

# COMUNE DI SANTA MARINA SALINA

(MESSINA)

## FATTIBILITA', AGGIORNAMENTO E MODIFICA DEL PIANO REGOLATORE DEL PORTO

È copia conforme a quello adottato con delibera  
consiliare n. 46 del 18-4-1985 approvata dalle C.P.C.  
nella seduta del 27-6-1985 n. 44164/43569 gr. 8.  
S. MARINA SALINA, li 25-3-1986

IL SINDACO

IL SEGRETARIO COMUNALE

All. 1.3 - Studio idraulico-marittimo. Tabelle



REGIONE SICILIANA  
ASSESSORATO DEL TERRITORIO E DELL'AMBIENTE  
Consiglio Regionale dell'Urbanistica  
Palermo, 6 FEB 1986

VISTO: CON RIFERIMENTO AL PROPRIO VOTO  
N. 821 del 28-11-86

IL SEGRETARIO

Redatto da:

Ing. M. Napolitano

IL SINDACO



REGIONE SICILIANA  
Assessorato del Territorio e dell'Ambiente  
IL PRESENTE DOCUMENTO COSTITUISCE ALLEGATO  
AL D. A. N.° 606/87 DEL 17/4/87  
L'ASSESSORE



## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 3.70 m  
 WAVE PERIOD 7.59 sec  
 TIME INCREMENT 28.00 sec  
 WAVE DIRECTION 45.00 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
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| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 23.00                  | 43.00 | 8.48        | 28.97 | 4.77         | 49.1                  | 67.39                      | 1.022            | 0.951             | 3.59                  |
| 2               | 22.82                  | 43.18 | 8.46        | 29.34 | 5.13         | 50.6                  | 68.32                      | 1.114            | 0.935             | 3.85                  |
| 3               | 22.69                  | 43.31 | 8.44        | 29.60 | 5.19         | 50.9                  | 69.12                      | 1.134            | 0.929             | 3.90                  |
| 4               | 22.49                  | 43.51 | 8.40        | 29.96 | 4.97         | 49.9                  | 70.12                      | 1.094            | 0.925             | 3.74                  |
| 5               | 22.29                  | 43.71 | 8.30        | 30.29 | 4.69         | 48.7                  | 72.67                      | 1.046            | 0.913             | 3.53                  |
| 6               | 22.12                  | 43.88 | 8.21        | 30.63 | 4.85         | 49.4                  | 75.40                      | 1.060            | 0.931             | 3.65                  |
| 7               | 21.98                  | 44.02 | 8.19        | 30.94 | 6.16         | 54.7                  | 76.69                      | 1.280            | 0.967             | 4.58                  |
| 8               | 21.78                  | 44.22 | 8.17        | 31.32 | 5.91         | 53.8                  | 74.03                      | 1.224            | 0.974             | 4.41                  |
| 9               | 21.59                  | 44.41 | 8.17        | 31.65 | 5.81         | 53.5                  | 69.98                      | 1.206            | 0.974             | 4.34                  |
| 10              | 21.41                  | 44.59 | 8.17        | 31.91 | 5.95         | 54.0                  | 65.95                      | 1.232            | 0.974             | 4.44                  |
| 11              | 21.28                  | 44.72 | 8.08        | 32.14 | 3.34         | 41.7                  | 64.69                      | 0.757            | 0.929             | 2.60                  |
| 12              | 21.18                  | 44.82 | 8.02        | 32.39 | 2.29         | 35.0                  | 63.91                      | 0.503            | 0.960             | 1.79                  |
| 13              | 21.10                  | 44.90 | 7.99        | 32.60 | 2.21         | 34.5                  | 63.51                      | 0.436            | 1.070             | 1.73                  |
| 14              | 21.05                  | 44.95 | 7.96        | 32.80 | 2.35         | 35.4                  | 64.70                      | 0.430            | 1.150             | 1.83                  |
| 15              | 20.96                  | 45.04 | 7.89        | 33.18 | 2.13         | 33.8                  | 72.13                      | 0.357            | 1.261             | 1.66                  |
| 16              | 20.92                  | 45.08 | 7.89        | 33.41 | 1.89         | 32.0                  | 78.17                      | 0.303            | 1.311             | 1.47                  |

Tab. 4.5.1.38



IL SEGRETARIO COMUNALE

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 20.88 | 45.12 | 7.91  | 33.65 | 1.92 | 32.2 | 85.09  | 0.312 | 1.294 | 1.50 |
| 18 | 20.83 | 45.17 | 7.91  | 33.90 | 1.77 | 31.0 | 92.05  | 0.282 | 1.324 | 1.38 |
| 19 | 20.79 | 45.21 | 8.00  | 34.12 | 1.63 | 29.7 | 95.92  | 0.255 | 1.342 | 1.27 |
| 20 | 20.75 | 45.25 | 8.09  | 34.31 | 1.74 | 30.7 | 97.87  | 0.291 | 1.259 | 1.36 |
| 21 | 20.68 | 45.32 | 8.28  | 34.64 | 1.87 | 31.8 | 101.63 | 0.328 | 1.201 | 1.46 |
| 22 | 20.62 | 45.38 | 8.44  | 34.85 | 2.18 | 34.2 | 103.42 | 0.392 | 1.173 | 1.70 |
| 23 | 20.51 | 45.49 | 8.64  | 35.16 | 2.39 | 35.7 | 104.96 | 0.437 | 1.153 | 1.86 |
| 24 | 20.42 | 45.58 | 8.78  | 35.42 | 2.56 | 36.9 | 106.56 | 0.510 | 1.056 | 1.99 |
| 25 | 20.36 | 45.64 | 8.97  | 35.68 | 2.85 | 38.8 | 107.95 | 0.643 | 0.936 | 2.23 |
| 26 | 20.31 | 45.69 | 9.10  | 35.83 | 3.29 | 41.4 | 106.81 | 0.760 | 0.913 | 2.57 |
| 27 | 20.24 | 45.76 | 9.34  | 36.03 | 3.34 | 41.8 | 96.59  | 0.759 | 0.927 | 2.60 |
| 28 | 20.17 | 45.83 | 9.36  | 36.22 | 2.85 | 38.8 | 94.04  | 0.629 | 0.955 | 2.22 |
| 29 | 20.08 | 45.92 | 9.42  | 36.44 | 2.76 | 38.2 | 90.07  | 0.584 | 0.995 | 2.15 |
| 30 | 19.93 | 46.07 | 9.51  | 36.83 | 2.59 | 37.1 | 85.82  | 0.512 | 1.067 | 2.02 |
| 31 | 19.81 | 46.19 | 9.58  | 37.09 | 2.68 | 37.7 | 85.31  | 0.517 | 1.091 | 2.09 |
| 32 | 19.73 | 46.27 | 9.70  | 37.33 | 3.09 | 40.3 | 86.40  | 0.606 | 1.073 | 2.41 |
| 33 | 19.59 | 46.41 | 9.85  | 37.67 | 3.13 | 40.5 | 88.53  | 0.608 | 1.084 | 2.44 |
| 34 | 19.53 | 46.47 | 9.94  | 37.84 | 3.24 | 41.2 | 88.27  | 0.632 | 1.080 | 2.53 |
| 35 | 19.46 | 46.54 | 10.03 | 38.07 | 3.59 | 43.1 | 87.79  | 0.739 | 1.024 | 2.80 |
| 36 | 19.38 | 46.62 | 10.10 | 38.32 | 4.88 | 49.5 | 85.24  | 1.070 | 0.927 | 3.67 |
| 37 | 19.22 | 46.78 | 10.21 | 38.66 | 5.73 | 53.1 | 81.51  | 1.266 | 0.914 | 4.28 |
| 38 | 18.99 | 47.01 | 10.31 | 39.03 | 5.68 | 52.9 | 74.66  | 1.252 | 0.916 | 4.24 |
| 39 | 18.76 | 47.24 | 10.28 | 39.30 | 5.53 | 52.3 | 66.95  | 1.224 | 0.915 | 4.14 |
| 40 | 18.40 | 47.60 | 10.25 | 39.69 | 5.66 | 52.8 | 56.18  | 1.219 | 0.939 | 4.24 |
| 41 | 18.23 | 47.77 | 10.19 | 39.95 | 5.59 | 52.5 | 52.87  | 1.165 | 0.970 | 4.18 |
| 42 | 18.05 | 47.95 | 10.01 | 40.17 | 4.81 | 49.2 | 54.01  | 0.972 | 1.006 | 3.62 |
| 43 | 17.87 | 48.13 | 9.86  | 40.47 | 4.37 | 47.2 | 58.52  | 0.908 | 1.016 | 3.41 |
| 44 | 17.74 | 48.26 | 9.81  | 40.74 | 4.77 | 49.0 | 61.95  | 0.975 | 0.995 | 3.59 |
| 45 | 17.64 | 48.36 | 9.77  | 40.92 | 4.90 | 49.6 | 63.72  | 1.010 | 0.986 | 3.68 |
| 46 | 17.49 | 48.51 | 9.80  | 41.25 | 5.82 | 53.5 | 63.39  | 1.222 | 0.962 | 4.35 |

Tab. 4.5.1.39

IL SEGRETARIO COMUNALE



IL SINDACO



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 17.34 | 48.66 | 9.76 | 41.50 | 5.62 | 52.6 | 63.40 | 1.187 | 0.958 | 4.21 |
| 48 | 17.17 | 48.83 | 9.77 | 41.82 | 5.98 | 54.0 | 62.33 | 1.271 | 0.948 | 4.46 |
| 49 | 17.03 | 48.97 | 9.70 | 42.01 | 5.73 | 53.1 | 62.47 | 1.230 | 0.940 | 4.28 |
| 50 | 16.67 | 49.00 | 9.46 | 42.21 | 5.32 | 51.4 | 64.37 | 1.180 | 0.915 | 3.99 |
| 51 | 16.27 | 49.00 | 9.33 | 42.51 | 5.59 | 52.5 | 63.32 | 1.230 | 0.919 | 4.18 |

IL SINDACO



IL SEGRETARIO COMUNALE



## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 4.46 m  
 WAVE PERIOD 8.25 sec  
 TIME INCREMENT 24.00 sec  
 WAVE DIRECTION 67.50 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
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| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | -----BREAKING CONDITIONS----- |       |       |                |                   |                  |                   |                |
|-----------------|------------------------|-------|-------------------------------|-------|-------|----------------|-------------------|------------------|-------------------|----------------|
|                 | X                      | Y     | COORDINATES                   |       | DEPTH | WAVE<br>LENGTH | WAVE<br>DIRECTION | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT |
|                 |                        |       | X                             | Y     | [m]   | [m]            | [deg]             |                  |                   | [m]            |
| 1               | 25.00                  | 36.00 | 8.48                          | 29.29 | 5.67  | 58.1           | 76.42             | 1.012            | 0.946             | 4.27           |
| 2               | 24.90                  | 36.23 | 8.47                          | 29.56 | 5.85  | 58.9           | 76.79             | 1.052            | 0.938             | 4.40           |
| 3               | 24.83                  | 36.40 | 8.47                          | 29.76 | 6.23  | 60.5           | 76.95             | 1.126            | 0.930             | 4.67           |
| 4               | 24.72                  | 36.66 | 8.42                          | 30.06 | 5.89  | 59.0           | 77.82             | 1.074            | 0.924             | 4.43           |
| 5               | 24.62                  | 36.92 | 8.29                          | 30.36 | 5.20  | 55.9           | 80.18             | 0.996            | 0.913             | 4.06           |
| 6               | 24.52                  | 37.15 | 8.21                          | 30.63 | 4.80  | 53.9           | 81.69             | 0.914            | 0.918             | 3.74           |
| 7               | 24.45                  | 37.33 | 8.16                          | 30.83 | 4.47  | 52.2           | 82.94             | 0.835            | 0.935             | 3.49           |
| 8               | 24.34                  | 37.59 | 8.16                          | 31.14 | 5.53  | 57.4           | 81.62             | 0.976            | 0.958             | 4.17           |
| 9               | 24.23                  | 37.85 | 8.20                          | 31.43 | 7.03  | 63.8           | 78.14             | 1.227            | 0.958             | 5.24           |
| 10              | 24.14                  | 38.08 | 8.20                          | 31.68 | 7.09  | 64.0           | 75.35             | 1.237            | 0.958             | 5.29           |
| 11              | 24.00                  | 38.43 | 8.19                          | 32.07 | 6.89  | 63.2           | 73.33             | 1.218            | 0.947             | 5.14           |
| 12              | 23.85                  | 38.77 | 8.12                          | 32.42 | 5.59  | 57.7           | 72.74             | 1.034            | 0.913             | 4.21           |
| 13              | 23.76                  | 39.00 | 8.07                          | 32.64 | 4.83  | 54.1           | 71.78             | 0.896            | 0.943             | 3.77           |
| 14              | 23.68                  | 39.18 | 8.03                          | 32.83 | 4.37  | 51.7           | 71.67             | 0.764            | 1.001             | 3.41           |
| 15              | 23.63                  | 39.31 | 8.01                          | 33.02 | 4.17  | 50.6           | 73.87             | 0.687            | 1.063             | 3.25           |
| 16              | 23.55                  | 39.50 | 8.01                          | 33.35 | 3.98  | 49.5           | 81.06             | 0.652            | 1.067             | 3.10           |

Tab. 4.5.1.41

IL SINDACO



IL SEGRETARIO COMUNALE

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 23.47 | 39.70 | 8.00  | 33.74 | 3.23 | 44.9 | 90.59  | 0.503 | 1.123 | 2.52 |
| 18 | 23.42 | 39.81 | 8.00  | 34.03 | 2.60 | 40.6 | 98.47  | 0.382 | 1.189 | 2.03 |
| 19 | 23.38 | 39.91 | 8.10  | 34.25 | 2.78 | 41.9 | 100.79 | 0.433 | 1.125 | 2.17 |
| 20 | 23.34 | 40.00 | 8.20  | 34.45 | 2.71 | 41.4 | 103.44 | 0.424 | 1.116 | 2.11 |
| 21 | 23.28 | 40.16 | 8.39  | 34.77 | 2.36 | 38.7 | 108.02 | 0.349 | 1.180 | 1.84 |
| 22 | 23.23 | 40.27 | 8.59  | 34.97 | 3.00 | 43.4 | 109.52 | 0.458 | 1.146 | 2.34 |
| 23 | 23.16 | 40.45 | 8.74  | 35.28 | 3.16 | 44.5 | 112.19 | 0.512 | 1.079 | 2.46 |
| 24 | 23.09 | 40.62 | 8.92  | 35.51 | 3.76 | 48.3 | 112.27 | 0.677 | 0.972 | 2.94 |
| 25 | 22.99 | 40.85 | 9.13  | 35.76 | 4.82 | 54.0 | 109.08 | 0.923 | 0.913 | 3.76 |
| 26 | 22.92 | 41.02 | 9.40  | 35.95 | 5.27 | 56.2 | 101.25 | 1.003 | 0.918 | 4.11 |
| 27 | 22.81 | 41.28 | 9.55  | 36.24 | 4.84 | 54.1 | 95.42  | 0.883 | 0.958 | 3.77 |
| 28 | 22.70 | 41.54 | 9.59  | 36.48 | 4.58 | 52.8 | 91.77  | 0.815 | 0.981 | 3.57 |
| 29 | 22.61 | 41.77 | 9.66  | 36.76 | 4.55 | 52.7 | 89.47  | 0.793 | 1.004 | 3.55 |
| 30 | 22.54 | 41.95 | 9.70  | 36.99 | 4.45 | 52.1 | 88.74  | 0.761 | 1.023 | 3.47 |
| 31 | 22.48 | 42.08 | 9.77  | 37.19 | 4.39 | 51.8 | 90.55  | 0.743 | 1.033 | 3.42 |
| 32 | 22.40 | 42.27 | 9.84  | 37.47 | 4.00 | 49.6 | 93.14  | 0.661 | 1.059 | 3.12 |
| 33 | 22.32 | 42.47 | 10.00 | 37.75 | 4.34 | 51.5 | 93.65  | 0.725 | 1.046 | 3.38 |
| 34 | 22.23 | 42.70 | 10.05 | 38.09 | 4.19 | 50.7 | 96.07  | 0.726 | 1.009 | 3.27 |
| 35 | 22.15 | 42.87 | 10.10 | 38.32 | 4.78 | 53.8 | 93.98  | 0.885 | 0.944 | 3.73 |
| 36 | 22.05 | 43.13 | 10.20 | 38.63 | 5.75 | 58.5 | 90.10  | 1.062 | 0.914 | 4.33 |
| 37 | 21.94 | 43.39 | 10.36 | 38.94 | 6.89 | 63.2 | 86.26  | 1.263 | 0.914 | 5.15 |
| 38 | 21.84 | 43.62 | 10.37 | 39.16 | 6.78 | 62.7 | 82.29  | 1.243 | 0.914 | 5.07 |
| 39 | 21.70 | 43.97 | 10.37 | 39.47 | 7.04 | 63.8 | 76.31  | 1.273 | 0.925 | 5.25 |
| 40 | 21.56 | 44.31 | 10.35 | 39.75 | 6.94 | 63.4 | 69.88  | 1.229 | 0.945 | 5.18 |
| 41 | 21.46 | 44.55 | 10.34 | 39.97 | 7.06 | 63.9 | 66.79  | 1.226 | 0.963 | 5.27 |
| 42 | 21.32 | 44.89 | 10.14 | 40.25 | 6.72 | 62.5 | 65.58  | 1.161 | 0.970 | 5.02 |
| 43 | 21.17 | 45.24 | 9.94  | 40.56 | 5.54 | 57.5 | 67.52  | 0.929 | 1.007 | 4.17 |
| 44 | 21.08 | 45.47 | 9.83  | 40.85 | 5.45 | 57.0 | 71.46  | 0.951 | 1.002 | 4.25 |
| 45 | 21.01 | 45.64 | 9.78  | 41.07 | 5.46 | 57.1 | 72.98  | 0.960 | 0.995 | 4.26 |
| 46 | 20.90 | 45.90 | 9.84  | 41.41 | 6.32 | 60.9 | 72.69  | 1.091 | 0.975 | 4.74 |

Tab. 4.5.1.42

IL SINDACO



IL SEGRETARIO COMUNALE

R



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 20.79 | 46.16 | 9.82 | 41.71 | 6.35 | 61.0 | 72.55 | 1.102 | 0.969 | 4.76 |
| 48 | 20.69 | 46.39 | 9.86 | 41.98 | 6.85 | 63.1 | 71.50 | 1.193 | 0.962 | 5.12 |
| 49 | 20.62 | 46.57 | 9.68 | 42.11 | 6.75 | 62.6 | 71.80 | 1.212 | 0.934 | 5.05 |
| 50 | 20.52 | 46.83 | 9.50 | 42.33 | 6.77 | 62.7 | 71.18 | 1.241 | 0.914 | 5.06 |
| 51 | 20.41 | 47.09 | 9.38 | 42.57 | 6.66 | 62.3 | 69.63 | 1.222 | 0.915 | 4.98 |

IL SINDACO

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IL SEGRETARIO COMUNALE

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\*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 4.79 m  
 WAVE PERIOD 8.44 sec  
 TIME INCREMENT 24.00 sec  
 WAVE DIRECTION 90.00 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*

| ORTH. NUMBER | INITIAL COORDINATES |       | COORDINATES |       | DEPTH [m] | BREAKING CONDITIONS |                      | REFRAC. COEF. | SHOALING COEF. | WAVE HEIGHT [m] |      |
|--------------|---------------------|-------|-------------|-------|-----------|---------------------|----------------------|---------------|----------------|-----------------|------|
|              | X                   | Y     | X           | Y     |           | WAVE LENGTH [m]     | WAVE DIRECTION [deg] |               |                |                 |      |
| 1            | 25.00               | 30.00 | 8.46        | 29.95 | 6.44      | 63.0                | 86.98                | 1.088         | 0.929          | 4.84            | 4.84 |
| 2            | 25.00               | 30.25 | 8.38        | 30.20 | 6.16      | 61.8                | 87.17                | 1.056         | 0.917          | 4.64            | 4.64 |
| 3            | 25.00               | 30.44 | 8.31        | 30.39 | 5.80      | 60.2                | 87.62                | 1.000         | 0.913          | 4.37            | 4.37 |
| 4            | 25.00               | 30.72 | 8.21        | 30.68 | 5.10      | 56.8                | 87.93                | 0.902         | 0.920          | 3.97            | 3.97 |
| 5            | 25.00               | 31.00 | 8.14        | 30.96 | 4.63      | 54.4                | 88.34                | 0.795         | 0.948          | 3.61            | 3.61 |
| 6            | 25.00               | 31.25 | 8.14        | 31.19 | 4.87      | 55.7                | 86.03                | 0.831         | 0.954          | 3.80            | 3.80 |
| 7            | 25.00               | 31.63 | 8.17        | 31.55 | 6.06      | 61.3                | 82.64                | 0.998         | 0.954          | 4.56            | 4.56 |
| 8            | 25.00               | 32.00 | 8.21        | 31.90 | 7.29      | 66.5                | 79.95                | 1.190         | 0.954          | 5.44            | 5.44 |
| 9            | 25.00               | 32.25 | 8.18        | 32.15 | 6.66      | 63.9                | 79.47                | 1.120         | 0.930          | 4.99            | 4.99 |
| 10           | 25.00               | 32.63 | 8.10        | 32.53 | 5.43      | 58.4                | 79.92                | 0.958         | 0.922          | 4.23            | 4.23 |
| 11           | 25.00               | 33.00 | 8.05        | 32.91 | 5.33      | 57.9                | 81.33                | 0.880         | 0.986          | 4.16            | 4.16 |
| 12           | 25.00               | 33.25 | 8.05        | 33.24 | 5.15      | 57.1                | 87.36                | 0.833         | 1.007          | 4.02            | 4.02 |
| 13           | 25.00               | 33.44 | 8.04        | 33.50 | 4.69      | 54.7                | 92.69                | 0.745         | 1.025          | 3.66            | 3.66 |
| 14           | 25.00               | 33.72 | 8.05        | 33.88 | 4.41      | 53.2                | 100.90               | 0.696         | 1.031          | 3.44            | 3.44 |
| 15           | 25.00               | 34.00 | 8.13        | 34.20 | 4.16      | 51.8                | 105.23               | 0.662         | 1.022          | 3.24            | 3.24 |
| 16           | 25.00               | 34.25 | 8.32        | 34.55 | 4.14      | 51.7                | 109.84               | 0.665         | 1.013          | 3.23            | 3.23 |

Tab. 4.5.1.44



IL SEGRETARIO COMUNALE

P



|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 25.00 | 34.44 | 8.52  | 34.77 | 5.01 | 56.3 | 112.30 | 0.821 | 0.992 | 3.90 |
| 18 | 25.00 | 34.72 | 8.75  | 35.07 | 4.89 | 55.7 | 115.38 | 0.776 | 1.026 | 3.81 |
| 19 | 25.00 | 35.00 | 8.91  | 35.37 | 5.01 | 56.4 | 116.82 | 0.842 | 0.970 | 3.91 |
| 20 | 25.00 | 35.25 | 9.05  | 35.58 | 5.37 | 58.2 | 116.07 | 0.949 | 0.922 | 4.19 |
| 21 | 25.00 | 35.44 | 9.18  | 35.72 | 6.38 | 62.7 | 113.55 | 1.095 | 0.913 | 4.79 |
| 22 | 25.00 | 35.72 | 9.42  | 35.88 | 7.19 | 66.0 | 106.64 | 1.228 | 0.913 | 5.37 |
| 23 | 25.00 | 36.00 | 9.69  | 36.10 | 6.66 | 64.0 | 101.10 | 1.101 | 0.947 | 4.99 |
| 24 | 25.00 | 36.25 | 9.75  | 36.34 | 6.64 | 63.8 | 99.25  | 1.085 | 0.959 | 4.98 |
| 25 | 25.00 | 36.63 | 9.79  | 36.71 | 6.16 | 61.7 | 97.92  | 0.987 | 0.979 | 4.63 |
| 26 | 25.00 | 37.00 | 9.85  | 37.07 | 5.89 | 60.6 | 97.18  | 0.928 | 0.998 | 4.43 |
| 27 | 25.00 | 37.25 | 9.94  | 37.35 | 5.62 | 59.3 | 99.43  | 0.907 | 1.009 | 4.38 |
| 28 | 25.00 | 37.44 | 10.00 | 37.56 | 5.20 | 57.3 | 101.09 | 0.827 | 1.023 | 4.05 |
| 29 | 25.00 | 37.72 | 10.04 | 37.88 | 4.77 | 55.1 | 103.98 | 0.763 | 1.017 | 3.72 |
| 30 | 25.00 | 38.00 | 10.07 | 38.18 | 4.65 | 54.5 | 104.16 | 0.775 | 0.976 | 3.62 |
| 31 | 25.00 | 38.25 | 10.13 | 38.41 | 5.10 | 56.8 | 101.28 | 0.893 | 0.931 | 3.98 |
| 32 | 25.00 | 38.63 | 10.27 | 38.76 | 6.59 | 63.6 | 96.95  | 1.130 | 0.913 | 4.94 |
| 33 | 25.00 | 39.00 | 10.39 | 39.09 | 7.03 | 65.4 | 93.77  | 1.201 | 0.913 | 5.25 |
| 34 | 25.00 | 39.25 | 10.39 | 39.30 | 7.24 | 66.3 | 90.75  | 1.228 | 0.919 | 5.40 |
| 35 | 25.00 | 39.63 | 10.39 | 39.61 | 7.35 | 66.7 | 86.15  | 1.224 | 0.935 | 5.48 |
| 36 | 25.00 | 40.00 | 10.40 | 39.91 | 7.56 | 67.5 | 81.77  | 1.230 | 0.956 | 5.63 |
| 37 | 25.00 | 40.25 | 10.29 | 40.13 | 7.64 | 67.8 | 79.56  | 1.240 | 0.958 | 5.69 |
| 38 | 25.00 | 40.63 | 10.04 | 40.43 | 6.34 | 62.6 | 77.54  | 1.004 | 0.990 | 4.76 |
| 39 | 25.00 | 40.81 | 9.93  | 40.59 | 5.55 | 59.0 | 77.90  | 0.892 | 1.013 | 4.33 |
| 40 | 25.00 | 41.00 | 9.80  | 40.76 | 4.72 | 54.8 | 79.05  | 0.743 | 1.033 | 3.68 |
| 41 | 25.00 | 41.25 | 9.77  | 41.05 | 5.25 | 57.6 | 81.84  | 0.848 | 1.008 | 4.09 |
| 42 | 25.00 | 41.44 | 9.76  | 41.26 | 5.37 | 58.1 | 82.01  | 0.876 | 0.999 | 4.19 |
| 43 | 25.00 | 41.72 | 9.74  | 41.58 | 5.48 | 58.7 | 82.02  | 0.905 | 0.986 | 4.28 |
| 44 | 25.00 | 42.00 | 9.84  | 41.91 | 6.63 | 63.8 | 82.69  | 1.070 | 0.970 | 4.97 |
| 45 | 25.00 | 42.25 | 9.63  | 42.14 | 6.54 | 63.4 | 81.51  | 1.098 | 0.933 | 4.91 |
| 46 | 25.00 | 42.44 | 9.47  | 42.31 | 6.23 | 62.1 | 80.06  | 1.067 | 0.917 | 4.68 |

