

DATA LOG FOR TRANSECT ID: CM-139-1

PART 1: USER INPUT

SWAN 1-D / WHAFIS input

station: -415 ft -70.0027 deg E LON:

LAT: 43.7235 deg N

Bottom ELEV: -56.769 ft-NAVD88

8.7974 ft-NAVD88

8.3049 ft HS: 9.9036 sec TP:

Wave Direction bin: 0 deg CCW from East (90 deg sector) Transect Direction: 12.4563 deg CCW from East

TAW/RUNUP input

-68 ft toe sta:

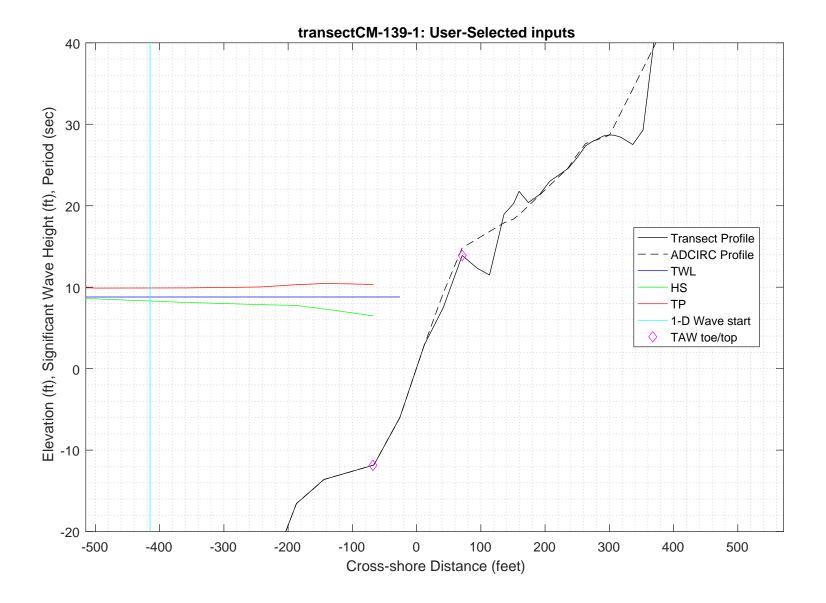
-11.8617 ft-NAVD88 toe elev:

71 ft top sta:

top elev: 13.8944 ft-NAVD88

Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE_



PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/CM-139-1zmeters_xmeters.grd
swan file name: 2_swan/swanfiles/CM-139-1.swn
swan output name: 2_swan/swanfiles/CM-139-1.dat

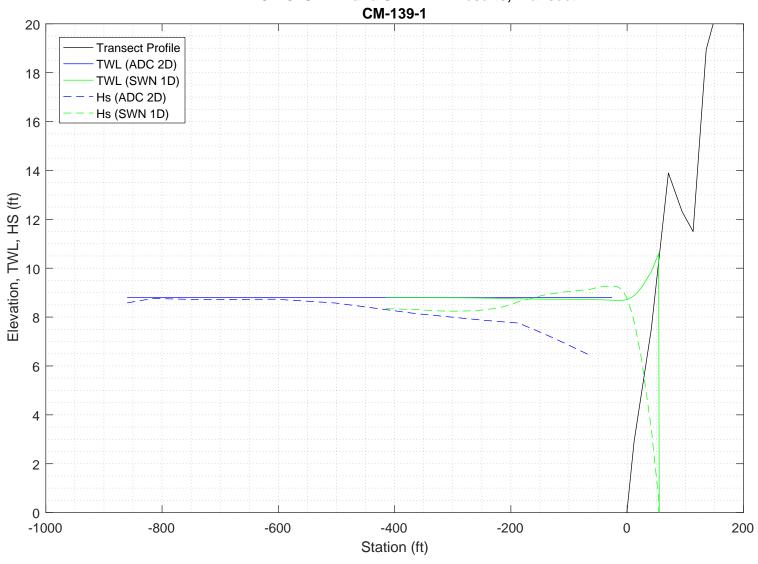
Boundary Conditions:
 TWL- 2.6815 meters
 HS- 2.5313 meters
 PER- 9.9036 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 1.804 feet
SWAN output at toe:
 SETUP- -0.071548 feet
 HS- 9.1162 feet
 PER- 9.9055 seconds

PART 2 COMPLETE_

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:



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]
             0 0 0
                             148
CGRID REGULAR
                                      0.
                                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
                                       148 0
!READinp BOTtom [fac] 'fname1' [idla] [nhedf] [FREe|FORmat[form]|UNFormatted]
      BOTTOM -1. '../gridfiles/CM-139-1zmeters xmeters.grd' 1
                                                                 FREE
I-----
! -- WIND [vel] [dir]
      25.1 0
WIND
! -- 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 2.5313 9.9036 0 2
!-- \ {\tt BOUndnest1} \ - \ {\tt optional} \ {\tt for} \ {\tt boundary} \ {\tt from} \ {\tt parent} \ {\tt run}
!-- BOUndnest2
!-- BOUndnest3
!-- INITial -- usest to specify initial values
```

```
!-- 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.
!-- 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
          Ω
! ----- 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
                        148 148 0
!TABLe 'sname' < HEADer NOHEADer INDexed > 'fname' <output parameters> (output time)
 Table 'curve'
               HEADER 'CM-139-1.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!-----
COMPUTE STATIONARY
              COMPUTATIONAL PART OF SWAN
_____
```

!----- P H Y S I C S -----

```
One-dimensional mode of SWAN is activated
                                      149 MYC
Gridresolution
                    : MXC
                                                           1
                     : MCGRD
                                      150
                    : MSC
                                       31 MDC
                                                          36
                    : MTC
                                        1
                    : NSTATC
                                        O TTERMX
                                                          50
Propagation flags
                    : ITFRE
                                        1 IREFR
                                                           1
                    : IBOT
Source term flags
                                        1 ISURF
                                                           1
                    : IWCAP
                                        1 IWIND
                                                           3
                    : ITRIAD
                                        1 IOUAD
                                                           2
                    : IVEG
                                        0 ITURBV
                    : IMUD
                              0.1000E+01 DY
Spatial step
                    : DX
                                                 0.1000E+01
Spectral bin
                    : df/f
                               0.1157E+00 DDIR
                                                 0.1000E+02
Physical constants : GRAV
                               0.9810E+01 RHO
                                                 0.1025E+04
                    : WSPEED 0.2510E+02 DIR
Wind input : WSPEED Tail parameters : E(f)
                                                 0.0000E+00
                               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
                    : LEVEL
                               0.0000E+00 DEPMIN 0.1000E-01
Drying/flooding
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space : PROPSC
                                  2 ICMAX
                               0.5000E+00 CDD
Scheme spectral space: CSS
                                                  0.5000E+00
Current is off
Quadruplets
                    : IQUAD
                    : LAMBDA 0.2500E+00 CNL4
                                                  0.3000E+08
                               0.5500E+01 CSH2
                    : CSH1
                                                  0.8330E+00
                    : CSH3
                              -0.1250E+01
                              0.1000E+02
Maximum Ursell nr for Snl4:
                                        1 TRFAC
                                                0.8000E+00
Triads
                    : ITRIAD
                    : CUTFR
                               0.2500E+01 URCRI 0.2000E+00
                               0.1000E-01
Minimum Ursell nr for Snl3 :
JONSWAP ('73)
                    : GAMMA
                             0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
                   : EMPCOF (CDS2):
: APM (STPM) :
: POWST :
W-cap Komen ('84)
                                      0.2360E-04
W-cap Komen ('84)
                                      0.3020E-02
                    : POWST
W-cap Komen ('84)
                                       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
                   : SUPCOR 0.0000E+00
Set-up
Diffraction is off
Janssen ('89,'90)
Janssen ('89,'90)
                    : ALPHA
                               0.1000E-01 KAPPA 0.4100E+00
                    : 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
                               0.0000E+00 CF80
                                               -0.5600E+00
                    : CF70
                               0.1249E-02 EDMLPM 0.3600E-02
                    : RHOAW
                    : CDRAG
                               0.1230E-02 UMIN
                    : LIM_PM
                              0.1300E+00
 First guess by 2nd generation model flags for first iteration:
                        0.1000E+23 ALFA
0 IQUAD 0
 ITER 1 GRWMX
 IWIND
            2 IWCAP
        1 IBOT 1 ISURF
0 ITURBV 0 IMUD
 ITRIAD
                        1 ISURF
                                     1
                                     0
 IVEG
 -----
iteration 1; sweep 1
          1; sweep 2
1; sweep 3
iteration
iteration
          1; sweep 4
iteration
not possible to compute, first iteration
 Options given by user are activated for proceeding calculation:
       2 GRWMX 0.1000E+00 ALFA
                                        0.0000E+00
 ITER
            3 IWCAP
 IWIND
                        1 IQUAD
                                     2
 TTRTAD
           1 IBOT
                        1 ISURF
                                     1
                       0 IMUD
 IVEG
          0 ITURBV
                                     0
 _____
iteration 2; sweep 1
iteration
            2; sweep 2
iteration
            2; sweep 3
            2; sweep 4
iteration
accuracy OK in 59.03 % of wet grid points ( 99.50 % required)
iteration
            3; sweep 1
            3; sweep 2
iteration
iteration
            3; sweep 3
```

```
3; sweep 4
iteration
accuracy OK in 0.70 % of wet grid points (99.50 % required)
iteration
             4; sweep 1
             4; sweep 2
iteration
iteration
             4; sweep 3
iteration
             4; sweep
accuracy OK in 55.56 % of wet grid points (99.50 % required)
iteration
             5; sweep 1
iteration
             5; sweep 2
iteration
             5; sweep 3
iteration
             5; sweep
accuracy OK in 91.67 % of wet grid points ( 99.50 % required)
iteration
             6; sweep 1
iteration
             6; sweep
iteration
             6; sweep
iteration
             6; sweep
accuracy OK in 92.37 % of wet grid points (99.50 % required)
iteration
             7; sweep 1
iteration
             7; sweep
             7; sweep 3
iteration
             7; sweep 4
iteration
accuracy OK in 94.45 % of wet grid points (99.50 % required)
iteration
             8; sweep 1
iteration
             8; sweep 2
             8; sweep 3
iteration
             8; sweep 4
iteration
accuracy OK in 95.84 % of wet grid points (99.50 % required)
             9; sweep 1
iteration
iteration
             9; sweep 2
             9; sweep 3
iteration
             9; sweep 4
iteration
accuracy OK in 95.1\overline{4} % of wet grid points ( 99.50 % required)
            10; sweep 1
iteration
iteration
            10; sweep 2
iteration
            10; sweep
iteration
            10; sweep 4
accuracy OK in 96.53 % of wet grid points (99.50 % required)
iteration
            11; sweep 1
iteration
           11; sweep 2
iteration
            11; sweep
iteration
            11; sweep 4
accuracy OK in 97.23 % of wet grid points ( 99.50 % required)
            12; sweep 1
iteration
iteration
           12; sweep 2
           12; sweep 3
iteration
           12; sweep 4
iteration
accuracy OK in 96.53 % of wet grid points (99.50 % required)
iteration
            13; sweep 1
iteration
           13; sweep
iteration
            13; sweep 3
iteration
            13; sweep
accuracy OK in 97.23 % of wet grid points (99.50 % required)
iteration
            14; sweep
iteration
           14; sweep
iteration
            14; sweep 3
            14; sweep
iteration
accuracy OK in 97.9\overline{2} % of wet grid points ( 99.50 % required)
            15; sweep 1
iteration
iteration
            15; sweep 2
iteration
           15; sweep 3
iteration
            15; sweep
accuracy OK in 98.62 % of wet grid points (99.50 % required)
iteration
            16; sweep 1
iteration
            16; sweep 2
iteration
           16; sweep 3
iteration
            16; sweep
accuracy OK in 97.92 % of wet grid points ( 99.50 % required)
iteration
            17; sweep 1
iteration
            17; sweep
            17; sweep
iteration
            17; sweep
accuracy OK in 98.62 % of wet grid points (99.50 % required)
iteration
            18; sweep 1
iteration
            18; sweep 2
iteration
           18; sweep 3
```

