

PROGETTO N.

DATA

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AUTOSTRADA TORINO SAVONA S.p.A.

gruppo

autostrade // per l'Italia

AUTOSTRADA TORINO – SAVONA S.p.A.

Corso Trieste nr. 170 – 10024 Moncalieri (TO)

AUTOSTRADA A6
TORINO – SAVONA

ADEGUAMENTO SVINCOLO STAZIONE DI NIELLA TANARO

PROGETTO DEFINITIVO

PARTE STRADALE
SEZIONI TRASVERSALI RAMPA B

spea **ingegneria
autostrade europea**

IL PROGETTISTA :

Ing. Fulvio DI TADDEO
Ord. Ingg. Teramo N. 368

IL DIRETTORE TECNICO :

Ing. Giampaolo NEBBIA
Ord. Ingg. Roma N. 12028

| RIFERIMENTO ELABORATO | | | | | | | | | | DATA: | | REVISIONE | |
|-----------------------|------------|----------|---------|------|-------|----------------|-----|------|-------|-------------|--|-----------|--|
| UNITA' | DIRETTORIO | | | | | FILE | | | n. | data | | | |
| | codice | commessa | N.Prog. | Fase | serie | n. progressivo | bis | rev. | | | | | |
| PCM | 5 | 701 | 0843 | PD | ST | 012 | - | 1 | 1 | APRILE 2011 | | | |
| SCALA: | | | | | | | | | 1:200 | | | | |

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|-------------|---------------------|-------------|--|
| REDATTO: | | CONSULENZA: | M&B Progettazioni Ambiente e Trasporti |
| PROGETTATO: | Ing. Gianluca GALLI | APPROVATO: | Ing. Fulvio Di TADDEO |

| | | |
|--|-------------------------|---|
| CAPO COMMESSA | VISTO DELLA COMMITTENTE | ats AUTOSTRADA TORINO SAVONA S.p.A. |
| Ing. Gianluca GALLI O.l. Roma n°23243 | | |

PROFILO RAMPA B

SEZIONE 3

PROGRESSIVA 30.63

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 84.12 |
| a | USURA DRENANTE | m | 7.32 |
| b | BINDER | m | 7.32 |
| c | BASE | m | 7.63 |
| d | MISTO CEMENTATO | m | 7.83 |
| e | MISTO GRANULARE | m | 8.04 |
| f | TERRENO VEGETALE | m | 6.02 |
| g | SCOTICO | m | 16.92 |
| i | ANTICAPILLARE | m | 13.64 |

Rilevato esistente da eliminare

410.00

200

200

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| PROGRESSIVE TERRENO | 419.04 | 419.20 | 423.30 | 424.81 | 424.83 | 424.88 | 424.95 | 425.00 | 424.98 | 424.90 | 422.76 | 418.85 | 418.86 | 418.98 | 419.02 | 419.04 | 419.06 | 419.05 | 419.26 | 419.30 | 419.35 | 419.35 | 419.44 | 419.35 | 418.88 | 419.37 | 419.46 | 419.45 | 419.51 | 419.52 | 419.51 | | |
| PARZIALI TERRENO | | 3.14 | 8.73 | 3.22 | 0.27 | 0.47 | 4.35 | 2.74 | 0.25 | 0.55 | 4.45 | 7.85 | 0.98 | 5.33 | 1.94 | 10.34 | 2.74 | 3.70 | 6.14 | 5.01 | 6.32 | 1.31 | 0.28 | 0.72 | 0.91 | 0.28 | 3.50 | 4.69 | 8.19 | 5.94 | 5.45 | 19.58 | 20.00 |
| QUOTE TERRENO | 419.04 | 419.20 | 423.30 | 424.81 | 424.83 | 424.88 | 424.95 | 425.00 | 424.98 | 424.90 | 422.76 | 418.85 | 418.86 | 418.98 | 419.02 | 419.04 | 419.06 | 419.05 | 419.26 | 419.30 | 419.35 | 419.35 | 419.44 | 419.35 | 418.88 | 419.37 | 419.46 | 419.45 | 419.51 | 419.52 | 419.51 | | |
| PROGRESSIVE PROGETTO | | | | | | | | | | | | | | 418.94 | 421.38 | 421.38 | | | | | | | | | | | | | | | | | |
| PARZIALI PROGETTO | | | | | | | | | | | | | | 3.66 | 2.00 | 7.50 | 1.50 | 1.70 | 4.00 | 2.47 | 1.82 | 4.00 | 1.50 | 1.50 | 3.76 | | | | | | | | |
| QUOTE PROGETTO | | | | | | | | | | | | | | 418.94 | 421.38 | 421.38 | | | | | | | | | | | | | | | | | |