Tab. 4.5.1.45

IL SINDACO




IL SEGRETARIO COMUNALE



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 25.00 | 42.72 | 9.30 | 42.56 | 5.20 | 57.4 | 76.88 | 0.928 | 0.913 | 4.06 |
| 48 | 25.00 | 43.00 | 9.23 | 42.78 | 4.87 | 55.6 | 73.19 | 0.864 | 0.918 | 3.80 |

IL SINDACO



IL SEGRETARIO COMUNALE

R



\*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 4.90 m  
WAVE PERIOD 8.54 sec  
TIME INCREMENT 24.00 sec  
WAVE DIRECTION 112.50 degrees  
ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
\*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH | BREAKING<br>WAVE<br>LENGTH | CONDITIONS<br>WAVE<br>DIRECTION | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT |
|-----------------|------------------------|-------|-------------|-------|-------|----------------------------|---------------------------------|------------------|-------------------|----------------|
|                 | X                      | Y     | X           | Y     | [m]   | [m]                        | [deg]                           |                  |                   | [m]            |
| 1               | 20.00                  | 27.00 | 8.12        | 31.49 | 4.34  | 53.5                       | 85.74                           | 0.727            | 0.951             | 3.39           |
| 2               | 20.10                  | 27.23 | 8.12        | 31.74 | 4.34  | 53.5                       | 82.96                           | 0.727            | 0.951             | 3.39           |
| 3               | 20.17                  | 27.40 | 8.15        | 31.95 | 5.11  | 57.6                       | 82.15                           | 0.856            | 0.951             | 3.99           |
| 4               | 20.28                  | 27.66 | 8.11        | 32.31 | 5.07  | 57.4                       | 85.30                           | 0.885            | 0.913             | 3.96           |
| 5               | 20.38                  | 27.92 | 8.07        | 32.68 | 4.98  | 56.9                       | 89.02                           | 0.832            | 0.953             | 3.89           |
| 6               | 20.48                  | 28.15 | 8.04        | 33.00 | 5.14  | 57.7                       | 91.86                           | 0.804            | 1.018             | 4.01           |
| 7               | 20.55                  | 28.33 | 8.05        | 33.28 | 5.11  | 57.6                       | 97.50                           | 0.804            | 1.013             | 3.99           |
| 8               | 20.60                  | 28.46 | 8.07        | 33.48 | 5.63  | 60.2                       | 101.93                          | 0.908            | 0.987             | 4.39           |
| 9               | 20.68                  | 28.65 | 8.08        | 33.78 | 5.32  | 58.7                       | 107.73                          | 0.853            | 0.994             | 4.15           |
| 10              | 20.77                  | 28.85 | 8.12        | 34.05 | 5.53  | 59.7                       | 112.58                          | 0.899            | 0.978             | 4.31           |
| 11              | 20.86                  | 29.08 | 8.25        | 34.31 | 5.57  | 59.9                       | 115.01                          | 0.919            | 0.965             | 4.35           |
| 12              | 20.93                  | 29.25 | 8.38        | 34.51 | 5.88  | 61.4                       | 117.26                          | 0.978            | 0.958             | 4.59           |
| 13              | 21.04                  | 29.51 | 8.59        | 34.78 | 6.21  | 62.8                       | 120.83                          | 0.987            | 0.966             | 4.67           |
| 14              | 21.15                  | 29.77 | 8.81        | 35.05 | 6.23  | 62.9                       | 124.01                          | 0.964            | 0.992             | 4.68           |
| 15              | 21.24                  | 30.00 | 8.92        | 35.32 | 5.54  | 60.0                       | 125.98                          | 0.922            | 0.966             | 4.36           |
| 16              | 21.33                  | 30.35 | 9.11        | 35.62 | 6.41  | 63.7                       | 124.66                          | 1.076            | 0.914             | 4.82           |

Tab. 4.5.1.47



IL SEGRETARIO COMUNALE

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 21.53 | 30.70 | 9.35  | 35.83 | 7.33 | 67.5 | 119.80 | 1.223 | 0.913 | 5.47 |
| 18 | 21.63 | 30.93 | 9.55  | 35.94 | 7.18 | 66.9 | 115.63 | 1.190 | 0.920 | 5.37 |
| 19 | 21.77 | 31.27 | 9.82  | 36.16 | 7.82 | 69.4 | 110.50 | 1.250 | 0.950 | 5.82 |
| 20 | 21.91 | 31.62 | 9.85  | 36.52 | 7.26 | 67.2 | 108.92 | 1.147 | 0.965 | 5.42 |
| 21 | 22.01 | 31.85 | 9.90  | 36.77 | 7.36 | 67.6 | 108.50 | 1.154 | 0.972 | 5.50 |
| 22 | 22.15 | 32.20 | 9.97  | 37.15 | 6.90 | 65.8 | 108.54 | 1.071 | 0.986 | 5.17 |
| 23 | 22.22 | 32.37 | 10.02 | 37.35 | 6.83 | 65.5 | 110.02 | 1.067 | 0.979 | 5.12 |
| 24 | 22.30 | 32.54 | 10.04 | 37.56 | 6.65 | 64.8 | 111.50 | 1.049 | 0.971 | 4.99 |
| 25 | 22.39 | 32.77 | 10.08 | 37.85 | 6.41 | 63.7 | 113.39 | 1.023 | 0.961 | 4.82 |
| 26 | 22.46 | 32.95 | 10.11 | 38.06 | 6.31 | 63.3 | 114.44 | 1.020 | 0.950 | 4.75 |
| 27 | 22.57 | 33.21 | 10.15 | 38.33 | 6.14 | 62.5 | 111.70 | 1.019 | 0.926 | 4.62 |
| 28 | 22.68 | 33.47 | 10.22 | 38.57 | 6.53 | 64.2 | 108.13 | 1.094 | 0.914 | 4.90 |
| 29 | 22.77 | 33.70 | 10.30 | 38.78 | 6.93 | 65.9 | 105.55 | 1.160 | 0.913 | 5.19 |
| 30 | 22.92 | 34.04 | 10.39 | 39.11 | 7.15 | 66.8 | 102.90 | 1.194 | 0.914 | 5.35 |
| 31 | 23.06 | 34.39 | 10.42 | 39.46 | 7.68 | 68.9 | 100.23 | 1.261 | 0.926 | 5.72 |
| 32 | 23.16 | 34.62 | 10.41 | 39.69 | 7.60 | 68.5 | 97.85  | 1.228 | 0.941 | 5.66 |
| 33 | 23.30 | 34.97 | 10.40 | 40.03 | 7.88 | 69.6 | 94.29  | 1.247 | 0.959 | 5.86 |
| 34 | 23.37 | 35.14 | 10.24 | 40.22 | 7.69 | 68.9 | 90.73  | 1.220 | 0.959 | 5.73 |
| 35 | 23.44 | 35.31 | 10.13 | 40.43 | 7.55 | 68.4 | 89.83  | 1.193 | 0.963 | 5.63 |
| 36 | 23.54 | 35.55 | 9.94  | 40.72 | 6.24 | 63.0 | 89.51  | 0.958 | 1.000 | 4.69 |
| 37 | 23.61 | 35.72 | 9.77  | 40.96 | 5.14 | 57.8 | 90.58  | 0.805 | 1.017 | 4.01 |
| 38 | 23.72 | 35.98 | 9.66  | 41.30 | 4.34 | 53.5 | 90.12  | 0.675 | 1.024 | 3.39 |
| 39 | 23.83 | 36.24 | 9.63  | 41.66 | 4.55 | 54.7 | 89.83  | 0.727 | 0.997 | 3.55 |
| 40 | 23.92 | 36.47 | 9.67  | 41.97 | 5.30 | 58.6 | 90.20  | 0.868 | 0.973 | 4.14 |
| 41 | 23.99 | 36.64 | 9.43  | 42.20 | 4.87 | 56.4 | 86.98  | 0.837 | 0.926 | 3.80 |
| 42 | 24.10 | 36.90 | 9.24  | 42.53 | 4.17 | 52.5 | 81.91  | 0.726 | 0.913 | 3.25 |
| 43 | 24.21 | 37.16 | 9.17  | 42.86 | 3.94 | 51.2 | 76.77  | 0.683 | 0.919 | 3.07 |
| 44 | 24.31 | 37.39 | 9.10  | 43.11 | 3.21 | 46.5 | 74.43  | 0.560 | 0.913 | 2.50 |
| 45 | 24.38 | 37.57 | 9.05  | 43.39 | 3.54 | 48.7 | 77.55  | 0.595 | 0.948 | 2.76 |
| 46 | 24.43 | 37.70 | 9.02  | 43.66 | 4.18 | 52.6 | 80.45  | 0.677 | 0.982 | 3.26 |

Tab. 4.5.1.48

IL SINDACO



IL SEGRETARIO COMUNALE

R



|    |       |       |      |       |      |      |        |       |       |      |
|----|-------|-------|------|-------|------|------|--------|-------|-------|------|
| 47 | 24.51 | 37.89 | 8.96 | 43.90 | 4.38 | 53.7 | 83.32  | 0.652 | 1.069 | 3.42 |
| 48 | 24.59 | 38.09 | 8.91 | 44.24 | 4.65 | 55.2 | 91.33  | 0.679 | 1.090 | 3.63 |
| 49 | 24.69 | 38.32 | 8.87 | 44.64 | 4.59 | 54.9 | 101.15 | 0.657 | 1.112 | 3.58 |
| 50 | 24.76 | 38.49 | 8.86 | 44.92 | 4.87 | 56.3 | 108.43 | 0.701 | 1.105 | 3.79 |
| 51 | 24.87 | 38.75 | 8.93 | 45.27 | 5.15 | 57.8 | 111.16 | 0.811 | 1.010 | 4.01 |
| 52 | 24.97 | 39.01 | 9.06 | 45.49 | 6.46 | 64.0 | 107.02 | 1.071 | 0.925 | 4.85 |

\*\*\*\*\* END OF TABULATION \*\*\*\*\*



IL SEGRETARIO COMUNALE

| D<br>(gradi) | T<br>(sec.) | H<br>(m) | $h_{min}$<br>(m) | $h_{med}$<br>(m) | $h_{max}$<br>(m) | $t_r$<br>(anni) |
|--------------|-------------|----------|------------------|------------------|------------------|-----------------|
| 45           | 5.09        | 1.69     | 0.72             | 1.85             | 2.89             | 5               |
| 67,5         | 5.84        | 2.18     | 1.33             | 2.59             | 3.63             | "               |
| 90           | 6.14        | 2.40     | 1.91             | 2.90             | 4.04             | "               |
| 112,5        | 6.28        | 2.60     | 1.54             | 3.09             | 4.22             | "               |
| 45           | 5.90        | 2.23     | 1.01             | 2.38             | 3.78             | 10              |
| 67,5         | 6.48        | 2.75     | 1.59             | 3.24             | 4.63             | "               |
| 90           | 7.03        | 3.20     | 2.55             | 3.88             | 5.16             | "               |
| 112,5        | 7.24        | 3.38     | 2.40             | 4.01             | 5.34             | "               |
| 45           | 6.58        | 2.84     | 1.36             | 3.16             | 4.91             | 20              |
| 67,5         | 7.42        | 3.54     | 1.91             | 4.09             | 5.83             | "               |
| 90           | 7.61        | 3.84     | 2.89             | 4.59             | 6.21             | "               |
| 112,5        | 7.79        | 4.01     | 2.92             | 4.73             | 6.45             | "               |
| 45           | 7.59        | 3.70     | 1.63             | 3.98             | 6.16             | 50              |
| 67,5         | 8.25        | 4.46     | 2.36             | 5.19             | 7.09             | "               |
| 90           | 8.44        | 4.79     | 4.14             | 5.76             | 7.64             | "               |
| 112,5        | 8.54        | 4.90     | 3.21             | 5.79             | 7.88             | "               |


Tab. 4.5.2. - Fascia di frangimento

IL SINDACO




Tab. 4.5.2

IL SEGRETARIO COMUNALE







|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 21.53 | 30.70 | 9.30  | 35.85 | 6.03 | 55.9 | 119.97 | 1.228 | 0.915 | 4.50 |
| 18 | 21.63 | 30.93 | 9.50  | 35.96 | 6.12 | 56.2 | 115.26 | 1.243 | 0.916 | 4.57 |
| 19 | 21.77 | 31.27 | 9.70  | 36.20 | 6.45 | 57.5 | 110.34 | 1.280 | 0.937 | 4.81 |
| 20 | 21.91 | 31.62 | 9.74  | 36.56 | 5.97 | 55.7 | 108.74 | 1.166 | 0.954 | 4.46 |
| 21 | 22.01 | 31.85 | 9.80  | 36.81 | 6.10 | 56.2 | 108.34 | 1.181 | 0.962 | 4.56 |
| 22 | 22.15 | 32.20 | 9.86  | 37.20 | 5.44 | 53.5 | 108.97 | 1.034 | 0.985 | 4.08 |
| 23 | 22.22 | 32.37 | 9.94  | 37.39 | 5.44 | 53.4 | 110.65 | 1.030 | 0.989 | 4.08 |
| 24 | 22.30 | 32.54 | 10.01 | 37.58 | 5.49 | 53.7 | 112.08 | 1.046 | 0.983 | 4.12 |
| 25 | 22.39 | 32.77 | 10.05 | 37.86 | 5.29 | 52.8 | 113.96 | 1.022 | 0.971 | 3.98 |
| 26 | 22.54 | 33.12 | 10.10 | 38.26 | 5.16 | 52.2 | 113.22 | 1.038 | 0.933 | 3.88 |
| 27 | 22.68 | 33.47 | 10.17 | 38.58 | 5.34 | 53.0 | 107.77 | 1.096 | 0.913 | 4.02 |
| 28 | 22.77 | 33.70 | 10.25 | 38.79 | 5.85 | 55.2 | 104.64 | 1.194 | 0.915 | 4.38 |
| 29 | 22.92 | 34.04 | 10.33 | 39.12 | 6.07 | 56.1 | 101.23 | 1.238 | 0.913 | 4.53 |
| 30 | 23.06 | 34.39 | 10.32 | 39.48 | 6.32 | 57.0 | 98.09  | 1.275 | 0.922 | 4.71 |
| 31 | 23.16 | 34.62 | 10.28 | 39.72 | 6.13 | 56.3 | 95.20  | 1.213 | 0.941 | 4.58 |
| 32 | 23.30 | 34.97 | 10.20 | 40.08 | 6.36 | 57.2 | 90.93  | 1.229 | 0.963 | 4.74 |
| 33 | 23.37 | 35.14 | 10.08 | 40.28 | 6.06 | 56.0 | 88.98  | 1.161 | 0.972 | 4.53 |
| 34 | 23.44 | 35.31 | 9.96  | 40.49 | 5.51 | 53.7 | 88.63  | 1.041 | 0.991 | 4.13 |
| 35 | 23.54 | 35.55 | 9.75  | 40.76 | 4.21 | 47.7 | 88.78  | 0.801 | 1.021 | 3.28 |
| 36 | 23.61 | 35.72 | 9.67  | 41.02 | 4.04 | 46.9 | 91.39  | 0.774 | 1.016 | 3.15 |
| 37 | 23.72 | 35.98 | 9.58  | 41.38 | 3.63 | 44.6 | 90.81  | 0.701 | 1.008 | 2.83 |
| 38 | 23.83 | 36.24 | 9.56  | 41.74 | 4.06 | 46.9 | 90.64  | 0.813 | 0.970 | 3.16 |
| 39 | 23.92 | 36.47 | 9.51  | 42.05 | 4.51 | 49.2 | 89.88  | 0.937 | 0.936 | 3.52 |
| 40 | 23.99 | 36.64 | 9.34  | 42.27 | 4.35 | 48.5 | 86.94  | 0.927 | 0.914 | 3.40 |
| 41 | 24.10 | 36.90 | 9.18  | 42.54 | 3.14 | 41.7 | 80.41  | 0.666 | 0.917 | 2.45 |
| 42 | 24.21 | 37.16 | 9.13  | 42.84 | 2.96 | 40.6 | 74.75  | 0.619 | 0.930 | 2.31 |
| 43 | 24.31 | 37.39 | 9.08  | 43.16 | 2.97 | 40.7 | 74.57  | 0.633 | 0.913 | 2.32 |
| 44 | 24.38 | 37.57 | 9.01  | 43.43 | 2.92 | 40.4 | 77.55  | 0.588 | 0.965 | 2.28 |
| 45 | 24.43 | 37.70 | 8.98  | 43.64 | 3.44 | 43.6 | 80.32  | 0.663 | 1.010 | 2.69 |
| 46 | 24.51 | 37.89 | 8.93  | 43.87 | 3.61 | 44.5 | 81.07  | 0.649 | 1.081 | 2.81 |

Tab. 4.5.1.36

IL SINDACO



IL SEGRETARIO COMUNALE



|    |       |       |      |       |      |      |        |       |       |      |
|----|-------|-------|------|-------|------|------|--------|-------|-------|------|
| 47 | 24.59 | 38.09 | 8.88 | 44.23 | 3.65 | 44.7 | 89.66  | 0.629 | 1.128 | 2.85 |
| 48 | 24.64 | 38.20 | 8.85 | 44.46 | 3.54 | 44.1 | 96.19  | 0.598 | 1.151 | 2.76 |
| 49 | 24.72 | 38.40 | 8.84 | 44.82 | 4.05 | 46.9 | 105.94 | 0.705 | 1.118 | 3.16 |
| 50 | 24.79 | 38.56 | 8.85 | 45.07 | 4.08 | 47.0 | 111.61 | 0.719 | 1.102 | 3.18 |
| 51 | 24.88 | 38.78 | 8.93 | 45.35 | 4.28 | 48.1 | 111.36 | 0.835 | 0.996 | 3.34 |
| 52 | 24.97 | 39.01 | 9.03 | 45.52 | 5.40 | 53.3 | 107.22 | 1.098 | 0.921 | 4.06 |

IL SINDACO



IL SEGRETARIO COMUNALE

## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 3.54 m  
 WAVE PERIOD 7.42 sec  
 TIME INCREMENT 28.00 sec  
 WAVE DIRECTION 67.50 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 25.00                  | 36.00 | 8.43        | 29.31 | 4.41         | 46.2                  | 77.74                      | 1.030            | 0.943             | 3.44                  |
| 2               | 24.90                  | 36.23 | 8.41        | 29.58 | 4.42         | 46.2                  | 78.48                      | 1.040            | 0.936             | 3.45                  |
| 3               | 24.83                  | 36.40 | 8.41        | 29.79 | 4.86         | 48.2                  | 78.82                      | 1.115            | 0.925             | 3.65                  |
| 4               | 24.72                  | 36.66 | 8.35        | 30.08 | 4.42         | 46.2                  | 79.75                      | 1.059            | 0.920             | 3.45                  |
| 5               | 24.62                  | 36.92 | 8.26        | 30.36 | 4.27         | 45.5                  | 81.02                      | 1.029            | 0.913             | 3.33                  |
| 6               | 24.52                  | 37.15 | 8.20        | 30.61 | 4.15         | 44.9                  | 82.12                      | 0.986            | 0.928             | 3.24                  |
| 7               | 24.38                  | 37.50 | 8.13        | 31.00 | 4.56         | 46.8                  | 83.51                      | 0.993            | 0.977             | 3.43                  |
| 8               | 24.23                  | 37.85 | 8.16        | 31.39 | 5.54         | 51.0                  | 78.20                      | 1.195            | 0.977             | 4.14                  |
| 9               | 24.14                  | 38.08 | 8.16        | 31.64 | 5.72         | 51.7                  | 75.05                      | 1.233            | 0.977             | 4.27                  |
| 10              | 24.00                  | 38.43 | 8.17        | 31.99 | 5.83         | 52.1                  | 70.42                      | 1.256            | 0.977             | 4.35                  |
| 11              | 23.85                  | 38.77 | 8.12        | 32.35 | 5.36         | 50.3                  | 69.58                      | 1.234            | 0.918             | 4.01                  |
| 12              | 23.76                  | 39.00 | 8.06        | 32.59 | 4.26         | 45.5                  | 68.84                      | 1.010            | 0.930             | 3.32                  |
| 13              | 23.68                  | 39.18 | 8.00        | 32.85 | 3.41         | 41.2                  | 71.38                      | 0.728            | 1.033             | 2.66                  |
| 14              | 23.58                  | 39.44 | 7.97        | 33.23 | 3.26         | 40.3                  | 78.14                      | 0.662            | 1.086             | 2.55                  |
| 15              | 23.52                  | 39.57 | 7.96        | 33.46 | 2.87         | 38.0                  | 83.79                      | 0.565            | 1.121             | 2.24                  |
| 16              | 23.47                  | 39.70 | 7.97        | 33.71 | 2.77         | 37.4                  | 89.81                      | 0.542            | 1.127             | 2.16                  |