```
iteration
           18; sweep 4
accuracy OK in 97.92 % of wet grid points (99.50 % required)
iteration
            19; sweep 1
            19; sweep 2
iteration
iteration
            19; sweep 3
iteration
            19; sweep
accuracy OK in 97.92 % of wet grid points (99.50 % required)
iteration
            20; sweep 1
iteration
            20; sweep 2
iteration
            20; sweep 3
iteration
            20; sweep
accuracy OK in 95.84 % of wet grid points (99.50 % required)
iteration
            21; sweep 1
iteration
            21; sweep 2
iteration
            21; sweep
            21; sweep
iteration
accuracy OK in 95.14 % of wet grid points (99.50 % required)
iteration
            22; sweep 1
iteration
            22; sweep 2
iteration
            22; sweep 3
            22; sweep 4
iteration
accuracy OK in 97.92 % of wet grid points (99.50 % required)
iteration
            23; sweep 1
iteration
            23; sweep 2
            23; sweep 3
iteration
iteration 23; sweep 4 accuracy OK in 98.62 % of wet grid points (99.50 % required)
            24; sweep 1
iteration
iteration
            24; sweep 2
            24; sweep 3
iteration
            24; sweep 4
iteration
accuracy OK in 98.62 % of wet grid points (99.50 % required)
iteration
            25; sweep 1
iteration
            25; sweep 2
iteration
            25; sweep 3
iteration
            25; sweep 4
accuracy OK in 99.31 % of wet grid points (99.50 % required)
iteration
            26; sweep 1
iteration
            26; sweep 2
iteration
            26; sweep
iteration
            26; sweep 4
accuracy OK in 98.62 % of wet grid points (99.50 % required)
            27; sweep 1
iteration
iteration
            27; sweep 2
            27; sweep 3
iteration
iteration
            27; sweep 4
accuracy OK in 98.62 % of wet grid points (99.50 % required)
iteration
            28; sweep 1
iteration
            28; sweep
            28; sweep 3
iteration
iteration
            28; sweep 4
accuracy OK in 99.31 % of wet grid points (99.50 % required)
iteration
            29; sweep 1
iteration
            29; sweep 2
            29; sweep 3
iteration
            29; sweep
iteration
accuracy OK in 98.62 % of wet grid points (99.50 % required)
iteration
            30; sweep 1
iteration
            30; sweep 2
iteration
            30; sweep
iteration
            30; sweep
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)
```

f f Run:1	Table:cu	ırve	SWAN version	n:41.20A						
ն Է Հր Է [Մ		Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
,	0.	0.	2.54397	9.8678	10.0005	8.9554	0.000	31.5057	19.9800	0.000000
	1.	0.	2.54303	9.8679	10.0005	8.9552	0.000	31.4256	19.9000	-0.000029
	2.	0.	2.54211	9.8679	10.0005	8.9550	0.000	31.3459	19.8199	-0.000059
	3.	0.	2.54121	9.8680	10.0005	8.9548	0.000	31.2667	19.7399	-0.000089
	4. 5.	0. 0.	2.54032	9.8681	10.0005	8.9547 8.9546	0.000	31.1883	19.6599	-0.000120 -0.000150
	6.	0.	2.53947 2.53863	9.8682 9.8683	10.0005 10.0005	8.9545	0.000	31.1131 31.0489	19.5798 19.4998	-0.000130
	7.	0.	2.53781	9.8684	10.0005	8.9544	0.000	30.9875	19.4198	-0.000209
	8.	Ö.	2.53700	9.8685	10.0005	8.9543	0.000	30.9269	19.3398	-0.000238
	9.	0.	2.53621	9.8686	10.0005	8.9543	0.000	30.8664	19.2597	-0.000269
	10.	0.	2.53544	9.8687	10.0005	8.9542	0.000	30.8064	19.1797	-0.000299
	11.	0.	2.53468	9.8688	10.0005	8.9542	0.000	30.7462	19.0997	-0.000330
	12.	0.	2.53389	9.8689	10.0005	8.9541	0.000	30.6832	19.0196	-0.000361
	13.	0.	2.53312 2.53237	9.8690	10.0005	8.9542	0.000	30.6193	18.9296	-0.000397
	14. 15.	0. 0.	2.53237	9.8691 9.8692	10.0005 10.0005	8.9542 8.9543	0.000	30.5578 30.4995	18.8496 18.7695	-0.000429 -0.000461
	16.	0.	2.53176	9.8693	10.0005	8.9543	0.000	30.4546	18.6995	-0.000490
	17.	0.	2.53022	9.8694	10.0005	8.9537	0.000	30.3814	18.6695	-0.000502
	18.	0.	2.52880	9.8696	10.0005	8.9547	0.000	30.2524	18.4694	-0.000586
	19.	0.	2.52716	9.8700	10.0005	8.9557	0.000	30.1013	18.2593	-0.000678
	20.	0.	2.52551	9.8703	10.0005	8.9568	0.000	29.9423	18.0492	-0.000772
	21.	0.	2.52392	9.8706	10.0005	8.9580	0.000	29.7800	17.8391	-0.000870
	22. 23.	0. 0.	2.52241 2.52101	9.8709 9.8712	10.0005 10.0005	8.9593 8.9607	0.000	29.6157 29.4499	17.6290 17.4189	-0.000971 -0.001077
	24.	0.	2.52101	9.8716	10.0005	8.9622	0.000	29.2829	17.4169	-0.001077
	25.	0.	2.51853	9.8719	10.0005	8.9638	0.000	29.1148	16.9987	-0.001299
	26.	0.	2.51742	9.8723	10.0005	8.9655	0.000	28.9434	16.7886	-0.001416
	27.	0.	2.51647	9.8726	10.0005	8.9675	0.000	28.7726	16.5685	-0.001543
	28.	0.	2.51560	9.8730	10.0005	8.9694	0.000	28.6077	16.3583	-0.001668
	29.	0.	2.51485	9.8734	10.0005	8.9715	0.000	28.4512	16.1482	-0.001796
	30.	0.	2.51419 2.51363	9.8737 9.8741	10.0005 10.0005	8.9736 8.9758	0.000	28.2966 28.1420	15.9381 15.7279	-0.001927 -0.002063
	31. 32.	0. 0.	2.51363	9.8741	10.0005	8.9780	0.000	27.9858	15.7279	-0.002063
	33.	0.	2.51317	9.8748	10.0005	8.9804	0.000	27.8292	15.3077	-0.002350
	34.	0.	2.51253	9.8751	10.0005	8.9828	0.000	27.6701	15.0975	-0.002501
	35.	0.	2.51236	9.8755	10.0005	8.9854	0.000	27.5086	14.8873	-0.002658
	36.	0.	2.51231	9.8759	10.0005	8.9880	0.000	27.3454	14.6772	-0.002822
	37.	0.	2.51239	9.8763	10.0005	8.9906	0.000	27.1809	14.4670	-0.002991
	38.	0.	2.51257 2.51286	9.8766	10.0005 10.0005	8.9933	0.000	27.0138	14.2568	-0.003167
	39. 40.	0. 0.	2.51266	9.8770 9.8774	10.0005	8.9962 8.9991	0.000	26.8441 26.6718	14.0467 13.8365	-0.003350 -0.003540
	41.	0.	2.51320	9.8778	10.0005	9.0021	0.000	26.4970	13.6263	-0.003737
	42.	0.	2.51447	9.8782	10.0005	9.0052	0.000	26.3203	13.4161	-0.003943
	43.	0.	2.51528	9.8786	10.0005	9.0083	0.000	26.1416	13.2058	-0.004157
	44.	0.	2.51624	9.8790	10.0005	9.0115	0.000	25.9603	12.9956	-0.004381
	45.	0.	2.51735	9.8794	10.0005	9.0147	0.000	25.7765	12.7854	-0.004613
	46. 47.	0. 0.	2.51864 2.52009	9.8798 9.8802	10.0005 10.0005	9.0179 9.0212	0.000	25.5908 25.4038	12.5751 12.3649	-0.004856 -0.005109
	48.	0.	2.52009	9.8806	10.0005	9.0212	0.000	25.2170	12.1546	-0.005109
	49.	0.	2.52356	9.8810	10.0005	9.0275	0.000	25.0325	11.9444	-0.005647
	50.	0.	2.52560	9.8814	10.0005	9.0305	0.000	24.8507	11.7341	-0.005932
	51.	0.	2.52785	9.8818	10.0005	9.0334	0.000	24.6676	11.5238	-0.006231
	52.	0.	2.53035	9.8822	10.0005	9.0362	0.000	24.4883	11.3135	-0.006542
	53.	0.	2.53289	9.8826	10.0005	9.0384	0.000	24.3065	11.1131	-0.006853
	54.	0.	2.53586	9.8830	10.0005	9.0405	0.000	24.1190	10.9028	-0.007196
	55. 56.	0. 0.	2.53913 2.54245	9.8834 9.8838	10.0005 10.0005	9.0423 9.0433	0.000	23.9321 23.7424	10.6924 10.4921	-0.007555 -0.007914
	57.	0.	2.54245	9.8838	10.0005	9.0440	0.000	23.7424	10.4921	-0.007914
	58.	0.	2.55028	9.8846	10.0005	9.0437	0.000	23.3516	10.0813	-0.008709
	59.	0.	2.55485	9.8851	10.0005	9.0429	0.000	23.1528	9.8709	-0.009149

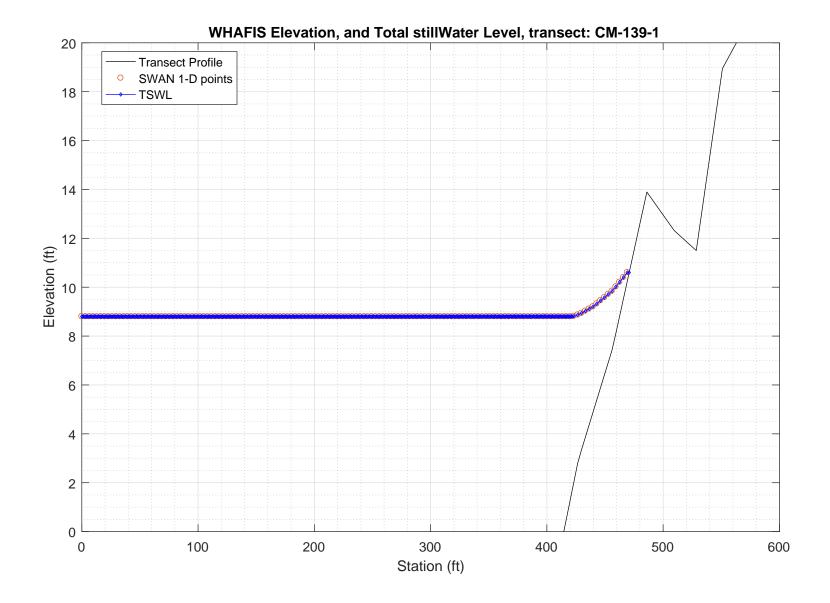
60.	0.	2.55953	9.8855	10.0005	9.0408	0.000	22.9505	9.6704	-0.009591
61.	0.	2.56487	9.8860	10.0005	9.0378	0.000	22.7404	9.4599	-0.010081
62.	0.	2.57071	9.8864	10.0005	9.0334	0.000	22.5282	9.2494	-0.010599
63.	0.	2.57670	9.8869	10.0005	9.0272	0.000	22.3127	9.0489	-0.011123
64.	0.	2.58356	9.8874	10.0005	9.0195	0.000	22.0937	8.8383	-0.011705
65.	0.	2.59061	9.8879	10.0005	9.0096	0.000	21.8714	8.6377	-0.012293
66.	0.	2.59862	9.8884	10.0005	8.9977	0.000	21.6450	8.4270	-0.012949
67.	0.	2.60687	9.8890	10.0005	8.9831	0.000	21.4155	8.2264	-0.013615
68.	0.	2.61619	9.8896	10.0005	8.9660	0.000	21.1852	8.0156	-0.014357
69.	0.	2.62603	9.8902	10.0005	8.9455	0.000	20.9792	7.8149	-0.015109
70.	0.	2.63430	9.8908	10.0005	8.9206	0.000	20.8356	7.6743	-0.015664
71.	0.	2.64006	9.8912	10.0005	8.8918	0.000	20.7364	7.6040	-0.015956
72.	0.	2.64608	9.8916	10.0005	8.8625	0.000	20.6546	7.5337	-0.016253
73.	0.	2.65174	9.8920	10.0005	8.8325	0.000	20.5786	7.4735	-0.016514
74.	0.	2.65789	9.8925	10.0005	8.8028	0.000	20.5013	7.4032	-0.016822
75.	0.	2.66408	9.8930	10.0005	8.7728	0.000	20.4240	7.3329	-0.017137
76.	0.	2.67031	9.8934	10.0005	8.7426	0.000	20.3458	7.2625	-0.017458
77.	0.	2.67656	9.8939	10.0005	8.7121	0.000	20.2670	7.1922	-0.017786
78.	0.	2.68285	9.8944	10.0005	8.6814	0.000	20.1875	7.1219	-0.018121
79.	0.	2.68914	9.8949	10.0005	8.6506	0.000	20.1073	7.0515	-0.018463
80.	0.	2.69545	9.8954	10.0005	8.6197	0.000	20.0265	6.9812	-0.018811
81.	0.	2.70176	9.8960	10.0005	8.5886	0.000	19.9451	6.9108	-0.019165
82.	0.	2.70816	9.8965	10.0005	8.5574	0.000	19.8751	6.8405	-0.019524
83.	0.	2.71317	9.8970	10.0005	8.5249	0.000	19.8246	6.8003	-0.019727
84.	0.	2.71769	9.8975	10.0005	8.4927	0.000	19.7879	6.7701	-0.019876
85.	0.	2.72165	9.8979	10.0005	8.4609	0.000	19.7598	6.7500	-0.019968
86.	0.	2.72552	9.8983	10.0005	8.4300	0.000	19.7345	6.7299	-0.020059
87.	0.	2.72922	9.8987	10.0005	8.4001	0.000	19.7066	6.7099	
									-0.020149
88.	0.	2.73328	9.8992	10.0005	8.3717	0.000	19.6773	6.6797	-0.020294
89.	0.	2.73675	9.8996	10.0005	8.3436	0.000	19.6519	6.6596	-0.020380
90.	0.	2.74006	9.9000	10.0005	8.3163	0.000	19.6240	6.6395	-0.020466
91.	0.	2.74373	9.9004	10.0005	8.2905	0.000	19.5947	6.6094	-0.020606
92.	0.	2.74681	9.9008	10.0005	8.2647	0.000	19.5695	6.5893	-0.020687
93.	0.	2.74978	9.9011	10.0005	8.2398	0.000	19.5455	6.5692	-0.020767
94.	0.	2.75259	9.9015	10.0005	8.2156	0.000	19.5181	6.5492	-0.020844
	0.								
95.		2.75575	9.9019	10.0005	8.1927	0.000	19.4893	6.5190	-0.020978
96.	0.	2.75834	9.9022	10.0005	8.1698	0.000	19.4642	6.4989	-0.021051
97.	0.	2.76079	9.9026	10.0005	8.1476	0.000	19.4367	6.4789	-0.021121
98.	0.	2.76359	9.9029	10.0005	8.1265	0.000	19.4078	6.4488	-0.021249
99.	0.	2.76582	9.9033	10.0005	8.1054	0.000	19.3828	6.4287	-0.021313
100.	0.	2.76794	9.9036	10.0005	8.0849	0.000	19.3591	6.4086	-0.021375
101.	0.	2.76991	9.9039	10.0005	8.0650	0.000	19.3320	6.3886	-0.021434
102.	0.	2.77224	9.9043	10.0005	8.0462	0.000	19.3034	6.3584	-0.021552
	0.								
103.		2.77399	9.9046	10.0005	8.0272	0.000	19.2787	6.3384	-0.021605
104.	0.	2.77560	9.9049	10.0005	8.0088	0.000	19.2513	6.3183	-0.021654
105.	0.	2.77757	9.9052	10.0005	7.9915	0.000	19.2227	6.2882	-0.021763
106.	0.	2.77861	9.9055	10.0005	7.9739	0.000	19.1596	6.2682	-0.021808
107.	0.	2.78393	9.9060	10.0005	7.9633	0.000	19.0341	6.1475	-0.022509
108.	0.	2.78992	9.9066	10.0005	7.9532	0.000	18.8741	6.0066	-0.023366
109.	0.	2.79624	9.9072	10.0005	7.9424	0.000	18.6988	5.8557	-0.024317
110.	0.	2.80180	9.9078	10.0005	7.9294	0.000	18.5198	5.7148	-0.025208
111.	0.	2.80696	9.9085	10.0005	7.9151	0.000	18.3318	5.5739	-0.026102
112.	0.	2.81222	9.9092	10.0005	7.9002	0.000	18.1367	5.4229	-0.027080
113.	0.	2.81618	9.9100	10.0005	7.8832	0.000	17.9382	5.2820	-0.027952
114.	0.	2.81995	9.9108		7.8656	0.000	17.7349		
				10.0005				5.1311	-0.028888
115.	0.	2.82200	9.9116	10.0005	7.8462	0.000	17.5308	4.9903	-0.029673
116.	0.	2.82276	9.9125	10.0005	7.8259	0.000	17.3187	4.8496	-0.030388
117.	0.	2.82274	9.9134	10.0005	7.8055	0.000	17.1007	4.6989	-0.031123
118.	0.	2.82001	9.9143	10.0005	7.7837	0.000	16.8581	4.5584	-0.031614
119.	0.	2.82042	9.9154	10.0005	7.7558	0.000	16.5606	4.3674	-0.032616
120.	0.	2.82169	9.9165	10.0005	7.7241	0.000	16.2219	4.1360	-0.033970
121.	0.	2.81912	9.9176	10.0005	7.6856	0.000	15.8543	3.9050	-0.034973
122.	0.	2.81074	9.9186	10.0005	7.6475	359.996	15.4762	3.6645	-0.035526
123.	0.	2.79290	9.9194	10.0005	7.6091	359.975	15.0912	3.4350	-0.034975
124.	0.	2.76793	9.9199	10.0005	7.5673	359.945	14.6951	3.1965	-0.033547
125.	0.	2.73412	9.9199	10.0005	7.5128	359.927	14.2893	2.9694	-0.030557
126.	0.	2.69137	9.9192	10.0005	7.4471	359.923	13.8571	2.7441	-0.025927

127. 128.	0. 0.	2.64072 2.56326	9.9177 9.9166	10.0005 10.0005	7.3742 7.3174	359.927 359.933	13.4078 12.9804	2.5102 2.2917	-0.019785 -0.008340
129.	0.	2.48257	9.9173	10.0005	7.2314	359.935	12.5808	2.0649	0.004932
130.	0.	2.39206	9.9205	10.0005	7.1326	359.887	12.2333	1.8513	0.004332
131.	0.	2.28972	9.9254	10.0005	6.9986	359.992	11.9787	1.7025	0.042500
132.	0.	2.16488	9.9320	10.0005	6.9079	0.034	11.7888	1.5790	0.068987
133.	0.	2.10400	9.9400	10.0005	6.8259	0.034	11.7606	1.4458	0.000907
134.		1.91811	9.9488	10.0005	6.7269	0.025	11.4485	1.3231	0.123124
	0.								
135.	0.	1.75548	9.9562	10.0005	6.7518	359.929	11.3710	1.1997	0.159654
136.	0.	1.58060	9.9627	10.0005	6.7828	359.725	11.3174	1.0798	0.199780
137.	0.	1.41663	9.9665	10.0005	6.8197	359.502	11.1457	0.9679	0.237869
138.	0.	1.24240	9.9694	10.0005	6.9424	359.155	10.9781	0.8487	0.278652
139.	0.	1.08035	9.9704	10.0005	7.0710	358.894	10.6710	0.7373	0.317308
140.	0.	0.85666	9.9723	10.0005	7.5145	358.928	11.1812	0.5822	0.372218
141.	0.	0.62583	12.5824	12.4477	8.1658	359.627	12.5288	0.4210	0.430988
142.	0.	0.40492	13.0189	12.4477	8.6048	0.317	14.2171	0.2691	0.489070
143.	0.	0.18003	13.9707	13.8874	9.5245	359.621	15.9380	0.1099	0.549868
144.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
145.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
146.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
147.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
148.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

WHAFIS input: CM-139-1.dat WHAFIS output: CM-139-1.out

PART 3 COMPLETE___



WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)

Executed on: Thu Feb 20 14:57:37 2020

Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Harpswell\3_whafis\whafis4\CM-139-1.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Harpswell\3_whafis\whafis4\CM-139-1.out
header

THIS IS A 100-YEAR CASE

THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDLE 56 14 WINDLE 66 14 WINDLE 60 00

			THE FOLLO WIND		EFAULT WIND WINDOF 56.	SPEEDS ARE 14 WINDVH				
IE	0.000	-56.769	1.000	1.000	PART1 INE 8.797		9.904	56.140	0.081	0.000
OF	1.000	-56.688	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	2.000 3.000	-56.607 -56.526	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.081	0.000
OF	4.000	-56.445	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF	5.000	-56.365	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	6.000 7.000	-56.284 -56.203	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.081	0.000
OF	8.000	-56.122	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF	9.000	-56.041	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	10.000 11.000	-55.961 -55.880	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080 0.081	0.000
OF	12.000	-55.799	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	13.000 14.000	-55.718 -55.637	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.080	0.000
OF	15.000	-55.557	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF	16.000 17.000	-55.476	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	18.000	-55.395 -55.314	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.081	0.000
OF	19.000	-55.233	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	20.000 21.000	-55.153 -55.072	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080 0.081	0.000
OF	22.000	-54.991	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF	23.000	-54.910	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	24.000 25.000	-54.830 -54.749	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080 0.081	0.000
OF	26.000	-54.668	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	27.000 28.000	-54.587 -54.507	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF	29.000	-54.426	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF	30.000	-54.345	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	31.000 32.000	-54.264 -54.183	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.080	0.000
OF	33.000	-54.103	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	34.000 35.000	-54.022 -53.941	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.081	0.000
OF	36.000	-53.860	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF	37.000 38.000	-53.779 -53.699	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	39.000	-53.618	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF	40.000	-53.537	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	41.000 42.000	-53.456 -53.375	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.080	0.000
OF	43.000	-53.295	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	44.000 45.000	-53.214 -53.133	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.081 0.081	0.000
OF	46.000	-53.153	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF	47.000	-52.971	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
OF OF	48.000 49.000	-52.891 -52.810	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080 0.081	0.000
OF	50.000	-52.729	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
OF OF	51.000 52.000	-52.648 -52.568	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.080 0.060	0.000
OF	53.000	-52.529	0.000	8.797	0.000	0.000	0.000	0.000	0.025	0.000
OF OF	54.000 55.000	-52.517 -52.505	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.012	0.000
OF	56.000	-52.430	0.000	8.797	0.000	0.000	0.000	0.000	0.143	0.000
OF	57.000	-52.219	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF OF	58.000 59.000	-52.009 -51.800	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.209	0.000
OF	60.000	-51.590	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF OF	61.000 62.000	-51.379 -51.169	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.211 0.210	0.000
OF	63.000	-50.959	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF	64.000 65.000	-50.748	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF OF	66.000	-50.538 -50.328	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.210 0.210	0.000
OF	67.000	-50.118	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
OF OF	68.000 69.000	-49.908 -49.698	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.210 0.211	0.000
OF	70.000	-49.487	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF	71.000	-49.277	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
OF OF	72.000 73.000	-49.067 -48.857	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.210 0.210	0.000
OF	74.000	-48.647	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
OF OF	75.000 76.000	-48.437 -48.226	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.211 0.211	0.000
OF	77.000	-48.016	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
OF	78.000	-47.806	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
OF OF	79.000 80.000	-47.596 -47.386	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.210 0.210	0.000
OF	81.000	-47.176	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF OF	82.000 83.000	-46.965 -46.755	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.211 0.210	0.000
OF	84.000	-46.545	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF	85.000	-46.334	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF OF	86.000 87.000	-46.124 -45.914	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.210 0.210	0.000
OF	88.000	-45.704	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
OF OF	89.000 90.000	-45.494 -45.284	0.000	8.797 8.797	0.000	0.000	0.000	0.000	0.210 0.211	0.000
OF	91.000	-45.073	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
OF	92.000	-44.863	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000

OF OF OF OF OF	93.000 94.000 95.000 96.000 97.000 98.000 99.000	-44.653 -44.443 -44.233 -44.023 -43.813 -43.603 -43.393	0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.210 0.210 0.210 0.210 0.210 0.210 0.210	0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	100.000 101.000 102.000 103.000 104.000 105.000 106.000	-43.183 -42.972 -42.762 -42.552 -42.342 -42.132 -41.922	0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.211 0.211 0.210 0.210 0.210 0.210 0.211	0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF	107.000 108.000 109.000 110.000 111.000 112.000	-41.711 -41.501 -41.291 -41.080 -40.870 -40.660 -40.450	0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.211 0.210 0.211 0.211 0.210 0.210 0.210	0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF OF	114.000 115.000 116.000 117.000 118.000 119.000 120.000 121.000	-40.240 -40.030 -39.819 -39.609 -39.399 -39.189 -38.979 -38.769	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.210 0.211 0.211 0.210 0.210 0.210 0.210 0.211	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	122.000 123.000 124.000 125.000 126.000 127.000 128.000 129.000	-38.558 -38.348 -38.138 -37.928 -37.718 -37.508 -37.297 -37.087	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.211 0.210 0.210 0.210 0.210 0.211 0.211 0.211	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	130.000 131.000 132.000 133.000 134.000 135.000 136.000	-36.877 -36.668 -36.457 -36.247 -36.037 -35.826 -35.616	0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.209 0.210 0.211 0.210 0.211 0.211 0.210	0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	137.000 138.000 139.000 140.000 141.000 142.000 143.000 144.000	-35.406 -35.196 -34.986 -34.776 -34.565 -34.355 -34.145 -33.935	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.210 0.210 0.210 0.211 0.211 0.210 0.210 0.210	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	145.000 146.000 147.000 148.000 150.000 151.000 152.000	-33.725 -33.515 -33.304 -33.094 -32.884 -32.674 -32.464 -32.254	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.210 0.211 0.211 0.210 0.210 0.210 0.210 0.211	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	153.000 154.000 155.000 156.000 157.000 158.000 159.000	-32.043 -31.833 -31.623 -31.413 -31.203 -30.992 -30.782	0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.211 0.210 0.210 0.210 0.211 0.211 0.211	0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF OF	160.000 161.000 162.000 163.000 164.000 165.000 166.000	-30.572 -30.362 -30.151 -29.941 -29.731 -29.521 -29.311 -29.101	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.210 0.211 0.211 0.210 0.210 0.210 0.210 0.210	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF OF	168.000 169.000 170.000 171.000 172.000 173.000 174.000 175.000	-28.891 -28.681 -28.471 -28.264 -28.059 -27.853 -27.647 -27.442	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.210 0.210 0.208 0.206 0.206 0.206 0.206	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	176.000 177.000 178.000 179.000 180.000 181.000 182.000 183.000	-27.236 -27.030 -26.825 -26.619 -26.414 -26.208 -26.002 -25.796	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.206 0.206 0.206 0.206 0.206 0.206 0.206	0.000 0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF OF OF OF	184.000 185.000 186.000 187.000 188.000 189.000 190.000	-25.590 -25.385 -25.179 -24.974 -24.768 -24.562 -24.357	0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.206 0.206 0.206 0.206 0.206 0.206 0.206	0.000 0.000 0.000 0.000 0.000 0.000
OF OF OF	191.000 192.000 193.000 194.000	-24.151 -23.945 -23.740 -23.534	0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.797	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.206 0.206 0.206 0.206	0.000 0.000 0.000 0.000

	195.000 196.000 197.000 198.000 201.000 201.000 202.000 203.000 204.000 205.000 206.000 211.000 212.000 213.000 211.000 215.000 211.000 212.000 213.000 214.000 215.000 221.000 222.000 223.000 221.000	-23.328 -23.123 -22.917 -22.711 -22.506 -22.300 -22.095 -21.889 -21.683 -21.478 -21.066 -20.861 -20.655 -20.450 -20.244 -20.038 -19.833 -19.627 -19.421 -19.216 -19.010 -18.393 -18.188 -17.776 -17.776 -17.776 -17.776 -17.7571 -17.365 -17.776 -17.159 -16.484 -16.484 -16.485 -16.346 -16.277 -16.208 -16.139 -16.070 -15.933 -15.657 -15.588 -15.519 -15.588 -15.519 -15.588 -15.519 -15.588 -15.519 -15.450 -15.381 -15.312 -15.243 -16.484 -16.484 -16.4967 -15.588 -15.519 -15.588 -15.519 -15.588 -15.519 -15.450 -15.381 -15.312 -15.243 -16.484 -16.484 -16.4967 -15.5588 -15.519 -15.5588 -15.519 -15.381 -15.312 -15.243 -15.312 -15.381 -15.322 -14.484 -14.415 -14.4967 -14.898 -14.4967 -14.899 -14.760 -14.691 -14.6	0.000 0.000	8.797 8.7997 8.7998 8.7998	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.206 0.206	0.000 0.000
OF OF OF OF OF OF OF	274.000 275.000 276.000 277.000 278.000 279.000 280.000 281.000 282.000	-13.531 -13.508 -13.485 -13.462 -13.439 -13.317 -13.371 -13.371	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.797 8.797 8.797 8.798 8.798 8.798 8.798 8.798 8.798	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000

OF OF OF OF OF OF OF OF OF OF OF OF OF O	297.000 298.000 299.000 300.000 301.000 302.000 305.000 307.000 308.000 311.000 311.000 311.000 311.000 312.000 314.000 315.000 317.000 318.000 317.000 320.000 321.000 321.000 321.000 321.000 321.000 322.000 323.000 325.000 327.000 328.000 329.000 329.000 329.000 329.000	-13.006 -12.983 -12.960 -12.937 -12.914 -12.891 -12.8868 -12.846 -12.823 -12.777 -12.754 -12.731 -12.686 -12.663 -12.6640 -12.617 -12.594 -12.571 -12.548 -12.525 -12.502 -12.434 -12.431 -12.388 -12.434 -12.411 -12.388 -12.437 -12.431 -12.319 -12.296 -12.273 -12.251 -12.228 -12.228	0.000 0.000	8.798 8.798 8.798 8.798 8.798 8.798 8.799	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.023 0.023	0.000 0.000
OF OF OF OF OF OF OF OF OF OF OF OF OF O	332.000 333.000 334.000 335.000 336.000 337.000 338.000 349.000 341.000 342.000 344.000 344.000 345.000 346.000 357.000 351.000 351.000 351.000 351.000 351.000 351.000 351.000 351.000 351.000 351.000 351.000 351.000	-12.205 -12.182 -12.189 -12.136 -12.133 -12.090 -12.067 -12.044 -12.022 -11.999 -11.976 -11.953 -11.930 -11.953 -11.930 -11.953 -11.930 -11.953 -11.930 -11.953 -11.930 -11.953 -11.95	0.000 0.000	8.799 8.790 8.800 8.800 8.800 8.800	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.024 0.144	0.000 0.000
OF O	367.000 368.000 369.000 370.000 371.000 371.000 373.000 374.000 375.000 376.000 377.000 380.000 381.000	-9.155 -9.010 -8.866 -8.722 -8.578 -8.434 -8.290 -8.145 -8.001 -7.857 -7.713 -7.569 -7.424 -7.280 -7.136 -6.992 -6.848 -6.704 -6.560 -6.415 -6.271 -6.127 -5.983 -5.751 -5.516 -5.282 -5.048 -4.814 -4.580 -4.346 -4.112 -3.878	0.000 0.000	8.800 800	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.144 0.124 0.144 0.123 0.234	0.000 0.000

	OF OF OF OF OF OF OF OF OF OF OF OF IF IF IF IF IF IF IF IF IF IF IF IF IF	400.000 401.000 402.000 403.000 405.000 405.000 406.000 407.000 410.000 411.000 411.000 411.000 411.000 411.000 412.000 413.000 414.000 415.000 416.000 417.000 418.000 419.000 420.000	-3.410 -3.176 -2.941 -2.707 -2.473 -2.239 -2.005 -1.771 -1.536 -1.302 -1.068 -0.834 -0.600 -0.365 -0.131 -0.103 0.337 0.571 0.806 1.040 1.274 1.508 1.742 2.030 2.798 3.346 4.366 4.366 4.376 5.895 6.405 5.895 6.405 5.895 6.405 5.895 6.405 5.895 6.405 5.895 6.405 5.895 6.405 5.895 6.405 5.895 6.405 6.915 7.425 8.108 8.819 9.531 10.242 10.6601 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000	8.800 8.900 8.000 8.000 8.000 8.000 8.000 8.000 8.000 8.000 8.000 8.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.234 0.235 0.199 0.154 0.157 0.1216 0.216 0.216 0.2216 0.225 0.000
1	END	END	FETCH	SURGE ELEV	SURGE ELEV	INITIAL	INITIAL		BOTTOM	AVERAGE
IE	STATION 0.000	ELEVATION -56.769	LENGTH 1.000	10-YEAR 1.000	100-YEAR 8.797	WAVE HEIGHT 13.288	W. PERIOD 9.904	56.140	SLOPE 0.081	A-ZONES 0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1.000 END	-56.688 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
OF	STATION 2.000	ELEVATION -56.607	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 3.000	ELEVATION -56.526	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000 END	-56.445 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	0.000 AVERAGE
0.11	STATION	ELEVATION	10-YEAR 0.000	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES 0.000
OF	5.000 END	-56.365 END	NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	AVERAGE
OF	STATION 6.000	ELEVATION -56.284	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	7.000	-56.203	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
		ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	8.000 END	-56.122 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
OF		ELEVATION -56.041	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.080	A-ZONES 0.000
Or	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	10.000	ELEVATION -55.961	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.080	A-ZONES 0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	11.000 END	-55.880	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	12.000 END	-55.799 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
OF	STATION 13.000	ELEVATION -55.718	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	14.000	ELEVATION -55.637	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.080	A-ZONES 0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	15.000	-55.557	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.080	0.000
-		ELEVATION	10-YEAR	100-YEAR				0.000	BOTTOM	AVERAGE A-ZONES
OF	16.000 END	-55.476 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
OF	STATION 17.000	ELEVATION -55.395	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	5.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 18.000	-55.314	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	19.000	-55.233	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000

OF OF 399.000 400.000 -3.644 -3.410 0.000

8.800

0.000

0.000

0.000

0.000

0.234 0.234 0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	20.000	-55.153	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 21.000	ELEVATION -55.072	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR 0.000	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	22.000 END	-54.991 END	NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	23.000 END	-54.910 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	24.000	-54.830	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	25.000	-54.749	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	26.000	-54.668	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 27.000	ELEVATION -54.587	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.080	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 28.000	ELEVATION -54.507	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.080	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	29.000 END	-54.426 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	30.000 END	-54.345 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	31.000	-54.264	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	32.000	-54.183	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	33.000	-54.103	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM SLOPE	AVERAGE A-ZONES
OF	STATION 34.000	ELEVATION -54.022	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 35.000	ELEVATION -53.941	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
Or	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0.000	SLOPE	A-ZONES
OF	36.000 END	-53.860 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	37.000 END	-53.779 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	38.000 END	-53.699 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	39.000 END	-53.618 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.081	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					BOTTOM SLOPE	A-ZONES
OF	40.000	-53.537	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	41.000	-53.456	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	42.000	-53.375	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
	END	END ELEVATION	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 43.000	-53.295	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.080	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 44.000	ELEVATION -53.214	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 45.000	ELEVATION -53.133	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
Or	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 46.000	ELEVATION -53.052	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.081	A-ZONES 0.000
Or	END	-53.052 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	47.000 END	-52.971 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	48.000 END	-52.891 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.080 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	49.000 END	-52.810	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.081 BOTTOM	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	50.000	-52.729	0.000	8.797	0.000	0.000	0.000	0.000	0.081	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	51.000	-52.648	0.000	8.797	0.000	0.000	0.000	0.000	0.080	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	52.000	-52.568	0.000	8.797	0.000	0.000	0.000	0.000	0.060	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	53.000	-52.529	0.000	8.797	0.000	0.000	0.000	0.000	0.025	0.000
			-	-		-	-		-	

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	54.000	-52.517	0.000	8.797	0.000	0.000	0.000	0.000	0.012	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 55.000	ELEVATION -52.505	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.043	A-ZONES 0.000
OF	END	-32.303 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	56.000 END	-52.430 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.143 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	57.000	-52.219	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	58.000	-52.009	0.000	8.797	0.000	0.000	0.000	0.000	0.209	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE A-ZONES
OF	STATION 59.000	ELEVATION -51.800	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.209	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 60.000	ELEVATION -51.590	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.211	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	61.000 END	-51.379 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	62.000 END	-51.169 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	63.000	-50.959	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	64.000	-50.748	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 65.000	ELEVATION -50.538	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 66.000	ELEVATION -50.328	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Or	END	-50.328 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	67.000 END	-50.118 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	68.000 END	-49.908 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	69.000	-49.698	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	70.000	-49.487	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 71.000	ELEVATION -49.277	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 72.000	ELEVATION -49.067	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Or	END	-49.007 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	73.000 END	-48.857 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	74.000 END	-48.647 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	75.000	-48.437	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	76.000	-48.226	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 77.000	ELEVATION -48.016	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 78.000	ELEVATION -47.806	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Ü1	END	END	NEW SURGE	NEW SURGE	3.000	0.000	3.000	0.000	BOTTOM	AVERAGE
OF	STATION 79.000	ELEVATION -47.596	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
OF	79.000 END	-47.596 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	80.000 END	-47.386 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	81.000	-47.176	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	82.000	-46.965	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	83.000	-46.755	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 84.000	ELEVATION -46.545	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.211	A-ZONES 0.000
Ü1	END	END	NEW SURGE	NEW SURGE	3.000	0.000	3.000	0.000	BOTTOM	AVERAGE
OF	STATION 85.000	ELEVATION -46.334	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.211	A-ZONES 0.000
OF	END	-46.334 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0=	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	86.000 END	-46.124 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	87.000	-45.914	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	88.000	-45.704	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 89.000	ELEVATION -45.494	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Or	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	90.000 END	-45.284 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	91.000	-45.073	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	92.000	-44.863	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 93.000	ELEVATION -44.653	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 94.000	ELEVATION -44.443	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
OF	94.000 END	-44.443 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	95.000 END	-44.233 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	96.000	-44.023	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	97.000	-43.813	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 98.000	ELEVATION -43.603	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.17	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	99.000 END	-43.393 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	100.000 END	-43.183 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	101.000	-42.972	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	102.000	-42.762	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 103.000	ELEVATION -42.552	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	104.000 END	-42.342 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	105.000	-42.132	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	106.000	-41.922	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	107.000	-41.711	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 108.000	ELEVATION -41.501	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Or	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	109.000 END	-41.291 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	110.000	-41.080	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	111.000	-40.870	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	112.000	-40.660	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 113.000	ELEVATION -40.450	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Or	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.17	STATION	ELEVATION	10-YEAR 0.000	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	114.000 END	-40.240 END	NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	115.000 END	-40.030 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	116.000	-39.819	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	117.000	-39.609	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE	-		-		BOTTOM	AVERAGE
OF	STATION 118.000	ELEVATION -39.399	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
Or	END	-39.399 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0=	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0.000	SLOPE	A-ZONES
OF	119.000 END	-39.189 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	120.000 END	-38.979	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
		ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	121.000	-38.769	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	122.000	-38.558	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 123.000	ELEVATION -38.348	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 124.000	ELEVATION -38.138	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
OF	END	-30.136 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	125.000 END	-37.928 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	126.000	-37.718	0.000	8.797	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					SLOPE	AVERAGE A-ZONES
OF	127.000	-37.508	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	128.000	-37.297	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 129.000	ELEVATION -37.087	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 130.000	ELEVATION -36.877	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.209	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	131.000 END	-36.668 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	132.000 END	-36.457 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	133.000	-36.247	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	134.000	-36.037	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	135.000	-35.826	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 136.000	ELEVATION -35.616	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 137.000	ELEVATION -35.406	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
OF	END	-35.406 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	138.000 END	-35.196 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	139.000 END	-34.986 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					BOTTOM SLOPE	A-ZONES
OF	140.000	-34.776	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	141.000	-34.565	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	142.000	-34.355	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 143.000	ELEVATION -34.145	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 144.000	ELEVATION -33.935	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0 000	SLOPE	A-ZONES
OF	145.000 END	-33.725 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000		SLOPE	A-ZONES
OF	146.000 END	-33.515 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	147.000 END	-33.304 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
		ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	148.000	-33.094	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	149.000	-32.884	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	150.000	-32.674	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 151.000	ELEVATION -32.464	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE	3.000		2.000	000	BOTTOM	AVERAGE
OF	STATION 152.000	ELEVATION -32.254	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.211	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	5.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF		ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	153.000 END	-32.043 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.211 BOTTOM	0.000 AVERAGE
0=	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	154.000 END	-31.833 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
_	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	155.000	-31.623	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000

	EMD	EMD	NEW GUDGE	NEW GIDGE					рошшом	ALIEDA CE
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	156.000	-31.413	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	157.000	-31.203	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 158.000	ELEVATION -30.992	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.211	A-ZONES 0.000
OF	END	-30.992 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	159.000 END	-30.782 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	160.000	-30.572	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	161.000	-30.362	0.000	8.797	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 162.000	ELEVATION -30.151	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.211	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.11	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	163.000 END	-29.941 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	164.000 END	-29.731 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	165.000	-29.521	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	166.000	-29.311	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 167.000	ELEVATION -29.101	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.210	A-ZONES 0.000
OF	END	-29.101 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	168.000 END	-28.891 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.210 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	169.000	-28.681	0.000	8.797	0.000	0.000	0.000	0.000	0.210	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	170.000	-28.471	0.000	8.797	0.000	0.000	0.000	0.000	0.208	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 171.000	ELEVATION -28.264	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.11	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	172.000 END	-28.059 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	173.000 END	-27.853 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	174.000	-27.647	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	175.000	-27.442	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 176.000	ELEVATION -27.236	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0 000	SLOPE	A-ZONES 0.000
OF	177.000 END	-27.030 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	178.000 END	-26.825 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	179.000	-26.619	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	180.000	-26.414	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 181.000	ELEVATION -26.208	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.11	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	182.000 END	-26.002 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	183.000 END	-25.796 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	184.000	-25.590	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	185.000	-25.385	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 186.000	ELEVATION -25.179	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	3.000	0.000	0.000	3.000	BOTTOM	AVERAGE
O.E.	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	187.000 END	-24.974 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	188.000 END	-24.768 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	189.000	-24.562	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000

	EMD	EMD	NEW GUDGE	NEW GIDGE					рошшом	ALIED A CE
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	190.000	-24.357	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	191.000	-24.151	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 192.000	ELEVATION -23.945	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
OF	END	-23.945 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	193.000 END	-23.740 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	194.000	-23.534	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	195.000	-23.328	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	196.000	-23.123	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 197.000	ELEVATION -22.917	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.11	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	198.000 END	-22.711 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	199.000 END	-22.506 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	200.000	-22.300	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	201.000	-22.095	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	STATION 202.000	ELEVATION -21.889	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 203.000	ELEVATION -21.683	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000			SLOPE	A-ZONES
OF	204.000 END	-21.478 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.205 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	205.000 END	-21.273 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	206.000	-21.066	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	207.000	-20.861	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 208.000	ELEVATION -20.655	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 209.000	ELEVATION -20.450	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