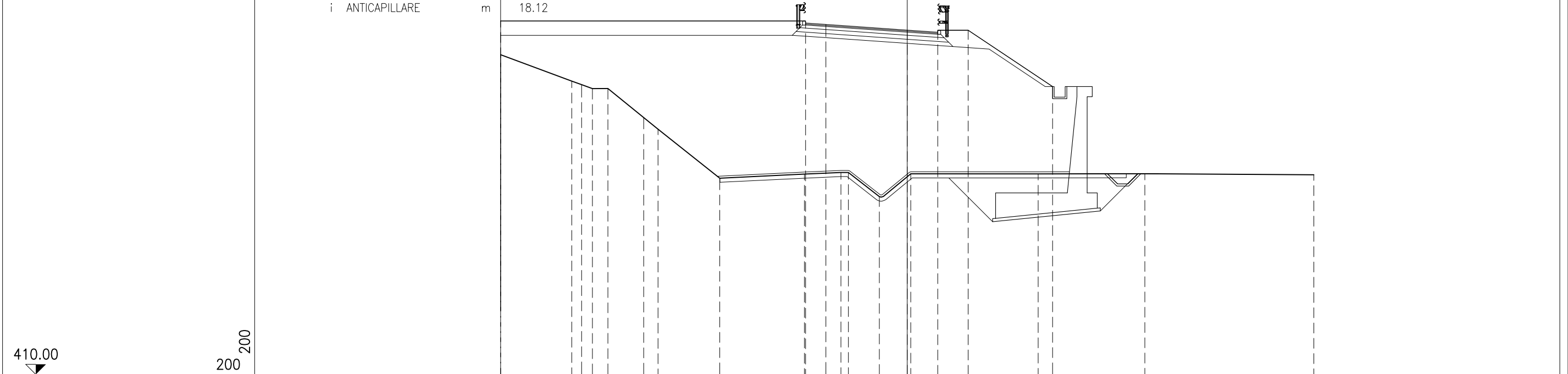
RAMPA C SEZ. 16

PROFILO RAMPA B

SEZIONE 4

PROGRESSIVA 50.00

| | | | |
|---|------------------|----|--------|
| A | RILEVATO | mq | 144.92 |
| a | USURA DRENANTE | mm | 6.51 |
| b | BINDER | mm | 6.51 |
| c | BASE | mm | 7.11 |
| d | MISTO CEMENTATO | mm | 7.52 |
| e | MISTO GRANULARE | mm | 7.92 |
| f | TERRENO VEGETALE | mm | 21.48 |
| g | SCOTICO | mm | 19.99 |
| i | ANTICAPILLARE | m | 18.12 |