Tab. 4.5.1.29



IL SEGRETARIO COMUNALE

R



|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 23.42 | 39.81 | 7.94  | 33.93 | 2.24 | 33.8 | 95.84  | 0.411 | 1.201 | 1.75 |
| 18 | 23.38 | 39.91 | 8.03  | 34.14 | 2.22 | 33.7 | 98.87  | 0.417 | 1.175 | 1.73 |
| 19 | 23.34 | 40.00 | 8.11  | 34.32 | 2.20 | 33.5 | 100.98 | 0.424 | 1.144 | 1.71 |
| 20 | 23.28 | 40.16 | 8.27  | 34.63 | 1.91 | 31.4 | 104.73 | 0.358 | 1.177 | 1.49 |
| 21 | 23.23 | 40.27 | 8.41  | 34.82 | 2.03 | 32.3 | 107.04 | 0.380 | 1.178 | 1.58 |
| 22 | 23.16 | 40.45 | 8.63  | 35.10 | 2.70 | 36.9 | 108.62 | 0.534 | 1.114 | 2.11 |
| 23 | 23.09 | 40.62 | 8.77  | 35.37 | 2.90 | 38.2 | 110.67 | 0.622 | 1.029 | 2.26 |
| 24 | 22.99 | 40.85 | 8.99  | 35.68 | 3.04 | 39.0 | 111.84 | 0.725 | 0.925 | 2.37 |
| 25 | 22.92 | 41.02 | 9.22  | 35.84 | 4.96 | 48.6 | 104.44 | 1.148 | 0.916 | 3.72 |
| 26 | 22.81 | 41.28 | 9.48  | 36.15 | 4.31 | 45.7 | 95.29  | 1.019 | 0.932 | 3.36 |
| 27 | 22.70 | 41.54 | 9.50  | 36.47 | 3.58 | 42.0 | 92.82  | 0.813 | 0.969 | 2.79 |
| 28 | 22.61 | 41.77 | 9.57  | 36.77 | 3.47 | 41.4 | 90.55  | 0.763 | 1.002 | 2.71 |
| 29 | 22.54 | 41.95 | 9.62  | 37.01 | 3.37 | 40.9 | 89.96  | 0.722 | 1.029 | 2.63 |
| 30 | 22.48 | 42.08 | 9.70  | 37.22 | 3.50 | 41.6 | 92.01  | 0.745 | 1.033 | 2.73 |
| 31 | 22.40 | 42.27 | 9.78  | 37.53 | 3.10 | 39.3 | 95.97  | 0.637 | 1.072 | 2.42 |
| 32 | 22.32 | 42.47 | 9.92  | 37.82 | 3.10 | 39.4 | 98.32  | 0.632 | 1.081 | 2.42 |
| 33 | 22.23 | 42.70 | 10.03 | 38.06 | 3.70 | 42.6 | 95.67  | 0.805 | 1.011 | 2.88 |
| 34 | 22.15 | 42.87 | 10.06 | 38.28 | 3.75 | 42.9 | 94.48  | 0.863 | 0.958 | 2.93 |
| 35 | 22.05 | 43.13 | 10.13 | 38.61 | 4.36 | 45.9 | 90.71  | 1.051 | 0.914 | 3.40 |
| 36 | 21.94 | 43.39 | 10.28 | 38.93 | 5.49 | 50.8 | 86.27  | 1.260 | 0.920 | 4.10 |
| 37 | 21.75 | 43.85 | 10.28 | 39.31 | 5.46 | 50.6 | 77.72  | 1.261 | 0.914 | 4.08 |
| 38 | 21.56 | 44.31 | 10.23 | 39.70 | 5.48 | 50.7 | 69.11  | 1.233 | 0.939 | 4.11 |
| 39 | 21.46 | 44.55 | 10.21 | 39.91 | 5.69 | 51.6 | 65.72  | 1.253 | 0.957 | 4.25 |
| 40 | 21.32 | 44.89 | 10.01 | 40.19 | 4.87 | 48.3 | 64.54  | 1.037 | 0.997 | 3.66 |
| 41 | 21.24 | 45.07 | 9.88  | 40.34 | 4.07 | 44.5 | 65.66  | 0.875 | 1.024 | 3.17 |
| 42 | 21.17 | 45.24 | 9.79  | 40.55 | 3.87 | 43.5 | 68.71  | 0.832 | 1.026 | 3.02 |
| 43 | 21.08 | 45.47 | 9.72  | 40.86 | 4.13 | 44.9 | 73.24  | 0.908 | 1.003 | 3.22 |
| 44 | 21.01 | 45.64 | 9.67  | 41.07 | 4.15 | 44.9 | 74.51  | 0.921 | 0.994 | 3.24 |
| 45 | 20.90 | 45.90 | 9.71  | 41.38 | 4.92 | 48.5 | 73.87  | 1.083 | 0.964 | 3.70 |
| 46 | 20.79 | 46.16 | 9.73  | 41.69 | 5.47 | 50.7 | 73.48  | 1.216 | 0.949 | 4.09 |

Tab. 4.5.1.30

IL SINDACO



IL SEGRETARIO COMUNALE

|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 20.69 | 46.39 | 9.69 | 41.93 | 5.45 | 50.6 | 72.93 | 1.223 | 0.942 | 4.08 |
| 48 | 20.55 | 46.74 | 9.45 | 42.23 | 5.33 | 50.2 | 72.58 | 1.234 | 0.913 | 3.99 |
| 49 | 20.41 | 47.09 | 9.31 | 42.54 | 5.39 | 50.4 | 69.90 | 1.236 | 0.923 | 4.04 |

IL SINDACO



IL SEGRETARIO COMUNALE



## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 3.84 m  
 WAVE PERIOD 7.61 sec  
 TIME INCREMENT 28.00 sec  
 WAVE DIRECTION 90.00 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 25.00                  | 30.00 | 8.40        | 29.95 | 4.95         | 50.0                  | 87.46                      | 1.048            | 0.925             | 3.72                  |
| 2               | 25.00                  | 30.25 | 8.32        | 30.20 | 4.68         | 48.8                  | 87.78                      | 1.039            | 0.915             | 3.65                  |
| 3               | 25.00                  | 30.63 | 8.21        | 30.58 | 4.27         | 46.8                  | 88.18                      | 0.940            | 0.922             | 3.33                  |
| 4               | 25.00                  | 31.00 | 8.12        | 30.96 | 4.05         | 45.7                  | 88.66                      | 0.850            | 0.967             | 3.16                  |
| 5               | 25.00                  | 31.25 | 8.12        | 31.20 | 4.30         | 47.0                  | 86.03                      | 0.898            | 0.973             | 3.36                  |
| 6               | 25.00                  | 31.63 | 8.15        | 31.57 | 5.37         | 51.8                  | 82.03                      | 1.078            | 0.973             | 4.03                  |
| 7               | 25.00                  | 32.00 | 8.18        | 31.94 | 6.21         | 55.1                  | 78.66                      | 1.237            | 0.973             | 4.62                  |
| 8               | 25.00                  | 32.25 | 8.13        | 32.19 | 5.30         | 51.5                  | 79.05                      | 1.109            | 0.935             | 3.98                  |
| 9               | 25.00                  | 32.63 | 8.06        | 32.57 | 4.39         | 47.4                  | 80.14                      | 0.960            | 0.928             | 3.42                  |
| 10              | 25.00                  | 33.00 | 8.01        | 32.95 | 4.08         | 45.9                  | 81.53                      | 0.810            | 1.024             | 3.18                  |
| 11              | 25.00                  | 33.25 | 8.00        | 33.27 | 3.77         | 44.3                  | 87.95                      | 0.727            | 1.054             | 2.94                  |
| 12              | 25.00                  | 33.44 | 8.01        | 33.52 | 3.88         | 44.8                  | 93.30                      | 0.761            | 1.037             | 3.03                  |
| 13              | 25.00                  | 33.72 | 8.04        | 33.88 | 4.10         | 46.0                  | 101.11                     | 0.823            | 1.013             | 3.20                  |
| 14              | 25.00                  | 34.00 | 8.12        | 34.21 | 3.64         | 43.6                  | 105.47                     | 0.729            | 1.014             | 2.84                  |
| 15              | 25.00                  | 34.13 | 8.21        | 34.40 | 3.41         | 42.3                  | 108.18                     | 0.684            | 1.015             | 2.66                  |
| 16              | 25.00                  | 34.34 | 8.40        | 34.71 | 3.38         | 42.1                  | 112.63                     | 0.671            | 1.023             | 2.64                  |

Tab. 4.5.1.32



IL SEGRETARIO COMUNALE



IL SINDACO

IL SEGRETARIO COMUNALE

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 25.00 | 34.51 | 8.56  | 34.91 | 3.43 | 42.4 | 115.27 | 0.662 | 1.052 | 2.67 |
| 18 | 25.00 | 34.75 | 8.70  | 35.23 | 2.89 | 39.1 | 119.23 | 0.543 | 1.079 | 2.25 |
| 19 | 25.00 | 35.00 | 8.86  | 35.47 | 3.22 | 41.2 | 120.78 | 0.663 | 0.986 | 2.51 |
| 20 | 25.00 | 35.25 | 9.02  | 35.67 | 3.66 | 43.6 | 120.05 | 0.808 | 0.920 | 2.85 |
| 21 | 25.00 | 35.63 | 9.29  | 35.86 | 5.72 | 53.2 | 110.45 | 1.217 | 0.915 | 4.28 |
| 22 | 25.00 | 35.81 | 9.52  | 35.99 | 5.59 | 52.7 | 104.51 | 1.183 | 0.921 | 4.18 |
| 23 | 25.00 | 36.00 | 9.62  | 36.15 | 5.73 | 53.3 | 102.14 | 1.197 | 0.932 | 4.28 |
| 24 | 25.00 | 36.25 | 9.63  | 36.40 | 5.21 | 51.1 | 100.92 | 1.075 | 0.947 | 3.91 |
| 25 | 25.00 | 36.63 | 9.67  | 36.76 | 4.70 | 48.9 | 99.23  | 0.946 | 0.975 | 3.54 |
| 26 | 25.00 | 37.00 | 9.74  | 37.13 | 4.38 | 47.3 | 99.10  | 0.887 | 1.002 | 3.41 |
| 27 | 25.00 | 37.25 | 9.89  | 37.41 | 4.76 | 49.1 | 101.67 | 0.935 | 0.999 | 3.58 |
| 28 | 25.00 | 37.44 | 9.93  | 37.62 | 4.22 | 46.6 | 104.02 | 0.839 | 1.022 | 3.29 |
| 29 | 25.00 | 37.72 | 10.02 | 37.93 | 4.07 | 45.8 | 106.58 | 0.813 | 1.017 | 3.17 |
| 30 | 25.00 | 38.00 | 10.06 | 38.23 | 4.03 | 45.6 | 106.08 | 0.849 | 0.963 | 3.14 |
| 31 | 25.00 | 38.25 | 10.10 | 38.43 | 4.25 | 46.7 | 102.33 | 0.930 | 0.927 | 3.31 |
| 32 | 25.00 | 38.63 | 10.20 | 38.73 | 5.18 | 51.0 | 96.31  | 1.109 | 0.914 | 3.89 |
| 33 | 25.00 | 39.00 | 10.31 | 39.08 | 5.72 | 53.2 | 92.31  | 1.218 | 0.915 | 4.28 |
| 34 | 25.00 | 39.25 | 10.31 | 39.29 | 5.88 | 53.8 | 89.19  | 1.251 | 0.914 | 4.39 |
| 35 | 25.00 | 39.63 | 10.27 | 39.60 | 5.83 | 53.6 | 84.30  | 1.220 | 0.930 | 4.36 |
| 36 | 25.00 | 40.00 | 10.25 | 39.90 | 6.05 | 54.5 | 79.48  | 1.231 | 0.954 | 4.51 |
| 37 | 25.00 | 40.25 | 10.14 | 40.12 | 5.93 | 54.1 | 77.67  | 1.191 | 0.967 | 4.42 |
| 38 | 25.00 | 40.63 | 9.93  | 40.45 | 5.01 | 50.2 | 77.62  | 0.984 | 0.997 | 3.77 |
| 39 | 25.00 | 40.81 | 9.80  | 40.62 | 4.20 | 46.4 | 78.63  | 0.837 | 1.019 | 3.27 |
| 40 | 25.00 | 41.00 | 9.68  | 40.81 | 3.57 | 43.1 | 80.75  | 0.697 | 1.039 | 2.78 |
| 41 | 25.00 | 41.25 | 9.67  | 41.09 | 4.15 | 46.2 | 82.97  | 0.842 | 1.001 | 3.24 |
| 42 | 25.00 | 41.63 | 9.65  | 41.48 | 4.44 | 47.6 | 82.59  | 0.926 | 0.975 | 3.47 |
| 43 | 25.00 | 42.00 | 9.66  | 41.87 | 5.13 | 50.8 | 82.27  | 1.057 | 0.950 | 3.85 |
| 44 | 25.00 | 42.25 | 9.56  | 42.11 | 5.47 | 52.2 | 81.53  | 1.157 | 0.923 | 4.10 |
| 45 | 25.00 | 42.44 | 9.41  | 42.27 | 5.11 | 50.7 | 80.04  | 1.095 | 0.913 | 3.84 |
| 46 | 25.00 | 42.72 | 9.27  | 42.52 | 4.45 | 47.7 | 76.69  | 0.984 | 0.919 | 3.47 |



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 25.00 | 43.00 | 9.19 | 42.76 | 3.95 | 45.2 | 72.47 | 0.863 | 0.930 | 3.08 |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|

IL SINDACO



IL SEGRETARIO COMUNALE

Tab. 4.5.1.34

## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 4.01 m  
 WAVE PERIOD 7.79 sec  
 TIME INCREMENT 24.00 sec  
 WAVE DIRECTION 112.50 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS-  |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 20.00                  | 27.00 | 8.11        | 31.53 | 3.71         | 45.1                  | 84.52                      | 0.746            | 0.969             | 2.90                  |
| 2               | 20.10                  | 27.23 | 8.11        | 31.78 | 3.97         | 46.5                  | 81.45                      | 0.797            | 0.969             | 3.10                  |
| 3               | 20.17                  | 27.40 | 8.13        | 31.98 | 4.61         | 49.7                  | 80.37                      | 0.926            | 0.969             | 3.60                  |
| 4               | 20.28                  | 27.66 | 8.08        | 32.33 | 3.86         | 45.8                  | 83.80                      | 0.821            | 0.913             | 3.01                  |
| 5               | 20.38                  | 27.92 | 8.05        | 32.69 | 4.30         | 48.2                  | 88.08                      | 0.876            | 0.955             | 3.35                  |
| 6               | 20.48                  | 28.15 | 8.00        | 33.01 | 4.12         | 47.3                  | 91.01                      | 0.767            | 1.045             | 3.21                  |
| 7               | 20.55                  | 28.33 | 8.02        | 33.28 | 4.29         | 48.1                  | 97.01                      | 0.814            | 1.025             | 3.35                  |
| 8               | 20.60                  | 28.46 | 8.03        | 33.49 | 4.37         | 48.5                  | 101.45                     | 0.837            | 1.015             | 3.41                  |
| 9               | 20.68                  | 28.65 | 8.04        | 33.79 | 4.31         | 48.2                  | 107.85                     | 0.829            | 1.011             | 3.36                  |
| 10              | 20.77                  | 28.85 | 8.09        | 34.07 | 4.52         | 49.3                  | 113.01                     | 0.891            | 0.988             | 3.53                  |
| 11              | 20.86                  | 29.08 | 8.23        | 34.33 | 4.96         | 51.4                  | 115.16                     | 0.974            | 0.956             | 3.74                  |
| 12              | 20.93                  | 29.25 | 8.34        | 34.53 | 4.87         | 50.9                  | 117.49                     | 0.990            | 0.957             | 3.80                  |
| 13              | 21.04                  | 29.51 | 8.54        | 34.80 | 4.93         | 51.2                  | 121.00                     | 0.953            | 0.972             | 3.71                  |
| 14              | 21.15                  | 29.77 | 8.76        | 35.08 | 5.09         | 51.9                  | 124.31                     | 0.966            | 0.990             | 3.83                  |
| 15              | 21.24                  | 30.00 | 8.87        | 35.34 | 4.61         | 49.7                  | 126.09                     | 0.931            | 0.964             | 3.60                  |
| 16              | 21.39                  | 30.35 | 9.08        | 35.63 | 5.53         | 53.9                  | 124.83                     | 1.134            | 0.913             | 4.15                  |

Tab. 4.5.1.35



IL SEGRETARIO COMUNALE

R



## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 2.84 m  
 WAVE PERIOD 6.58 sec  
 TIME INCREMENT 32.00 sec  
 WAVE DIRECTION 45.00 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 23.00                  | 43.00 | 8.44        | 28.91 | 3.56         | 36.7                  | 67.61                      | 0.998            | 0.947             | 2.69                  |
| 2               | 22.82                  | 43.18 | 8.41        | 29.31 | 3.81         | 37.9                  | 69.71                      | 1.085            | 0.929             | 2.86                  |
| 3               | 22.69                  | 43.31 | 8.38        | 29.59 | 3.78         | 37.7                  | 71.16                      | 1.083            | 0.924             | 2.84                  |
| 4               | 22.49                  | 43.51 | 8.35        | 29.98 | 3.74         | 37.5                  | 73.11                      | 1.080            | 0.918             | 2.81                  |
| 5               | 22.29                  | 43.71 | 8.24        | 30.33 | 3.44         | 36.2                  | 76.74                      | 1.031            | 0.916             | 2.68                  |
| 6               | 22.12                  | 43.88 | 8.17        | 30.59 | 3.23         | 35.2                  | 77.33                      | 0.945            | 0.939             | 2.52                  |
| 7               | 21.98                  | 44.02 | 8.14        | 30.89 | 4.33         | 40.0                  | 78.67                      | 1.158            | 0.984             | 3.24                  |
| 8               | 21.78                  | 44.22 | 8.14        | 31.28 | 4.91         | 42.2                  | 74.69                      | 1.292            | 0.992             | 3.64                  |
| 9               | 21.59                  | 44.41 | 8.13        | 31.60 | 4.52         | 40.7                  | 69.75                      | 1.196            | 0.992             | 3.37                  |
| 10              | 21.41                  | 44.59 | 8.13        | 31.86 | 4.52         | 40.8                  | 65.13                      | 1.197            | 0.992             | 3.37                  |
| 11              | 21.28                  | 44.72 | 8.13        | 32.04 | 4.79         | 41.8                  | 62.03                      | 1.272            | 0.986             | 3.56                  |
| 12              | 21.18                  | 44.82 | 8.11        | 32.23 | 4.64         | 41.2                  | 60.70                      | 1.286            | 0.946             | 3.45                  |
| 13              | 21.10                  | 44.90 | 8.01        | 32.41 | 1.96         | 28.0                  | 61.08                      | 0.562            | 0.959             | 1.53                  |
| 14              | 20.99                  | 45.01 | 7.94        | 32.76 | 1.89         | 27.5                  | 62.03                      | 0.452            | 1.146             | 1.47                  |
| 15              | 20.93                  | 45.07 | 7.86        | 32.98 | 1.67         | 25.9                  | 65.69                      | 0.355            | 1.290             | 1.30                  |
| 16              | 20.88                  | 45.12 | 7.86        | 33.30 | 1.53         | 24.9                  | 74.21                      | 0.315            | 1.331             | 1.19                  |

Tab. 4.5.1.26



IL SEGRETARIO COMUNALE

IL SINDACO

IL SINDACO



IL SEGRETARIO COMUNALE

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 20.83 | 45.17 | 7.87  | 33.57 | 1.50 | 24.7 | 81.69  | 0.309 | 1.331 | 1.17 |
| 18 | 20.79 | 45.21 | 7.90  | 33.83 | 1.58 | 25.3 | 89.71  | 0.336 | 1.294 | 1.23 |
| 19 | 20.75 | 45.25 | 7.91  | 34.03 | 1.36 | 23.5 | 94.57  | 0.274 | 1.362 | 1.06 |
| 20 | 20.72 | 45.28 | 8.04  | 34.23 | 1.41 | 24.0 | 96.16  | 0.300 | 1.290 | 1.10 |
| 21 | 20.65 | 45.35 | 8.20  | 34.54 | 1.49 | 24.6 | 99.61  | 0.340 | 1.202 | 1.16 |
| 22 | 20.59 | 45.41 | 8.36  | 34.78 | 1.58 | 25.3 | 101.64 | 0.365 | 1.188 | 1.23 |
| 23 | 20.49 | 45.51 | 8.57  | 35.05 | 1.96 | 28.0 | 102.33 | 0.463 | 1.162 | 1.53 |
| 24 | 20.41 | 45.59 | 8.66  | 35.27 | 1.88 | 27.5 | 104.25 | 0.459 | 1.126 | 1.47 |
| 25 | 20.35 | 45.65 | 8.75  | 35.44 | 1.92 | 27.7 | 105.80 | 0.495 | 1.064 | 1.49 |
| 26 | 20.30 | 45.70 | 8.86  | 35.61 | 1.99 | 28.2 | 107.81 | 0.558 | 0.982 | 1.56 |
| 27 | 20.24 | 45.76 | 9.06  | 35.85 | 2.42 | 30.9 | 108.32 | 0.726 | 0.916 | 1.89 |
| 28 | 20.17 | 45.83 | 9.25  | 36.04 | 2.34 | 30.4 | 99.71  | 0.703 | 0.915 | 1.83 |
| 29 | 20.08 | 45.92 | 9.29  | 36.27 | 1.93 | 27.8 | 94.36  | 0.558 | 0.951 | 1.51 |
| 30 | 20.01 | 45.99 | 9.34  | 36.47 | 1.86 | 27.3 | 90.18  | 0.513 | 0.998 | 1.45 |
| 31 | 19.87 | 46.13 | 9.45  | 36.81 | 2.04 | 28.5 | 84.96  | 0.535 | 1.050 | 1.59 |
| 32 | 19.77 | 46.23 | 9.52  | 37.09 | 1.89 | 27.5 | 85.31  | 0.467 | 1.111 | 1.47 |
| 33 | 19.62 | 46.38 | 9.68  | 37.45 | 2.32 | 30.2 | 87.14  | 0.588 | 1.084 | 1.81 |
| 34 | 19.54 | 46.46 | 9.81  | 37.65 | 2.81 | 33.0 | 86.89  | 0.736 | 1.049 | 2.19 |
| 35 | 19.46 | 46.54 | 9.89  | 37.85 | 2.69 | 32.4 | 88.36  | 0.692 | 1.066 | 2.10 |
| 36 | 19.38 | 46.62 | 10.02 | 38.13 | 3.17 | 34.8 | 86.13  | 0.877 | 0.991 | 2.47 |
| 37 | 19.30 | 46.70 | 10.08 | 38.35 | 4.03 | 38.8 | 84.15  | 1.157 | 0.920 | 3.02 |
| 38 | 19.16 | 46.84 | 10.14 | 38.65 | 4.30 | 39.9 | 81.33  | 1.235 | 0.917 | 3.22 |
| 39 | 18.96 | 47.04 | 10.24 | 38.98 | 4.43 | 40.4 | 75.14  | 1.242 | 0.937 | 3.30 |
| 40 | 18.76 | 47.24 | 10.22 | 39.22 | 4.36 | 40.1 | 67.83  | 1.252 | 0.916 | 3.26 |
| 41 | 18.58 | 47.42 | 10.19 | 39.41 | 4.35 | 40.1 | 61.76  | 1.253 | 0.914 | 3.25 |
| 42 | 18.32 | 47.68 | 10.13 | 39.75 | 4.52 | 40.7 | 54.02  | 1.264 | 0.938 | 3.37 |
| 43 | 18.18 | 47.82 | 10.03 | 39.92 | 3.97 | 38.5 | 52.88  | 1.069 | 0.981 | 2.98 |
| 44 | 18.05 | 47.95 | 9.95  | 40.15 | 4.13 | 39.2 | 54.31  | 1.103 | 0.987 | 3.09 |
| 45 | 17.87 | 48.13 | 9.82  | 40.46 | 3.91 | 38.2 | 58.56  | 1.046 | 0.987 | 2.93 |
| 46 | 17.74 | 48.26 | 9.75  | 40.71 | 4.00 | 38.6 | 62.27  | 1.083 | 0.975 | 3.00 |



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 17.54 | 48.46 | 9.65 | 41.03 | 3.84 | 38.0 | 65.18 | 1.050 | 0.968 | 2.88 |
| 48 | 17.34 | 48.66 | 9.64 | 41.40 | 4.25 | 39.7 | 64.85 | 1.186 | 0.945 | 3.18 |
| 49 | 17.17 | 48.83 | 9.61 | 41.72 | 4.46 | 40.5 | 64.84 | 1.258 | 0.931 | 3.33 |
| 50 | 17.03 | 48.97 | 9.55 | 41.93 | 4.30 | 39.9 | 65.32 | 1.225 | 0.924 | 3.21 |
| 51 | 16.67 | 49.00 | 9.40 | 42.18 | 4.42 | 40.3 | 66.06 | 1.272 | 0.914 | 3.30 |
| 52 | 16.27 | 49.00 | 9.29 | 42.48 | 4.64 | 41.2 | 64.43 | 1.299 | 0.936 | 3.45 |