OF	END	-20.430 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000			SLOPE	A-ZONES
OF	210.000 END	-20.244 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	211.000 END	-20.038 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	212.000	-19.833	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	213.000	-19.627	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	214.000	-19.421	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 215.000	ELEVATION -19.216	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR 0.000	100-YEAR	0.000	0 000	0.000	0.000	SLOPE	A-ZONES
OF	216.000 END	-19.010 END	NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	217.000 END	-18.804 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.206 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	218.000	-18.599	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	219.000	-18.393	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	220.000	-18.188	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 221.000	ELEVATION -17.982	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE	3.550	000	2.000		BOTTOM	AVERAGE
OF	STATION 222.000	ELEVATION -17.776	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
OF	222.000 END	-17.776 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.7	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	223.000	-17.571	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	224.000	-17.365	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	225.000	-17.159	0.000	8.797	0.000	0.000	0.000	0.000	0.206	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 226.000	ELEVATION -16.954	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.206	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 227.000	ELEVATION -16.748	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.200	A-ZONES 0.000
OF	227.000 END	-10.748 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	228.000 END	-16.553 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.132 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	229.000	-16.484	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	230.000	-16.415	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	231.000	-16.346	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 232.000	ELEVATION -16.277	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION -16.208	10-YEAR 0.000	100-YEAR	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES
OF	233.000 END	-10.208 END	NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	234.000 END	-16.139 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	235.000	-16.070	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.068	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	236.000	-16.002	0.000	8.797	0.000	0.000	0.000	0.000	0.068	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	237.000	-15.933	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 238.000	ELEVATION -15.864	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 239.000	ELEVATION -15.795	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
OF	END	-15.795 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	240.000 END	-15.726 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	241.000 END	-15.657 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	242.000	-15.588	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	243.000	-15.519	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	244.000	-15.450	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 245.000	ELEVATION -15.381	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 246.000	ELEVATION -15.312	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
Or	END		NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	247.000 END	-15.243 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	248.000 END	-15.174 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	249.000	-15.105	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	250.000	-15.036	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	251.000	-14.967	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 252.000	ELEVATION -14.898	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
0.	END	END	NEW SURGE	NEW SURGE	3.000	3.300	0.000	3.300	BOTTOM	AVERAGE
Or.	STATION	ELEVATION	10-YEAR	100-YEAR	0 000	0 000	0 000	0.000	SLOPE	A-ZONES
OF	253.000 END	-14.829 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	254.000 END	-14.760 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	255.000	-14.691	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	256.000	-14.622	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	257.000	-14.553	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM	AVERAGE
OF	258.000	-14.484	0.000	8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	259.000	-14.415	0.000 NEW SURGE	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	260.000	-14.346	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 261.000	ELEVATION -14.277	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	262.000	-14.208	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	263.000	-14.139	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 264.000	ELEVATION -14.070	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	265.000 END	-14.001 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	266.000	-13.932	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 267.000	ELEVATION -13.863	10-YEAR 0.000	100-YEAR 8.797	0.000	0.000	0.000	0.000	SLOPE 0.069	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	268.000 END	-13.794 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.069 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	269.000	-13.725	0.000	8.797	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	270.000	-13.656	0.000	8.797	0.000	0.000	0.000	0.000	0.063	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	271.000 END	-13.599 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.040 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	272.000	-13.577	0.000	8.797	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	273.000	-13.554	0.000	8.797	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	0.000				SLOPE	A-ZONES
OF	274.000 END	-13.531 END	0.000 NEW SURGE	8.797 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	275.000	-13.508	0.000	8.797	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	276.000	-13.485	0.000	8.797	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 277.000	ELEVATION -13.462	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	END	-13.462 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	278.000	-13.439	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	279.000	-13.417	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	280.000	ELEVATION -13.394	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	281.000 END	-13.371 END	0.000 NEW SURGE	8.798 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	282.000	-13.348	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	283.000	-13.325	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
0.0		ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	284.000 END	-13.303 END	0.000 NEW SURGE	8.798 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
		ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	285.000	-13.280	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	286.000	-13.257	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 287.000	ELEVATION -13.234	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	287.000 END	-13.234 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	288.000	-13.211	0.000 NEW SURGE	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	289.000	-13.188	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END		NEW SURGE					BOTTOM	AVERAGE
OF	STATION 290.000	ELEVATION -13.166	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE	3.000	000	2.000	000	BOTTOM	AVERAGE
0=		ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0 000	0 000	SLOPE	A-ZONES
OF	291.000	-13.143	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	292.000	-13.120	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 293.000	ELEVATION -13.097	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	294.000 END	-13.074 END	0.000 NEW SURGE	8.798 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	295.000	-13.051	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	296.000	-13.028	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 297.000	ELEVATION -13.006	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	298.000 END	-12.983 END	0.000 NEW SURGE	8.798 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	299.000	-12.960	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	300.000	-12.937	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 301.000	ELEVATION -12.914	10-YEAR 0.000	100-YEAR 8.798	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
Or	END	-12.914 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	302.000 END	-12.891 END	0.000 NEW SURGE	8.798 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	303.000	-12.868	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	304.000	-12.846	0.000	8.798	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 305.000	ELEVATION -12.823	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0 000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	END	-12.823 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	306.000 END	-12.800 END	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	STATION	ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	307.000	-12.777	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	308.000	ELEVATION -12.754	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR	0 000	0.000	0.000	0 000	SLOPE	A-ZONES 0.000
OF	309.000 END	-12.731 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	310.000	-12.708	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	311.000	-12.686	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 312.000	ELEVATION -12.663	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.17	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	313.000 END	-12.640 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	314.000	-12.617	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	315.000	-12.594	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 316.000	ELEVATION -12.571	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
91	END	END	NEW SURGE	NEW SURGE	3.000	0.000	0.000	0.000	BOTTOM	AVERAGE
c=	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	317.000 END	-12.548 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	318.000	-12.525	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	STATION	TITE ATTITION								0.000
	STATION 319.000	-12.502	0.000	8.799	0.000	0.000	0.000	0.000	0.023	
OF	319.000 END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	319.000 END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
	319.000 END STATION 320.000 END	END ELEVATION -12.480 END	NEW SURGE 10-YEAR 0.000 NEW SURGE	NEW SURGE 100-YEAR 8.799 NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM	AVERAGE A-ZONES 0.000 AVERAGE
c=	319.000 END STATION 320.000 END STATION	END ELEVATION -12.480 END ELEVATION	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES
OF	319.000 END STATION 320.000 END STATION 321.000	END ELEVATION -12.480 END ELEVATION -12.457	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799					BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000
	319.000 END STATION 320.000 END STATION 321.000 END STATION	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES
OF OF	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000
	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000 END	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434 END	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE
	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000
OF	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000 END STATION 323.000 END STATION	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434 END ELEVATION -12.434 END	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES
OF OF	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000 END STATION 323.000 END STATION 323.000 STATION	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434 END ELEVATION -12.411 END ELEVATION	NEW SURGE 10-YEAR 0.000 NEW SURGE	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000 0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE	AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES 0.000 AVERAGE A-ZONES
OF	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000 END STATION 323.000 END STATION 324.000 END STATION 324.000	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434 END ELEVATION -12.411 END ELEVATION -12.411 END ELEVATION -12.388 END	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE	AVERAGE A-ZONES 0.000 AVERAGE
OF OF	319.000 END STATION 320.000 END STATION 321.000 END STATION 322.000 END STATION 323.000 END STATION 323.000 END STATION 324.000	END ELEVATION -12.480 END ELEVATION -12.457 END ELEVATION -12.434 END ELEVATION -12.411 END ELEVATION -12.411 END ELEVATION -12.388	NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000 NEW SURGE 10-YEAR 0.000	NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799 NEW SURGE 100-YEAR 8.799	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000 0.000	BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023 BOTTOM SLOPE 0.023	AVERAGE A-ZONES 0.000 AVERAGE 0.000 AVERAGE 0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	326.000	-12.342	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 327.000	ELEVATION -12.319	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 328.000	ELEVATION -12.296	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	526.000 END	-12.296 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	329.000 END	-12.273 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	330.000	-12.251	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	331.000	-12.228	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	332.000	-12.205	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 333.000	ELEVATION -12.182	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 334.000	ELEVATION -12.159	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000			SLOPE	A-ZONES
OF	335.000 END	-12.136 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	336.000 END	-12.113 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	337.000	-12.090	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	338.000	-12.067	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	339.000	-12.044	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 340.000	ELEVATION -12.022	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 341.000	ELEVATION -11.999	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
OF	341.000 END	-11.999 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	342.000 END	-11.976 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	343.000 END	-11.953	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.023	0.000 AVERAGE
	STATION	END ELEVATION	10-YEAR	100-YEAR					BOTTOM SLOPE	A-ZONES
OF	344.000	-11.930	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	345.000	-11.907	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	346.000	-11.884	0.000	8.799	0.000	0.000	0.000	0.000	0.023	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 347.000	ELEVATION -11.861	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.023	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 348.000	ELEVATION -11.838	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.056	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR 0.000	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES 0.000
OF	349.000 END	-11.749 END	NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.116 BOTTOM	AVERAGE
OF		ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	350.000 END	-11.605 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	351.000 END	-11.461 END	0.000 NEW SURGE	8.799 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
		ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	352.000	-11.317	0.000 NEW SURGE	8.799	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	353.000	-11.172	0.000	8.799	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	354.000	-11.028	0.000	8.799	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM	AVERAGE
OF	STATION 355.000	ELEVATION -10.884	0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE			-		BOTTOM	AVERAGE
OF	STATION 356.000	ELEVATION -10.740	10-YEAR 0.000	100-YEAR 8.799	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
O1	END	END	NEW SURGE	NEW SURGE	3.000	0.000	3.000	0.000	BOTTOM	AVERAGE
OF	STATION 357.000	ELEVATION -10.596	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
OF	357.000 END	-10.596 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
0.5	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	358.000 END	-10.452 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
_	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	359.000	-10.308	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	360.000	-10.164	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 361.000	ELEVATION -10.020	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 362.000	ELEVATION -9.876	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
OF	END	-9.876 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	363.000 END	-9.732 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	364.000	-9.587 END	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	365.000	-9.443	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	366.000	-9.299	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 367.000	ELEVATION -9.155	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 368.000	ELEVATION -9.010	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	369.000 END	-8.866 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	370.000 END	-8.722 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	371.000	-8.578	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	372.000	-8.434	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	373.000	-8.290	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 374.000	ELEVATION -8.145	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 375.000	ELEVATION -8.001	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
OF	3/5.000 END	-8.001 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	376.000 END	-7.857 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	377.000 END	-7.713 END	0.000 NEW SURGE	8.800	0.000	0.000	0.000	0.000	0.144	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	A-ZONES
OF	378.000	-7.569	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	379.000	-7.424	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	380.000	-7.280	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 381.000	ELEVATION -7.136	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 382.000	ELEVATION -6.992	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.144	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0 000	SLOPE	A-ZONES
OF	383.000 END	-6.848 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	384.000 END	-6.704 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	385.000 END	-6.560 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.144 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	386.000	-6.415	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	387.000	-6.271	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	388.000	-6.127	0.000	8.800	0.000	0.000	0.000	0.000	0.144	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 389.000	ELEVATION -5.983	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.188	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 390.000	ELEVATION -5.751	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.233	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	5.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0 000	0.000	0 000	SLOPE	A-ZONES
OF	391.000 END	-5.516 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
0=	STATION	ELEVATION	10-YEAR	100-YEAR	0.000	0.000	0.000	0.000	SLOPE	A-ZONES
OF	392.000 END	-5.282 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
_	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	393.000	-5.048	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000

	EMD	END	NEW CUDGE	NEW CUDGE					DOTTOM	ALTEDACE
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	394.000	-4.814	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	395.000	-4.580	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 396.000	ELEVATION -4.346	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 397.000	ELEVATION -4.112	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
OF	END	-4.112 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	398.000 END	-3.878 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	399.000	-3.644	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	400.000	-3.410	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	401.000	-3.176	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 402.000	ELEVATION -2.941	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
01	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
OF	STATION 403.000	ELEVATION -2.707	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
OF	END	-2.707 END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	404.000 END	-2.473 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	405.000 END	-2.239 END	0.000 NEW SURGE	8.800	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	NEW SURGE 100-YEAR					SLOPE	A-ZONES
OF	406.000	-2.005	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	407.000	-1.771	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 408.000	ELEVATION -1.536	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION 409.000	ELEVATION -1.302	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
OF	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0.000				SLOPE	A-ZONES
OF	410.000 END	-1.068 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	411.000 END	-0.834 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
OF	412.000	-0.600	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	413.000	-0.365	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	414.000	-0.131	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END	END	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	STATION 415.000	ELEVATION 0.103	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION 416.000	ELEVATION 0.337	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE	0.000	0.000	0.000	0.000	BOTTOM	AVERAGE
IF	STATION 417.000	ELEVATION 0.571	10-YEAR 0.000	100-YEAR 8.800	0.000	0.000	0.000	0.000	SLOPE 0.234	A-ZONES 0.000
TT.	END	END	NEW SURGE	NEW SURGE	3.000	0.000	0.000	0.000	BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR	0 000	0 000	0.000	0 000	SLOPE	A-ZONES
IF	418.000 END	0.806 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	419.000 END	1.040 END	0.000 NEW SURGE	8.800 NEW SURGE	0.000	0.000	0.000	0.000	0.234 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	420.000	1.274	0.000 NEW SURGE	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	421.000	1.508	0.000	8.800	0.000	0.000	0.000	0.000	0.234	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	422.000	1.742	0.000	8.800	0.000	0.000	0.000	0.000	0.237	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION 423.200	ELEVATION 2.030	10-YEAR 0.000	100-YEAR 8.814	0.000	0.000	0.000	0.000	SLOPE 0.235	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION 426.500	ELEVATION 2.798	10-YEAR 0.000	100-YEAR 8.867	0.000	0.000	0.000	0.000	SLOPE 0.199	A-ZONES 0.000
TT.	END	END	NEW SURGE	NEW SURGE	3.000	0.000	0.000	0.000	BOTTOM	AVERAGE
TE	STATION	ELEVATION	10-YEAR	100-YEAR	0 000	0 000	0 000	0 000	SLOPE	A-ZONES
IF	429.800 END	3.346 END	0.000 NEW SURGE	8.937 NEW SURGE	0.000	0.000	0.000	0.000	0.160 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR		0.00-	0.00-	0.00	SLOPE	A-ZONES
IF	433.100 END	3.856 END	0.000 NEW SURGE	9.024 NEW SURGE	0.000	0.000	0.000	0.000	0.154 BOTTOM	0.000 AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	436.400	4.366	0.000	9.112	0.000	0.000	0.000	0.000	0.157	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	439.600	4.876	0.000	9.201	0.000	0.000	0.000	0.000	0.157	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	442.900	5.385	0.000	9.321	0.000	0.000	0.000	0.000	0.154	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	446.200	5.895	0.000	9.453	0.000	0.000	0.000	0.000	0.154	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	449.500	6.405	0.000	9.578	0.000	0.000	0.000	0.000	0.154	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	452.800	6.915	0.000	9.712	0.000	0.000	0.000	0.000	0.157	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	456.000	7.425	0.000	9.838	0.000	0.000	0.000	0.000	0.184	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	459.300	8.108	0.000	10.019	0.000	0.000	0.000	0.000	0.211	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	462.600	8.819	0.000	10.211	0.000	0.000	0.000	0.000	0.216	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	465.900	9.531	0.000	10.402	0.000	0.000	0.000	0.000	0.216	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	469.200	10.242	0.000	10.601	0.000	0.000	0.000	0.000	0.219	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
IF	470.800	10.601	0.000	10.601	0.000	0.000	0.000	0.000	0.225	0.000
					-END OF TRANS	ECT				
MODEL .										

NOTE:

SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

LOCATION

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

		WAVE HEIGHT	WAVE PERIOD	ELEVATION
ΙE	0.00	13.29	9.90	18.10
OF	1.00	13.29	9.90	18.10
OF	2.00	13.29	9.90	18.10
OF	3.00	13.29	9.90	18.10
OF	4.00	13.29	9.90	18.10
OF	5.00 6.00	13.29	9.90 9.90	18.10
OF OF	7.00	13.30 13.30	9.90	18.10 18.11
OF	8.00	13.30	9.90	18.11
OF	9.00	13.30	9.90	18.11
OF	10.00	13.30	9.90	18.11
OF	11.00	13.30	9.90	18.11
OF	12.00	13.30	9.90	18.11
OF	13.00	13.31	9.90	18.11
OF	14.00	13.31	9.90	18.11
OF	15.00	13.31	9.90	18.11
OF	16.00	13.31	9.90	18.11
OF	17.00	13.31	9.90	18.12
OF	18.00	13.31	9.90	18.12
OF	19.00	13.31	9.90	18.12
OF	20.00	13.32	9.90	18.12
OF	21.00	13.32	9.90	18.12
OF	22.00	13.32	9.90	18.12
OF	23.00	13.32	9.90 9.90	18.12
OF	24.00 25.00	13.32 13.32	9.90	18.12
OF OF	26.00	13.32	9.90	18.12 18.12
OF	27.00	13.33	9.90	18.13
OF	28.00	13.33	9.90	18.13
OF	29.00	13.33	9.90	18.13
OF	30.00	13.33	9.90	18.13
OF	31.00	13.33	9.90	18.13
OF	32.00	13.33	9.90	18.13
OF	33.00	13.34	9.90	18.13
OF	34.00	13.34	9.90	18.13
OF	35.00	13.34	9.90	18.13
OF	36.00	13.34	9.90	18.14
OF	37.00	13.34	9.90	18.14
OF	38.00	13.34	9.90	18.14
OF	39.00	13.35	9.90	18.14
OF	40.00	13.35	9.90	18.14
OF	41.00 42.00	13.35	9.90 9.90	18.14 18.14
OF OF	43.00	13.35 13.35	9.90	18.14
OF	44.00	13.35	9.90	18.14
OF	45.00	13.36	9.90	18.15
OF	46.00	13.36	9.90	18.15
OF	47.00	13.36	9.90	18.15
OF	48.00	13.36	9.90	18.15
OF	49.00	13.36	9.90	18.15
OF	50.00	13.36	9.90	18.15
OF	51.00	13.37	9.90	18.15
OF	52.00	13.37	9.90	18.15
OF	53.00	13.37	9.90	18.16
OF	54.00	13.37	9.90	18.16
OF	55.00	13.37	9.90	18.16
OF	56.00	13.37	9.90	18.16
OF	57.00	13.38	9.90	18.16
OF OF	58.00 59.00	13.38 13.38	9.90 9.90	18.16
OF	60.00	13.38	9.90	18.17 18.17
Or	00.00	13.39	2.20	10.1/

OF	163.00	14.33	9.91	18.83
OF	164.00	14.35	9.91	18.84
OF	165.00 166.00	14.37 14.38	9.91 9.91	18.85
OF	167.00	14.40	9.91	18.86 18.88
OF OF	168.00	14.40	9.91	18.89
OF	169.00	14.43	9.91	18.90
OF	170.00	14.45	9.91	18.91
OF	171.00	14.46	9.91	18.92
OF	172.00	14.48	9.91	18.93
OF	173.00	14.50	9.91	18.95
OF	174.00	14.51	9.91	18.96
OF	175.00	14.53	9.91	18.97
OF	176.00	14.55	9.91	18.98
OF	177.00	14.57	9.91	18.99
OF	178.00	14.59	9.91	19.01
OF	179.00	14.60	9.91	19.02
OF	180.00	14.62	9.91	19.03
OF	181.00	14.64	9.91	19.05
OF	182.00	14.66	9.91	19.06
OF	183.00	14.68 14.70	9.91 9.91	19.07 19.09
OF OF	184.00 185.00	14.70	9.91	19.10
OF	186.00	14.74	9.91	19.11
OF	187.00	14.76	9.91	19.13
OF	188.00	14.78	9.91	19.14
OF	189.00	14.80	9.91	19.16
OF	190.00	14.82	9.91	19.17
OF	191.00	14.84	9.91	19.18
OF	192.00	14.86	9.91	19.20
OF	193.00	14.88	9.91	19.21
OF	194.00	14.90	9.91	19.23
OF OF	195.00 196.00	14.93 14.95	9.91 9.91	19.24 19.26
OF	197.00	14.95	9.91	19.28
OF	198.00	14.99	9.91	19.29
OF	199.00	15.02	9.91	19.31
OF	200.00	15.04	9.91	19.32
OF	201.00	15.06	9.91	19.34
OF	202.00	15.09	9.91	19.36
OF	203.00	15.11	9.91	19.38
OF	204.00	15.14	9.91	19.39
OF	205.00	15.16	9.91	19.41
OF	206.00	15.19	9.91	19.43
OF	207.00	15.21	9.91	19.45
OF	208.00	15.24	9.91	19.46
OF	209.00 210.00	15.26 15.29	9.91 9.91	19.48 19.50
OF OF	211.00	15.32	9.91	19.50
OF	212.00	15.35	9.91	19.54
OF	213.00	15.37	9.91	19.56
OF	214.00	15.40	9.91	19.58
OF	215.00	15.43	9.91	19.60
OF	216.00	15.46	9.91	19.62
OF	217.00	15.49	9.91	19.64
OF	218.00	15.52	9.91	19.66
OF	219.00	15.55	9.91	19.68
OF	220.00	15.58	9.91 9.91	19.70 19.72
OF OF	221.00 222.00	15.61 15.64	9.91	19.72
OF	223.00	15.67	9.91	19.77
OF	224.00	15.70	9.91	19.79
OF	225.00	15.70	9.91	19.78
OF	226.00	15.67	9.91	19.77
OF	227.00	15.64	9.91	19.75
OF	228.00	15.61	9.91	19.73
OF	229.00	15.61	9.91	19.72
OF	230.00 231.00	15.60 15.59	9.91 9.91	19.72 19.71
OF OF	232.00	15.58	9.91	19.71
OF	233.00	15.58	9.91	19.70
OF	234.00	15.57	9.91	19.70
OF	235.00	15.56	9.91	19.69
OF	236.00	15.55	9.91	19.69
OF	237.00	15.55	9.91	19.68
OF	238.00	15.54	9.91	19.67
OF	239.00	15.53	9.91 9.91	19.67
OF	240.00	15.52 15.52	9.91	19.66
OF OF	241.00 242.00	15.52	9.91	19.66 19.65
OF	243.00	15.50	9.91	19.65
OF	244.00	15.49	9.91	19.64
OF	245.00	15.48	9.91	19.64
OF	246.00	15.47	9.91	19.63
OF	247.00	15.47	9.91	19.62
OF	248.00	15.46	9.91	19.62
OF		15.45	9.91 9.91	19.61 19.61
OF OF	249.00			
	249.00 250.00	15.44		
	249.00 250.00 251.00	15.44 15.43	9.91	19.60
OF	249.00 250.00 251.00 252.00	15.44 15.43 15.42	9.91 9.91	19.60 19.59
OF OF	249.00 250.00 251.00 252.00 253.00	15.44 15.43 15.42 15.42	9.91 9.91 9.91	19.60 19.59 19.59
OF	249.00 250.00 251.00 252.00	15.44 15.43 15.42	9.91 9.91	19.60 19.59
OF OF	249.00 250.00 251.00 252.00 253.00 254.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39	9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.59 19.58 19.58 19.57
OF OF OF	249.00 250.00 251.00 252.00 253.00 254.00 255.00 256.00 257.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39 15.38	9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.59 19.58 19.58 19.57
OF OF OF OF OF	249.00 250.00 251.00 252.00 253.00 254.00 255.00 256.00 257.00 258.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39 15.38 15.37	9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.58 19.58 19.57 19.56
OF OF OF OF OF OF	249.00 250.00 251.00 252.00 253.00 254.00 255.00 256.00 257.00 258.00 259.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39 15.38 15.37	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.59 19.58 19.57 19.56 19.56
OF OF OF OF OF OF	249.00 250.00 251.00 252.00 253.00 254.00 255.00 256.00 257.00 258.00 259.00 260.00	15.44 15.43 15.42 15.42 15.41 15.39 15.38 15.37 15.36 15.35	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.59 19.58 19.58 19.57 19.56 19.55
OF OF OF OF OF OF OF	249.00 250.00 251.00 251.00 252.00 253.00 254.00 256.00 257.00 258.00 259.00 260.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39 15.38 15.37 15.36 15.35	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.58 19.58 19.57 19.56 19.56 19.55 19.55
OF OF OF OF OF OF OF OF	249.00 250.00 251.00 251.00 253.00 254.00 255.00 256.00 257.00 258.00 259.00 260.00 261.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39 15.38 15.36 15.35 15.35	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.58 19.58 19.57 19.56 19.55 19.55 19.55
OF OF OF OF OF OF OF	249.00 250.00 251.00 251.00 252.00 253.00 254.00 256.00 257.00 258.00 259.00 260.00	15.44 15.43 15.42 15.42 15.41 15.40 15.39 15.38 15.37 15.36 15.35	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.58 19.58 19.57 19.56 19.56 19.55 19.55
OF OF OF OF OF OF OF OF OF	249.00 250.00 251.00 252.00 253.00 254.00 255.00 256.00 257.00 258.00 259.00 260.00 261.00 263.00	15.44 15.43 15.42 15.42 15.41 15.39 15.38 15.37 15.36 15.35 15.35 15.35	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.60 19.59 19.59 19.58 19.58 19.56 19.56 19.55 19.55 19.55

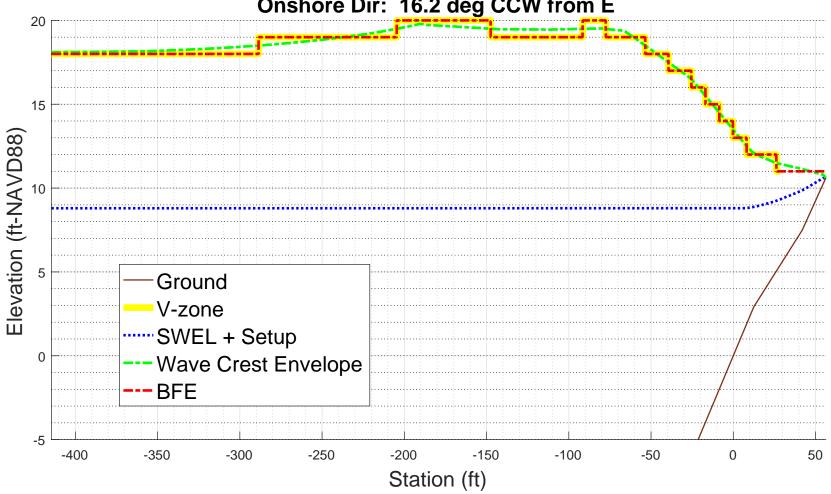
	265.00 266.00 267.00 268.00 267.00 270.00 271.00 271.00 273.00 274.00 275.00 276.00 277.00 278.00 288.00 289.00 281.00 282.00 283.00 284.00 285.00 286.00 287.00 297.00 298.00 291.00 291.00 291.00 292.00 293.00 291.00 29	15.31 15.30 15.29 15.28 15.27 15.26 15.25 15.24 15.24 15.24 15.24 15.24 15.24 15.24 15.23 15.24 15.25 15.26 15.27 15.28 15.29 15.30 15.30 15.30 15.30 15.30 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.32 15.25 15.26 15.27 15.28 15.29 15.29 15.29 15.29 15.30 15.30 15.30 15.30 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.32 15.30 15.30 15.30 15.30 15.30 15.30 15.30 15.30 15.30 15.30 15.30 15.31 15.31 15.32 15.32 15.30 15.30 15.31 15.31 15.32 15.30 15.30 15.31 15.31 15.32 15.30 15.31 15.31 15.32 15.30 15.30 15.31 15.31 15.32 15.30 15.30 15.31 15.31 15.32 15.30 15.31 15.31 15.32 15.30 15.31 15.31 15.32 15.32 15.33 15.30 15.31 15.31 15.32 15.32 15.33 15.31 15.32 15.30 15.31 15.31 15.32 15.32 15.30 15.31 15.31 15.31 15.32 15.32 15.32 15.32 15.30 15.31 15.31 15.31 15.32 15.32 15.33 15.31 15.31 15.31 15.31 15.31 15.32 15.32 15.33 15.31 15.31 15.32 15.33 15.31 15.31 15.32 15.32 15.33 15.33 15.34 15.35 14.45 14	9.91 9.91 9.91 9.91 9.91 9.91 9.91 9.91	19.51 19.50 19.49 19.49 19.48 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.47 19.46 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.45 19.46 19.46 19.46 19.47 19.46
OF OF OF	355.00 356.00 357.00 358.00	14.45 14.35 14.25 14.15	9.91 9.91 9.91 9.91	18.92 18.85 18.78 18.71

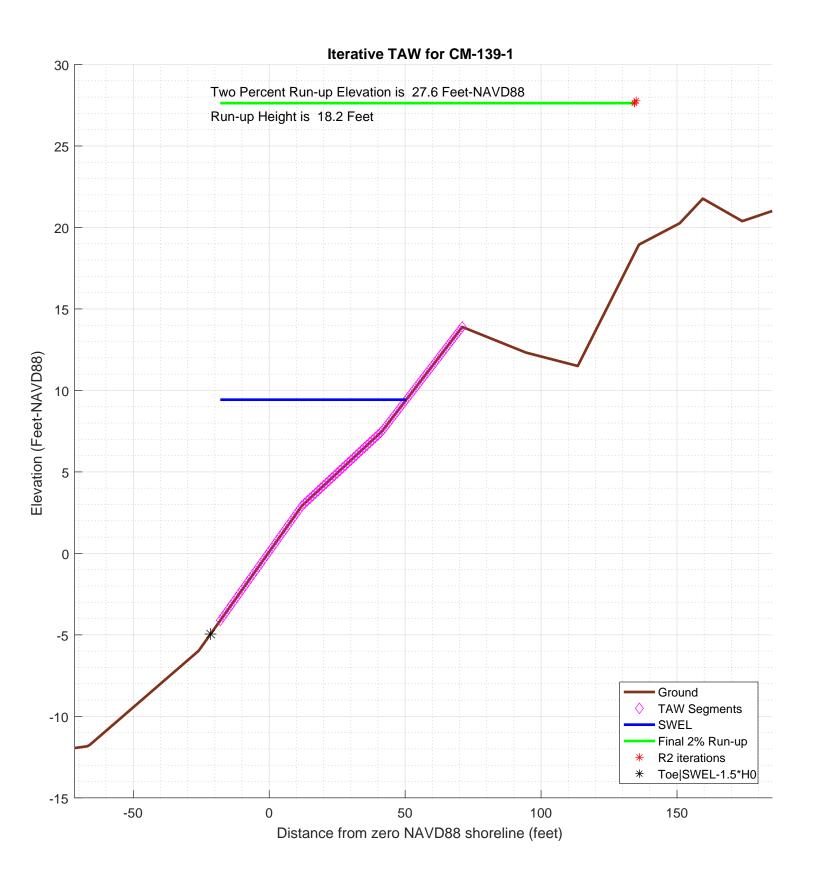
```
367.00
                            13.15
13.05
12.95
                                                                18.01
17.94
17.87
OF
          368.00
                                                9.91
         369.00
370.00
                                                9.91
9.91
OF
                            12.85
12.75
12.65
OF
          371.00
                                                9.91
                                                                17.79
          372.00
                                                                17.72
OF
                                                9.91
OF
          373.00
                                                9.91
                                                                17.65
                            12.55
12.44
12.34
          374.00
OF
                                                9.91
                                                                17 58
         375.00
376.00
                                                9.91
OF
                                                                17.51
OF
                                                9.91
                                                                17.44
         377.00
378.00
                            12.24
12.14
12.04
OF
                                                9.91
                                                                17 37
OF
                                                9.91
                                                                17.30
OF
          379.00
                                                9.91
                                                                17.23
         380.00
381.00
382.00
                             11.94
                                                9.91
OF
                                                                17 16
                            11.84
                                                9.91
9.91
OF
                                                                17.08
OF
                                                                17.01
                                                9.91
OF
          383.00
                             11.63
                                                                16.94
                            11.53
11.43
11.32
                                                9.91
9.91
OF
          384.00
                                                                16.87
OF
          385.00
                                                                16.80
                                                9.91
OF
          386.00
                                                                16.73
          387.00
                             11.22
OF
                                                9.91
                                                                16.66
                            11.12
11.02
OF
          388.00
                                                9.91
                                                                16.58
                                                9.91
          389.00
OF
                                                                16.51
          390.00
                             10.85
                                                9.91
OF
                                                                16.40
OF
         391.00
392.00
                            10.68
                                                9.91
9.91
                                                                16.28
OF
                                                                16.16
          393.00
                             10.35
                                                9.91
OF
                                                                16.05
         394.00
395.00
                            10.18
OF
                                                9.91
                                                                15.93
OF
                                                9.91
                                                                15.81
                              9.85
9.68
9.51
          396.00
                                                9.91
OF
                                                                15.69
         397.00
398.00
OF
                                                9.91
                                                                15.57
OF
                                                9.91
                                                                15.46
OF
          399.00
                              9.34
                                                9.91
         400.00
OF
                              9.17
                                                9.91
                                                                15.22
OF
                              9.00
                                                9.91
                                                                15.10
OF
          402.00
                              8.83
                                                9.91
                                                                14.98
OF
                              8.66
                                                9.91
          403.00
                                                                14.86
OF
          404.00
                              8.49
                                                9.91
                                                                14.74
                                                9.91
9.91
OF
          405.00
                              8.32
                                                                14.63
OF
         406.00
407.00
                              8.15
7.98
                                                                14.51
OF
                                                9.91
                                                                14.39
         408.00
409.00
                              7.81
                                                9.91
9.91
OF
                                                                14.27
OF
                                                                14.15
OF
          410.00
                              7.47
                                                9.91
OF
OF
         411.00
412.00
                              7.29
7.12
                                                9.91
9.91
                                                                13.91
                                                                13.79
OF
          413.00
                              6.95
                                                9.91
                                                                13.66
OF
         414.00
415.00
                              6.78
6.60
                                                9.91
9.91
                                                                13.54
13.42
ΙF
IF
          416.00
                              6.43
                                                9.91
                                                                13.30
         417.00
418.00
                              6.26
6.08
                                                9.91
9.91
                                                                13.18
13.06
IF
IF
IF
          419.00
                              5.91
                                                9.91
                                                                12.94
IF
         420.00
421.00
                              5.73
5.56
                                                9.91
9.91
                                                                12.81
12.69
IF
IF
          422.00
                              5.39
                                                9.91
                                                                12.57
                                                9.91
9.91
TF
         423.20
426.50
                              5.18
4.65
                                                                12.44
IF
                                                                12.12
IF
          429.80
                              4.29
                                                9.91
                                                                11.94
                              3.97
3.65
                                                9.91
9.91
         433.10
436.40
TF
                                                                11.80
ΙF
                                                                11.67
TF
          439.60
                              3.33
                                                9.91
                                                                11.53
         442.90
446.20
                              3.03
2.74
                                                9.91
9.91
                                                                11.44
11.37
TF
ΙF
TF
          449.50
                              2.45
                                                9.91
                                                                11.29
                              2.16
                                                9.91
9.91
IF
          452.80
                                                                11.23
          456.00
ΙF
                              1.48
TF
          459.30
                                                9.91
                                                                11.06
         462.60
465.90
                                                9.91
IF
                                                                10.97
                              0.68
                                                9.91
TF
         469.20
470.80
                              0.28
                                                9.91
                                                                10 80
                              0.01
IF
                                                9.91
                                                                10.61
PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE
NO AREAS ABOVE 100-YEAR SURGE IN THIS TRANSECT
PART4 LOCATION OF SURGE CHANGES
STATION
                       10-YEAR SURGE
                                                      100-YEAR SURGE
277.00
305.00
                                                            8.80
                               1.00
                               1.00
357.00
                               1.00
                                                            8.80
                               1.00
1.00
1.00
423 20
                                                            8.81
                                                            8.87
426.50
429.80
                                                            8.94
                               1.00
1.00
1.00
1.00
433.10
                                                            9.02
436.40
                                                            9.11
439.60
                                                            9.20
442.90
                                                            9.32
                               1.00
446.20
                               1.00
                                                            9.58
9.71
449 50
452.80
                                1.00
456.00
459.30
                                1.00
                                                           10.02
                                1.00
                                                           10.21
462.60
                                1.00
                                                           10.40
469.20
                               1.00
                                                           10.60
                    PART5 LOCATION OF V ZONES
       STATION OF GUTTER 443.27
                                           LOCATION OF ZONE
                                               WINDWARD
               PART6 NUMBERED A ZONES AND V ZONES
STATION OF GUTTER ELEVATION ZONE DESIGNATION 0.00 18.10
                                                                   FHF
                                              V22 EL=18
                                                                   120
       125.79
                            18.50
```

209.97	19.50	V22	EL=19	120
267.02	19.50	V22	EL=20	120
276.00	19.47	V22	EL=19	120
277.00	19.47	V22	EL=19	120
304.00	19.47	V22	EL=19	120
305.00	19.45	V22	EL=19	120
324.41		V22	EL=19	120
	19.50	V22	EL=20	120
336.57	19.50	V22	EL=19	120
356.00	18.85	V22	EL=19	120
357.00	18.78	V22	EL=19	120
360.97	18.50	V22	EL=18	120
375.16	17.50	V22	EL=17	120
389.11	16.50	V22	EL=16	120
397.63	15.50	V22	EL=15	120
406.05	14.50	V22	EL=14	120
414.36	13.50	V22	EL=13	120
422.00	12.57	V22	EL=13	120
422.65	12.50	V22	EL=12	120
423.20	12.44	V22	EL=12	120
426.50	12.12	V22	EL=12	120
429.80	11.94	V22	EL=12	120
433.10	11.80	V23	EL=12	130
436.40	11.67	V23	EL=12	130
439.60	11.53	V23	EL=12	130
440.77	11.50	V23	EL=11	130
442.90	11.44	V23	EL=11	130
443.27	11.49	A20	EL=11	100
446.20	11.37	A20	EL=11	100
449.50	11.29	A20	EL=11	100
452.80	11.23	A20	EL=11	100
456.00	11.15	A20	EL=11	100
459.30	11.06	A20	EL=11	100
462.60	10.97	A20	EL=11	100
465.90	10.88	A20	EL=11	100
469.20	10.80	A20		
470.80 ZONE	10.61 TERMINATED AT			

CM-139-1 **100-year WHAFIS Output** Zero Station: -70.00124010, 43.72383685

Onshore Dir: 16.2 deg CCW from E