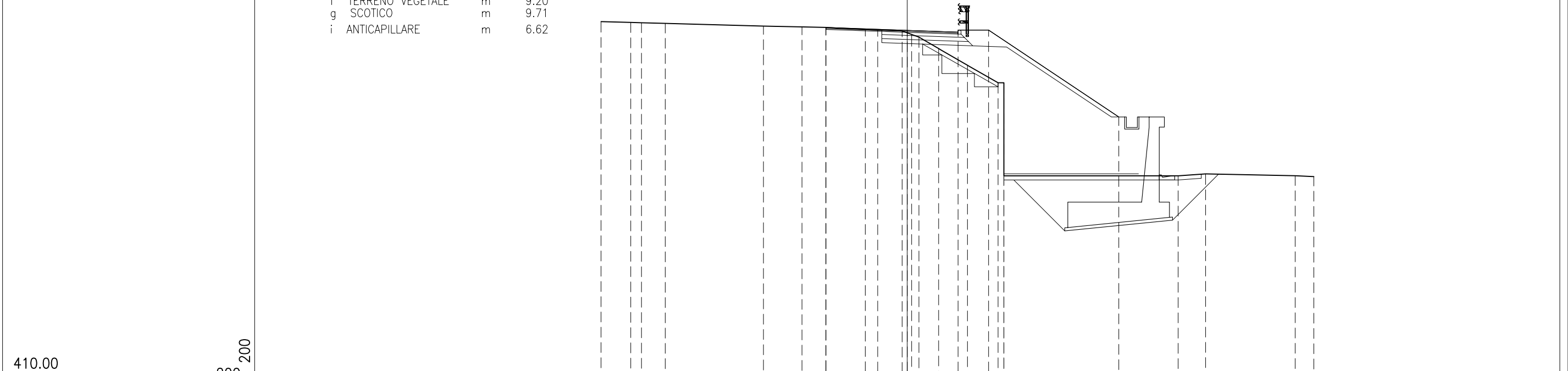
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|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROGRESSIVE TERRENO | 410.00 | 200 | 200 | 20.00 | 16.50 | 16.02 | 15.48 | 14.72 | 12.96 | 12.26 | 9.22 | 5.06 | 3.26 | 2.89 | 1.37 | 0.17 | 6.44 | 11.69 | 20.00 |
| PARZIALI TERRENO | | | | 3.50 | 0.48 | 0.54 | 0.76 | 1.76 | 0.70 | 3.04 | 4.16 | 1.80 | 0.37 | 1.52 | 1.54 | 6.27 | 5.25 | 8.31 | |
| QUOTE TERRENO | 427.37 | 425.71 | 424.42 | 424.24 | 424.04 | 424.05 | 422.62 | 422.05 | 419.64 | 419.84 | 419.93 | 419.92 | 418.74 | 419.86 | 419.86 | 419.86 | 419.86 | 419.86 | 419.81 |
| PROGRESSIVE PROGETTO | | | | | | | | | | | | 5.00 | 4.00 | 0.00 | 1.50 | 3.00 | 7.15 | | |
| PARZIALI PROGETTO | | | | | | | 15.00 | | | | | 1.00 | 4.00 | 1.50 | 1.50 | 4.15 | | | |
| QUOTE PROGETTO | 427.37 | 427.20 | 426.92 | 426.91 | 426.91 | 424.15 | | | | | | 427.27 | 427.20 | 426.92 | 426.91 | 426.91 | 424.15 | | |

PROFILO RAMPA B

SEZIONE 6

PROGRESSIVA 90.00

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 31.27 |
| B | SCAVO | mq | 1.11 |
| a | USURA DRENANTE | m | 6.50 |
| b | BINDER | m | 6.50 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.27 |
| e | MISTO GRANULARE | m | 4.47 |
| f | TERRENO VEGETALE | m | 9.20 |
| g | SCOTICO | m | 9.71 |
| i | ANTICAPILLARE | m | 6.62 |



