OF	1228.00	0.65	0.94	9.58
OF	1229.00	0.65	0.94	9.58
OF	1230.00	0.65	0.95	9.58
OF	1231.00	0.66	0.95	9.58
OF	1232.00	0.66	0.95	9.58
OF	1233.00	0.66	0.95	9.58
OF	1234.00	0.66	0.95	9.58
OF	1235.00	0.66	0.95	9.58
OF	1236.00	0.66	0.95	9.58
OF	1237.00	0.66	0.95	9.58
OF	1238.00	0.67	0.95	9.59
OF	1239.00	0.67	0.95	9.59
IF	1240.00	0.67	0.96	9.59
IF	1246.50	0.68	0.96	9.59
IF	1258.00	0.69	0.97	9.61
IF	1267.50	0.71	0.98	9.61
IF	1277.50	0.72	0.99	9.62
IF	1286.50	0.73	1.00	9.63
IF	1293.50	0.74	1.01	9.64
IF	1302.00	0.75	1.01	9.64
IF	1315.50	0.76	1.03	9.65
IF	1329.50	0.65	1.04	9.57
IF	1339.50	0.25	1.05	9.29
IF	1343.50	0.01	1.05	9.12

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN 490.30 AND 622.20
BETWEEN 671.20 AND 843.30
BETWEEN 846.00 AND 852.40
BETWEEN 882.40 AND 923.60

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
3.30	1.00	9.02
6.60	1.00	9.02
9.80	1.00	9.03
13.10	1.00	9.03
16.40	1.00	9.03
19.70	1.00	9.03
23.00	1.00	9.03
26.20	1.00	9.03
29.50	1.00	9.03
32.80	1.00	9.03
36.10	1.00	9.03
39.40	1.00	9.04
42.70	1.00	9.04
45.90	1.00	9.04
49.20	1.00	9.04
52.50	1.00	9.04
55.80	1.00	9.04
59.10	1.00	9.05
62.30	1.00	9.05
65.60	1.00	9.05
68.90	1.00	9.05
72.20	1.00	9.05
75.50	1.00	9.05
78.70	1.00	9.06
82.00	1.00	9.06
85.30	1.00	9.06
88.60	1.00	9.07
91.90	1.00	9.07
95.10	1.00	9.07
98.40	1.00	9.07
101.70	1.00	9.08
105.00	1.00	9.08
108.30	1.00	9.08
111.50	1.00	9.09
114.80	1.00	9.09
118.10	1.00	9.09
121.40	1.00	9.10
124.70	1.00	9.10
128.00	1.00	9.10
131.20	1.00	9.10
134.50	1.00	9.11
137.80	1.00	9.11
141.10	1.00	9.11
144.40	1.00	9.12
147.60	1.00	9.12
150.90	1.00	9.12
154.20	1.00	9.12
157.50	1.00	9.13
160.80	1.00	9.13
164.00	1.00	9.13
167.30	1.00	9.14
170.60	1.00	9.14
173.90	1.00	9.14
177.20	1.00	9.14