IL SINDACO



IL SEGRETARIO COMUNALE

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 25.00 | 34.51 | 8.49  | 34.89 | 2.55 | 33.9 | 114.61 | 0.571 | 1.086 | 1.99 |
| 18 | 25.00 | 34.75 | 8.66  | 35.18 | 2.55 | 33.9 | 117.96 | 0.573 | 1.087 | 1.99 |
| 19 | 25.00 | 35.00 | 8.80  | 35.43 | 2.76 | 35.2 | 119.86 | 0.671 | 1.002 | 2.15 |
| 20 | 25.00 | 35.25 | 8.96  | 35.64 | 3.08 | 37.0 | 120.17 | 0.809 | 0.927 | 2.40 |
| 21 | 25.00 | 35.63 | 9.22  | 35.85 | 4.81 | 45.1 | 111.56 | 1.222 | 0.920 | 3.60 |
| 22 | 25.00 | 35.81 | 9.42  | 35.98 | 4.73 | 44.8 | 105.58 | 1.210 | 0.914 | 3.54 |
| 23 | 25.00 | 36.00 | 9.51  | 36.15 | 4.67 | 44.6 | 102.85 | 1.184 | 0.923 | 3.50 |
| 24 | 25.00 | 36.25 | 9.55  | 36.39 | 4.39 | 43.4 | 101.03 | 1.100 | 0.937 | 3.30 |
| 25 | 25.00 | 36.63 | 9.60  | 36.75 | 3.90 | 41.2 | 99.10  | 0.980 | 0.970 | 3.04 |
| 26 | 25.00 | 37.00 | 9.69  | 37.12 | 3.76 | 40.5 | 98.99  | 0.920 | 0.997 | 2.93 |
| 27 | 25.00 | 37.25 | 9.79  | 37.41 | 3.65 | 40.0 | 102.28 | 0.879 | 1.013 | 2.85 |
| 28 | 25.00 | 37.44 | 9.87  | 37.62 | 3.60 | 39.7 | 104.46 | 0.859 | 1.022 | 2.81 |
| 29 | 25.00 | 37.72 | 10.01 | 37.92 | 3.62 | 39.8 | 106.71 | 0.864 | 1.022 | 2.83 |
| 30 | 25.00 | 38.00 | 10.04 | 38.22 | 3.44 | 38.9 | 106.75 | 0.863 | 0.973 | 2.69 |
| 31 | 25.00 | 38.25 | 10.07 | 38.42 | 3.58 | 39.7 | 102.81 | 0.939 | 0.930 | 2.80 |
| 32 | 25.00 | 38.63 | 10.16 | 38.72 | 4.33 | 43.1 | 96.33  | 1.110 | 0.916 | 3.25 |
| 33 | 25.00 | 39.00 | 10.27 | 39.06 | 4.92 | 45.6 | 91.42  | 1.247 | 0.921 | 3.68 |
| 34 | 25.00 | 39.25 | 10.24 | 39.28 | 4.86 | 45.4 | 88.11  | 1.245 | 0.913 | 3.64 |
| 35 | 25.00 | 39.63 | 10.20 | 39.59 | 4.92 | 45.6 | 83.23  | 1.238 | 0.927 | 3.67 |
| 36 | 25.00 | 40.00 | 10.15 | 39.90 | 5.07 | 46.2 | 78.20  | 1.235 | 0.957 | 3.78 |
| 37 | 25.00 | 40.25 | 10.04 | 40.12 | 4.93 | 45.6 | 76.61  | 1.178 | 0.977 | 3.68 |
| 38 | 25.00 | 40.63 | 9.84  | 40.46 | 4.03 | 41.8 | 77.59  | 0.947 | 1.003 | 3.04 |
| 39 | 25.00 | 40.81 | 9.72  | 40.64 | 3.37 | 38.5 | 79.13  | 0.799 | 1.027 | 2.63 |
| 40 | 25.00 | 41.00 | 9.63  | 40.82 | 2.99 | 36.5 | 81.32  | 0.701 | 1.040 | 2.33 |
| 41 | 25.00 | 41.25 | 9.58  | 41.10 | 3.19 | 37.6 | 83.42  | 0.769 | 1.010 | 2.49 |
| 42 | 25.00 | 41.63 | 9.55  | 41.49 | 3.50 | 39.2 | 83.22  | 0.880 | 0.970 | 2.73 |
| 43 | 25.00 | 41.81 | 9.55  | 41.69 | 3.85 | 40.9 | 83.12  | 0.986 | 0.951 | 3.00 |
| 44 | 25.00 | 42.00 | 9.60  | 41.89 | 4.60 | 44.2 | 83.13  | 1.153 | 0.935 | 3.45 |
| 45 | 25.00 | 42.25 | 9.45  | 42.12 | 4.58 | 44.1 | 82.15  | 1.172 | 0.915 | 3.43 |
| 46 | 25.00 | 42.63 | 9.25  | 42.45 | 3.90 | 41.2 | 77.85  | 1.030 | 0.924 | 3.05 |

Tab. 4.5.1.21

IL SEGRETARIO COMUNALE



IL SEGRETARIO

*[Handwritten signature]*



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 25.00 | 43.00 | 9.17 | 42.79 | 3.54 | 39.5 | 71.79 | 0.914 | 0.945 | 2.76 |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|

IL SINDACO



IL SEGRETARIO COMUNALE

R

## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 3.38 m  
 WAVE PERIOD 7.24 sec  
 TIME INCREMENT 28.00 sec  
 WAVE DIRECTION 112.50 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 20.00                  | 27.00 | 8.09        | 31.50 | 3.30         | 39.4                  | 84.07                      | 0.777            | 0.981             | 2.58                  |
| 2               | 20.10                  | 27.23 | 8.11        | 31.75 | 3.90         | 42.6                  | 81.07                      | 0.917            | 0.981             | 3.04                  |
| 3               | 20.17                  | 27.40 | 8.13        | 31.96 | 4.43         | 45.0                  | 79.43                      | 1.005            | 0.981             | 3.33                  |
| 4               | 20.28                  | 27.66 | 8.07        | 32.32 | 3.63         | 41.2                  | 83.25                      | 0.918            | 0.913             | 2.83                  |
| 5               | 20.38                  | 27.92 | 8.02        | 32.71 | 3.58         | 41.0                  | 88.02                      | 0.850            | 0.972             | 2.79                  |
| 6               | 20.48                  | 28.15 | 7.97        | 33.06 | 3.53         | 40.6                  | 91.83                      | 0.769            | 1.058             | 2.75                  |
| 7               | 20.55                  | 28.33 | 7.99        | 33.33 | 3.53         | 40.7                  | 98.30                      | 0.776            | 1.051             | 2.76                  |
| 8               | 20.66                  | 28.59 | 8.01        | 33.72 | 3.60         | 41.1                  | 106.69                     | 0.803            | 1.035             | 2.81                  |
| 9               | 20.77                  | 28.85 | 8.05        | 34.09 | 3.44         | 40.2                  | 113.38                     | 0.773            | 1.026             | 2.68                  |
| 10              | 20.86                  | 29.08 | 8.19        | 34.34 | 3.66         | 41.4                  | 115.41                     | 0.859            | 0.985             | 2.86                  |
| 11              | 20.93                  | 29.25 | 8.30        | 34.54 | 3.75         | 41.8                  | 117.54                     | 0.887            | 0.975             | 2.92                  |
| 12              | 21.04                  | 29.51 | 8.51        | 34.83 | 3.93         | 42.7                  | 121.35                     | 0.919            | 0.987             | 3.07                  |
| 13              | 21.15                  | 29.77 | 8.73        | 35.10 | 4.31         | 44.5                  | 124.33                     | 0.969            | 0.991             | 3.25                  |
| 14              | 21.24                  | 30.00 | 8.84        | 35.36 | 3.95         | 42.8                  | 126.09                     | 0.946            | 0.964             | 3.08                  |
| 15              | 21.39                  | 30.35 | 9.05        | 35.63 | 4.79         | 46.6                  | 125.05                     | 1.165            | 0.913             | 3.60                  |
| 16              | 21.53                  | 30.70 | 9.24        | 35.85 | 5.08         | 47.8                  | 120.22                     | 1.225            | 0.918             | 3.80                  |

Tab. 4.5.1.23



IL SEGRETARIO COMUNALE



|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 21.63 | 30.93 | 9.44  | 35.97 | 5.22 | 48.3 | 115.02 | 1.263 | 0.913 | 3.90 |
| 18 | 21.77 | 31.27 | 9.60  | 36.24 | 5.34 | 48.8 | 110.47 | 1.268 | 0.929 | 3.98 |
| 19 | 21.91 | 31.62 | 9.68  | 36.59 | 5.26 | 48.5 | 108.75 | 1.231 | 0.945 | 3.93 |
| 20 | 22.01 | 31.85 | 9.73  | 36.84 | 5.16 | 48.1 | 108.19 | 1.192 | 0.958 | 3.86 |
| 21 | 22.15 | 32.20 | 9.81  | 37.22 | 4.72 | 46.2 | 109.25 | 1.069 | 0.980 | 3.54 |
| 22 | 22.22 | 32.37 | 9.87  | 37.42 | 4.46 | 45.2 | 111.16 | 1.007 | 0.992 | 3.37 |
| 23 | 22.30 | 32.54 | 9.97  | 37.61 | 4.63 | 45.9 | 112.65 | 1.039 | 0.991 | 3.48 |
| 24 | 22.39 | 32.77 | 10.03 | 37.88 | 4.44 | 45.1 | 114.42 | 1.005 | 0.985 | 3.34 |
| 25 | 22.54 | 33.12 | 10.08 | 38.26 | 4.42 | 44.9 | 113.22 | 1.051 | 0.935 | 3.32 |
| 26 | 22.68 | 33.47 | 10.14 | 38.56 | 4.80 | 46.6 | 107.37 | 1.166 | 0.913 | 3.60 |
| 27 | 22.77 | 33.70 | 10.21 | 38.77 | 5.10 | 47.9 | 103.82 | 1.231 | 0.918 | 3.82 |
| 28 | 22.92 | 34.04 | 10.28 | 39.10 | 5.13 | 48.0 | 99.45  | 1.240 | 0.916 | 3.84 |
| 29 | 23.06 | 34.39 | 10.23 | 39.48 | 5.08 | 47.7 | 95.60  | 1.221 | 0.921 | 3.80 |
| 30 | 23.16 | 34.62 | 10.18 | 39.73 | 5.01 | 47.5 | 92.40  | 1.176 | 0.944 | 3.75 |
| 31 | 23.30 | 34.97 | 10.06 | 40.11 | 5.05 | 47.6 | 87.89  | 1.141 | 0.980 | 3.78 |
| 32 | 23.37 | 35.14 | 9.95  | 40.31 | 4.75 | 46.4 | 87.33  | 1.063 | 0.992 | 3.56 |
| 33 | 23.44 | 35.31 | 9.81  | 40.54 | 4.05 | 43.3 | 88.11  | 0.927 | 1.009 | 3.16 |
| 34 | 23.54 | 35.55 | 9.68  | 40.83 | 3.65 | 41.3 | 90.13  | 0.831 | 1.014 | 2.85 |
| 35 | 23.61 | 35.72 | 9.57  | 41.09 | 3.04 | 38.0 | 91.85  | 0.682 | 1.030 | 2.37 |
| 36 | 23.72 | 35.98 | 9.53  | 41.45 | 3.16 | 38.7 | 91.60  | 0.735 | 0.993 | 2.47 |
| 37 | 23.83 | 36.24 | 9.48  | 41.79 | 3.36 | 39.8 | 91.02  | 0.812 | 0.956 | 2.62 |
| 38 | 23.92 | 36.47 | 9.43  | 42.08 | 4.00 | 43.0 | 90.05  | 1.002 | 0.921 | 3.12 |
| 39 | 23.99 | 36.64 | 9.31  | 42.29 | 4.00 | 43.0 | 87.01  | 1.009 | 0.914 | 3.12 |
| 40 | 24.10 | 36.90 | 9.17  | 42.54 | 2.87 | 37.0 | 80.03  | 0.717 | 0.926 | 2.24 |
| 41 | 24.21 | 37.16 | 9.12  | 42.84 | 2.72 | 36.1 | 73.80  | 0.667 | 0.943 | 2.12 |
| 42 | 24.31 | 37.39 | 9.06  | 43.16 | 2.40 | 34.0 | 73.20  | 0.607 | 0.913 | 1.87 |
| 43 | 24.38 | 37.57 | 9.01  | 43.43 | 2.79 | 36.5 | 77.08  | 0.674 | 0.955 | 2.17 |
| 44 | 24.43 | 37.70 | 8.96  | 43.64 | 2.93 | 37.3 | 79.81  | 0.658 | 1.028 | 2.29 |
| 45 | 24.51 | 37.89 | 8.91  | 43.86 | 2.93 | 37.4 | 80.15  | 0.607 | 1.113 | 2.29 |
| 46 | 24.59 | 38.09 | 8.85  | 44.24 | 2.88 | 37.1 | 89.70  | 0.561 | 1.182 | 2.24 |

Tab. 4.5.1.24

IL SINDACO



IL SEGRETARIO COMUNALE

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|    |       |       |      |       |      |      |        |       |       |      |
|----|-------|-------|------|-------|------|------|--------|-------|-------|------|
| 47 | 24.64 | 38.20 | 8.84 | 44.48 | 3.21 | 39.0 | 96.95  | 0.644 | 1.150 | 2.50 |
| 48 | 24.72 | 38.40 | 8.81 | 44.85 | 3.23 | 39.0 | 107.42 | 0.638 | 1.166 | 2.52 |
| 49 | 24.79 | 38.56 | 8.85 | 45.11 | 3.71 | 41.6 | 113.42 | 0.788 | 1.086 | 2.89 |
| 50 | 24.88 | 38.78 | 8.92 | 45.37 | 3.77 | 41.9 | 111.52 | 0.875 | 0.994 | 2.94 |
| 51 | 24.97 | 39.01 | 9.00 | 45.54 | 4.56 | 45.6 | 107.43 | 1.101 | 0.921 | 3.43 |

IL SINDACO



IL SEGRETARIO COMUNALE



IL SEGRETARIO COMUNALE



IL SINDACO

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 20.79 | 45.21 | 7.85  | 33.43 | 1.30 | 20.5 | 75.98  | 0.338 | 1.341 | 1.01 |
| 18 | 20.75 | 45.25 | 7.87  | 33.63 | 1.31 | 20.6 | 82.03  | 0.344 | 1.329 | 1.02 |
| 19 | 20.68 | 45.32 | 7.89  | 34.02 | 1.11 | 19.1 | 93.97  | 0.278 | 1.402 | 0.87 |
| 20 | 20.62 | 45.38 | 8.07  | 34.33 | 1.01 | 18.2 | 96.24  | 0.260 | 1.362 | 0.79 |
| 21 | 20.56 | 45.44 | 8.20  | 34.56 | 1.24 | 20.1 | 98.27  | 0.361 | 1.205 | 0.97 |
| 22 | 20.51 | 45.49 | 8.31  | 34.74 | 1.19 | 19.7 | 99.54  | 0.339 | 1.226 | 0.93 |
| 23 | 20.43 | 45.57 | 8.52  | 34.98 | 1.52 | 22.1 | 100.26 | 0.447 | 1.191 | 1.19 |
| 24 | 20.36 | 45.64 | 8.66  | 35.27 | 1.83 | 24.1 | 102.52 | 0.595 | 1.074 | 1.42 |
| 25 | 20.32 | 45.68 | 8.78  | 35.52 | 1.68 | 23.2 | 106.43 | 0.577 | 1.017 | 1.31 |
| 26 | 20.24 | 45.76 | 8.99  | 35.82 | 1.68 | 23.2 | 111.02 | 0.644 | 0.913 | 1.31 |
| 27 | 20.17 | 45.83 | 9.16  | 35.99 | 1.76 | 23.7 | 105.26 | 0.670 | 0.917 | 1.37 |
| 28 | 20.08 | 45.92 | 9.24  | 36.20 | 1.71 | 23.3 | 97.20  | 0.645 | 0.925 | 1.33 |
| 29 | 19.93 | 46.07 | 9.33  | 36.56 | 1.45 | 21.6 | 88.13  | 0.497 | 1.018 | 1.13 |
| 30 | 19.81 | 46.19 | 9.42  | 36.83 | 1.58 | 22.5 | 84.08  | 0.519 | 1.062 | 1.23 |
| 31 | 19.73 | 46.27 | 9.47  | 37.05 | 1.43 | 21.5 | 84.03  | 0.441 | 1.132 | 1.11 |
| 32 | 19.59 | 46.41 | 9.58  | 37.35 | 1.65 | 23.0 | 86.23  | 0.517 | 1.118 | 1.29 |
| 33 | 19.53 | 46.47 | 9.67  | 37.52 | 1.92 | 24.6 | 87.15  | 0.615 | 1.089 | 1.49 |
| 34 | 19.46 | 46.54 | 9.79  | 37.78 | 2.09 | 25.7 | 88.90  | 0.677 | 1.082 | 1.63 |
| 35 | 19.38 | 46.62 | 9.99  | 38.11 | 2.61 | 28.3 | 85.87  | 0.901 | 1.012 | 2.03 |
| 36 | 19.22 | 46.78 | 10.07 | 38.49 | 3.31 | 31.5 | 83.68  | 1.219 | 0.913 | 2.48 |
| 37 | 19.11 | 46.89 | 10.11 | 38.72 | 3.18 | 30.9 | 81.54  | 1.161 | 0.923 | 2.39 |
| 38 | 18.93 | 47.07 | 10.21 | 39.01 | 3.77 | 33.3 | 75.39  | 1.314 | 0.956 | 2.80 |
| 39 | 18.76 | 47.24 | 10.17 | 39.17 | 3.50 | 32.3 | 68.61  | 1.265 | 0.927 | 2.62 |
| 40 | 18.40 | 47.60 | 10.09 | 39.56 | 3.47 | 32.1 | 56.55  | 1.261 | 0.921 | 2.59 |
| 41 | 18.23 | 47.77 | 9.99  | 39.78 | 3.02 | 30.2 | 52.75  | 1.049 | 0.970 | 2.27 |
| 42 | 18.05 | 47.95 | 9.90  | 40.07 | 3.23 | 31.1 | 53.04  | 1.090 | 0.995 | 2.42 |
| 43 | 17.87 | 48.13 | 9.78  | 40.38 | 3.11 | 30.6 | 57.54  | 1.060 | 0.990 | 2.34 |
| 44 | 17.74 | 48.26 | 9.70  | 40.63 | 3.09 | 30.6 | 61.37  | 1.063 | 0.980 | 2.32 |
| 45 | 17.54 | 48.46 | 9.59  | 40.95 | 3.02 | 30.2 | 65.29  | 1.052 | 0.968 | 2.27 |
| 46 | 17.34 | 48.66 | 9.54  | 41.35 | 3.17 | 30.9 | 66.72  | 1.131 | 0.943 | 2.38 |

|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 17.17 | 48.83 | 9.50 | 41.66 | 3.35 | 31.6 | 67.22 | 1.216 | 0.925 | 2.51 |
| 48 | 17.03 | 48.97 | 9.46 | 41.89 | 3.41 | 31.9 | 67.80 | 1.249 | 0.916 | 2.55 |
| 49 | 16.67 | 49.00 | 9.31 | 42.14 | 3.21 | 31.1 | 68.78 | 1.174 | 0.919 | 2.41 |
| 50 | 16.27 | 49.00 | 9.22 | 42.46 | 3.50 | 32.3 | 65.71 | 1.231 | 0.953 | 2.62 |

IL SINDACO



IL SEGRETARIO COMUNALE



## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 2.75 m  
 WAVE PERIOD 6.48 sec  
 TIME INCREMENT 32.00 sec  
 WAVE DIRECTION 67.50 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | -----BREAKING CONDITIONS----- |       |                  |                                       |                                |                  |                   |                           |
|-----------------|------------------------|-------|-------------------------------|-------|------------------|---------------------------------------|--------------------------------|------------------|-------------------|---------------------------|
|                 | X                      | Y     | COORDINATES                   |       | DEPTH<br><br>[m] | BREAKING<br>WAVE<br>LENGTH<br><br>[m] | WAVE<br>DIRECTION<br><br>[deg] | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br><br>[m] |
|                 |                        |       | X                             | Y     |                  |                                       |                                |                  |                   |                           |
| 1               | 25.00                  | 36.00 | 8.39                          | 29.30 | 3.28             | 34.8                                  | 78.75                          | 0.990            | 0.938             | 2.56                      |
| 2               | 24.90                  | 36.23 | 8.37                          | 29.58 | 3.31             | 35.0                                  | 79.58                          | 1.010            | 0.930             | 2.58                      |
| 3               | 24.83                  | 36.40 | 8.35                          | 29.78 | 3.44             | 35.5                                  | 80.14                          | 1.021            | 0.923             | 2.59                      |
| 4               | 24.72                  | 36.66 | 8.32                          | 30.08 | 3.55             | 36.1                                  | 80.91                          | 1.063            | 0.914             | 2.67                      |
| 5               | 24.62                  | 36.92 | 8.23                          | 30.37 | 3.38             | 35.3                                  | 82.24                          | 1.041            | 0.920             | 2.63                      |
| 6               | 24.52                  | 37.15 | 8.17                          | 30.62 | 3.28             | 34.8                                  | 83.50                          | 0.982            | 0.947             | 2.56                      |
| 7               | 24.38                  | 37.50 | 8.10                          | 31.00 | 3.61             | 36.3                                  | 84.55                          | 0.993            | 0.993             | 2.71                      |
| 8               | 24.23                  | 37.85 | 8.13                          | 31.38 | 4.55             | 40.1                                  | 77.95                          | 1.239            | 0.993             | 3.38                      |
| 9               | 24.14                  | 38.08 | 8.13                          | 31.62 | 4.63             | 40.5                                  | 73.99                          | 1.260            | 0.993             | 3.44                      |
| 10              | 24.00                  | 38.43 | 8.13                          | 31.95 | 4.48             | 39.9                                  | 68.12                          | 1.221            | 0.993             | 3.33                      |
| 11              | 23.85                  | 38.77 | 8.09                          | 32.31 | 4.33             | 39.3                                  | 67.16                          | 1.264            | 0.929             | 3.23                      |
| 12              | 23.76                  | 39.00 | 8.04                          | 32.55 | 3.64             | 36.4                                  | 66.90                          | 1.082            | 0.920             | 2.74                      |
| 13              | 23.68                  | 39.18 | 8.00                          | 32.75 | 2.92             | 33.1                                  | 67.19                          | 0.831            | 0.997             | 2.28                      |
| 14              | 23.63                  | 39.31 | 7.96                          | 32.91 | 2.85             | 32.7                                  | 68.06                          | 0.769            | 1.052             | 2.22                      |
| 15              | 23.55                  | 39.50 | 7.92                          | 33.28 | 2.47             | 30.6                                  | 78.19                          | 0.628            | 1.116             | 1.93                      |
| 16              | 23.47                  | 39.70 | 7.93                          | 33.63 | 2.36             | 30.0                                  | 86.87                          | 0.597            | 1.122             | 1.84                      |

Tab. 4.5.1.17



IL SEGRETARIO COMUNALE

IL SINDACO

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 23.42 | 39.81 | 7.91  | 33.84 | 1.77 | 26.2 | 92.76  | 0.408 | 1.231 | 1.38 |
| 18 | 23.38 | 39.91 | 7.96  | 34.04 | 2.00 | 27.8 | 97.26  | 0.486 | 1.168 | 1.56 |
| 19 | 23.34 | 40.00 | 8.05  | 34.23 | 1.82 | 26.6 | 99.27  | 0.443 | 1.164 | 1.42 |
| 20 | 23.28 | 40.16 | 8.20  | 34.54 | 1.59 | 24.9 | 102.79 | 0.387 | 1.165 | 1.24 |
| 21 | 23.23 | 40.27 | 8.34  | 34.73 | 1.86 | 26.8 | 104.34 | 0.474 | 1.112 | 1.45 |
| 22 | 23.16 | 40.45 | 8.55  | 35.00 | 1.95 | 27.4 | 106.36 | 0.474 | 1.164 | 1.52 |
| 23 | 23.09 | 40.62 | 8.69  | 35.30 | 2.10 | 28.4 | 109.24 | 0.555 | 1.074 | 1.64 |
| 24 | 23.04 | 40.73 | 8.79  | 35.47 | 2.27 | 29.5 | 110.90 | 0.644 | 1.001 | 1.77 |
| 25 | 22.96 | 40.94 | 9.00  | 35.74 | 2.62 | 31.5 | 111.66 | 0.814 | 0.913 | 2.04 |
| 26 | 22.89 | 41.09 | 9.17  | 35.88 | 3.57 | 36.1 | 106.19 | 1.057 | 0.924 | 2.68 |
| 27 | 22.80 | 41.32 | 9.36  | 36.15 | 3.10 | 34.0 | 97.55  | 0.957 | 0.919 | 2.42 |
| 28 | 22.70 | 41.54 | 9.41  | 36.43 | 2.76 | 32.2 | 93.81  | 0.827 | 0.948 | 2.16 |
| 29 | 22.61 | 41.77 | 9.49  | 36.73 | 2.70 | 31.9 | 90.61  | 0.777 | 0.985 | 2.11 |
| 30 | 22.54 | 41.95 | 9.53  | 36.97 | 2.49 | 30.7 | 89.72  | 0.687 | 1.026 | 1.94 |
| 31 | 22.48 | 42.08 | 9.61  | 37.18 | 2.62 | 31.5 | 91.72  | 0.721 | 1.032 | 2.05 |
| 32 | 22.40 | 42.27 | 9.70  | 37.48 | 2.47 | 30.6 | 95.62  | 0.659 | 1.064 | 1.93 |
| 33 | 22.32 | 42.47 | 9.86  | 37.77 | 2.79 | 32.4 | 97.57  | 0.753 | 1.049 | 2.17 |
| 34 | 22.23 | 42.70 | 9.99  | 38.11 | 2.60 | 31.4 | 99.01  | 0.705 | 1.047 | 2.03 |
| 35 | 22.08 | 43.04 | 10.06 | 38.44 | 3.29 | 34.9 | 92.37  | 1.012 | 0.923 | 2.57 |
| 36 | 22.01 | 43.22 | 10.13 | 38.65 | 4.01 | 38.0 | 89.13  | 1.193 | 0.917 | 3.01 |
| 37 | 21.94 | 43.39 | 10.19 | 38.87 | 4.22 | 38.9 | 86.14  | 1.228 | 0.933 | 3.15 |
| 38 | 21.84 | 43.62 | 10.22 | 39.09 | 4.22 | 38.9 | 81.60  | 1.236 | 0.927 | 3.15 |
| 39 | 21.70 | 43.97 | 10.18 | 39.39 | 4.19 | 38.7 | 74.81  | 1.247 | 0.914 | 3.13 |
| 40 | 21.56 | 44.31 | 10.14 | 39.65 | 4.33 | 39.3 | 68.20  | 1.263 | 0.929 | 3.23 |
| 41 | 21.46 | 44.55 | 10.09 | 39.83 | 4.30 | 39.2 | 63.93  | 1.228 | 0.950 | 3.21 |
| 42 | 21.32 | 44.89 | 9.92  | 40.14 | 3.69 | 36.7 | 63.29  | 1.009 | 1.000 | 2.78 |
| 43 | 21.24 | 45.07 | 9.81  | 40.32 | 3.30 | 34.9 | 65.52  | 0.923 | 1.014 | 2.57 |
| 44 | 21.17 | 45.24 | 9.73  | 40.53 | 3.11 | 34.0 | 68.76  | 0.868 | 1.016 | 2.43 |
| 45 | 21.08 | 45.47 | 9.65  | 40.84 | 3.22 | 34.6 | 73.56  | 0.919 | 0.995 | 2.51 |
| 46 | 21.01 | 45.64 | 9.62  | 41.05 | 3.50 | 35.9 | 74.94  | 0.986 | 0.973 | 2.64 |