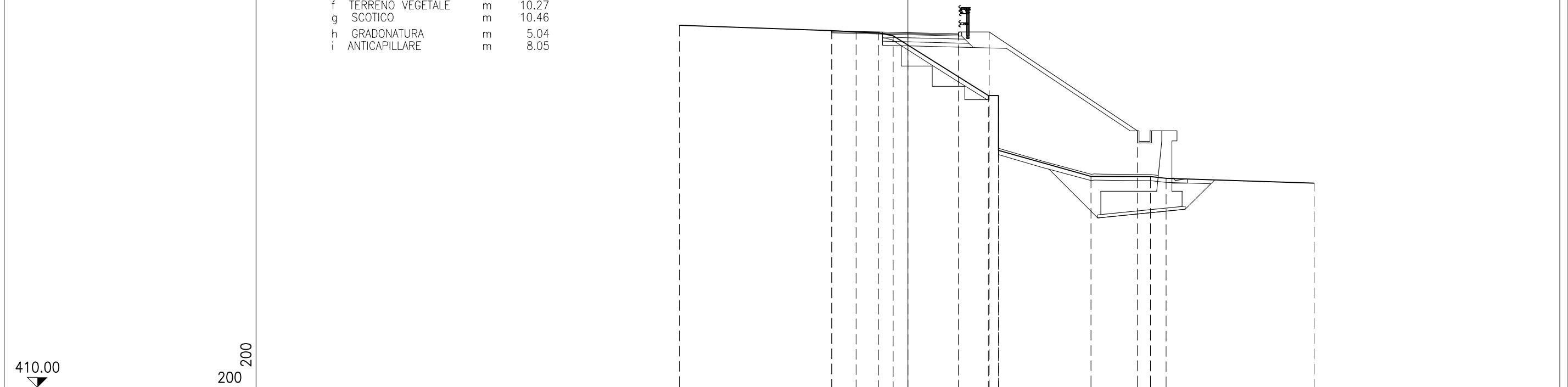
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|----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROGRESSIVE TERRENO | | 427.80 | 427.76 | 427.74 | 427.71 | | 427.58 | 427.53 | 427.51 | 427.40 | 427.38 | 427.34 | 427.16 | 427.04 | 426.47 | 425.65 | 424.79 | 420.21 | 424.79 | 420.21 | 420.17 | 420.00 |
| PARZIALI TERRENO | | 1.46 | 0.53 | 1.17 | 4.83 | 1.89 | 1.18 | 1.94 | 0.61 | 1.20 | 0.47 | 0.22 | 0.35 | 0.57 | 1.54 | 1.42 | 1.51 | 8.57 | 1.35 | 4.41 | 0.91 | 20.00 |
| QUOTE TERRENO | | 427.80 | 427.76 | 427.74 | 427.71 | 427.58 | 427.53 | 427.51 | 427.40 | 427.38 | 427.34 | 427.16 | 427.04 | 426.47 | 425.65 | 424.79 | 420.21 | 420.21 | 420.31 | 420.22 | 420.17 | 420.00 |
| PROGRESSIVE PROGETTO | | | | | | | | 4.00 | | | | 0.00 | | | 2.50 | 4.00 | | 10.41 | | | | |
| PARZIALI PROGETTO | | | | | | | | | 4.00 | | | 2.50 | | | 1.50 | 6.41 | | | | | | |
| QUOTE PROGETTO | | | | | | | | 427.51 | | | | 427.37 | | | 427.38 | 427.38 | | 423.11 | | | | |

PROFILO RAMPA B

SEZIONE 7

PROGRESSIVA 116.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 33.48 |
| B | SCAVO | mq | 0.46 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.26 |
| e | MISTO GRANULARE | m | 4.47 |
| f | TERRENO VEGETALE | m | 10.27 |
| g | SCOTICO | m | 10.46 |
| h | GRADONATURA | m | 5.04 |
| i | ANTICAPILLARE | m | 8.05 |



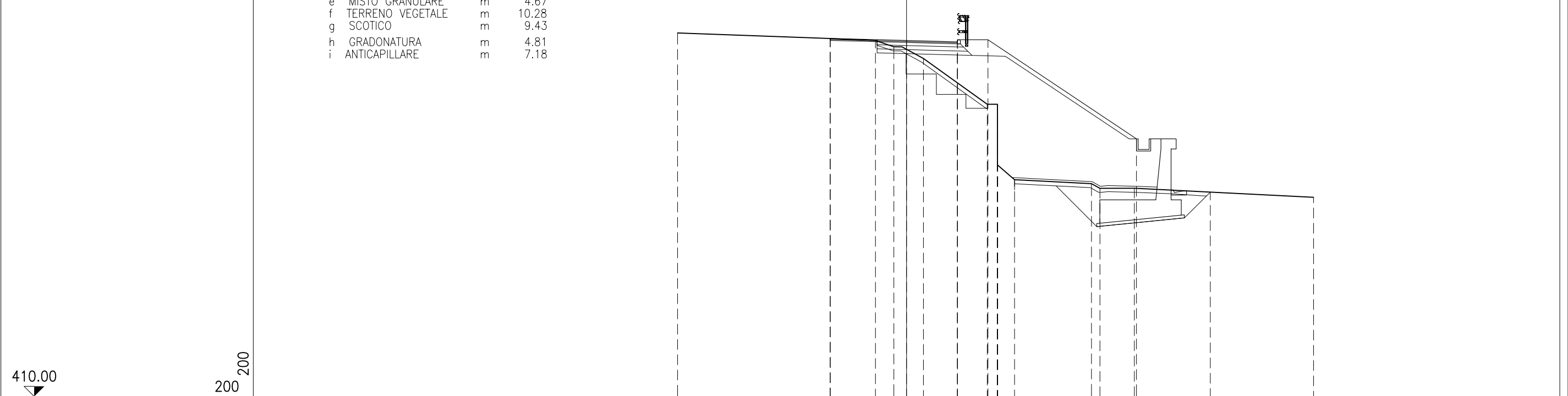
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|----------------------|--|--------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROGRESSIVE TERRENO | | 427.83 | | 427.57 | 427.51 | 427.46 | 427.31 | 427.00 | 427.50 | 427.40 | 427.50 | 421.67 | 424.37 | 420.39 | 420.38 | 420.30 | 420.06 |
| PARZIALI TERRENO | | | 7.50 | 1.20 | 1.10 | 0.73 | | 4.68 | 0.50 | | 4.56 | 2.92 | | 7.29 | | | 20.00 |
| QUOTE TERRENO | | | | | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | | | 3.75 | | | 0.00 | | 2.50 | | 4.00 | | | | 1.30 | | |
| PARZIALI PROGETTO | | | | | 3.75 | | 2.50 | 1.50 | | 7.30 | | | | | | | |
| QUOTE PROGETTO | | | | 427.56 | | | 427.47 | | 427.50 | | 427.50 | | | | 422.64 | | |