180.40	1.00	9.15
183.70	1.00	9.15
187.00	1.00	9.15
190.30	1.00	9.15
193.60	1.00	9.16
196.80	1.00	9.16
200.10	1.00	9.16
203.40	1.00	9.17
206.70	1.00	9.17
210.00	1.00	9.18
216.50	1.00	9.18
219.80	1.00	9.18
223.10	1.00	9.19
226.40	1.00	9.19
229.70	1.00	9.19
232.90	1.00	9.19
236.20	1.00	9.19
239.50	1.00	9.20
242.80	1.00	9.20
246.10	1.00	9.20
249.30	1.00	9.21
252.60	1.00	9.21
255.90	1.00	9.21
259.20	1.00	9.21
265.70	1.00	9.22
269.00	1.00	9.22
272.30	1.00	9.22
275.60	1.00	9.22
278.90	1.00	9.23
282.20	1.00	9.23
285.40	1.00	9.23
288.70	1.00	9.23
292.00	1.00	9.24
295.30	1.00	9.24
298.60	1.00	9.24
301.80	1.00	9.24
305.10	1.00	9.25
308.40	1.00	9.25
311.70	1.00	9.25
318.20	1.00	9.26
324.80	1.00	9.26
328.10	1.00	9.26
331.40	1.00	9.26
334.60	1.00	9.26
337.90	1.00	9.26
341.20	1.00	9.27
344.50	1.00	9.27
347.80	1.00	9.27
351.00	1.00	9.27
354.30	1.00	9.27
364.20	1.00	9.27
367.50	1.00	9.28
377.30	1.00	9.28
380.60	1.00	9.28
383.90	1.00	9.29
387.10	1.00	9.29
390.40	1.00	9.29
393.70	1.00	9.29
400.30	1.00	9.29
403.50	1.00	9.29
406.80	1.00	9.30
410.10	1.00	9.30
413.40	1.00	9.30
416.70	1.00	9.30
419.90	1.00	9.30
423.20	1.00	9.31
426.50	1.00	9.31
433.10	1.00	9.31
436.40	1.00	9.31
439.60	1.00	9.31
442.90	1.00	9.31
446.20	1.00	9.31
449.50	1.00	9.31
452.80	1.00	9.31
456.00	1.00	9.31
459.30	1.00	9.31
462.60	1.00	9.30
465.90	1.00	9.31
469.20	1.00	9.31
475.70	1.00	9.31
479.00	1.00	9.38
482.30	1.00	9.72
622.20	1.00	9.16
923.60	1.00	9.12
1055.00	1.00	9.12
1198.00	1.00	9.12
1293.50	1.00	9.12

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
473.74	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	15.76	V22 EL=16	120
2.00	15.75	V22 EL=16	120
3.30	15.74	V22 EL=16	120
6.60	15.72	V22 EL=16	120
9.80	15.70	V22 EL=16	120

13.10	15.68	V22	EL=16	120
16.40	15.66	V22	EL=16	120
19.70	15.63	V22	EL=16	120
23.00	15.59	V22	EL=16	120
26.20	15.56	V22	EL=16	120
29.50	15.52	V22	EL=16	120
31.77	15.50	V22	EL=15	120
32.80	15.49	V22	EL=15	120
36.10	15.46	V22	EL=15	120
39.40	15.42	V22	EL=15	120
42.70	15.38	V22	EL=15	120
45.90	15.35	V22	EL=15	120
49.20	15.31	V22	EL=15	120
52.50	15.27	V22	EL=15	120
55.80	15.23	V22	EL=15	120
59.10	15.20	V22	EL=15	120
62.30	15.16	V22	EL=15	120
65.60	15.12	V22	EL=15	120
68.90	15.09	V22	EL=15	120
72.20	15.05	V22	EL=15	120
75.50	15.01	V22	EL=15	120
78.70	14.98	V22	EL=15	120
82.00	14.94	V22	EL=15	120
85.30	14.91	V23	EL=15	130
88.60	14.87	V23	EL=15	130
91.90	14.84	V23	EL=15	130
95.10	14.80	V23	EL=15	130
98.40	14.77	V23	EL=15	130
101.70	14.73	V23	EL=15	130
105.00	14.70	V23	EL=15	130
108.30	14.68	V23	EL=15	130
111.50	14.65	V23	EL=15	130
114.80	14.63	V23	EL=15	130
118.10	14.60	V23	EL=15	130
121.40	14.58	V23	EL=15	130
124.70	14.55	V23	EL=15	130
128.00	14.52	V23	EL=15	130
130.91	14.50	V23	EL=14	130
131.20	14.50	V23	EL=14	130
134.50	14.47	V23	EL=14	130
137.80	14.44	V23	EL=14	130
141.10	14.42	V23	EL=14	130
144.40	14.39	V23	EL=14	130
147.60	14.36	V23	EL=14	130
150.90	14.34	V23	EL=14	130
154.20	14.31	V23	EL=14	130
157.50	14.28	V23	EL=14	130
160.80	14.26	V23	EL=14	130
164.00	14.23	V23	EL=14	130
167.30	14.20	V23	EL=14	130
170.60	14.18	V23	EL=14	130