Tab. 4.5.1.18

IL SEGRETARIO COMUNALE



IL SINDACO

*[Signature]*



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 20.90 | 45.90 | 9.60 | 41.37 | 3.81 | 37.2 | 75.21 | 1.093 | 0.950 | 2.86 |
| 48 | 20.79 | 46.16 | 9.57 | 41.65 | 3.98 | 37.9 | 75.03 | 1.160 | 0.935 | 2.98 |
| 49 | 20.69 | 46.39 | 9.55 | 41.89 | 4.24 | 39.0 | 74.67 | 1.247 | 0.923 | 3.17 |
| 50 | 20.55 | 46.74 | 9.35 | 42.21 | 4.10 | 38.4 | 74.37 | 1.219 | 0.916 | 3.07 |
| 51 | 20.41 | 47.09 | 9.25 | 42.53 | 4.32 | 39.3 | 70.35 | 1.244 | 0.943 | 3.23 |

IL SINDACO



IL SEGRETARIO COMUNALE

## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 3.20 m  
 WAVE PERIOD 7.03 sec  
 TIME INCREMENT 28.00 sec  
 WAVE DIRECTION 90.00 degrees  
 ORTHOGONAL DISTANCE 250 m

 \*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 25.00                  | 30.00 | 8.36        | 29.97 | 3.87         | 41.0                  | 88.25                      | 1.019            | 0.926             | 3.02                  |
| 2               | 25.00                  | 30.25 | 8.29        | 30.22 | 4.02         | 41.8                  | 88.44                      | 1.038            | 0.913             | 3.03                  |
| 3               | 25.00                  | 30.63 | 8.18        | 30.59 | 3.63         | 39.9                  | 88.78                      | 0.950            | 0.931             | 2.83                  |
| 4               | 25.00                  | 31.00 | 8.11        | 30.97 | 3.79         | 40.6                  | 89.10                      | 0.941            | 0.982             | 2.96                  |
| 5               | 25.00                  | 31.25 | 8.11        | 31.21 | 3.96         | 41.5                  | 85.93                      | 0.980            | 0.985             | 3.09                  |
| 6               | 25.00                  | 31.63 | 8.14        | 31.57 | 4.75         | 44.9                  | 81.42                      | 1.127            | 0.985             | 3.55                  |
| 7               | 25.00                  | 32.00 | 8.15        | 31.94 | 5.16         | 46.5                  | 77.18                      | 1.220            | 0.985             | 3.84                  |
| 8               | 25.00                  | 32.25 | 8.11        | 32.19 | 4.58         | 44.2                  | 77.49                      | 1.139            | 0.943             | 3.44                  |
| 9               | 25.00                  | 32.63 | 8.04        | 32.56 | 3.57         | 39.6                  | 79.28                      | 0.932            | 0.934             | 2.78                  |
| 10              | 25.00                  | 33.00 | 8.00        | 32.94 | 3.73         | 40.3                  | 81.03                      | 0.891            | 1.020             | 2.91                  |
| 11              | 25.00                  | 33.25 | 7.98        | 33.26 | 3.38         | 38.6                  | 87.17                      | 0.783            | 1.053             | 2.64                  |
| 12              | 25.00                  | 33.44 | 7.99        | 33.50 | 3.33         | 38.4                  | 92.51                      | 0.771            | 1.052             | 2.60                  |
| 13              | 25.00                  | 33.72 | 8.01        | 33.85 | 3.40         | 38.7                  | 100.32                     | 0.801            | 1.036             | 2.66                  |
| 14              | 25.00                  | 34.00 | 8.09        | 34.18 | 3.31         | 38.3                  | 104.85                     | 0.799            | 1.011             | 2.59                  |
| 15              | 25.00                  | 34.13 | 8.17        | 34.37 | 2.93         | 36.2                  | 107.53                     | 0.700            | 1.021             | 2.29                  |
| 16              | 25.00                  | 34.34 | 8.37        | 34.67 | 3.28         | 38.1                  | 111.48                     | 0.803            | 0.994             | 2.56                  |

Tab. 4.5.1.20



IL SEGRETARIO COMUNALE



|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 20.75 | 45.25 | 7.84  | 33.32 | 1.23 | 17.1 | 70.90  | 0.446 | 1.272 | 0.96 |
| 18 | 20.72 | 45.28 | 7.85  | 33.59 | 1.14 | 16.5 | 78.88  | 0.404 | 1.302 | 0.89 |
| 19 | 20.65 | 45.35 | 7.96  | 34.11 | 1.17 | 16.7 | 93.06  | 0.427 | 1.262 | 0.91 |
| 20 | 20.59 | 45.41 | 8.13  | 34.47 | 0.72 | 13.3 | 97.64  | 0.241 | 1.390 | 0.56 |
| 21 | 20.54 | 45.46 | 8.29  | 34.73 | 0.89 | 14.7 | 100.11 | 0.330 | 1.245 | 0.69 |
| 22 | 20.49 | 45.51 | 8.42  | 34.91 | 0.99 | 15.4 | 100.96 | 0.370 | 1.233 | 0.77 |
| 23 | 20.41 | 45.59 | 8.59  | 35.19 | 1.38 | 18.1 | 102.05 | 0.583 | 1.097 | 1.08 |
| 24 | 20.35 | 45.65 | 8.68  | 35.39 | 1.39 | 18.1 | 104.66 | 0.613 | 1.045 | 1.08 |
| 25 | 20.26 | 45.74 | 8.82  | 35.66 | 1.04 | 15.9 | 110.46 | 0.480 | 1.004 | 0.81 |
| 26 | 20.17 | 45.83 | 8.94  | 35.79 | 1.39 | 18.1 | 110.41 | 0.704 | 0.913 | 1.09 |
| 27 | 20.08 | 45.92 | 9.11  | 35.97 | 1.51 | 18.8 | 108.37 | 0.737 | 0.942 | 1.17 |
| 28 | 20.01 | 45.99 | 9.18  | 36.14 | 1.26 | 17.3 | 100.26 | 0.636 | 0.913 | 0.98 |
| 29 | 19.94 | 46.06 | 9.25  | 36.36 | 1.21 | 17.0 | 91.90  | 0.593 | 0.942 | 0.94 |
| 30 | 19.82 | 46.18 | 9.36  | 36.71 | 1.28 | 17.5 | 84.13  | 0.586 | 1.012 | 1.00 |
| 31 | 19.73 | 46.27 | 9.45  | 37.02 | 1.28 | 17.5 | 82.90  | 0.549 | 1.076 | 1.00 |
| 32 | 19.66 | 46.34 | 9.52  | 37.26 | 1.33 | 17.8 | 85.81  | 0.562 | 1.094 | 1.04 |
| 33 | 19.56 | 46.44 | 9.66  | 37.59 | 1.58 | 19.2 | 89.26  | 0.675 | 1.078 | 1.23 |
| 34 | 19.46 | 46.54 | 9.79  | 37.87 | 1.66 | 19.6 | 91.01  | 0.703 | 1.087 | 1.29 |
| 35 | 19.29 | 46.71 | 9.97  | 38.19 | 2.09 | 21.8 | 85.89  | 0.972 | 0.991 | 1.63 |
| 36 | 19.16 | 46.84 | 10.05 | 38.49 | 2.68 | 24.3 | 82.69  | 1.296 | 0.913 | 2.00 |
| 37 | 19.06 | 46.94 | 10.08 | 38.71 | 2.59 | 24.0 | 80.94  | 1.234 | 0.929 | 1.94 |
| 38 | 18.91 | 47.09 | 10.15 | 38.96 | 2.86 | 25.0 | 76.17  | 1.284 | 0.979 | 2.12 |
| 39 | 18.76 | 47.24 | 10.13 | 39.12 | 2.75 | 24.5 | 69.78  | 1.270 | 0.954 | 2.05 |
| 40 | 18.40 | 47.60 | 10.05 | 39.48 | 2.57 | 23.8 | 56.44  | 1.240 | 0.915 | 1.92 |
| 41 | 18.23 | 47.77 | 9.97  | 39.71 | 2.45 | 23.4 | 51.83  | 1.141 | 0.952 | 1.84 |
| 42 | 18.05 | 47.95 | 9.84  | 39.98 | 2.31 | 22.8 | 51.54  | 1.016 | 1.010 | 1.73 |
| 43 | 17.87 | 48.13 | 9.71  | 40.31 | 2.15 | 22.0 | 57.30  | 0.947 | 1.010 | 1.62 |
| 44 | 17.74 | 48.26 | 9.63  | 40.58 | 2.17 | 22.1 | 61.61  | 0.976 | 0.991 | 1.63 |
| 45 | 17.54 | 48.46 | 9.54  | 40.94 | 2.33 | 22.9 | 66.06  | 1.082 | 0.958 | 1.75 |
| 46 | 17.34 | 48.66 | 9.49  | 41.27 | 2.39 | 23.1 | 67.13  | 1.135 | 0.936 | 1.80 |

Tab. 4.5.1.3

IL SINDACO



IL SEGRETARIO COMUNALE

*[Handwritten signature]*

|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 17.17 | 48.83 | 9.43 | 41.58 | 2.47 | 23.5 | 68.73 | 1.191 | 0.919 | 1.85 |
| 48 | 17.03 | 48.97 | 9.37 | 41.87 | 2.59 | 23.9 | 70.78 | 1.256 | 0.913 | 1.94 |
| 49 | 16.67 | 49.00 | 9.25 | 42.19 | 2.78 | 24.7 | 71.56 | 1.293 | 0.947 | 2.07 |
| 50 | 16.27 | 49.00 | 9.18 | 42.45 | 2.83 | 24.8 | 66.82 | 1.272 | 0.978 | 2.10 |

IL SINDACO



IL SEGRETARIO COMUNALE



\*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 2.18 m  
WAVE PERIOD 5.84 sec  
TIME INCREMENT 36.00 sec  
WAVE DIRECTION 67.50 degrees  
ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
\*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 25.00                  | 36.00 | 8.35        | 29.30 | 2.42         | 27.1                  | 79.83                      | 0.919            | 0.943             | 1.89                  |
| 2               | 24.90                  | 36.23 | 8.34        | 29.58 | 2.58         | 27.9                  | 80.52                      | 0.995            | 0.928             | 2.01                  |
| 3               | 24.83                  | 36.40 | 8.33        | 29.78 | 2.78         | 28.8                  | 80.98                      | 1.044            | 0.919             | 2.09                  |
| 4               | 24.72                  | 36.66 | 8.28        | 30.07 | 2.58         | 27.9                  | 81.80                      | 1.010            | 0.915             | 2.01                  |
| 5               | 24.62                  | 36.92 | 8.21        | 30.35 | 2.66         | 28.3                  | 82.85                      | 1.032            | 0.924             | 2.08                  |
| 6               | 24.52                  | 37.15 | 8.15        | 30.62 | 2.63         | 28.1                  | 84.14                      | 0.980            | 0.959             | 2.05                  |
| 7               | 24.45                  | 37.33 | 8.11        | 30.83 | 2.83         | 29.1                  | 85.03                      | 0.990            | 0.988             | 2.13                  |
| 8               | 24.34                  | 37.59 | 8.10        | 31.12 | 3.57         | 32.1                  | 82.68                      | 1.222            | 0.998             | 2.66                  |
| 9               | 24.23                  | 37.85 | 8.10        | 31.38 | 3.63         | 32.3                  | 77.30                      | 1.243            | 0.998             | 2.70                  |
| 10              | 24.14                  | 38.08 | 8.10        | 31.60 | 3.59         | 32.2                  | 72.58                      | 1.228            | 0.998             | 2.67                  |
| 11              | 24.00                  | 38.43 | 8.04        | 31.88 | 1.41         | 21.1                  | 64.14                      | 0.504            | 0.998             | 1.10                  |
| 12              | 23.85                  | 38.77 | 8.07        | 32.27 | 3.35         | 31.3                  | 64.41                      | 1.229            | 0.937             | 2.51                  |
| 13              | 23.76                  | 39.00 | 8.04        | 32.52 | 3.44         | 31.6                  | 64.99                      | 1.290            | 0.914             | 2.57                  |
| 14              | 23.68                  | 39.18 | 7.99        | 32.74 | 2.79         | 28.9                  | 66.54                      | 0.991            | 0.973             | 2.10                  |
| 15              | 23.58                  | 39.44 | 7.90        | 33.10 | 2.35         | 26.7                  | 72.71                      | 0.773            | 1.088             | 1.83                  |
| 16              | 23.52                  | 39.57 | 7.90        | 33.31 | 2.10         | 25.4                  | 77.67                      | 0.672            | 1.121             | 1.64                  |

Tab. 4.5.1.5



IL SEGRETARIO COMUNALE

R

|    |       |        |       |       |      |      |        |       |       |      |
|----|-------|--------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 23.47 | 39.70  | 7.90  | 33.54 | 1.87 | 24.1 | 83.64  | 0.578 | 1.159 | 1.46 |
| 18 | 23.42 | 39.81  | 7.90  | 33.75 | 1.73 | 23.2 | 89.20  | 0.520 | 1.187 | 1.35 |
| 19 | 23.34 | 40.01  | 8.00  | 34.14 | 1.43 | 21.2 | 97.46  | 0.410 | 1.243 | 1.11 |
| 20 | 23.27 | 40.16  | 8.16  | 34.48 | 1.42 | 21.2 | 101.41 | 0.442 | 1.151 | 1.11 |
| 21 | 23.23 | 40.28  | 8.29  | 34.71 | 1.33 | 20.5 | 103.90 | 0.406 | 1.169 | 1.03 |
| 22 | 23.16 | 40.45  | 8.54  | 34.99 | 1.96 | 24.6 | 105.46 | 0.643 | 1.093 | 1.53 |
| 23 | 23.09 | 40.62  | 8.66  | 35.29 | 1.82 | 23.8 | 108.45 | 0.611 | 1.066 | 1.42 |
| 24 | 23.04 | 40.73  | 8.77  | 35.47 | 2.03 | 25.0 | 110.22 | 0.738 | 0.985 | 1.59 |
| 25 | 22.96 | *40.94 | 9.01  | 35.77 | 2.41 | 27.1 | 112.62 | 0.940 | 0.917 | 1.88 |
| 26 | 22.83 | 41.24  | 9.27  | 36.07 | 2.41 | 27.0 | 102.28 | 0.943 | 0.913 | 1.88 |
| 27 | 22.70 | 41.54  | 9.37  | 36.43 | 2.24 | 26.2 | 94.63  | 0.856 | 0.939 | 1.75 |
| 28 | 22.61 | 41.77  | 9.44  | 36.73 | 2.15 | 25.7 | 90.95  | 0.787 | 0.980 | 1.68 |
| 29 | 22.54 | 41.95  | 9.49  | 36.95 | 1.98 | 24.7 | 89.62  | 0.689 | 1.027 | 1.54 |
| 30 | 22.48 | 42.08  | 9.56  | 37.15 | 2.14 | 25.6 | 91.15  | 0.744 | 1.029 | 1.67 |
| 31 | 22.40 | 42.27  | 9.65  | 37.45 | 1.98 | 24.7 | 95.03  | 0.662 | 1.070 | 1.54 |
| 32 | 22.32 | 42.47  | 9.78  | 37.74 | 2.11 | 25.4 | 97.68  | 0.702 | 1.073 | 1.64 |
| 33 | 22.23 | 42.70  | 9.93  | 38.07 | 2.09 | 25.4 | 100.56 | 0.698 | 1.072 | 1.63 |
| 34 | 22.08 | 43.04  | 10.03 | 38.40 | 2.51 | 27.5 | 92.74  | 0.955 | 0.940 | 1.96 |
| 35 | 22.01 | 43.22  | 10.08 | 38.61 | 3.01 | 29.9 | 89.73  | 1.137 | 0.914 | 2.26 |
| 36 | 21.94 | 43.39  | 10.14 | 38.82 | 3.42 | 31.6 | 86.40  | 1.248 | 0.940 | 2.56 |
| 37 | 21.84 | 43.62  | 10.19 | 39.05 | 3.53 | 32.0 | 81.53  | 1.273 | 0.949 | 2.63 |
| 38 | 21.70 | 43.97  | 10.13 | 39.33 | 3.34 | 31.2 | 74.07  | 1.253 | 0.914 | 2.50 |
| 39 | 21.56 | 44.31  | 10.07 | 39.59 | 3.28 | 31.0 | 66.82  | 1.216 | 0.926 | 2.46 |
| 40 | 21.46 | 44.55  | 10.03 | 39.76 | 3.36 | 31.3 | 62.50  | 1.214 | 0.949 | 2.51 |
| 41 | 21.32 | 44.89  | 9.85  | 40.09 | 2.82 | 29.0 | 61.91  | 0.960 | 1.016 | 2.13 |
| 42 | 21.24 | 45.07  | 9.77  | 40.29 | 2.70 | 28.4 | 64.77  | 0.951 | 1.016 | 2.11 |
| 43 | 21.17 | 45.24  | 9.69  | 40.51 | 2.62 | 28.1 | 68.56  | 0.927 | 1.010 | 2.04 |
| 44 | 21.08 | 45.47  | 9.59  | 40.82 | 2.48 | 27.4 | 73.83  | 0.885 | 1.002 | 1.93 |
| 45 | 21.01 | 45.64  | 9.55  | 41.04 | 2.71 | 28.5 | 75.61  | 0.996 | 0.975 | 2.12 |
| 46 | 20.90 | 45.90  | 9.51  | 41.32 | 2.75 | 28.7 | 75.91  | 1.030 | 0.954 | 2.14 |

Tab. 4.5.1.6

IL SINDACO



IL SEGRETARIO COMUNALE

P



|    |       |       |      |       |      |      |       |       |       |      |
|----|-------|-------|------|-------|------|------|-------|-------|-------|------|
| 47 | 20.79 | 46.16 | 9.50 | 41.62 | 3.21 | 30.7 | 76.15 | 1.190 | 0.927 | 2.40 |
| 48 | 20.69 | 46.39 | 9.43 | 41.86 | 3.15 | 30.4 | 76.69 | 1.183 | 0.917 | 2.36 |
| 49 | 20.55 | 46.74 | 9.28 | 42.21 | 3.31 | 31.1 | 75.65 | 1.225 | 0.928 | 2.48 |
| 50 | 20.41 | 47.09 | 9.20 | 42.53 | 3.42 | 31.5 | 70.30 | 1.220 | 0.961 | 2.56 |

IL SINDACO



IL SEGRETARIO COMUNALE

\*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 2.40 m  
WAVE PERIOD 6.14 sec  
TIME INCREMENT 32.00 sec  
WAVE DIRECTION 90.00 degrees  
ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
\*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH | BREAKING<br>WAVE<br>LENGTH | CONDITIONS<br>WAVE<br>DIRECTION | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT |
|-----------------|------------------------|-------|-------------|-------|-------|----------------------------|---------------------------------|------------------|-------------------|----------------|
|                 | X                      | Y     | X           | Y     | [m]   | [m]                        | [deg]                           |                  |                   | [m]            |
| 1               | 25.00                  | 30.00 | 8.31        | 29.98 | 2.78  | 30.5                       | 89.19                           | 0.980            | 0.922             | 2.17           |
| 2               | 25.00                  | 30.25 | 8.24        | 30.23 | 2.71  | 30.1                       | 89.30                           | 0.965            | 0.913             | 2.11           |
| 3               | 25.00                  | 30.63 | 8.15        | 30.61 | 2.69  | 30.0                       | 89.56                           | 0.921            | 0.948             | 2.10           |
| 4               | 25.00                  | 31.00 | 8.07        | 30.99 | 2.43  | 28.7                       | 89.71                           | 0.792            | 0.996             | 1.89           |
| 5               | 25.00                  | 31.25 | 8.08        | 31.21 | 2.91  | 31.1                       | 85.18                           | 0.949            | 0.996             | 2.27           |
| 6               | 25.00                  | 31.63 | 8.10        | 31.55 | 3.52  | 33.8                       | 78.83                           | 1.102            | 0.996             | 2.64           |
| 7               | 25.00                  | 32.00 | 8.11        | 31.88 | 3.87  | 35.2                       | 72.79                           | 1.208            | 0.996             | 2.89           |
| 8               | 25.00                  | 32.25 | 8.09        | 32.14 | 3.49  | 33.7                       | 73.44                           | 1.128            | 0.966             | 2.61           |
| 9               | 25.00                  | 32.44 | 8.05        | 32.36 | 3.02  | 31.6                       | 76.11                           | 1.074            | 0.914             | 2.36           |
| 10              | 25.00                  | 32.72 | 8.00        | 32.64 | 2.64  | 29.8                       | 78.11                           | 0.886            | 0.970             | 2.06           |
| 11              | 25.00                  | 33.00 | 7.94        | 32.92 | 2.69  | 30.0                       | 79.24                           | 0.831            | 1.051             | 2.10           |
| 12              | 25.00                  | 33.25 | 7.92        | 33.24 | 2.56  | 29.4                       | 85.70                           | 0.770            | 1.080             | 2.00           |
| 13              | 25.00                  | 33.44 | 7.93        | 33.48 | 2.51  | 29.1                       | 91.42                           | 0.756            | 1.081             | 1.96           |
| 14              | 25.00                  | 33.72 | 7.96        | 33.83 | 2.50  | 29.0                       | 99.87                           | 0.755            | 1.074             | 1.95           |
| 15              | 25.00                  | 34.00 | 8.05        | 34.16 | 2.42  | 28.7                       | 104.70                          | 0.750            | 1.050             | 1.89           |
| 16              | 25.00                  | 34.13 | 8.14        | 34.35 | 2.42  | 28.6                       | 107.02                          | 0.773            | 1.018             | 1.89           |

Tab. 4.5.1.8



IL SEGRETARIO COMUNALE

IL SINDACO



|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 25.00 | 34.34 | 8.30  | 34.65 | 2.20 | 27.4 | 111.08 | 0.698 | 1.026 | 1.72 |
| 18 | 25.00 | 34.51 | 8.45  | 34.86 | 2.27 | 27.8 | 113.46 | 0.709 | 1.042 | 1.77 |
| 19 | 25.00 | 34.75 | 8.61  | 35.15 | 1.91 | 25.6 | 116.88 | 0.558 | 1.111 | 1.49 |
| 20 | 25.00 | 35.00 | 8.76  | 35.41 | 2.44 | 28.7 | 118.74 | 0.803 | 0.985 | 1.90 |
| 21 | 25.00 | 35.25 | 8.90  | 35.63 | 2.42 | 28.6 | 120.36 | 0.846 | 0.929 | 1.89 |
| 22 | 25.00 | 35.44 | 9.04  | 35.77 | 3.02 | 31.6 | 119.28 | 1.067 | 0.920 | 2.36 |
| 23 | 25.00 | 35.72 | 9.22  | 35.91 | 3.87 | 35.2 | 110.64 | 1.295 | 0.929 | 2.89 |
| 24 | 25.00 | 36.00 | 9.40  | 36.14 | 3.58 | 34.1 | 103.76 | 1.224 | 0.914 | 2.68 |
| 25 | 25.00 | 36.25 | 9.42  | 36.39 | 3.03 | 31.6 | 101.76 | 1.060 | 0.928 | 2.36 |
| 26 | 25.00 | 36.63 | 9.49  | 36.75 | 2.67 | 29.9 | 99.07  | 0.892 | 0.972 | 2.08 |
| 27 | 25.00 | 37.00 | 9.61  | 37.13 | 2.78 | 30.5 | 99.09  | 0.907 | 0.997 | 2.17 |
| 28 | 25.00 | 37.25 | 9.70  | 37.42 | 2.71 | 30.1 | 102.79 | 0.864 | 1.018 | 2.11 |
| 29 | 25.00 | 37.44 | 9.81  | 37.62 | 2.91 | 31.1 | 105.08 | 0.932 | 1.014 | 2.27 |
| 30 | 25.00 | 37.72 | 9.93  | 37.93 | 2.76 | 30.3 | 108.16 | 0.864 | 1.036 | 2.15 |
| 31 | 25.00 | 38.00 | 10.01 | 38.22 | 2.74 | 30.3 | 107.59 | 0.908 | 0.982 | 2.14 |
| 32 | 25.00 | 38.25 | 10.05 | 38.42 | 3.05 | 31.7 | 103.36 | 1.034 | 0.926 | 2.30 |
| 33 | 25.00 | 38.63 | 10.12 | 38.71 | 3.62 | 34.2 | 96.34  | 1.226 | 0.922 | 2.71 |
| 34 | 25.00 | 39.00 | 10.22 | 39.01 | 4.04 | 35.9 | 89.41  | 1.322 | 0.948 | 3.01 |
| 35 | 25.00 | 39.25 | 10.16 | 39.25 | 3.55 | 34.0 | 86.17  | 1.211 | 0.915 | 2.66 |
| 36 | 25.00 | 39.63 | 10.10 | 39.57 | 3.62 | 34.2 | 81.03  | 1.222 | 0.925 | 2.71 |
| 37 | 25.00 | 40.00 | 10.00 | 39.88 | 3.46 | 33.5 | 75.07  | 1.106 | 0.978 | 2.60 |
| 38 | 25.00 | 40.25 | 9.88  | 40.11 | 3.25 | 32.6 | 74.49  | 1.012 | 1.006 | 2.44 |
| 39 | 25.00 | 40.63 | 9.72  | 40.43 | 2.69 | 30.0 | 76.15  | 0.849 | 1.029 | 2.10 |
| 40 | 25.00 | 40.81 | 9.65  | 40.64 | 2.56 | 29.3 | 79.29  | 0.809 | 1.027 | 1.99 |
| 41 | 25.00 | 41.00 | 9.58  | 40.86 | 2.58 | 29.5 | 82.75  | 0.827 | 1.012 | 2.01 |
| 42 | 25.00 | 41.25 | 9.51  | 41.13 | 2.32 | 28.1 | 84.32  | 0.747 | 1.009 | 1.81 |
| 43 | 25.00 | 41.63 | 9.48  | 41.52 | 2.79 | 30.5 | 84.53  | 0.954 | 0.951 | 2.18 |
| 44 | 25.00 | 42.00 | 9.45  | 41.91 | 3.38 | 33.2 | 84.73  | 1.151 | 0.919 | 2.54 |
| 45 | 25.00 | 42.25 | 9.33  | 42.14 | 3.46 | 33.6 | 83.38  | 1.181 | 0.916 | 2.60 |
| 46 | 25.00 | 42.63 | 9.20  | 42.48 | 3.24 | 32.6 | 77.81  | 1.071 | 0.947 | 2.44 |

