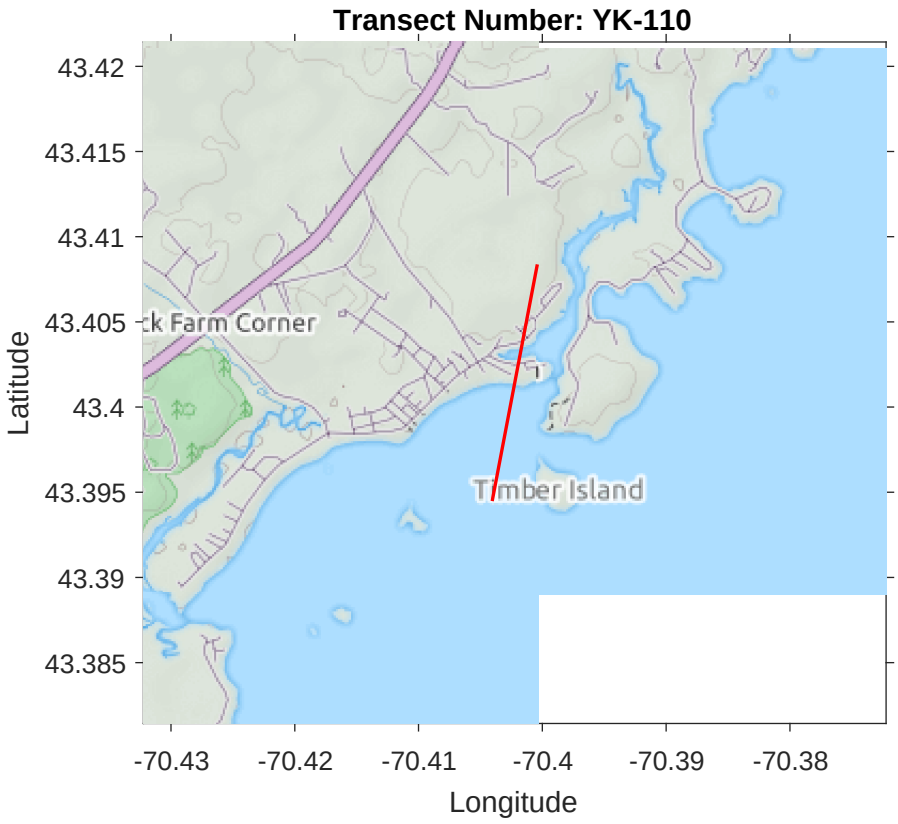