173.90	14.15	V23	EL=14	130
177.20	14.12	V23	EL=14	130
180.40	14.09	V23	EL=14	130
183.70	14.11	V23	EL=14	130
187.00	14.05	V23	EL=14	130
190.30	14.01	V23	EL=14	130
193.60	14.01	V23	EL=14	130
196.80	14.00	V23	EL=14	130
200.10	13.90	V23	EL=14	130
203.40	13.96	V23	EL=14	130
206.70	13.98	V23	EL=14	130
210.00	13.95	V23	EL=14	130
213.30	13.89	V23	EL=14	130
216.50	13.89	V23	EL=14	130
219.80	13.88	V23	EL=14	130
223.10	13.88	V23	EL=14	130
226.40	13.85	V23	EL=14	130
229.70	13.82	V23	EL=14	130
232.90	13.79	V23	EL=14	130
236.20	13.76	V23	EL=14	130
239.50	13.75	V23	EL=14	130
242.80	13.76	V23	EL=14	130
246.10	13.76	V23	EL=14	130
249.30	13.78	V23	EL=14	130
252.60	13.79	V23	EL=14	130
255.90	13.80	V23	EL=14	130
259.20	13.76	V23	EL=14	130
262.50	13.68	V23	EL=14	130
265.70	13.59	V23	EL=14	130
269.00	13.53	V23	EL=14	130
272.30	13.53	V23	EL=14	130
275.60	13.54	V23	EL=14	130
278.90	13.56	V23	EL=14	130
282.20	13.57	V23	EL=14	130
285.40	13.55	V23	EL=14	130
288.70	13.56	V23	EL=14	130
292.00	13.56	V23	EL=14	130
295.30	13.54	V23	EL=14	130
298.60	13.55	V23	EL=14	130
301.80	13.57	V23	EL=14	130
305.10	13.58	V23	EL=14	130
308.40	13.60	V23	EL=14	130
311.70	13.60	V23	EL=14	130
315.00	13.59	V23	EL=14	130
318.20	13.57	V23	EL=14	130
321.50	13.53	V23	EL=14	130
324.16	13.50	V23	EL=13	130
324.80	13.49	V23	EL=13	130
328.10	13.47	V23	EL=13	130
331.40	13.44	V23	EL=13	130
334.60	13.41	V23	EL=13	130

337.90	13.40	V23	EL=13	130
341.20	13.42	V23	EL=13	130
344.50	13.43	V23	EL=13	130
347.80	13.44	V23	EL=13	130
351.00	13.45	V23	EL=13	130
354.30	13.45	V23	EL=13	130
360.90	13.34	V23	EL=13	130
364.20	13.32	V23	EL=13	130
367.50	13.33	V23	EL=13	130
374.00	13.19	V23	EL=13	130
377.30	13.20	V23	EL=13	130
380.60	13.21	V23	EL=13	130
383.90	13.22	V23	EL=13	130
387.10	13.23	V23	EL=13	130
390.40	13.23	V23	EL=13	130
393.70	13.24	V23	EL=13	130
397.00	13.21	V23	EL=13	130
400.30	13.16	V23	EL=13	130
403.50	13.14	V23	EL=13	130
406.80	13.13	V23	EL=13	130
410.10	13.12	V23	EL=13	130
413.40	13.11	V23	EL=13	130
416.70	13.11	V23	EL=13	130
419.90	13.12	V23	EL=13	130
423.20	13.12	V23	EL=13	130
426.50	13.13	V23	EL=13	130
429.80	13.12	V23	EL=13	130
433.10	13.07	V23	EL=13	130
436.40	13.08	V23	EL=13	130
439.60	13.09	V23	EL=13	130
442.90	13.10	V23	EL=13	130
446.20	13.09	V23	EL=13	130
449.50	12.94	V23	EL=13	130
452.80	12.78	V23	EL=13	130
456.00	12.59	V23	EL=13	130
457.11	12.50	V23	EL=12	130
459.30	12.31	V23	EL=12	130
462.60	12.08	V23	EL=12	130
465.90	12.07	V23	EL=12	130
469.20	11.87	V23	EL=12	130
472.40	11.59	V23	EL=12	130
473.06	11.50	V23	EL=11	130
473.74	11.41	A17	EL=11	85
475.70	11.15	A17	EL=11	85
479.00	10.58	A17	EL=11	85
480.64	10.50	A17	EL=10	85
482.30	10.42	A17	EL=10	85
490.30	9.72			
622.20	9.16	A17	EL= 9	85
671.20	9.16			
843.30	9.16	A17	EL= 9	85
846.00	9.16			
852.40	9.16			

```
                                                    A17  EL= 9      85
                    882.40          9.16
                    923.60          9.12
                                                    A17  EL= 9      85
                   1054.00          9.38
                                                    A17  EL= 9      85
                   1055.00          9.38
                                                    A17  EL= 9      85
                   1154.16          9.50
                                                    A17  EL=10      85
                   1197.00          9.55
                                                    A17  EL=10      85
                   1198.00          9.55
                                                    A17  EL=10      85
                   1286.50          9.63
                                                    A17  EL=10      85
                   1293.50          9.64
                                                    A17  EL=10      85
                   1332.10          9.50
                                                    A17  EL= 9      85
                   1343.50          9.12
                         ZONE TERMINATED AT END OF TRANSECT
                         PART 7   POSTSCRIPT NOTES
PS#  1   START(386426.334,4806221.6516)
PS#  2   END(386561.1798,4806867.0114)
-1.000000e+00
```