Tab. 4.5.1.9

IL SINDACO



IL SEGRETARIO COMUNALE

*[Handwritten signature]*

47      25.00    43.00      9.11    42.72      2.13      27.0      68.20      0.717      0.967      1.66

IL SINDACO



IL SEGRETARIO COMUNALE

R



# \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 2.60 m  
WAVE PERIOD 6.28 sec  
TIME INCREMENT 32.00 sec  
WAVE DIRECTION 112.50 degrees  
ORTHOGONAL DISTANCE 250 m

IL SINDACO

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
\*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 20.00                  | 27.00 | 8.09        | 31.51 | 3.23         | 33.4                  | 83.20                      | 0.940            | 0.995             | 2.43                  |
| 2               | 20.10                  | 27.23 | 8.10        | 31.76 | 3.67         | 35.3                  | 79.51                      | 1.063            | 0.995             | 2.75                  |
| 3               | 20.17                  | 27.40 | 8.12        | 31.97 | 4.22         | 37.5                  | 77.63                      | 1.215            | 0.995             | 3.14                  |
| 4               | 20.28                  | 27.66 | 8.04        | 32.34 | 2.79         | 31.3                  | 81.94                      | 0.916            | 0.913             | 2.17                  |
| 5               | 20.33                  | 27.79 | 8.02        | 32.54 | 2.72         | 30.9                  | 84.90                      | 0.867            | 0.941             | 2.12                  |
| 6               | 20.38                  | 27.92 | 7.99        | 32.74 | 2.82         | 31.4                  | 87.90                      | 0.852            | 0.992             | 2.20                  |
| 7               | 20.48                  | 28.15 | 7.94        | 33.09 | 2.99         | 32.3                  | 92.76                      | 0.856            | 1.047             | 2.33                  |
| 8               | 20.55                  | 28.33 | 7.95        | 33.36 | 2.88         | 31.7                  | 98.68                      | 0.820            | 1.052             | 2.24                  |
| 9               | 20.66                  | 28.59 | 7.96        | 33.74 | 2.65         | 30.6                  | 107.03                     | 0.744            | 1.068             | 2.07                  |
| 10              | 20.77                  | 28.85 | 8.03        | 34.09 | 2.72         | 30.9                  | 113.88                     | 0.785            | 1.038             | 2.12                  |
| 11              | 20.86                  | 29.08 | 8.16        | 34.34 | 2.94         | 32.0                  | 115.53                     | 0.899            | 0.981             | 2.30                  |
| 12              | 20.93                  | 29.25 | 8.27        | 34.54 | 3.08         | 32.7                  | 117.31                     | 0.959            | 0.963             | 2.40                  |
| 13              | 21.04                  | 29.51 | 8.46        | 34.84 | 2.66         | 30.7                  | 121.30                     | 0.790            | 1.011             | 2.08                  |
| 14              | 21.15                  | 29.77 | 8.66        | 35.12 | 3.04         | 32.5                  | 124.16                     | 0.909            | 1.002             | 2.37                  |
| 15              | 21.24                  | 30.00 | 8.77        | 35.38 | 2.74         | 31.0                  | 126.03                     | 0.843            | 0.976             | 2.14                  |
| 16              | 21.39                  | 30.35 | 9.01        | 35.63 | 3.85         | 36.1                  | 125.02                     | 1.213            | 0.913             | 2.88                  |

Tab. 4.5.1.11



IL SEGRETARIO COMUNALE

R

|    |       |       |       |       |      |      |        |       |       |      |
|----|-------|-------|-------|-------|------|------|--------|-------|-------|------|
| 17 | 21.53 | 30.70 | 9.18  | 35.85 | 4.18 | 37.3 | 120.39 | 1.285 | 0.932 | 3.11 |
| 18 | 21.63 | 30.93 | 9.34  | 35.98 | 3.85 | 36.1 | 115.66 | 1.212 | 0.915 | 2.88 |
| 19 | 21.77 | 31.27 | 9.48  | 36.27 | 3.95 | 36.4 | 110.31 | 1.236 | 0.918 | 2.95 |
| 20 | 21.91 | 31.62 | 9.56  | 36.63 | 3.81 | 35.9 | 108.15 | 1.170 | 0.937 | 2.85 |
| 21 | 22.01 | 31.85 | 9.59  | 36.89 | 3.43 | 34.3 | 107.46 | 1.033 | 0.961 | 2.58 |
| 22 | 22.08 | 32.02 | 9.64  | 37.08 | 3.34 | 33.9 | 107.98 | 0.991 | 0.975 | 2.51 |
| 23 | 22.19 | 32.28 | 9.75  | 37.37 | 3.39 | 34.1 | 110.77 | 0.994 | 0.986 | 2.55 |
| 24 | 22.30 | 32.54 | 9.87  | 37.66 | 3.33 | 33.9 | 113.72 | 0.966 | 0.998 | 2.51 |
| 25 | 22.39 | 32.77 | 10.00 | 37.89 | 3.51 | 34.6 | 115.29 | 1.020 | 0.995 | 2.64 |
| 26 | 22.54 | 33.12 | 10.04 | 38.25 | 3.52 | 34.7 | 113.77 | 1.083 | 0.937 | 2.64 |
| 27 | 22.68 | 33.47 | 10.11 | 38.56 | 3.87 | 36.2 | 107.40 | 1.220 | 0.914 | 2.90 |
| 28 | 22.87 | 33.93 | 10.21 | 38.93 | 4.20 | 37.4 | 97.18  | 1.275 | 0.943 | 3.13 |
| 29 | 22.97 | 34.16 | 10.19 | 39.22 | 3.91 | 36.3 | 95.20  | 1.224 | 0.918 | 2.92 |
| 30 | 23.06 | 34.39 | 10.13 | 39.48 | 3.73 | 35.6 | 92.19  | 1.171 | 0.918 | 2.79 |
| 31 | 23.16 | 34.62 | 10.04 | 39.75 | 3.48 | 34.5 | 88.48  | 1.050 | 0.958 | 2.62 |
| 32 | 23.23 | 34.80 | 9.97  | 39.95 | 3.50 | 34.6 | 85.61  | 1.017 | 0.995 | 2.63 |
| 33 | 23.34 | 35.06 | 9.82  | 40.28 | 3.25 | 33.5 | 86.33  | 0.934 | 1.008 | 2.45 |
| 34 | 23.44 | 35.31 | 9.67  | 40.58 | 2.63 | 30.5 | 87.50  | 0.762 | 1.035 | 2.05 |
| 35 | 23.54 | 35.55 | 9.55  | 40.94 | 2.45 | 29.5 | 92.04  | 0.718 | 1.025 | 1.91 |
| 36 | 23.61 | 35.72 | 9.51  | 41.20 | 2.53 | 29.9 | 93.46  | 0.761 | 0.997 | 1.97 |
| 37 | 23.72 | 35.98 | 9.46  | 41.54 | 2.69 | 30.8 | 93.26  | 0.843 | 0.957 | 2.10 |
| 38 | 23.83 | 36.24 | 9.40  | 41.87 | 2.89 | 31.8 | 92.74  | 0.939 | 0.925 | 2.26 |
| 39 | 23.92 | 36.47 | 9.33  | 42.15 | 3.47 | 34.5 | 90.74  | 1.097 | 0.915 | 2.61 |
| 40 | 24.07 | 36.82 | 9.17  | 42.50 | 2.82 | 31.4 | 82.02  | 0.894 | 0.945 | 2.20 |
| 41 | 24.21 | 37.16 | 9.07  | 42.77 | 1.54 | 23.8 | 68.65  | 0.478 | 0.966 | 1.20 |
| 42 | 24.31 | 37.39 | 9.05  | 43.10 | 1.79 | 25.5 | 67.60  | 0.579 | 0.929 | 1.40 |
| 43 | 24.38 | 37.57 | 8.98  | 43.37 | 1.77 | 25.4 | 72.74  | 0.545 | 0.972 | 1.38 |
| 44 | 24.43 | 37.70 | 8.95  | 43.57 | 2.16 | 27.9 | 76.23  | 0.630 | 1.030 | 1.69 |
| 45 | 24.51 | 37.89 | 8.88  | 43.89 | 2.39 | 29.2 | 80.36  | 0.637 | 1.127 | 1.87 |
| 46 | 24.59 | 38.09 | 8.84  | 44.27 | 2.77 | 31.2 | 91.13  | 0.744 | 1.119 | 2.16 |

Tab. 4.5.1.12

IL SINDACO



IL SEGRETARIO COMUNALE

R



|    |       |       |      |       |      |      |        |       |       |      |
|----|-------|-------|------|-------|------|------|--------|-------|-------|------|
| 47 | 24.64 | 38.20 | 8.82 | 44.51 | 2.61 | 30.4 | 98.34  | 0.679 | 1.152 | 2.03 |
| 48 | 24.72 | 38.40 | 8.79 | 44.89 | 2.56 | 30.1 | 109.36 | 0.654 | 1.176 | 2.00 |
| 49 | 24.79 | 38.56 | 8.83 | 45.15 | 2.66 | 30.6 | 114.77 | 0.716 | 1.115 | 2.07 |
| 50 | 24.88 | 38.78 | 8.90 | 45.40 | 2.81 | 31.4 | 112.43 | 0.843 | 1.001 | 2.19 |
| 51 | 24.97 | 39.01 | 8.97 | 45.55 | 3.58 | 34.9 | 108.11 | 1.126 | 0.919 | 2.69 |

IL SINDACO



IL SEGRETARIO COMUNALE

## \*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 2.23 m  
 WAVE PERIOD 5.90 sec  
 TIME INCREMENT 36.00 sec  
 WAVE DIRECTION 45.00 degrees  
 ORTHOGONAL DISTANCE 250 m

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
 \*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 23.00                  | 43.00 | 8.40        | 28.93 | 2.71         | 28.8                  | 69.25                      | 1.000            | 0.947             | 2.11                  |
| 2               | 22.82                  | 43.18 | 8.37        | 29.32 | 2.84         | 29.4                  | 71.52                      | 1.032            | 0.929             | 2.14                  |
| 3               | 22.69                  | 43.31 | 8.35        | 29.59 | 2.90         | 29.7                  | 72.89                      | 1.064            | 0.921             | 2.19                  |
| 4               | 22.49                  | 43.51 | 8.32        | 29.97 | 2.84         | 29.4                  | 74.87                      | 1.047            | 0.916             | 2.14                  |
| 5               | 22.29                  | 43.71 | 8.22        | 30.29 | 2.64         | 28.5                  | 76.83                      | 1.005            | 0.917             | 2.06                  |
| 6               | 22.12                  | 43.88 | 8.16        | 30.62 | 2.98         | 30.0                  | 78.47                      | 1.043            | 0.963             | 2.24                  |
| 7               | 21.98                  | 44.02 | 8.12        | 30.93 | 3.78         | 33.3                  | 80.00                      | 1.265            | 0.995             | 2.81                  |
| 8               | 21.78                  | 44.22 | 8.04        | 31.27 | 1.36         | 21.0                  | 77.45                      | 0.476            | 0.998             | 1.06                  |
| 9               | 21.59                  | 44.41 | 8.07        | 31.57 | 2.59         | 28.3                  | 69.73                      | 0.908            | 0.998             | 2.02                  |
| 10              | 21.41                  | 44.59 | 8.07        | 31.81 | 2.45         | 27.5                  | 64.28                      | 0.859            | 0.998             | 1.91                  |
| 11              | 21.28                  | 44.72 | 8.10        | 32.02 | 3.72         | 33.1                  | 60.50                      | 1.248            | 0.996             | 2.77                  |
| 12              | 21.18                  | 44.82 | 8.06        | 32.22 | 3.07         | 30.5                  | 59.34                      | 1.097            | 0.942             | 2.30                  |
| 13              | 21.03                  | 44.97 | 7.98        | 32.54 | 1.56         | 22.4                  | 59.09                      | 0.521            | 1.049             | 1.22                  |
| 14              | 20.95                  | 45.05 | 7.92        | 32.75 | 1.42         | 21.4                  | 60.11                      | 0.413            | 1.203             | 1.11                  |
| 15              | 20.88                  | 45.12 | 7.84        | 32.99 | 1.36         | 21.0                  | 63.94                      | 0.359            | 1.325             | 1.06                  |
| 16              | 20.83                  | 45.17 | 7.85        | 33.20 | 1.43         | 21.5                  | 69.59                      | 0.385            | 1.298             | 1.11                  |

Tab. 4.5.1.14



IL SEGRETARIO COMUNALE



DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA 112.5 deg (416/5/I)

DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30     | 40     | 50     | 60     | 70     | 80     | 90     | 100    |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 3   | 109.52 | 109.69 | 109.86 | 109.84 | 109.77 | 109.71 | 109.65 | --     |
| 5   | 109.37 | 109.26 | 109.49 | 109.66 | 109.80 | 109.90 | 109.84 | 109.78 |
| 10  | 109.37 | 108.68 | 108.89 | 109.14 | 109.36 | 109.52 | 109.64 | 109.74 |
| 15  | 109.37 | 108.68 | 108.59 | 108.79 | 109.02 | 109.22 | 109.40 | 109.53 |
| 20  | 109.37 | 108.68 | 108.41 | 108.61 | 108.79 | 109.00 | 109.19 | 109.35 |
| 30  | 109.37 | 108.68 | 108.24 | 108.35 | 108.55 | 108.72 | 108.89 | 109.07 |
| 40  | 109.37 | 108.68 | 108.24 | 108.22 | 108.37 | 108.55 | 108.70 | 108.86 |
| 50  | 109.37 | 108.68 | 108.24 | 108.14 | 108.26 | 108.41 | 108.58 | 108.72 |
| 75  | 109.37 | 108.68 | 108.24 | 107.99 | 108.11 | 108.22 | 108.34 | 108.50 |
| 100 | 109.37 | 108.68 | 108.24 | 107.99 | 108.00 | 108.12 | 108.23 | 108.34 |

Tab.3.5.11

IL SINDACO



IL SEGRETARIO COMUNALE

DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA S (416/5/I)

IL SINDACO

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|-----|----|----|----|----|----|----|----|-----|
| 3   | -- | -- | -- | -- | -- | -- | -- | --  |
| 5   | -- | -- | -- | -- | -- | -- | -- | --  |
| 10  | -- | -- | -- | -- | -- | -- | -- | --  |
| 15  | -- | -- | -- | -- | -- | -- | -- | --  |
| 20  | -- | -- | -- | -- | -- | -- | -- | --  |
| 30  | -- | -- | -- | -- | -- | -- | -- | --  |
| 40  | -- | -- | -- | -- | -- | -- | -- | --  |
| 50  | -- | -- | -- | -- | -- | -- | -- | --  |
| 75  | -- | -- | -- | -- | -- | -- | -- | --  |
| 100 | -- | -- | -- | -- | -- | -- | -- | --  |



IL SEGRETARIO COMUNALE



TABELLE DEL CAPITOLO 4

IL SINDACO



IL SEGRETARIO COMUNALE

R

2

16 2 3 33

IL SINDACO

[illegible]



\*\*\* INITIAL WAVE PARAMETERS

WAVE HEIGHT 1.69 m  
WAVE PERIOD 5.09 sec  
TIME INCREMENT 40.00 sec  
WAVE DIRECTION 45.00 degrees  
ORTHOGONAL DISTANCE 250 m

IL SINDACO

\*\*\*\*\* OUTPUT DATA \*\*\*\*\*  
\*\*\*\*\*

| ORTH.<br>NUMBER | INITIAL<br>COORDINATES |       | COORDINATES |       | DEPTH<br>[m] | BREAKING CONDITIONS   |                            | REFRAC.<br>COEF. | SHOALING<br>COEF. | WAVE<br>HEIGHT<br>[m] |
|-----------------|------------------------|-------|-------------|-------|--------------|-----------------------|----------------------------|------------------|-------------------|-----------------------|
|                 | X                      | Y     | X           | Y     |              | WAVE<br>LENGTH<br>[m] | WAVE<br>DIRECTION<br>[deg] |                  |                   |                       |
| 1               | 23.00                  | 43.00 | 8.37        | 28.95 | 2.01         | 21.4                  | 71.88                      | 0.991            | 0.938             | 1.57                  |
| 2               | 22.82                  | 43.18 | 8.34        | 29.29 | 2.13         | 22.0                  | 73.73                      | 1.028            | 0.922             | 1.60                  |
| 3               | 22.69                  | 43.31 | 8.32        | 29.53 | 2.01         | 21.4                  | 74.85                      | 1.007            | 0.921             | 1.57                  |
| 4               | 22.49                  | 43.51 | 8.29        | 29.91 | 2.08         | 21.8                  | 73.85                      | 1.053            | 0.914             | 1.63                  |
| 5               | 22.39                  | 43.61 | 8.25        | 30.12 | 2.21         | 22.3                  | 75.35                      | 1.074            | 0.916             | 1.66                  |
| 6               | 22.29                  | 43.71 | 8.20        | 30.33 | 2.35         | 23.0                  | 77.20                      | 1.112            | 0.940             | 1.77                  |
| 7               | 22.12                  | 43.88 | 8.14        | 30.68 | 2.80         | 24.7                  | 80.09                      | 1.243            | 0.990             | 2.08                  |
| 8               | 21.98                  | 44.02 | 8.09        | 30.93 | 2.89         | 25.1                  | 82.06                      | 1.271            | 0.999             | 2.15                  |
| 9               | 21.78                  | 44.22 | 8.04        | 31.24 | 1.25         | 17.2                  | 78.15                      | 0.575            | 1.000             | 0.97                  |
| 10              | 21.59                  | 44.41 | 8.03        | 31.54 | 0.94         | 15.1                  | 69.27                      | 0.436            | 1.000             | 0.74                  |
| 11              | 21.41                  | 44.59 | 8.03        | 31.76 | 1.20         | 16.9                  | 62.72                      | 0.552            | 1.000             | 0.93                  |
| 12              | 21.14                  | 44.86 | 8.06        | 32.15 | 2.72         | 24.4                  | 56.78                      | 1.226            | 0.980             | 2.03                  |
| 13              | 21.01                  | 44.99 | 8.00        | 32.37 | 1.58         | 19.2                  | 56.34                      | 0.787            | 0.926             | 1.23                  |
| 14              | 20.98                  | 45.12 | 7.95        | 32.65 | 1.50         | 18.8                  | 55.85                      | 0.655            | 1.057             | 1.17                  |
| 15              | 20.83                  | 45.17 | 7.91        | 32.77 | 1.27         | 17.4                  | 56.08                      | 0.499            | 1.178             | 0.99                  |
| 16              | 20.79                  | 45.21 | 7.83        | 33.02 | 1.22         | 17.1                  | 62.69                      | 0.439            | 1.283             | 0.95                  |

Tab. 4.5.1.2



IL SEGRETARIO COMUNALE

DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA 22.5 deg (416/5/1)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|-----|----|----|----|----|----|----|----|-----|
| 3   | -- | -- | -- | -- | -- | -- | -- | --  |
| 5   | -- | -- | -- | -- | -- | -- | -- | --  |
| 10  | -- | -- | -- | -- | -- | -- | -- | --  |
| 15  | -- | -- | -- | -- | -- | -- | -- | --  |
| 20  | -- | -- | -- | -- | -- | -- | -- | --  |
| 30  | -- | -- | -- | -- | -- | -- | -- | --  |
| 40  | -- | -- | -- | -- | -- | -- | -- | --  |
| 50  | -- | -- | -- | -- | -- | -- | -- | --  |
| 75  | -- | -- | -- | -- | -- | -- | -- | --  |
| 100 | -- | -- | -- | -- | -- | -- | -- | --  |

Tab. 3.5.7

IL SINDACO



IL SEGRETARIO COMUNALE

R



DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA NE (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40    | 50    | 60    | 70    | 80    | 90    | 100   |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| 3   | 66.04 | 65.46 | --    | --    | --    | --    | --    | --    |
| 5   | 67.92 | 67.40 | 66.83 | 66.31 | 65.87 | 65.48 | 65.14 | --    |
| 10  | 69.88 | 69.51 | 68.99 | 68.49 | 68.05 | 67.64 | 67.25 | 66.90 |
| 15  | 70.93 | 70.69 | 70.21 | 69.70 | 69.23 | 68.81 | 68.43 | 68.09 |
| 20  | 71.29 | 71.44 | 70.98 | 70.49 | 70.02 | 69.58 | 69.19 | 68.84 |
| 30  | 71.29 | 72.45 | 72.03 | 71.54 | 71.06 | 70.63 | 70.23 | 69.87 |
| 40  | 71.29 | 73.16 | 72.78 | 72.30 | 71.82 | 71.37 | 70.96 | 70.59 |
| 50  | 71.29 | 73.71 | 73.36 | 72.88 | 72.40 | 71.94 | 71.52 | 71.15 |
| 75  | 71.29 | 74.04 | 74.38 | 73.92 | 73.43 | 72.97 | 72.54 | 72.14 |
| 100 | 71.29 | 74.04 | 75.09 | 74.64 | 74.15 | 73.68 | 73.24 | 72.83 |

Tab. 3.5.8

IL SINDACO



IL SEGRETARIO COMUNALE

IL SINDACO

DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA 67.5 deg (416/5/1)

DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40    | 50    | 60    | 70    | 80    | 90    | 100   |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| 3   | 79.44 | 78.76 | 78.15 | 77.64 | --    | --    | --    | --    |
| 5   | 80.57 | 80.08 | 79.57 | 79.06 | 78.58 | 78.18 | 77.84 | 77.54 |
| 10  | 81.24 | 81.42 | 80.93 | 80.46 | 80.05 | 79.70 | 79.39 | 79.05 |
| 15  | 81.24 | 82.17 | 81.69 | 81.22 | 80.81 | 80.43 | 80.10 | 79.81 |
| 20  | 81.24 | 82.68 | 82.19 | 81.72 | 81.29 | 80.92 | 80.58 | 80.28 |
| 30  | 81.24 | 82.81 | 82.91 | 82.41 | 81.95 | 81.56 | 81.21 | 80.91 |
| 40  | 81.24 | 82.81 | 83.43 | 82.93 | 82.45 | 82.03 | 81.67 | 81.35 |
| 50  | 81.24 | 82.81 | 83.84 | 83.32 | 82.84 | 82.40 | 82.02 | 81.69 |
| 75  | 81.24 | 82.81 | 84.24 | 84.05 | 83.55 | 83.09 | 82.68 | 82.32 |
| 100 | 81.24 | 82.81 | 84.24 | 84.56 | 84.05 | 83.57 | 83.15 | 82.77 |