```
% begin recording
diary on
% FEMA appeal for The Town of Harpswell, Cumberland county, Maine
% TRANSECT ID: CM-139-1
% TRANSECTIO. CM-139-1
% calculation by SJH, Ransom Consulting, Inc. 20-Feb-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
\mbox{\ensuremath{\mbox{\$}}} transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
\ensuremath{\text{\upshape 8}} 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/CM-139-1sta_ele_include.csv'; % file with station, elevation, include
                                             % third column is 0 for excluded points
imgname='logfiles/CM-139-1-runup';
SWEL=8.7974; % 100-yr still water level including wave setup. H0=9.1162; % significant wave height at toe of structure
Tp=9.9055;
               % peak period, 1/fma,
T0=Tp/1.1;
gamma_berm=1; % this may get changed automatically below
gamma_rough=0.8;
gamma_beta=1;
gamma_perm=1;
setupAtToe=-0.071548;
maxSetup=1.804; % only used in case of berm/shallow foreshore weighted average
plotTitle='Iterative TAW for CM-139-1'
plotTitle =
Iterative TAW for CM-139-1
% END CONFIG
              ______
SWEL=SWEL+setupAtToe
SWEL =
                     8.725852
SWEL_fore=SWEL+maxSetup
SWEL fore =
                    10.529852
% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2
T<sub>1</sub>O =
            414.923987801381
% 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 =
                 -4.948448
% 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 =
                 22.400152
% 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)
                                                    % here is the intersection of Ztoe with profile
    i f
       ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end
toe_sta =
         -21.5741922258949
% 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)
top_sta =
          110.220889108171
% just so the reader can tell the values aren't -999 anymore
top sta
top_sta =
          110.220889108171
toe_sta
toe sta =
         -21.5741922258949
% 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*HO
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interpl(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*HO 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 123.5 ft landward of toe of slope
-!!- Setup is interpolated between setup at toe of slope and max setup
ans =
-!!-
               setup is adjusted to 0.63 feet
ans =
               SWEL is adjusted to 9.43 feet
-!!-
k =
       1
       2
       3
       4
5
      6
7
8
9
      10
      11
      12
     13
     14
     15
      16
      17
     18
      19
      20
      21
      22
      23
      25
      26
      27
      28
      29
      30
     31
32
     33
34
35
     36
37
38
39
40
41
```