PROFILO RAMPA B

SEZIONE 8

PROGRESSIVA 136.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 35.44 |
| B | SCAVO | mq | 0.61 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.26 |
| d | MISTO CEMENTATO | m | 4.46 |
| e | MISTO GRANULARE | m | 4.67 |
| f | TERRENO VEGETALE | m | 10.28 |
| g | SCOTICO | m | 9.43 |
| h | GRADONATURA | m | 4.81 |
| i | ANTICAPILLARE | m | 7.18 |



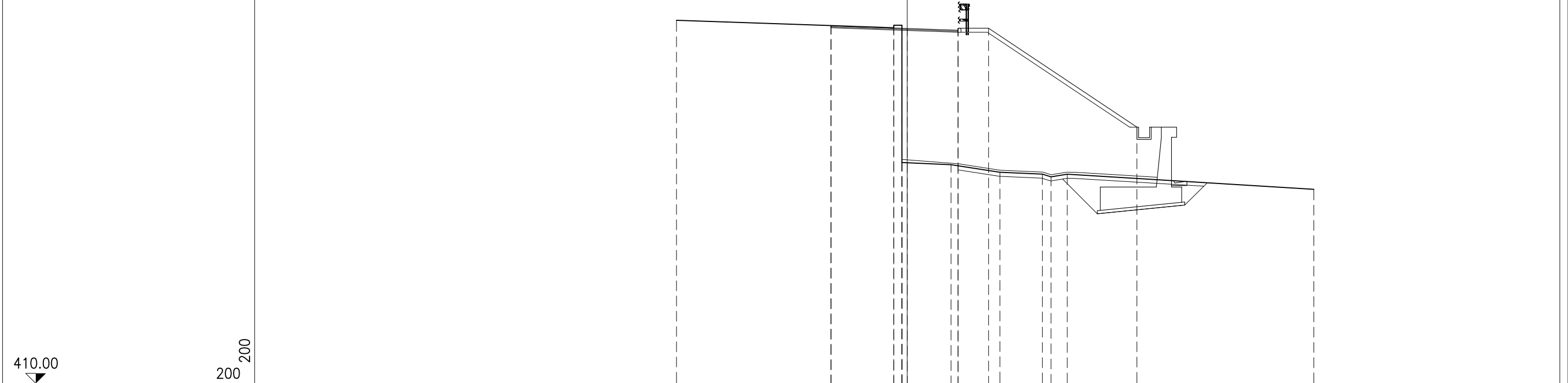
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|----------------------|--|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|--|--------|
| PROGRESSIVE TERRENO | | 427.86 | | 427.59 | | 427.49 | | 427.18 | | 426.61 | | 424.36 | | 421.38 | | 424.36 | | 420.65 | | 420.46 | | 420.23 | | 420.23 | | 420.04 | | 419.78 |
| PARZIALI TERRENO | | | 7.50 | | 2.22 | | 0.91 | | 1.45 | | 3.14 | | 0.50 | | 0.84 | | 3.78 | | 0.41 | | 1.70 | | 3.73 | | 5.07 | | | |
| QUOTE TERRENO | | 427.86 | | 427.59 | | 427.49 | | 427.18 | | 426.61 | | 424.36 | | 421.38 | | 424.36 | | 420.65 | | 420.46 | | 420.23 | | 420.23 | | 420.04 | | 419.78 |
| PROGRESSIVE PROGETTO | | | | 427.59 | | 427.49 | | 427.43 | | 427.43 | | 427.53 | | 427.53 | | | | 422.66 | | | | | | | | | | |
| PARZIALI PROGETTO | | | | 3.75 | | | | 3.75 | | 2.50 | | 1.50 | | | | 7.30 | | | | | | | | | | | | |
| QUOTE PROGETTO | | | | 427.59 | | 427.49 | | 427.43 | | 427.43 | | 427.53 | | 427.53 | | | | 422.66 | | | | | | | | | | |