Tab. 3.5.9



IL SEGRETARIO COMUNALE



DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA E (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40    | 50    | 60    | 70    | 80    | 90    | 100   |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| 3   | 94.30 | 94.09 | 93.66 | 93.28 | 92.97 | --    | --    | --    |
| 5   | 94.56 | 94.51 | 94.30 | 94.12 | 93.83 | 93.53 | 93.26 | 93.04 |
| 10  | 94.56 | 94.79 | 94.67 | 94.57 | 94.42 | 94.27 | 94.14 | 93.98 |
| 15  | 94.56 | 94.87 | 94.85 | 94.72 | 94.62 | 94.53 | 94.39 | 94.27 |
| 20  | 94.56 | 94.87 | 94.98 | 94.83 | 94.72 | 94.63 | 94.55 | 94.43 |
| 30  | 94.56 | 94.87 | 95.20 | 95.02 | 94.88 | 94.76 | 94.67 | 94.60 |
| 40  | 94.56 | 94.87 | 95.23 | 95.17 | 95.01 | 94.88 | 94.76 | 94.69 |
| 50  | 94.56 | 94.87 | 95.23 | 95.34 | 95.11 | 94.97 | 94.85 | 94.76 |
| 75  | 94.56 | 94.87 | 95.23 | 95.62 | 95.39 | 95.17 | 95.02 | 94.91 |
| 100 | 94.56 | 94.87 | 95.23 | 95.70 | 95.59 | 95.36 | 95.16 | 95.03 |

Tab. 3.5.10

IL SINDACO



IL SEGRETARIO COMUNALE

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 67.5 deg (416/5/I)

I. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.35 | 1.28 | 1.23 | 1.18 | --   | --   | --   | --   |
| 5   | 1.76 | 1.65 | 1.55 | 1.49 | 1.45 | 1.41 | 1.38 | 1.35 |
| 10  | 2.05 | 2.21 | 2.08 | 1.97 | 1.89 | 1.81 | 1.75 | 1.72 |
| 15  | 2.05 | 2.58 | 2.44 | 2.31 | 2.20 | 2.12 | 2.05 | 1.99 |
| 20  | 2.05 | 2.84 | 2.69 | 2.56 | 2.44 | 2.34 | 2.26 | 2.19 |
| 30  | 2.05 | 2.91 | 3.06 | 2.91 | 2.78 | 2.67 | 2.57 | 2.49 |
| 40  | 2.05 | 2.91 | 3.34 | 3.18 | 3.04 | 2.92 | 2.82 | 2.73 |
| 50  | 2.05 | 2.91 | 3.57 | 3.40 | 3.25 | 3.12 | 3.01 | 2.92 |
| 75  | 2.05 | 2.91 | 3.80 | 3.81 | 3.65 | 3.51 | 3.38 | 3.27 |
| 100 | 2.05 | 2.91 | 3.80 | 4.11 | 3.94 | 3.78 | 3.65 | 3.54 |

Tab. 3.5.3



IL SEGRETARIO COMUNALE

IL SINDACO



ALTEZZA SOTTOCOSTA (M) DELL'ONDA SIGNIFICATIVA DA E (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.72 | 1.55 | 1.43 | 1.34 | 1.26 | --   | --   | --   |
| 5   | 2.11 | 2.07 | 1.90 | 1.75 | 1.65 | 1.57 | 1.50 | 1.44 |
| 10  | 2.11 | 2.85 | 2.61 | 2.40 | 2.24 | 2.11 | 2.00 | 1.91 |
| 15  | 2.11 | 3.05 | 3.11 | 2.86 | 2.65 | 2.48 | 2.36 | 2.25 |
| 20  | 2.11 | 3.05 | 3.47 | 3.19 | 2.96 | 2.78 | 2.62 | 2.49 |
| 30  | 2.11 | 3.05 | 4.01 | 3.70 | 3.43 | 3.20 | 3.02 | 2.87 |
| 40  | 2.11 | 3.05 | 4.08 | 4.10 | 3.80 | 3.55 | 3.34 | 3.17 |
| 50  | 2.11 | 3.05 | 4.08 | 4.42 | 4.10 | 3.83 | 3.60 | 3.41 |
| 75  | 2.11 | 3.05 | 4.08 | 5.04 | 4.68 | 4.37 | 4.11 | 3.89 |
| 100 | 2.11 | 3.05 | 4.08 | 5.18 | 5.12 | 4.78 | 4.49 | 4.24 |

Tab. 3.5.4



IL SEGRETARIO COMUNALE

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 112.5 deg (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 2.02 | 1.87 | 1.73 | 1.63 | 1.56 | 1.49 | 1.44 | --   |
| 5   | 2.22 | 2.43 | 2.25 | 2.11 | 1.99 | 1.89 | 1.83 | 1.77 |
| 10  | 2.22 | 3.25 | 3.02 | 2.81 | 2.64 | 2.50 | 2.39 | 2.30 |
| 15  | 2.22 | 3.25 | 3.54 | 3.30 | 3.09 | 2.92 | 2.78 | 2.66 |
| 20  | 2.22 | 3.25 | 3.92 | 3.65 | 3.42 | 3.23 | 3.07 | 2.93 |
| 30  | 2.22 | 3.25 | 4.39 | 4.18 | 3.91 | 3.69 | 3.50 | 3.34 |
| 40  | 2.22 | 3.25 | 4.39 | 4.59 | 4.30 | 4.05 | 3.84 | 3.66 |
| 50  | 2.22 | 3.25 | 4.39 | 4.93 | 4.61 | 4.34 | 4.11 | 3.92 |
| 75  | 2.22 | 3.25 | 4.39 | 5.57 | 5.22 | 4.91 | 4.64 | 4.42 |
| 100 | 2.22 | 3.25 | 4.39 | 5.64 | 5.67 | 5.33 | 5.04 | 4.78 |

Tab. 3.5.5



IL SEGRETARIO COMUNALE

IL SINDACO



ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA S (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|-----|----|----|----|----|----|----|----|-----|
| 3   | -- | -- | -- | -- | -- | -- | -- | --  |
| 5   | -- | -- | -- | -- | -- | -- | -- | --  |
| 10  | -- | -- | -- | -- | -- | -- | -- | --  |
| 15  | -- | -- | -- | -- | -- | -- | -- | --  |
| 20  | -- | -- | -- | -- | -- | -- | -- | --  |
| 30  | -- | -- | -- | -- | -- | -- | -- | --  |
| 40  | -- | -- | -- | -- | -- | -- | -- | --  |
| 50  | -- | -- | -- | -- | -- | -- | -- | --  |
| 75  | -- | -- | -- | -- | -- | -- | -- | --  |
| 100 | -- | -- | -- | -- | -- | -- | -- | --  |

Tab. 3.5.6

IL SINDACO



IL SEGRETARIO COMUNALE

R

IL SEGRETARIO COMUNALE



IL SINDACO

TABELLE DEL CAPITULO 3



ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 22.5 deg (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|-----|----|----|----|----|----|----|----|-----|
| 3   | -- | -- | -- | -- | -- | -- | -- | --  |
| 5   | -- | -- | -- | -- | -- | -- | -- | --  |
| 10  | -- | -- | -- | -- | -- | -- | -- | --  |
| 15  | -- | -- | -- | -- | -- | -- | -- | --  |
| 20  | -- | -- | -- | -- | -- | -- | -- | --  |
| 30  | -- | -- | -- | -- | -- | -- | -- | --  |
| 40  | -- | -- | -- | -- | -- | -- | -- | --  |
| 50  | -- | -- | -- | -- | -- | -- | -- | --  |
| 75  | -- | -- | -- | -- | -- | -- | -- | --  |
| 100 | -- | -- | -- | -- | -- | -- | -- | --  |

Tab. 3.5.1



IL SEGRETARIO COMUNALE

IL SINDACO

ALTEZZA SOTTOCOSTA (M) DELL'ONDA SIGNIFICATIVA DA NE (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.01 | 1.00 | --   | --   | --   | --   | --   | --   |
| 5   | 1.29 | 1.28 | 1.26 | 1.24 | 1.23 | 1.21 | 1.20 | --   |
| 10  | 1.60 | 1.61 | 1.60 | 1.60 | 1.59 | 1.58 | 1.57 | 1.55 |
| 15  | 1.82 | 1.83 | 1.81 | 1.80 | 1.79 | 1.79 | 1.78 | 1.77 |
| 20  | 1.90 | 2.01 | 1.98 | 1.95 | 1.93 | 1.92 | 1.92 | 1.91 |
| 30  | 1.90 | 2.26 | 2.24 | 2.21 | 2.17 | 2.14 | 2.12 | 2.11 |
| 40  | 1.90 | 2.46 | 2.44 | 2.40 | 2.37 | 2.33 | 2.30 | 2.28 |
| 50  | 1.90 | 2.61 | 2.60 | 2.56 | 2.52 | 2.48 | 2.45 | 2.43 |
| 75  | 1.90 | 2.71 | 2.90 | 2.87 | 2.82 | 2.78 | 2.74 | 2.70 |
| 100 | 1.90 | 2.71 | 3.13 | 3.09 | 3.04 | 3.00 | 2.95 | 2.91 |

Tab. 3.5.2

IL SINDACO



IL SEGRETARIO COMUNALE



PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 112.5 deg (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 5.83 | 5.46 | 5.09 | 4.77 | 4.50 | 4.27 | 4.08 | 3.91 |
| 5   | 6.12 | 6.28 | 5.89 | 5.54 | 5.23 | 4.97 | 4.75 | 4.56 |
| 10  | 6.12 | 7.24 | 6.86 | 6.47 | 6.13 | 5.83 | 5.58 | 5.35 |
| 15  | 6.12 | 7.24 | 7.42 | 7.03 | 6.67 | 6.35 | 6.07 | 5.83 |
| 20  | 6.12 | 7.24 | 7.79 | 7.39 | 7.02 | 6.69 | 6.40 | 6.15 |
| 30  | 6.12 | 7.24 | 8.21 | 7.90 | 7.51 | 7.17 | 6.86 | 6.59 |
| 40  | 6.12 | 7.24 | 8.21 | 8.26 | 7.87 | 7.51 | 7.20 | 6.91 |
| 50  | 6.12 | 7.24 | 8.21 | 8.54 | 8.15 | 7.78 | 7.45 | 7.16 |
| 75  | 6.12 | 7.24 | 8.21 | 9.04 | 8.64 | 8.26 | 7.92 | 7.61 |
| 100 | 6.12 | 7.24 | 8.21 | 9.09 | 8.98 | 8.60 | 8.25 | 7.93 |

Tab. 2.5.11

IL SINDACO

IL SEGRETARIO COMUNALE



R

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA S (416/5/1)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 5.29 | 5.24 | 5.13 | 5.02 | 4.92 | 4.82 | 4.73 | 4.66 |
| 5   | 5.29 | 5.64 | 5.54 | 5.43 | 5.32 | 5.22 | 5.13 | 5.04 |
| 10  | 5.29 | 6.09 | 6.00 | 5.89 | 5.77 | 5.67 | 5.57 | 5.48 |
| 15  | 5.29 | 6.22 | 6.25 | 6.14 | 6.03 | 5.92 | 5.82 | 5.73 |
| 20  | 5.29 | 6.22 | 6.42 | 6.31 | 6.19 | 6.09 | 5.99 | 5.89 |
| 30  | 5.29 | 6.22 | 6.64 | 6.53 | 6.42 | 6.31 | 6.20 | 6.11 |
| 40  | 5.29 | 6.22 | 6.79 | 6.69 | 6.57 | 6.46 | 6.36 | 6.26 |
| 50  | 5.29 | 6.22 | 6.91 | 6.80 | 6.69 | 6.58 | 6.47 | 6.38 |
| 75  | 5.29 | 6.22 | 7.03 | 7.01 | 6.90 | 6.79 | 6.68 | 6.58 |
| 100 | 5.29 | 6.22 | 7.03 | 7.15 | 7.04 | 6.93 | 6.82 | 6.72 |

Tab. 2.5.12

IL SINDACO



IL SEGRETARIO COMUNALE

R



IL SINDACO

T. DI RITORNO  
(anni)



IL SEGRETARIO COMUNALE

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 22.5 deg (416/5/1)

|     | VELOCITA'<br>(nodi) |      |      |      |      |      |      |      |
|-----|---------------------|------|------|------|------|------|------|------|
|     | 30                  | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
| 3   | 5.24                | 4.73 | 4.31 | 3.99 | 3.73 | 3.52 | 3.35 | 3.20 |
| 5   | 5.94                | 5.45 | 5.00 | 4.64 | 4.35 | 4.11 | 3.92 | 3.75 |
| 10  | 6.54                | 6.30 | 5.83 | 5.44 | 5.11 | 4.85 | 4.62 | 4.43 |
| 15  | 6.54                | 6.79 | 6.32 | 5.91 | 5.57 | 5.28 | 5.04 | 4.84 |
| 20  | 6.54                | 7.11 | 6.64 | 6.23 | 5.87 | 5.58 | 5.33 | 5.11 |
| 30  | 6.54                | 7.53 | 7.08 | 6.66 | 6.29 | 5.98 | 5.72 | 5.49 |
| 40  | 6.54                | 7.77 | 7.40 | 6.97 | 6.59 | 6.28 | 6.00 | 5.77 |
| 50  | 6.54                | 7.77 | 7.64 | 7.21 | 6.83 | 6.50 | 6.22 | 5.98 |
| 75  | 6.54                | 7.77 | 8.07 | 7.64 | 7.25 | 6.91 | 6.62 | 6.37 |
| 100 | 6.54                | 7.77 | 8.37 | 7.94 | 7.54 | 7.20 | 6.90 | 6.64 |

Tab. 2.5.7

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA NE (416/5/1)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 4.39 | 4.17 | 3.97 | 3.80 | 3.66 | 3.54 | 3.43 | 3.34 |
| 5   | 5.09 | 4.89 | 4.68 | 4.49 | 4.32 | 4.18 | 4.06 | 3.95 |
| 10  | 5.90 | 5.75 | 5.54 | 5.33 | 5.14 | 4.98 | 4.83 | 4.71 |
| 15  | 6.36 | 6.25 | 6.04 | 5.83 | 5.63 | 5.46 | 5.30 | 5.16 |
| 20  | 6.52 | 6.58 | 6.38 | 6.17 | 5.96 | 5.78 | 5.62 | 5.47 |
| 30  | 6.52 | 7.03 | 6.84 | 6.63 | 6.42 | 6.23 | 6.05 | 5.90 |
| 40  | 6.52 | 7.35 | 7.18 | 6.96 | 6.75 | 6.55 | 6.37 | 6.21 |
| 50  | 6.52 | 7.59 | 7.44 | 7.22 | 7.01 | 6.81 | 6.62 | 6.46 |
| 75  | 6.52 | 7.74 | 7.89 | 7.69 | 7.47 | 7.26 | 7.07 | 6.89 |
| 100 | 6.52 | 7.74 | 8.20 | 8.01 | 7.79 | 7.58 | 7.38 | 7.20 |

Tab. 2.5.8

IL SINDACO



IL SEGRETARIO COMUNALE



PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 67.5 deg (416/5/I)

DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 5.04 | 4.67 | 4.34 | 4.07 | 3.85 | 3.67 | 3.51 | 3.38 |
| 5   | 5.84 | 5.49 | 5.13 | 4.83 | 4.57 | 4.36 | 4.18 | 4.02 |
| 10  | 6.34 | 6.48 | 6.11 | 5.77 | 5.47 | 5.22 | 5.01 | 4.82 |
| 15  | 6.34 | 7.05 | 6.68 | 6.33 | 6.01 | 5.74 | 5.51 | 5.31 |
| 20  | 6.34 | 7.42 | 7.07 | 6.70 | 6.38 | 6.10 | 5.85 | 5.63 |
| 30  | 6.34 | 7.52 | 7.59 | 7.22 | 6.88 | 6.58 | 6.32 | 6.09 |
| 40  | 6.34 | 7.52 | 7.96 | 7.60 | 7.25 | 6.94 | 6.67 | 6.43 |
| 50  | 6.34 | 7.52 | 8.25 | 7.89 | 7.54 | 7.22 | 6.93 | 6.69 |
| 75  | 6.34 | 7.52 | 8.54 | 8.41 | 8.05 | 7.72 | 7.42 | 7.16 |
| 100 | 6.34 | 7.52 | 8.54 | 8.77 | 8.40 | 8.06 | 7.76 | 7.49 |

Tab. 2.5.9



IL SEGRETARIO COMUNALE

IL SINDACO

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA E (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 5.51 | 5.06 | 4.65 | 4.30 | 4.02 | 3.79 | 3.59 | 3.42 |
| 5   | 6.14 | 5.96 | 5.51 | 5.12 | 4.80 | 4.52 | 4.29 | 4.09 |
| 10  | 6.14 | 7.03 | 6.57 | 6.14 | 5.77 | 5.44 | 5.17 | 4.93 |
| 15  | 6.14 | 7.26 | 7.20 | 6.75 | 6.35 | 6.00 | 5.70 | 5.44 |
| 20  | 6.14 | 7.26 | 7.61 | 7.16 | 6.74 | 6.38 | 6.06 | 5.79 |
| 30  | 6.14 | 7.26 | 8.18 | 7.72 | 7.29 | 6.90 | 6.56 | 6.27 |
| 40  | 6.14 | 7.26 | 8.24 | 8.12 | 7.68 | 7.28 | 6.93 | 6.62 |
| 50  | 6.14 | 7.26 | 8.24 | 8.44 | 7.99 | 7.58 | 7.22 | 6.90 |
| 75  | 6.14 | 7.26 | 8.24 | 9.00 | 8.54 | 8.12 | 7.74 | 7.40 |
| 100 | 6.14 | 7.26 | 8.24 | 9.12 | 8.92 | 8.49 | 8.10 | 7.75 |

Tab. 2.5.10

IL SINDACO



IL SEGRETARIO COMUNALE



IL SINDACO

I. DI RITORNO  
(anni)

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 22.5 deg (416/5/I)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.78 | 1.56 | 1.41 | 1.29 | 1.21 | 1.14 | 1.09 | 1.04 |
| 5   | 2.25 | 2.01 | 1.82 | 1.68 | 1.57 | 1.49 | 1.42 | 1.36 |
| 10  | 2.71 | 2.62 | 2.39 | 2.21 | 2.07 | 1.97 | 1.88 | 1.81 |
| 15  | 2.71 | 3.00 | 2.75 | 2.55 | 2.40 | 2.28 | 2.18 | 2.10 |
| 20  | 2.71 | 3.27 | 3.01 | 2.80 | 2.63 | 2.50 | 2.39 | 2.30 |
| 30  | 2.71 | 3.64 | 3.37 | 3.14 | 2.96 | 2.82 | 2.70 | 2.60 |
| 40  | 2.71 | 3.86 | 3.65 | 3.41 | 3.22 | 3.06 | 2.93 | 2.83 |
| 50  | 2.71 | 3.86 | 3.87 | 3.62 | 3.42 | 3.25 | 3.12 | 3.01 |
| 75  | 2.71 | 3.86 | 4.28 | 4.01 | 3.79 | 3.62 | 3.47 | 3.35 |
| 100 | 2.71 | 3.86 | 4.57 | 4.30 | 4.07 | 3.88 | 3.72 | 3.59 |

Tab. 2.5.1



IL SEGRETARIO COMUNALE

R

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA NE (416/5/1)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.29 | 1.25 | 1.22 | 1.20 | 1.17 | 1.15 | 1.13 | 1.12 |
| 5   | 1.69 | 1.66 | 1.62 | 1.59 | 1.56 | 1.53 | 1.50 | 1.48 |
| 10  | 2.23 | 2.22 | 2.18 | 2.13 | 2.09 | 2.06 | 2.03 | 2.00 |
| 15  | 2.56 | 2.58 | 2.54 | 2.49 | 2.45 | 2.41 | 2.37 | 2.34 |
| 20  | 2.69 | 2.84 | 2.80 | 2.75 | 2.70 | 2.66 | 2.62 | 2.58 |
| 30  | 2.69 | 3.20 | 3.17 | 3.12 | 3.07 | 3.02 | 2.97 | 2.94 |
| 40  | 2.69 | 3.48 | 3.46 | 3.40 | 3.35 | 3.30 | 3.25 | 3.21 |
| 50  | 2.69 | 3.70 | 3.68 | 3.63 | 3.57 | 3.52 | 3.47 | 3.42 |
| 75  | 2.69 | 3.83 | 4.10 | 4.06 | 4.00 | 3.94 | 3.88 | 3.83 |
| 100 | 2.69 | 3.83 | 4.41 | 4.36 | 4.30 | 4.24 | 4.18 | 4.13 |

Tab. 2.5.2



IL SEGRETARIO COMUNALE

R



IL SINDACO

DI RITORNO  
(anni)



IL SEGRETARIO COMUNALE

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 67.5 deg (416/5/I)

|     | VELOCITA'<br>(nodi) |      |      |      |      |      |      |      |
|-----|---------------------|------|------|------|------|------|------|------|
|     | 30                  | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
| 3   | 1.66                | 1.53 | 1.42 | 1.34 | 1.28 | 1.22 | 1.18 | 1.14 |
| 5   | 2.18                | 2.04 | 1.91 | 1.80 | 1.71 | 1.64 | 1.58 | 1.53 |
| 10  | 2.55                | 2.75 | 2.59 | 2.45 | 2.33 | 2.23 | 2.15 | 2.08 |
| 15  | 2.55                | 3.22 | 3.04 | 2.88 | 2.74 | 2.63 | 2.53 | 2.45 |
| 20  | 2.55                | 3.54 | 3.36 | 3.18 | 3.04 | 2.91 | 2.81 | 2.71 |
| 30  | 2.55                | 3.63 | 3.82 | 3.63 | 3.46 | 3.32 | 3.20 | 3.10 |
| 40  | 2.55                | 3.63 | 4.17 | 3.97 | 3.79 | 3.64 | 3.51 | 3.40 |
| 50  | 2.55                | 3.63 | 4.46 | 4.25 | 4.06 | 3.89 | 3.75 | 3.63 |
| 75  | 2.55                | 3.63 | 4.74 | 4.76 | 4.56 | 4.38 | 4.22 | 4.08 |
| 100 | 2.55                | 3.63 | 4.74 | 5.13 | 4.92 | 4.72 | 4.56 | 4.41 |

Tab. 2.5.3

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA E (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.96 | 1.76 | 1.60 | 1.47 | 1.37 | 1.29 | 1.22 | 1.16 |
| 5   | 2.40 | 2.37 | 2.16 | 1.99 | 1.86 | 1.75 | 1.65 | 1.57 |
| 10  | 2.40 | 3.20 | 2.95 | 2.73 | 2.55 | 2.40 | 2.27 | 2.16 |
| 15  | 2.40 | 3.40 | 3.47 | 3.22 | 3.01 | 2.83 | 2.69 | 2.56 |
| 20  | 2.40 | 3.40 | 3.84 | 3.57 | 3.34 | 3.15 | 2.98 | 2.84 |
| 30  | 2.40 | 3.40 | 4.38 | 4.08 | 3.83 | 3.60 | 3.42 | 3.26 |
| 40  | 2.40 | 3.40 | 4.44 | 4.48 | 4.20 | 3.96 | 3.75 | 3.58 |
| 50  | 2.40 | 3.40 | 4.44 | 4.79 | 4.50 | 4.24 | 4.02 | 3.84 |
| 75  | 2.40 | 3.40 | 4.44 | 5.38 | 5.06 | 4.78 | 4.54 | 4.32 |
| 100 | 2.40 | 3.40 | 4.44 | 5.51 | 5.47 | 5.17 | 4.91 | 4.68 |

Tab. 2.5.4

IL SINDACO



IL SEGRETARIO COMUNALE



IL SINDACO

T. DI RITORNO  
(anni)

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 112.5 deg (416/5/1)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 2.17 | 2.02 | 1.88 | 1.76 | 1.67 | 1.59 | 1.52 | 1.46 |
| 5   | 2.38 | 2.60 | 2.43 | 2.28 | 2.16 | 2.05 | 1.97 | 1.89 |
| 10  | 2.38 | 3.38 | 3.18 | 2.99 | 2.83 | 2.70 | 2.58 | 2.49 |
| 15  | 2.38 | 3.38 | 3.67 | 3.46 | 3.28 | 3.12 | 2.99 | 2.87 |
| 20  | 2.38 | 3.38 | 4.01 | 3.79 | 3.59 | 3.42 | 3.27 | 3.15 |
| 30  | 2.38 | 3.38 | 4.42 | 4.26 | 4.04 | 3.85 | 3.69 | 3.54 |
| 40  | 2.38 | 3.38 | 4.42 | 4.62 | 4.38 | 4.18 | 4.00 | 3.85 |
| 50  | 2.38 | 3.38 | 4.42 | 4.90 | 4.66 | 4.44 | 4.25 | 4.09 |
| 75  | 2.38 | 3.38 | 4.42 | 5.43 | 5.17 | 4.93 | 4.72 | 4.54 |
| 100 | 2.38 | 3.38 | 4.42 | 5.48 | 5.54 | 5.29 | 5.06 | 4.87 |