```
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)</pre>
    iter=iter+1;
    sprintf ('!-----!',iter)
    % elevation of toe of slope
   Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    % station of top of slope/extent of 2% run-up
    % elevation of top of slope/extent of 2% run-up
    Z_2
    % incident significant wave height
    НΟ
    % incident spectral peak wave period
    Тp
    % incident spectral mean wave period
   т0
   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)
    % 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];
       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=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;
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
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;
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 * LO;
   disp ('! Berm_width is greater than 1/4 wave length') disp ('! Runup will be weighted average with foreshor
              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)
   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 =
                -4.948448
toe_sta =
        -21.5741922258949
top_sta =
         110.220889108171
7.2 =
                22.400152
H0 =
                  9.1162
Tp =
                   9.9055
T0 =
                   9.005
R2 =
                  27.3486
Z2 =
         36.7795831525375
top_sta =
         176.525576050692
Lslope =
         198.099768276587
ans =
!----- End Berm Factor Calculation, Iter: 1 -----!
berm_width =
rB =
    0
rdh_mean =
gamma_berm =
slope =
       0.210641494008599
Irb =
        1.42108899326213
gamma_berm =
gamma_perm =
gamma_beta =
gamma_rough =
                     0.8
gamma =
                     0.8
!!! - - Iribaren number: 1.42 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
!!! - - slope: 1:4.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2\_new =
         18.3441829762128
R2del =
        9.00441702378723
         27.7751661287503
ans =
!-----!
Ztoe =
                -4.948448
toe_sta =
        -21.5741922258949
top_sta =
         135.005501610421
Z_{2} =
         27.7751661287503
H0 =
                  9.1162
Tp =
                  9.9055
T0 =
                   9.005
R2 =
        18.3441829762128
Z2 =
         27.7751661287503
top_sta =
         135.005501610421
Lslope =
         156.579693836316
!----- End Berm Factor Calculation, Iter: 2 -----!
berm_width =
```