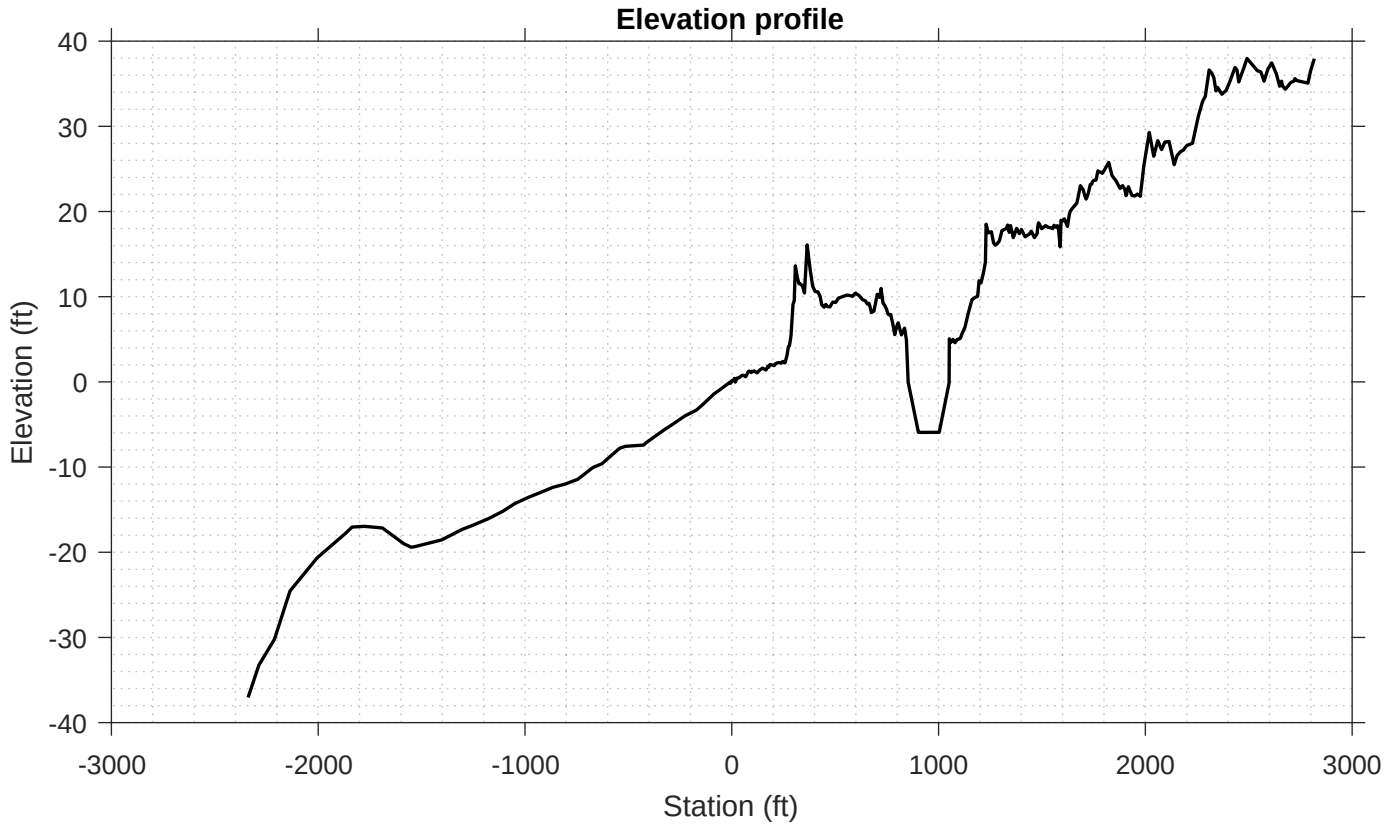