YK-110
100-year WHAFIS Output
Zero Station: -70.40239847, 43.40077695
Onshore Dir: 78.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
0
200
400
600
800
1000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

Iterative TAW for YK-110
Two Percent Run-up Elevation is 17.4 Feet-NAVD88
Run-up Height is 8.0 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
18
16
14
12
10
8
6
4
2
240
260
280
300
320
340
360
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-110
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-110sta_ele_include.csv';   % file with station, elevation, include
                                              % third colunm is 0 for excluded points
imgname='logfiles/YK-110-runup';
SWEL=9.0222;  % 100-yr still water level including wave setup.
H0=3.8292;    % significant wave height at toe of structure
Tp=15.3192;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.98222;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=0.28621;
maxSetup=0.69584;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-110'

plotTitle =

Iterative TAW for YK-110



% END CONFIG
%-------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                    9.30841

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                   10.00425



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          992.402639890351


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

                   3.56461


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                  15.05221


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end

toe_sta =

          270.110339935196

% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end
if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          313.011653301769


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          313.011653301769

toe_sta

toe_sta =

          270.110339935196




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- Location of SWEL-1.5*H0 is 35.6 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.32 feet


ans =

-!!-       SWEL is adjusted to 9.34 feet


k =

     1
     2
     3
     4




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta

    % loop over profile segments to determine berm factor
```

```
% re-calculate influence of depth of berm based on this run-up elevation
% check for berm, berm width, berm height
berm_width=0;
rdh_sum=0;
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end


% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
   % do the foreshore calculation
   fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
```

```
        % get upper slope
        fore_toe_sta=-999;
        fore_toe_dep=-999;
        for kk=length(dep)-1:-1:1
           ddep=dep(kk+1)-dep(kk);
           dsta=sta(kk+1)-sta(kk);
           s=ddep/dsta;
           if s < 1/15
              break
           end
           fore_toe_sta=sta(kk);
           fore_toe_dep=dep(kk);
           upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
        end
        fore_Irb=upper_slope/(sqrt(fore_H0/L0));
        fore_gamma=gamma_perm*gamma_beta*gamma_rough;
        if (fore_Irb < 1.8)
           fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
        else
           fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
        end
        if berm_width >= L0
           R2_new=fore_R2
           disp (’berm is wider than one wavelength, use full shallow foreshore solution’);
        else
           w2=(berm_width-0.25*L0)/(0.75*L0)
           w1=1-w2
           R2_new=w2*fore_R2 + w1*R2_new
        end
     end % end berm width check

     % convergence criterion
     R2del=abs(R2-R2_new)
     R2_all(iter)=R2_new;

     % get the new top station (for plot purposes)
     Z2=R2_new+SWEL
     top_sta=-999;
     for kk=1:length(sta)-1
        if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
           top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
           break;
        end
     end
     if top_sta==-999
        dy=Z2-dep(end);
        top_sta=sta(end)+dy/S(end);
     end
     topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
                   3.56461
toe_sta =
          270.110339935196
top_sta =
          313.011653301769
Z2 =
                  15.05221
H0 =
                    3.8292
Tp =
                   15.3192
T0 =
          13.9265454545455
R2 =
                   11.4876
Z2 =
          20.8317507147308
top_sta =
          332.282249019658
Lslope =
          62.1719090844625
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 4
dh =
          5.16436071473079
rdh_sum =
         0.760363173490502
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 5
dh =
           5.1512372147308
rdh_sum =
          1.51842459353642
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 6
dh =
          5.13811371473079
```