```
rB = 0
rdh_mean =
gamma_berm =
    1
slope =
        0.208990152726692
Irb =
         1.40994824945531
gamma_berm =
gamma_perm =
gamma_beta =
gamma_rough =
                      0.8
gamma =
                       0.8
ans =
!!! - - Iribaren number: 1.41 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
!!! - - slope: 1:4.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2\_new =
         18.2003722480652
R2del =
        0.143810728147567
z2 =
        27.6313554006027
ans =
     -----! STARTING ITERATION 3 -----!
Ztoe =
                 -4.948448
toe_sta =
        -21.5741922258949
top_sta =
         134.342379042661
Z_{2} =
          27.6313554006027
H0 =
                   9.1162
Tp =
                   9.9055
T0 =
                    9.005
R2 =
         18.2003722480652
Z2 =
          27.6313554006027
top_sta =
         134.342379042661
Lslope =
         155.916571268556
!----- End Berm Factor Calculation, Iter: 3 -----!
berm_width =
    0
rdh_mean =
gamma_berm =
slope =
        0.208956643514731
Irb =
         1.40972218016865
gamma_berm =
gamma_perm =
     1
gamma_beta =
gamma_rough =
                      0.8
gamma =
                       0.8
ans =
!!! - - Iribaren number: 1.41 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
!!! - - slope: 1:4.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
         18.1974540238165
R2del =
    0.00291822424871313
          27.628437176354
% final 2% runup elevation
Z2=R2_new+SWEL
```