Transect Number: YK-110
43.42
43.415
43.41
43.405
43.4
43.395
43.39
43.385
Latitude
k Farm Corner
Timber Island
-70.43
-70.42
-70.41
-70.4
-70.39
-70.38
Longitude


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

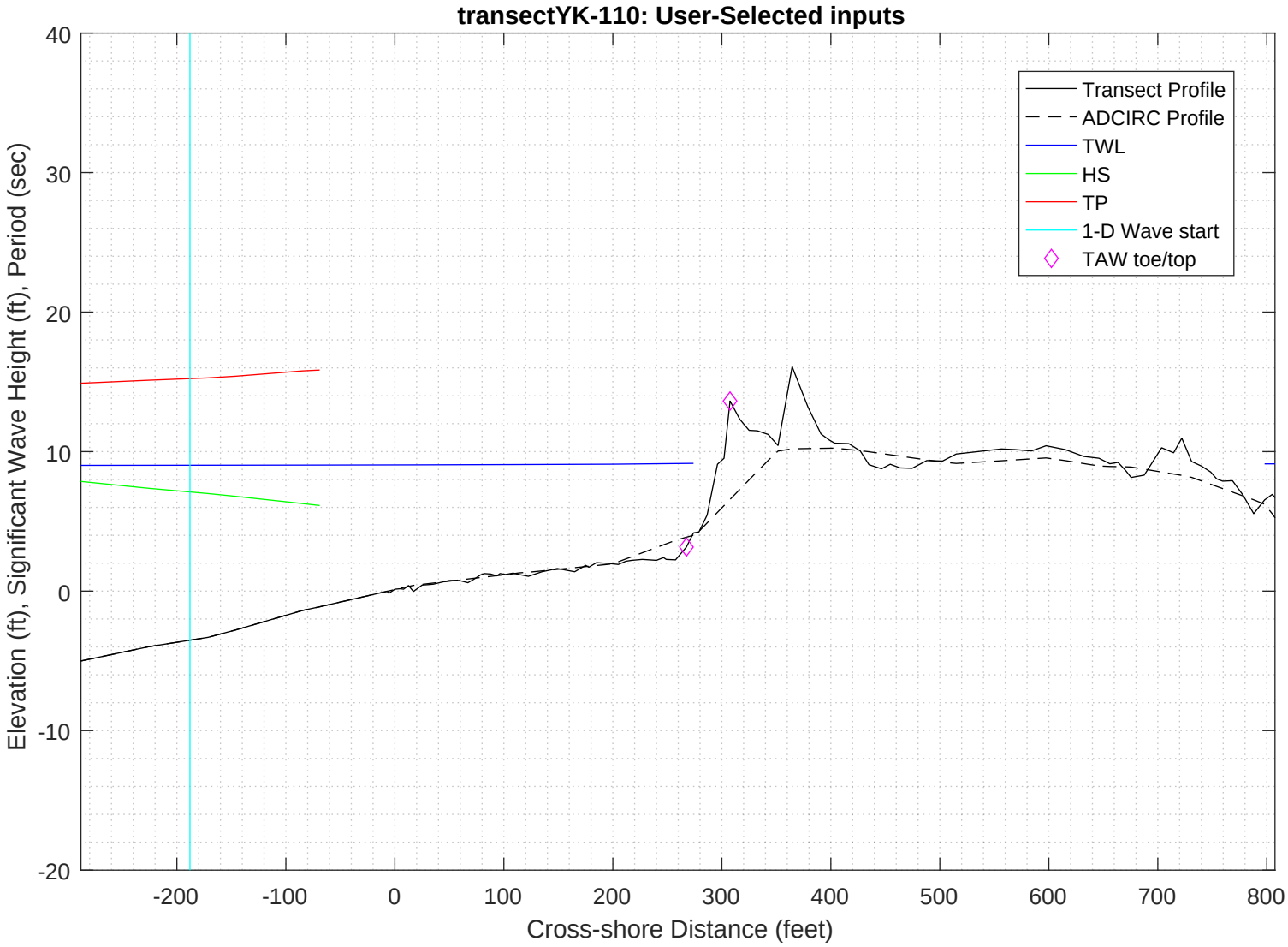
SWAN 1-D / WHAFIS input

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
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
-200
-100
0
100
200
300
400
500
600
700
800