```
rdh_sum =
          2.27417678112447
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 7
dh =
          5.12499021473079
rdh_sum =
          3.02761232416643
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 8
dh =
          5.11186721473079
rdh_sum =
          3.77872396639609
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
     5
rB =
        0.0804221725475301
rdh_mean =
         0.755744793279218
gamma_berm =
         0.980356465619469
slope =
         0.302021412110295
Irb =
          4.86214228816446
gamma_berm =
         0.980356465619469
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.588213879371681
ans =
!!! - - Iribaren number:   4.77 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.3 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          8.05090436047726
R2del =
          3.43669563952274
Z2 =
          17.3950550752081
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                    3.56461
toe_sta =
          270.110339935196
top_sta =
          320.823350199917
Z2 =
          17.3950550752081
H0 =
                     3.8292
Tp =
                    15.3192
T0 =
          13.9265454545455
R2 =
          8.05090436047726
Z2 =
          17.3950550752081
top_sta =
          320.823350199917
Lslope =
          50.7130102647212
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 4
dh =
          5.16436071473079
rdh_sum =
         0.760363173490502
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 5
dh =
           5.1512372147308
rdh_sum =
          1.51842459353642
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 6
dh =
          5.13811371473079
rdh_sum =
          2.27417678112447
```

```
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 7
dh =
          5.12499021473079
rdh_sum =
          3.02761232416643
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 8
dh =
          5.11186721473079
rdh_sum =
          3.77872396639609
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
     5
rB =
        0.0985940289069821
rdh_mean =
          0.755744793279218
gamma_berm =
          0.97591789508789
slope =
          0.302549427288136
Irb =
          4.87064262894173
gamma_berm =
          0.97591789508789
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
          0.585550737052734
ans =
!!! - - Iribaren number:   4.75 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.3 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          8.01587416375328
R2del =
        0.0350301967239783
Z2 =
          17.3600248784841
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                   3.56461
toe_sta =
          270.110339935196
top_sta =
          320.706549784052
Z2 =
          17.3600248784841
H0 =
                    3.8292
Tp =
                   15.3192
T0 =
          13.9265454545455
R2 =
          8.01587416375328
Z2 =
          17.3600248784841
top_sta =
          320.706549784052
Lslope =
          50.5962098488567
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 4
dh =
          5.16436071473079
rdh_sum =
          0.760363173490502
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 5
dh =
           5.1512372147308
rdh_sum =
          1.51842459353642
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 6
dh =
          5.13811371473079
rdh_sum =
          2.27417678112447
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 7
```

```
dh =
          5.12499021473079
rdh_sum =
          3.02761232416643
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 8
dh =
          5.11186721473079
rdh_sum =
          3.77872396639609
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
     5
rB =
        0.0988216314015659
rdh_mean =
         0.755744793279218
gamma_berm =
         0.975862301993526
slope =
         0.302556175704371
Irb =
          4.87075126945079
gamma_berm =
         0.975862301993526
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.585517381196115
ans =
!!! - - Iribaren number:   4.75 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.3 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          8.01543566775495
R2del =
       0.00043849599833834
Z2 =
          17.3595863824857
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          17.3595863824857
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-110

Station locations shifted by: -2.57 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-110

Incident significant wave height: 7.11 feet

Peak wave period: 15.23 seconds

Mean wave height: 4.45 feet

Local Depth below SWEL: 12.54 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

```
    Depth, D = 12.54
    Period, T = 12.95
    Waveheight, H = 4.45
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*12.95*12.95/6.28 = 858.19
Deep water wave celerity, C0 (ft/s)
    C0 = L0/T
    C0 = 858.19/12.95 = 66.29
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/12.95 = 0.49
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.49*0.49*12.54/32.17 = 0.09
    C1H = sqrt( g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)) )
    C1H = 19.78
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(66.29/19.78) = 1.83
Deepwater Wave Height H0_H (ft)
    H0_H = H/KsH
    H0_H = 4.45/1.83 = 2.43
```

Deepwater mean wave height: 2.43 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-110