```
PART 5: RUNUP2
        for transect: CM-139-1
Station locations shifted by: -0.44 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input
              _RUNUP2 INPUT CONVERSIONS_
        for transect: CM-139-1
Incident significant wave height: 8.30 feet
Peak wave period: 9.90 seconds
Mean wave height: 5.20 feet
Local Depth below SWEL: 65.57 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 = 65.57
    Period, T = 8.42
    Waveheight, H = 5.20
Deep water wavelength, L0 (ft)
    L0 = g*T*T/twopi
    L0 = 32.17*8.42*8.42/6.28 = 362.87
Deep water wave celerity, CO (ft/s)
    C0 = L0/T
    C0 = 362.87/8.42 = 43.11
Angular frequency, sigma (rad/s)
    sigma = twopi/T
    sigma = 6.28/8.42 = 0.75
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
    y = sigma.*sigma.*D./g
    y = 0.75*0.75*65.57/32.17 = 1.14
    \texttt{C1H} = \texttt{sqrt}( \texttt{g.*D.}/(\texttt{y+1.}/(\texttt{1} + \texttt{0.6522.*y} + \texttt{0.4622.*y.^2} + \texttt{0.0864.*y.^4} + \texttt{0.0675.*y.^5})) \ )
    C1H = 37.27
Shoaling Coefficient KsH
    KsH = sqrt(C0/C1H)
    KsH = sqrt(43.11/37.27) = 1.08
Deepwater Wave Height HO_H (ft)
    H0_H = H/KsH
    H0_H = 5.20/1.08 = 4.83
Deepwater mean wave height: 4.83 feet
              END RUNUP2 CONVERSIONS
              RUNUP2 RESULTS
        for transect: CM-139-1
RUNUP2 SWEL:
8.80
```

8.80 8.80 8.80