_____
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

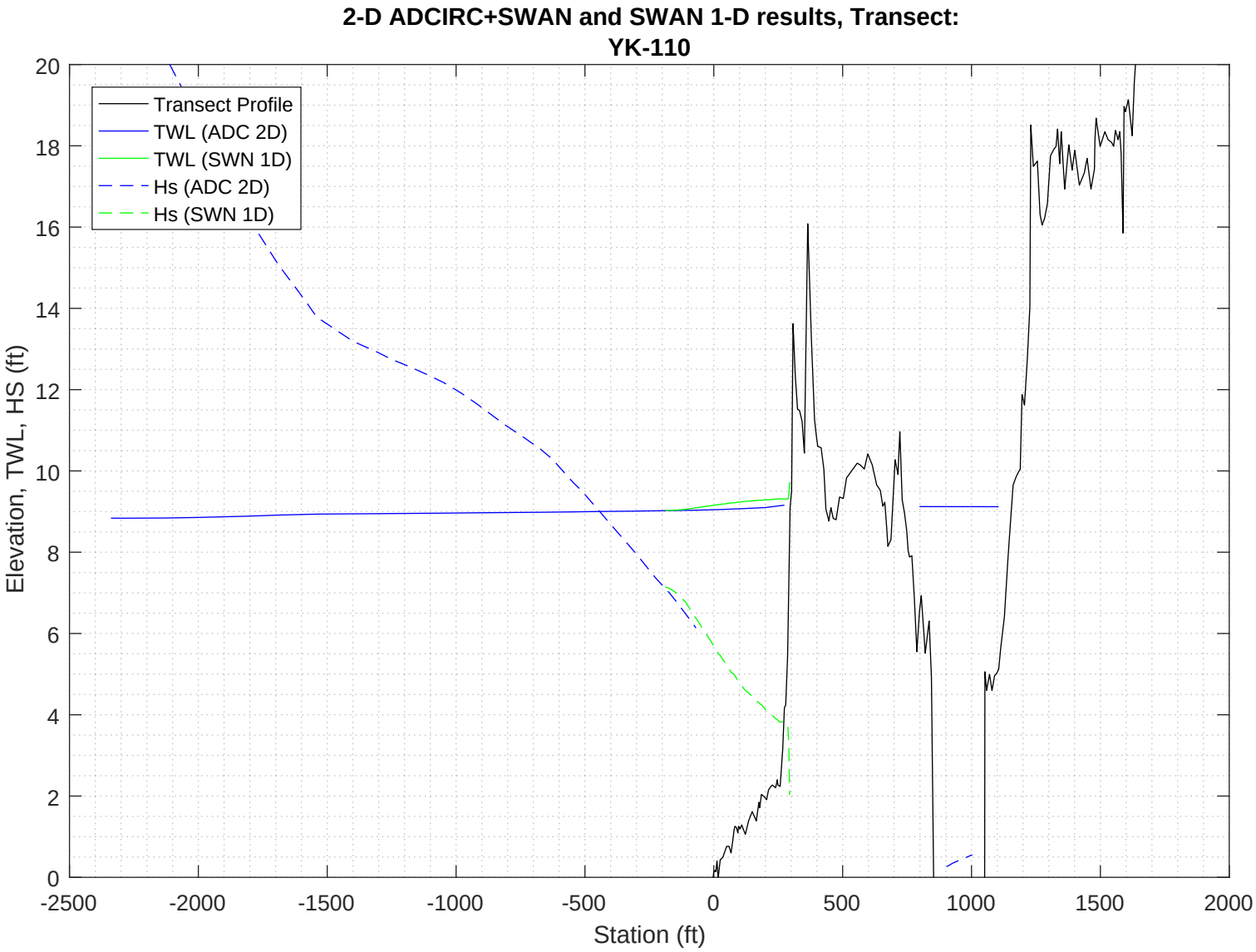
Batch File: 2_swan/swanfiles/runswan.dat