Tab. 2.5.5



IL SEGRETARIO COMUNALE

*[Handwritten signature]*

ALTEZZA (M) DELL'ONDA SIGNIFICATIVA DA S (416/5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|------|------|------|------|------|------|------|------|
| 3   | 1.81 | 1.88 | 1.91 | 1.92 | 1.94 | 1.95 | 1.96 | 1.96 |
| 5   | 1.81 | 2.14 | 2.18 | 2.20 | 2.22 | 2.23 | 2.24 | 2.25 |
| 10  | 1.81 | 2.46 | 2.51 | 2.53 | 2.55 | 2.57 | 2.58 | 2.59 |
| 15  | 1.81 | 2.56 | 2.70 | 2.73 | 2.75 | 2.77 | 2.78 | 2.79 |
| 20  | 1.81 | 2.56 | 2.83 | 2.86 | 2.88 | 2.90 | 2.92 | 2.93 |
| 30  | 1.81 | 2.56 | 3.00 | 3.04 | 3.07 | 3.09 | 3.10 | 3.11 |
| 40  | 1.81 | 2.56 | 3.13 | 3.17 | 3.20 | 3.22 | 3.23 | 3.25 |
| 50  | 1.81 | 2.56 | 3.22 | 3.27 | 3.30 | 3.32 | 3.34 | 3.35 |
| 75  | 1.81 | 2.56 | 3.33 | 3.45 | 3.48 | 3.50 | 3.52 | 3.54 |
| 100 | 1.81 | 2.56 | 3.33 | 3.57 | 3.60 | 3.63 | 3.65 | 3.66 |

Tab. 2.5.6

IL SINDACO



IL SEGRETARIO COMUNALE



- Valori dell'altezza d'onda  $H_{1/n}$  in funzione  
di n per  $H_{1/3} = 1$

| n   | $H_{1/n}$ |
|-----|-----------|
| 200 | 1,768     |
| 100 | 1,666     |
| 50  | 1,558     |
| 20  | 1,403     |
| 10  | 1,271     |
| 5   | 1,124     |
| 4   | 1,071     |
| 3   | 1,000     |
| 2   | 0,887     |
| 1   | 0,626     |

Tab. 2.4.1

IL SINDACO



IL SEGRETARIO COMUNALE

R

- Valori dell'altezza d'onda  $H_N$  in funzione  
di  $N$  per  $H_{1/3} = 1$

| $N$ | $H_N$ | $n$    | $H_N$ |
|-----|-------|--------|-------|
| 1   | 0,499 | 500    | 1,772 |
| 2   | 0,727 | 1000   | 1,866 |
| 5   | 0,965 | 2000   | 1,956 |
| 10  | 1,118 | 5000   | 2,069 |
| 20  | 1,256 | 10000  | 2,150 |
| 50  | 1,419 | 20000  | 2,228 |
| 100 | 1,534 | 50000  | 2,328 |
| 200 | 1,641 | 100000 | 2,401 |

Tab. 2.4.2

IL SINDACO



IL SEGRETARIO COMUNALE

R



DURATA (h) DEL VENTO DA 67.5 deg - STAZIONE DI STROMBOLI (5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40    | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|-------|-------|------|------|------|------|------|------|
| 3   | 2.76  | 1.09  | 0.53 | 0.29 | 0.18 | 0.12 | 0.08 | 0.06 |
| 5   | 4.71  | 1.85  | 0.90 | 0.50 | 0.31 | 0.20 | 0.14 | 0.10 |
| 10  | 8.25  | 3.24  | 1.57 | 0.88 | 0.53 | 0.35 | 0.24 | 0.17 |
| 15  | 11.10 | 4.35  | 2.11 | 1.18 | 0.72 | 0.47 | 0.32 | 0.23 |
| 20  | 13.38 | 5.24  | 2.55 | 1.42 | 0.86 | 0.56 | 0.39 | 0.28 |
| 30  | 17.03 | 6.67  | 3.24 | 1.80 | 1.10 | 0.72 | 0.49 | 0.35 |
| 40  | 20.12 | 7.88  | 3.82 | 2.12 | 1.30 | 0.85 | 0.58 | 0.42 |
| 50  | 22.77 | 8.91  | 4.32 | 2.40 | 1.46 | 0.96 | 0.66 | 0.47 |
| 75  | 28.18 | 11.02 | 5.35 | 2.97 | 1.81 | 1.18 | 0.81 | 0.58 |
| 100 | 32.45 | 12.69 | 6.15 | 3.42 | 2.08 | 1.36 | 0.93 | 0.67 |

Tab. 1.4.3

IL SINDACO



IL SEGRETARIO COMUNALE

DURATA (h) DEL VENTO DA E - STAZIONE DI STROMBOLI (5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40    | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|-------|-------|------|------|------|------|------|------|
| 3   | 3.80  | 1.41  | 0.66 | 0.35 | 0.21 | 0.13 | 0.09 | 0.06 |
| 5   | 6.56  | 2.44  | 1.13 | 0.60 | 0.35 | 0.22 | 0.15 | 0.10 |
| 10  | 11.61 | 4.31  | 2.00 | 1.07 | 0.63 | 0.40 | 0.26 | 0.18 |
| 15  | 15.71 | 5.84  | 2.71 | 1.45 | 0.85 | 0.54 | 0.36 | 0.25 |
| 20  | 18.99 | 7.06  | 3.27 | 1.75 | 1.03 | 0.65 | 0.43 | 0.30 |
| 30  | 24.29 | 9.02  | 4.19 | 2.24 | 1.31 | 0.83 | 0.55 | 0.39 |
| 40  | 28.78 | 10.69 | 4.96 | 2.65 | 1.56 | 0.98 | 0.66 | 0.46 |
| 50  | 32.65 | 12.13 | 5.63 | 3.00 | 1.77 | 1.12 | 0.74 | 0.52 |
| 75  | 40.55 | 15.06 | 6.99 | 3.73 | 2.20 | 1.39 | 0.92 | 0.64 |
| 100 | 46.80 | 17.39 | 8.07 | 4.31 | 2.53 | 1.60 | 1.07 | 0.74 |

Tab. 1.4.4

IL SINDACO



IL SEGRETARIO COMUNALE

R



IL SINDACO

T. DI RITORNO  
(anni)



IL SEGRETARIO COMUNALE

DURATA (h) DEL VENTO DA 112.5 deg - STAZIONE DI STROMBOLI (5/I)

|     | VELOCITA'<br>(nodi) |       |      |      |      |      |      |      |
|-----|---------------------|-------|------|------|------|------|------|------|
|     | 30                  | 40    | 50   | 60   | 70   | 80   | 90   | 100  |
| 3   | 4.67                | 1.82  | 0.88 | 0.48 | 0.29 | 0.19 | 0.13 | 0.09 |
| 5   | 7.50                | 2.91  | 1.40 | 0.77 | 0.47 | 0.30 | 0.20 | 0.14 |
| 10  | 12.38               | 4.80  | 2.30 | 1.26 | 0.76 | 0.49 | 0.33 | 0.24 |
| 15  | 16.17               | 6.26  | 3.00 | 1.65 | 0.99 | 0.64 | 0.43 | 0.31 |
| 20  | 19.13               | 7.40  | 3.54 | 1.94 | 1.17 | 0.75 | 0.51 | 0.36 |
| 30  | 23.80               | 9.20  | 4.40 | 2.41 | 1.45 | 0.94 | 0.63 | 0.45 |
| 40  | 27.70               | 10.69 | 5.11 | 2.80 | 1.69 | 1.09 | 0.74 | 0.52 |
| 50  | 30.99               | 11.96 | 5.72 | 3.13 | 1.88 | 1.21 | 0.82 | 0.58 |
| 75  | 37.63               | 14.50 | 6.93 | 3.79 | 2.28 | 1.47 | 1.00 | 0.70 |
| 100 | 42.80               | 16.49 | 7.87 | 4.31 | 2.59 | 1.67 | 1.13 | 0.80 |

Tab. 1.4.5

DURATA (h) DEL VENTO DA S - STAZIONE DI STROMBOLI (5/I)

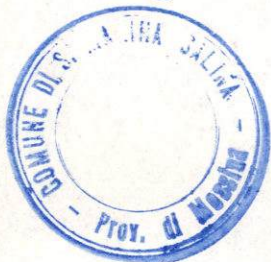
T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|-------|------|------|------|------|------|------|------|
| 3   | 3.29  | 1.59 | 0.90 | 0.57 | 0.38 | 0.27 | 0.20 | 0.15 |
| 5   | 4.20  | 2.02 | 1.15 | 0.72 | 0.49 | 0.35 | 0.26 | 0.20 |
| 10  | 5.43  | 2.61 | 1.48 | 0.93 | 0.63 | 0.45 | 0.33 | 0.26 |
| 15  | 6.21  | 2.99 | 1.70 | 1.07 | 0.72 | 0.52 | 0.38 | 0.29 |
| 20  | 6.76  | 3.26 | 1.85 | 1.16 | 0.79 | 0.56 | 0.42 | 0.32 |
| 30  | 7.55  | 3.64 | 2.07 | 1.30 | 0.88 | 0.63 | 0.46 | 0.36 |
| 40  | 8.15  | 3.93 | 2.23 | 1.40 | 0.95 | 0.68 | 0.50 | 0.38 |
| 50  | 8.62  | 4.16 | 2.36 | 1.48 | 1.00 | 0.72 | 0.53 | 0.41 |
| 75  | 9.50  | 4.58 | 2.60 | 1.64 | 1.11 | 0.79 | 0.58 | 0.45 |
| 100 | 10.14 | 4.88 | 2.77 | 1.74 | 1.18 | 0.84 | 0.62 | 0.48 |

Tab. 1.4.6

IL SINDACO



IL SEGRETARIO COMUNALE



TABELLE DEL CAPITOLO 2

IL SINDACO



IL SEGRETARIO COMUNALE



TABELLE DEL CAPITOLO 1

IL SINDACO

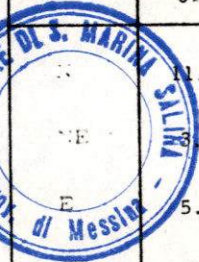


IL SEGRETARIO COMUNALE

R



FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di gennaio



| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 11.6                         | 0.1   | ---   | ---  |
| NE        | 8.5                          | ---   | ---   | ---  |
| E         | 5.9                          | 0.1   | ---   | ---  |
| SE        | 9.3                          | 0.1   | ---   | ---  |
| S         | 14.2                         | ---   | ---   | ---  |
| SW        | 5.8                          | ---   | ---   | ---  |
| W         | 15.0                         | ---   | ---   | ---  |
| NW        | 17.1                         | ---   | ---   | ---  |

Tab. 1.2.1

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di febbraio

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 7.6                          | 0.1   | ---   | ---  |
| NE        | 2.9                          | ---   | ---   | ---  |
| E         | 4.3                          | ---   | ---   | ---  |
| SE        | 7.6                          | ---   | ---   | ---  |
| S         | 15.4                         | 0.1   | ---   | ---  |
| SW        | 5.4                          | ---   | ---   | ---  |
| W         | 18.1                         | 0.2   | ---   | ---  |
| NW        | 19.5                         | ---   | ---   | ---  |

Tab. 1.2.2

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE

STAZIONE DI STROMBOLI

Mese di marzo

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 8.8                          | 0.1   | ----  | ---- |
| NE        | 2.2                          | ----  | ----  | ---- |
| E         | 5.5                          | 0.2   | ----  | ---- |
| SE        | 10.5                         | 0.1   | ----  | ---- |
| S         | 13.0                         | ----  | ----  | ---- |
| SW        | 4.0                          | ----  | ----  | ---- |
| W         | 15.7                         | ----  | ----  | ---- |
| NW        | 20.0                         | 0.1   | ----  | ---- |

Tab. 1.2.3

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE

STAZIONE DI STROMBOLI

Mese di aprile

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 6.7                          | ----  | ----  | ---- |
| NE        | 1.2                          | ----  | ----  | ---- |
| E         | 4.2                          | ----  | ----  | ---- |
| SE        | 9.0                          | ----  | ----  | ---- |
| S         | 14.9                         | ----  | ----  | ---- |
| SW        | 3.0                          | ----  | ----  | ---- |
| W         | 16.9                         | ----  | ----  | ---- |
| NW        | 21.9                         | ----  | ----  | ---- |

Tab. 1.2.4



FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di maggio

**IL SINDACO**

**IL SEGRETARIO COMUNALE**

COMUNE DI S. MARIA SALINA  
- Prov. di Messina

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 6.0                          | ---   | ---   | ---  |
| NE        | 1.2                          | ---   | ---   | ---  |
| E         | 2.5                          | ---   | ---   | ---  |
| SE        | 7.0                          | ---   | ---   | ---  |
| S         | 11.7                         | ---   | ---   | ---  |
| SW        | 1.6                          | ---   | ---   | ---  |
| W         | 14.7                         | ---   | ---   | ---  |
| NW        | 24.5                         | ---   | ---   | ---  |

Tab. 1.2.5

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di giugno

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 8.1                          | ---   | ---   | ---  |
| NE        | 1.3                          | ---   | ---   | ---  |
| E         | 2.3                          | ---   | ---   | ---  |
| SE        | 5.0                          | ---   | ---   | ---  |
| S         | 9.7                          | ---   | ---   | ---  |
| SW        | 1.3                          | ---   | ---   | ---  |
| W         | 12.3                         | ---   | ---   | ---  |
| NW        | 27.9                         | ---   | ---   | ---  |

Tab. 1.2.6

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di luglio

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 11.1                         | ----  | ----  | ---- |
| NE        | 1.3                          | ----  | ----  | ---- |
| E         | 1.1                          | ----  | ----  | ---- |
| SE        | 4.0                          | ----  | ----  | ---- |
| S         | 4.7                          | ----  | ----  | ---- |
| SW        | 0.9                          | ----  | ----  | ---- |
| W         | 9.5                          | ----  | ----  | ---- |
| NW        | 35.7                         | ----  | ----  | ---- |

Tab. 1.2.7

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di agosto

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 11.3                         | ----  | ----  | ---- |
| NE        | 1.2                          | ----  | ----  | ---- |
| E         | 1.5                          | ----  | ----  | ---- |
| SE        | 4.4                          | ----  | ----  | ---- |
| S         | 6.3                          | ----  | ----  | ---- |
| SW        | 1.1                          | ----  | ----  | ---- |
| W         | 8.5                          | ----  | ----  | ---- |
| NW        | 32.7                         | ----  | ----  | ---- |

Tab. 1.2.8



FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di settembre

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 11.0                         | ---   | ---   | ---  |
| NE        | 2.6                          | ---   | ---   | ---  |
| E         | 3.6                          | ---   | ---   | ---  |
| SE        | 7.4                          | ---   | ---   | ---  |
| S         | 9.3                          | ---   | ---   | ---  |
| SW        | 1.6                          | ---   | ---   | ---  |
| W         | 6.2                          | ---   | ---   | ---  |
| NW        | 21.1                         | ---   | ---   | ---  |

Tab. 1.2.9

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di ottobre

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 8.0                          | ---   | ---   | ---  |
| NE        | 3.8                          | 0.1   | ---   | ---  |
| E         | 8.8                          | 0.1   | ---   | ---  |
| SE        | 10.4                         | 0.1   | ---   | ---  |
| S         | 12.0                         | ---   | ---   | ---  |
| SW        | 2.9                          | ---   | ---   | ---  |
| W         | 9.0                          | ---   | ---   | ---  |
| NW        | 14.7                         | ---   | ---   | ---  |

Tab. 1.2.10

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di novembre

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 6.3                          | ----  | ----  | ---- |
| NE        | 2.2                          | ----  | ----  | ---- |
| E         | 6.3                          | ----  | ----  | ---- |
| SE        | 9.0                          | 0.1   | ----  | ---- |
| S         | 16.7                         | ----  | ----  | ---- |
| SW        | 5.1                          | ----  | ----  | ---- |
| W         | 14.2                         | ----  | ----  | ---- |
| NW        | 16.8                         | ----  | ----  | ---- |

Tab. 1.2.11

FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
Mese di dicembre

| Direzioni | CAMPI DI VELOCITA'<br>(NODI) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| N         | 8.9                          | 0.1   | ----  | ---- |
| NE        | 3.0                          | ----  | ----  | ---- |
| E         | 7.2                          | 0.4   | ----  | ---- |
| SE        | 10.7                         | 0.3   | 0.1   | ---- |
| S         | 13.8                         | ----  | ----  | ---- |
| SW        | 6.7                          | ----  | ----  | ---- |
| W         | 14.8                         | ----  | ----  | ---- |
| NW        | 16.7                         | 0.1   | ----  | ---- |

Tab. 1.2.12



FREQUENZA IN PERCENTO CALCOLATA  
SU OTTO OSSERVAZIONI GIORNALIERE  
STAZIONE DI STROMBOLI  
ANNO

| Direzioni | CAMPI DI VELOCITA'<br>(NODE) |       |       |      |
|-----------|------------------------------|-------|-------|------|
|           | 01-30                        | 31-40 | 41-50 | > 50 |
| NE        | 8.8                          | ---   | ---   | ---  |
| E         | 2.2                          | ---   | ---   | ---  |
| SE        | 4.4                          | 0.1   | ---   | ---  |
| S         | 7.9                          | 0.1   | ---   | ---  |
| SW        | 11.8                         | ---   | ---   | ---  |
| W         | 3.3                          | ---   | ---   | ---  |
| NW        | 12.9                         | ---   | ---   | ---  |
|           | 22.4                         | ---   | ---   | ---  |

Tab. 1.2.13



IL SINDACO  
IL SEGRETARIO COMUNALE

7

IL SINDACO



IL SEGRETARIO COMUNALE

DURATA (h) DEL VENTO DA 22.5 deg - STAZIONE DI STROMBOLI (S/I)

| T. DI RITORNO<br>(anni) | VELOCITA'<br>(nodi) |      |      |      |      |      |      |      |
|-------------------------|---------------------|------|------|------|------|------|------|------|
|                         | 30                  | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
| 3                       | 3.16                | 1.13 | 0.52 | 0.28 | 0.16 | 0.10 | 0.07 | 0.05 |
| 5                       | 5.01                | 1.80 | 0.83 | 0.44 | 0.26 | 0.17 | 0.11 | 0.08 |
| 10                      | 8.12                | 2.94 | 1.36 | 0.73 | 0.43 | 0.28 | 0.19 | 0.13 |
| 15                      | 10.50               | 3.81 | 1.76 | 0.95 | 0.56 | 0.36 | 0.25 | 0.17 |
| 20                      | 12.33               | 4.48 | 2.07 | 1.12 | 0.67 | 0.43 | 0.29 | 0.21 |
| 30                      | 15.20               | 5.54 | 2.57 | 1.38 | 0.83 | 0.53 | 0.36 | 0.26 |
| 40                      | 17.56               | 6.41 | 2.97 | 1.60 | 0.96 | 0.62 | 0.42 | 0.30 |
| 50                      | 19.55               | 7.14 | 3.32 | 1.79 | 1.07 | 0.69 | 0.47 | 0.33 |
| 75                      | 23.51               | 8.61 | 4.00 | 2.16 | 1.30 | 0.84 | 0.57 | 0.40 |
| 100                     | 26.57               | 9.74 | 4.54 | 2.45 | 1.47 | 0.95 | 0.65 | 0.46 |

Tab. 1.4.1



DURATA (h) DEL VENTO DA NE - STAZIONE DI STROMBOLI (5/I)

T. DI RITORNO  
(anni)

VELOCITA'  
(nodi)

|     | 30    | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
|-----|-------|------|------|------|------|------|------|------|
| 3   | 1.72  | 0.76 | 0.40 | 0.24 | 0.15 | 0.11 | 0.08 | 0.06 |
| 5   | 2.86  | 1.26 | 0.67 | 0.40 | 0.26 | 0.18 | 0.13 | 0.09 |
| 10  | 4.89  | 2.16 | 1.15 | 0.68 | 0.44 | 0.30 | 0.22 | 0.16 |
| 15  | 6.49  | 2.87 | 1.52 | 0.91 | 0.58 | 0.40 | 0.29 | 0.21 |
| 20  | 7.76  | 3.43 | 1.82 | 1.08 | 0.70 | 0.48 | 0.34 | 0.25 |
| 30  | 9.77  | 4.32 | 2.29 | 1.36 | 0.88 | 0.60 | 0.43 | 0.32 |
| 40  | 11.46 | 5.06 | 2.69 | 1.60 | 1.03 | 0.71 | 0.51 | 0.37 |
| 50  | 12.90 | 5.70 | 3.02 | 1.80 | 1.16 | 0.79 | 0.57 | 0.42 |
| 75  | 15.81 | 6.98 | 3.70 | 2.21 | 1.42 | 0.97 | 0.70 | 0.52 |
| 100 | 18.09 | 7.99 | 4.24 | 2.52 | 1.63 | 1.11 | 0.80 | 0.59 |

Tab. 1.4.2



IL SEGRETARIO COMUNALE

IL SINDACO





IL SEGRETARIO COMUNALE



IL SINDACO

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IL SEGRETARIO COMUNALE

R



# CAPITOLO 1

|            |   |                                 |           |
|------------|---|---------------------------------|-----------|
| Tab. 1.2.1 | - | Frequenze del vento nel mese di | Gennaio   |
| " 1.2.2    | - | " " " " "                       | Febbraio  |
| " 1.2.3    | - | " " " " "                       | Marzo     |
| " 1.2.4    | - | " " " " "                       | Aprile    |
| " 1.2.5    | - | " " " " "                       | Maggio    |
| " 1.2.6    | - | " " " " "                       | Giugno    |
| " 1.2.7    | - | " " " " "                       | Luglio    |
| " 1.2.8    | - | " " " " "                       | Agosto    |
| " 1.2.9    | - | " " " " "                       | Settembre |
| " 1.2.10   | - | " " " " "                       | Ottobre   |
| " 1.2.11   | - | " " " " "                       | Novembre  |
| " 1.2.12   | - | " " " " "                       | Dicembre  |
| " 1.2.13   | - | " " " annue                     |           |
| " 1.4.1    | - | Durata del vento da             | 22°,5     |
| " 1.4.2    | - | " " " " "                       | 45°       |
| " 1.4.3    | - | " " " " "                       | 67°,5     |
| " 1.4.4    | - | " " " " "                       | 90°       |
| " 1.4.5    | - | " " " " "                       | 112°,5    |
| " 1.4.6    | - | " " " " "                       | 180°      |

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IL SEGRETARIO COMUNALE

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## CAPITOLO 2

|            |   |                                    |      |   |  |  |  |
|------------|---|------------------------------------|------|---|--|--|--|
| Tab. 2.4.1 | - | Altezza d'onda $H_{1/n}$           |      |   |  |  |  |
| " 2.4.2    | - | " " $H_n$                          |      |   |  |  |  |
| " 2.5.1    | - | Altezza dell'onda significativa da | 22°  | 5 |  |  |  |
| " 2.5.2    | - | " " " " "                          | 45°  |   |  |  |  |
| " 2.5.3    | - | " " " " "                          | 67°  | 5 |  |  |  |
| " 2.5.4    | - | " " " " "                          | 90°  |   |  |  |  |
| " 2.5.5    | - | " " " " "                          | 112° | 5 |  |  |  |
| " 2.5.6    | - | " " " " "                          | 180° |   |  |  |  |
| " 2.5.7    | - | Periodo dell'onda significativa da | 22°  | 5 |  |  |  |
| " 2.5.8    | - | " " " " "                          | 45°  |   |  |  |  |
| " 2.5.9    | - | " " " " "                          | 67°  | 5 |  |  |  |
| " 2.5.10   | - | " " " " "                          | 90°  |   |  |  |  |
| " 2.5.11   | - | " " " " "                          | 112° | 5 |  |  |  |
| " 2.5.12   | - | " " " " "                          | 180° |   |  |  |  |

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### CAPITOLO 3

|            |   |   |        |
|------------|---|---|--------|
| Tab. 3.5.1 | - | Altezze sottocosta dell'onda significativa da   | 22°,5  |
| " 3.5.2    | - | " " " " " "                                     | 45°    |
| " 3.5.3    | - | " " " " " "                                     | 67°,5  |
| " 3.5.4    | - | " " " " " "                                     | 90°    |
| " 3.5.5    | - | " " " " " "                                     | 112°,5 |
| " 3.5.6    | - | " " " " " "                                     | 180°   |
| " 3.5.7    | - | Direzioni sottocosta dell'onda significativa da | 22°,5  |
| " 3.5.8    | - | " " " " " "                                     | 45°    |
| " 3.5.9    | - | " " " " " "                                     | 67°,5  |
| " 3.5.10   | - | " " " " " "                                     | 90°    |
| " 3.5.11   | - | " " " " " "                                     | 112°,5 |
| " 3.5.12   | - | " " " " " "                                     | 18°    |

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IL SEGRETARIO COMUNALE

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#### CAPITOLO 4

|       |          |                         |                     |      |      |
|-------|----------|-------------------------|---------------------|------|------|
| Tabb. | 4.5.1.1  | - 4.5.1.13              | - Frangimento per t | = 5  | anni |
| "     | 4.5.1.14 | - 4.5.1.25              | - " "r              | = 10 | "    |
| "     | 4.5.1.26 | - 4.5.1.37              | - " "               | = 20 | "    |
| "     | 4.5.1.38 | - 4.5.1.49              | - " "               | = 50 | "    |
| "     | 4.5.2    | - Fascia di frangimento |                     |      |      |

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