```
8.80
8.80
8.80
8.80
RUNUP2 deepwater mean wave heights:
4.59
4.59
4.59
4.83
4.83
4.83
5.08
5.08
5.08
RUNUP2 mean wave periods:
8.00
8.42
8.84
8.00
8.42
8.84
8.00
8.42
8.84
RUNUP2 runup above SWEL:
6.02
6.41
6.83
6.24
6.65
7.07
6.46
6.91
7.32
RUNUP2 Mean runup height above SWEL: 6.66 feet
RUNUP2 2-percent runup height above SWEL: 14.64 feet
RUNUP2 2-percent runup elevation: 23.44 feet-NAVD88
RUNUP2 Messages:
No Messages
             __END RUNUP2 RESULTS_
              ___ACES BEACH RUNUP_
Incident significant wave height: 8.30 feet
Significant wave height deshoaled using Hunt equation
Deepwater significant wave height: 6.77 feet
Peak wave period: 9.90 seconds
Average beach Slope: 1:6.88 (H:V)
ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'
ACES Beach 2-percent runup height above SWEL: 14.77 feet
ACES Beach 2-percent runup elevation: 23.57 feet-NAVD88
ACES BEACH RUNUP is valid
```

8.80

FEMA RUNUP2 transect: C
5.00
-56.77 -414.6 0.8
-52.57 -362.6 0.8
-52.53 -361.6 0.8
-52.51 -359.6 0.8
-52.43 -358.6 0.8
-41.08 -304.6 0.8
-28.47 -244.6 0.8
-26.00 -232.6 0.8
-16.75 -187.6 0.8
-16.55 -186.6 0.8
-13.66 -144.6 0.8
-13.66 -144.6 0.8
-13.66 -144.6 0.8
-13.66 -144.6 0.8
-11.75 -65.6 0.8
-11.84 -66.6 0.8
-11.75 -65.6 0.8
-4.11 -17.6 0.8
2.91 12.4 0.8
7.50 41.9 0.8
1 13.89 71.4 0.8
8.8 4.59 8.00
8.8 4.59 8.00 RUNUP2 transect: CM-139-1 4.59 8.84 8.8 4.83 8.00 8.8 4.83 8.42 8.8 4.83 8.84 5.08 8.00 5.08 8.42 5.08 8.84 8.8 8.8

sjh job 2 1

CROSS SECTION PROFILE

LENGTH	ELEV.	SLOPE	ROUGHNESS	
-414.0	-56.7	0.0	80	
-362.0	-52.5			
-361.0	-52.5			
-359.0	-52.5			
-358.0	-52.4			
-304.0	-41.0	4.74	.80	
-244.0	-28.4	4.76	.80	
		5.00	.80	
		4.84	.80	
		5.00	.80	
		14.48	.80	
		FLAT	.80	
-143.0	-13.6	40.00	.80	
-107.0	-12.7	44.89	.80	
-66.6	-11.8	10.00	. 80	
-65.6	-11.7			
-25.6	-6.0			
-17.6	-4.1			
12.4	2.9			
41.9	7.5		.80	
71.4	13.9	4.62	.80	
LAS	T SLOPE	5.00	LAST ROUGHNESS	.80
	-414.0 -362.0 -361.0 -359.0 -358.0 -304.0 -244.0 -232.0 -187.0 -186.0 -144.0 -143.0 -107.0 -66.6 -65.6 -25.6 -17.6 12.4 41.9 71.4	-414.0 -56.7 -362.0 -52.5 -361.0 -52.5 -359.0 -52.5 -358.0 -52.4 -304.0 -41.0 -244.0 -28.4 -232.0 -26.0 -187.0 -16.7 -186.0 -16.5 -144.0 -13.6 -143.0 -13.6 -107.0 -12.7 -66.6 -11.8 -65.6 -11.7 -25.6 -6.0 -17.6 -4.1 12.4 2.9 41.9 7.5	-414.0 -56.7 -362.0 -52.5 -361.0 -52.5 -359.0 -52.5 -358.0 -52.4 -304.0 -41.0 -244.0 -28.4 -232.0 -26.0 -187.0 -16.7 -186.0 -16.7 -186.0 -16.5 -144.0 -13.6 -143.0 -13.6 -107.0 -12.7 -66.6 -11.8 -65.6 -11.7 -25.6 -6.0 -17.6 -4.1 -12.4 2.9 -41.9 7.5 -71.4 13.9	-414.0 -56.7 -362.0 -52.5 -361.0 -52.5 FLAT .80 -359.0 -52.5 -358.0 -52.4 -304.0 -41.0 -244.0 -28.4 -232.0 -26.0 -187.0 -16.7 -186.0 -16.5 -144.0 -13.6 -143.0 -13.6 -107.0 -12.7 -66.6 -11.8 -65.6 -11.7 -25.6 -6.0 -17.6 -4.1 -12.4 2.9 -41.9 7.5 -71.4 13.9

CLIENT- FEMA ** WAVE RUNUP-VERSION 2.0 ** ENGINEERED BY sjh JOB job 2
PROJECT-RUNUP2 transect: CM-139-1 RUN 1 PAGE 2

OUTPUT TABLE

INPUT PARAMETERS RUNUP RESULTS

WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
8.80	4.59	8.00	11	20	6.02	6.96
8.80	4.59	8.42	11	20	6.41	7.08
8.80	4.59	8.84	11	20	6.83	7.19
8.80	4.83	8.00	11	20	6.24	7.27
8.80	4.83	8.42	11	20	6.65	7.38
8.80	4.83	8.84	11	20	7.07	7.50
8.80	5.08	8.00	11	20	6.46	7.59
8.80	5.08	8.42	11	20	6.91	7.71
8.80	5.08	8.84	11	20	7.32	7.83