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

1

```
                    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 [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

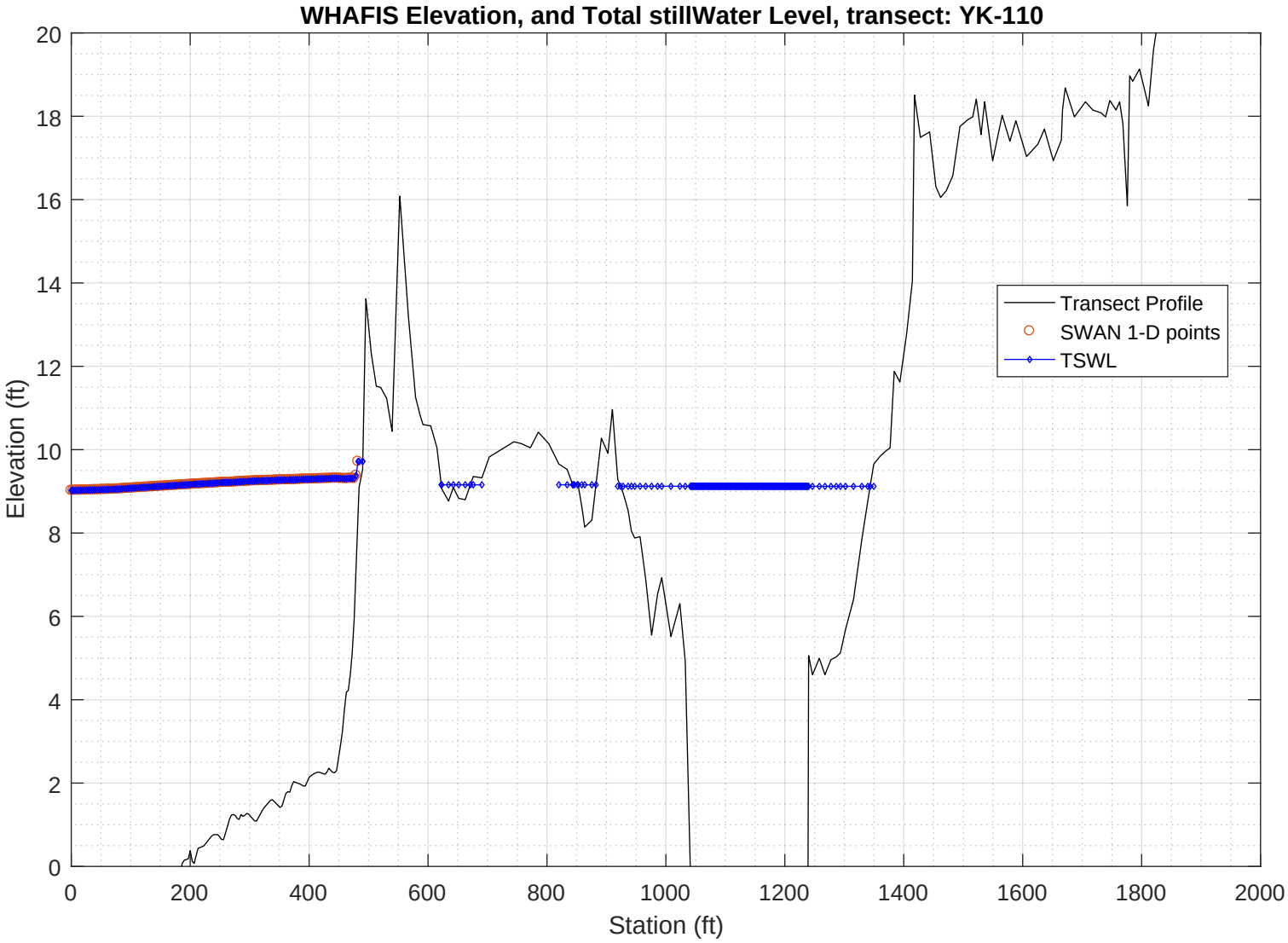
60.	0.	1.70930	15.3128	15.4936	9.6285	359.955	23.6336	2.7327	0.042661
61.	0.	1.70484	15.3134	15.4936	9.6108	0.006	23.6006	2.6729	0.042908
62.	0.	1.68628	15.3138	15.4936	9.5706	0.034	23.7975	2.7551	0.045148
63.	0.	1.67425	15.3142	15.4936	9.5448	0.062	23.7787	2.7764	0.046357
64.	0.	1.67004	15.3146	15.4936	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)
Transect Profile
SWAN 1-D points
TSWL
0
2
4
6
8
10
12
14
16
18
20
0
200
400
600
800
1000
1200
1400
1600
1800
2000

```
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

1

	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.

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	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