RUNUP2 SWEL:
9.00
9.00
9.00
9.00

9.00
9.00
9.00
9.00
9.00

RUNUP2 deepwater mean wave heights:
2.31
2.31
2.31
2.43
2.43
2.43
2.55
2.55
2.55

RUNUP2 mean wave periods:
12.30
12.95
13.59
12.30
12.95
13.59
12.30
12.95
13.59

RUNUP2 runup above SWEL:
1.35
1.48
1.60
1.47
1.60
1.74
1.58
1.73
1.89

RUNUP2 Mean runup height above SWEL: 1.60 feet

RUNUP2 2-percent runup height above SWEL: 3.53 feet

RUNUP2 2-percent runup elevation: 12.53 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 7.11 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 3.88 feet

Peak wave period: 15.23 seconds

Average beach Slope: 1:28.90 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     3.88
Wave Period,                        T  =    15.23
Beach Slope,                        S  =    0.035

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
           a = [2.32, 1.86,  1.70,   1.38,   0.88]
           b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 6.1,  5.1,   4.6,    3.8,    2.4]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 5.05 feet

ACES Beach 2-percent runup elevation: 14.05 feet-NAVD88

ACES BEACH RUNUP is valid

______________END ACES BEACH RESULTS____________________

PART 5 COMPLETE_________________________________________
```

```
  FEMA                                                    sjh            job 2
  RUNUP2 transect: YK-110                                                    1
2.00
  -3.52 -185.4 0.6
  -3.31 -168.4 0.6
  -1.39 -82.4  0.6
  -0.01 -4.4   0.6
  0.40  15.1   0.6
  0.76  69.6   0.6
  1.26  84.6   0.6
  1.29  125.1  0.6
  1.62  151.6  0.6
  1.62  167.6  0.6
  2.04  187.6  0.6
  2.04  207.6  0.6
  2.40  260.1  0.6
  3.16  270.1  0.6
  4.17  276.6  0.6
  4.24  281.6  0.6
  5.45  289.1  0.6
  9.09  298.6  0.6
  9.52  304.6  0.6
1 13.62 310.1  0.6
 9.0   2.31  12.30
 9.0   2.31  12.95
 9.0   2.31  13.59
 9.0   2.43  12.30
 9.0   2.43  12.95
 9.0   2.43  13.59
 9.0   2.55  12.30
 9.0   2.55  12.95
 9.0   2.55  13.59
```

****

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-185.4	-3.5		
			.00	.60
2	-168.4	-3.3		
			44.79	.60
3	-82.4	-1.4		
			56.52	.60
4	-4.4	.0		
			47.56	.60
5	15.1	.4		
			151.39	.60
6	69.6	.8		
			30.00	.60
7	84.6	1.3		
			FLAT	.60
8	125.1	1.3		
			80.30	.60
9	151.6	1.6		
			FLAT	.60
10	167.6	1.6		
			47.62	.60
11	187.6	2.0		
			FLAT	.60
12	207.6	2.0		
			145.83	.60
13	260.1	2.4		
			13.16	.60
14	270.1	3.2		
			6.44	.60
15	276.6	4.2		
			71.43	.60
16	281.6	4.3		
			6.20	.60
17	289.1	5.5		
			2.61	.60
18	298.6	9.1		
			13.95	.60
19	304.6	9.5		
			1.34	.60
20	310.1	13.6		

LAST SLOPE 2.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.00	2.31	12.30	11	19	1.35	5.99
9.00	2.31	12.95	11	19	1.48	6.18
9.00	2.31	13.59	11	19	1.60	6.37
9.00	2.43	12.30	11	19	1.47	6.21
9.00	2.43	12.95	11	19	1.60	6.40
9.00	2.43	13.59	11	19	1.74	6.60
9.00	2.55	12.30	11	19	1.58	6.43
9.00	2.55	12.95	11	19	1.73	6.63
9.00	2.55	13.59	11	19	1.89	6.82

Runup2 2% runup elevation for Transect: YK-110
Ground
Swel
2% Runup
Two Percent Run-up Elevation is 12.5 Feet-NAVD88
Run-up Height is 3.5 Feet
Elevation (ft)
Station (ft)
15
10
5
0
-200
-100
0
100
200
300
400