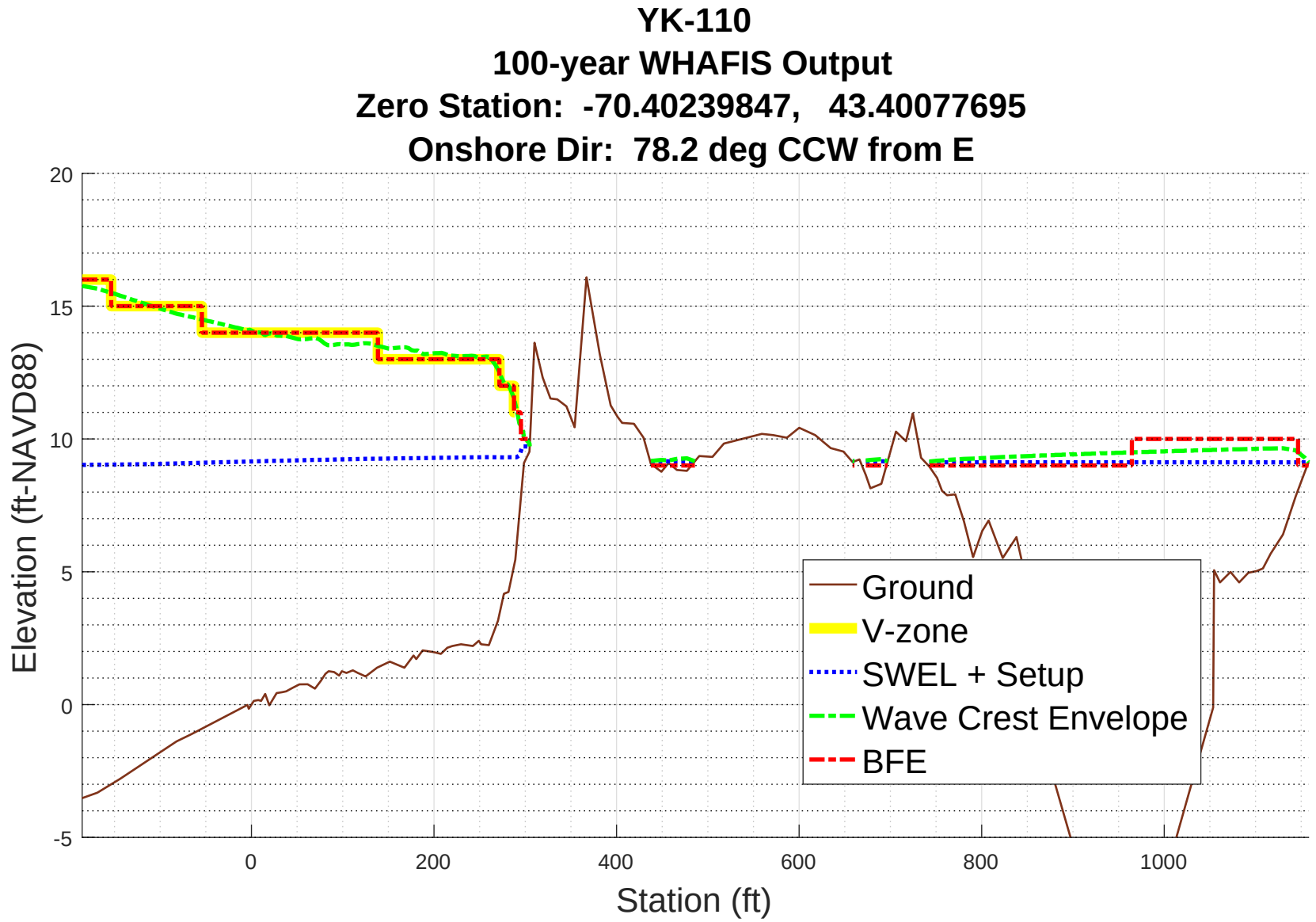
STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	15.76		
		V22 EL=16	120
2.00	15.75		
		V22 EL=16	120
3.30	15.74		
		V22 EL=16	120
6.60	15.72		
		V22 EL=16	120
9.80	15.70		
		V22 EL=16	120

13.10	15.68			
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=16	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	V22	EL=15	120
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			
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=14	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
		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

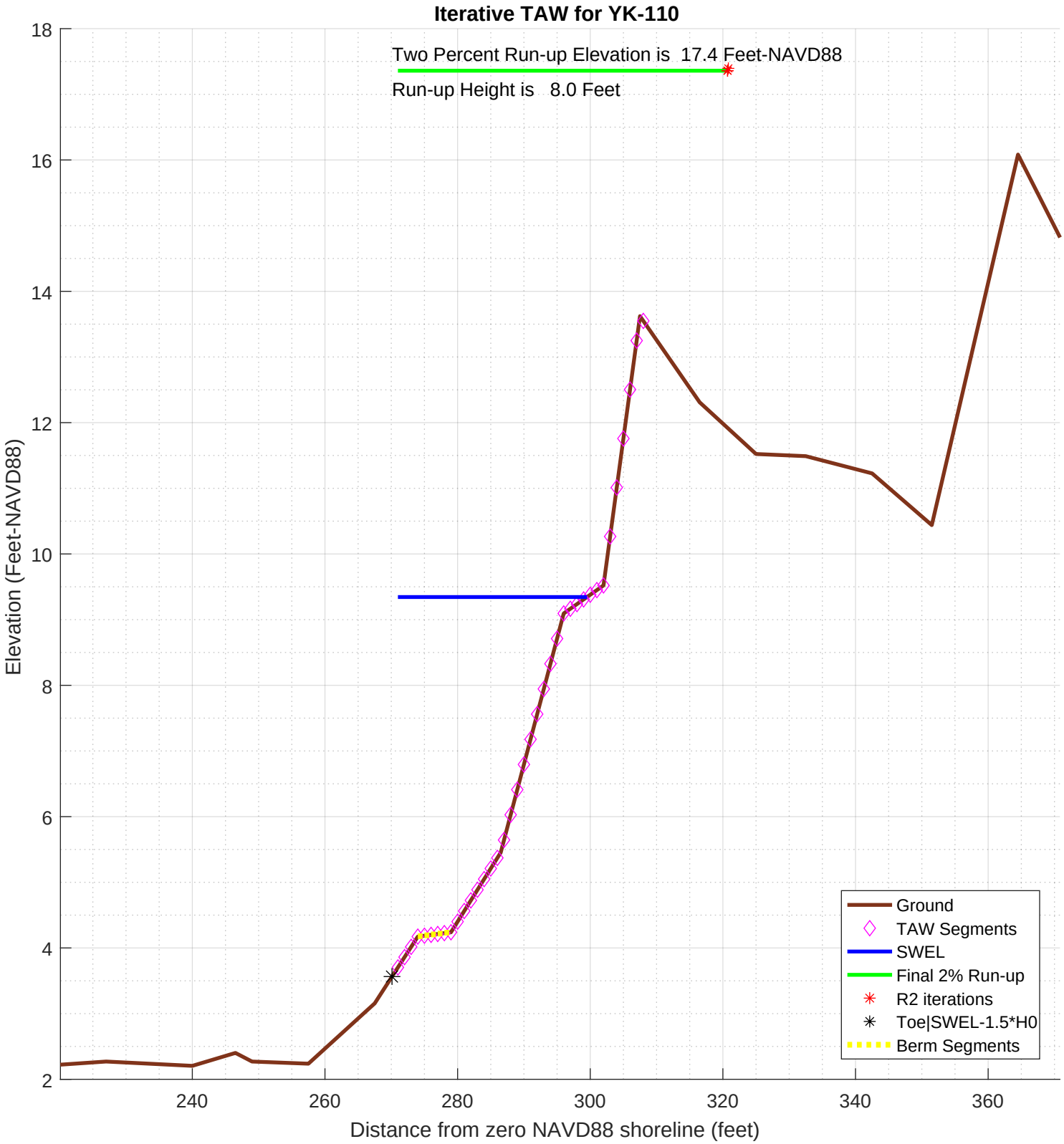
```
_____________________________________________________________
PART 4: TAW

Input Paramters:
    TWL- 9.0222 feet
    HS-  3.8292 feet
    PER- 15.3192 seconds
    TOE- x: 267.5 , z: 3.1562 feet
    TOP- x: 307.5 , z: 13.622 feet
    GBERM-   0.97586
    GGROUGH- 0.6
    GBETA-   1
    GPERM-   1

RUNNING TAW:
...
MATLAB DIARY: /4_taw/logfiles/YK-110-DIARY.txt

CHECKING VALIDITY:
...
TAW method is valid!
Using TAW runup to detemine runup elevation
TAW 2% runup: 17.3596 feet

PART 4 COMPLETE_____________________________________________
```


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

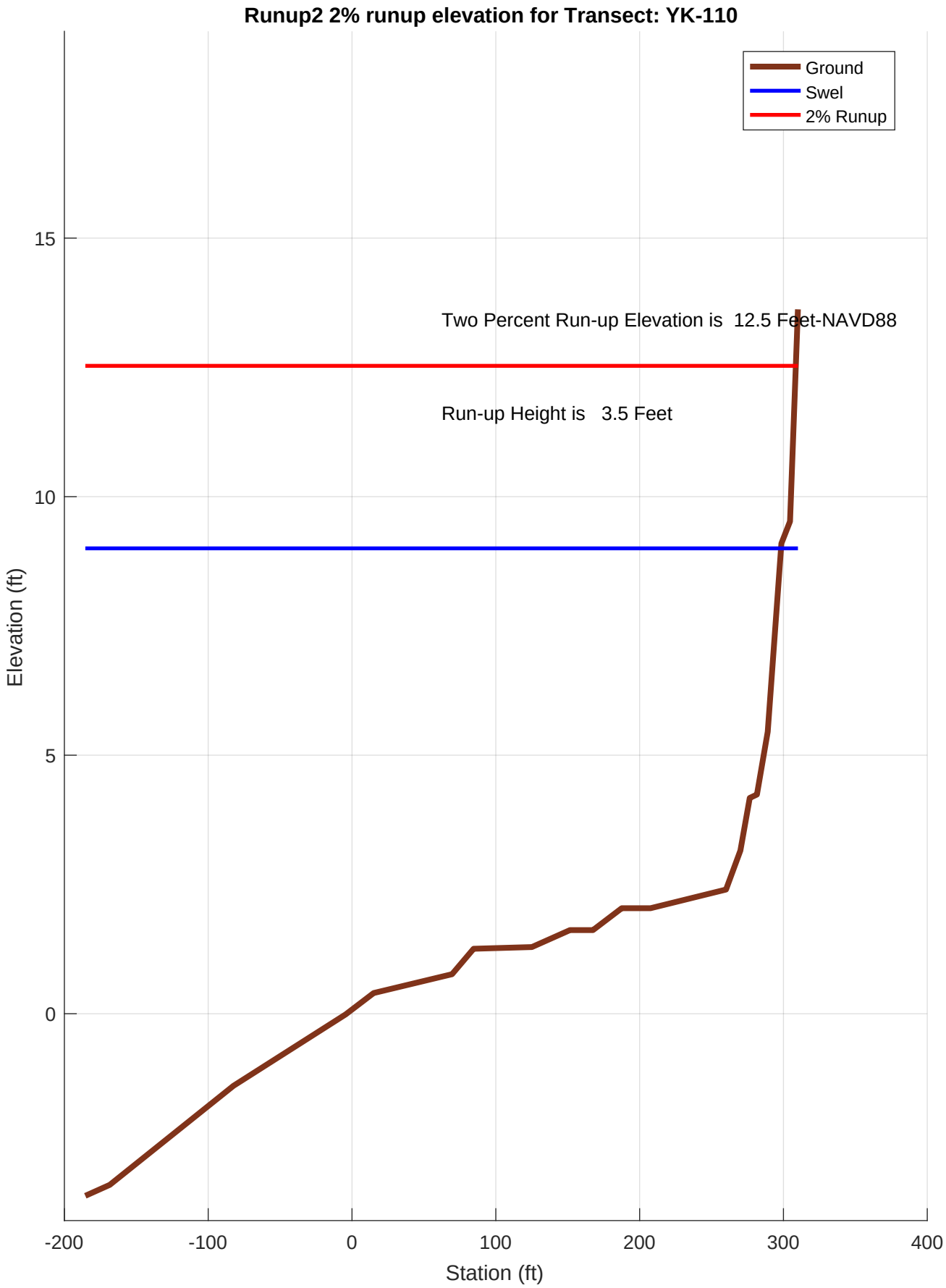
	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-185.4	-3.5		
			.00	.60
2	-168.4	-3.3		
			44.79	.60
3	-82.4	-1.4		
			56.52	.60
4	-4.4	.0		
			47.56	.60
5	15.1	.4		
			151.39	.60
6	69.6	.8		
			30.00	.60
7	84.6	1.3		
			FLAT	.60
8	125.1	1.3		
			80.30	.60
9	151.6	1.6		
			FLAT	.60
10	167.6	1.6		
			47.62	.60
11	187.6	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)
15
10
5
0
-200
-100
0
100
200
300
400
Station (ft)