PROFILO RAMPA B

SEZIONE 9

PROGRESSIVA 156.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 62.25 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| f | TERRENO VEGETALE | m | 10.28 |
| g | SCOTICO | m | 14.86 |
| i | ANTICAPILLARE | m | 12.63 |



410.00

200 200

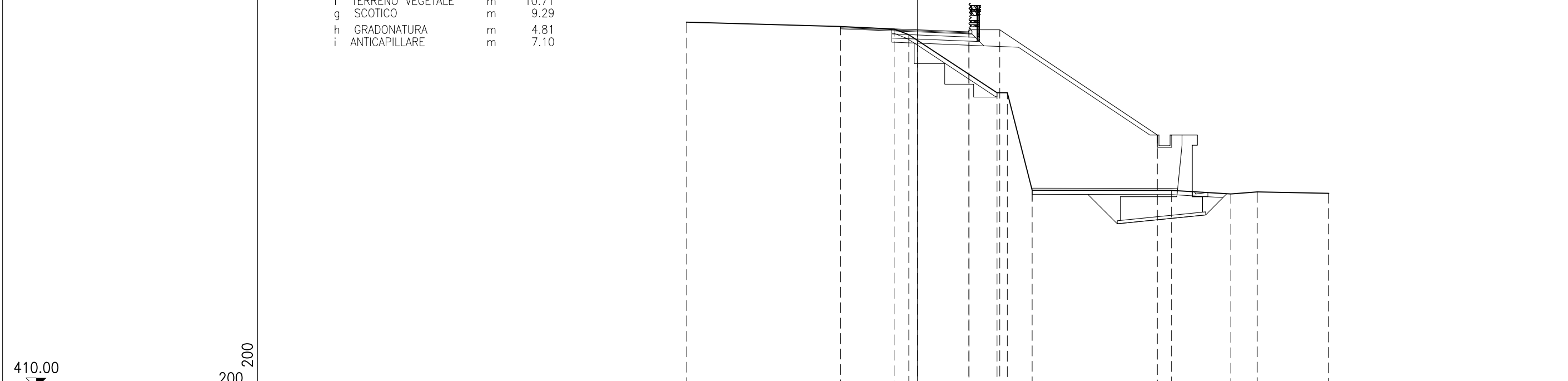
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|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROGRESSIVE TERRENO | -11.35 | 3.75 | 0.66 | 0.66 | 0.26 | 0.26 | 2.15 | 4.56 | 6.65 | 7.07 | 7.87 | 20.00 |
| PARZIALI TERRENO | | 7.60 | 3.09 | 0.40 | 2.41 | 2.41 | 2.09 | 0.42 | 0.80 | 12.13 | | |
| QUOTE TERRENO | 427.86 | 427.60 | 427.62 | 427.49 | 420.87 | 427.62 | 420.76 | 420.39 | 420.29 | 420.16 | 420.29 | 419.55 |
| PROGRESSIVE PROGETTO | | 3.75 | 427.59 | 427.46 | 427.37 | 427.47 | 427.47 | 422.60 | | | | |
| PARZIALI PROGETTO | | | 3.75 | 2.50 | 1.50 | 7.30 | 11.30 | | | | | |
| QUOTE PROGETTO | | | 427.59 | 427.46 | 427.37 | 427.47 | 422.60 | | | | | |

PROFILO RAMPA B

SEZIONE 11

PROGRESSIVA 186.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 39.74 |
| B | SCAVO | mq | 0.56 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.27 |
| e | MISTO GRANULARE | m | 4.48 |
| f | TERRENO VEGETALE | m | 10.71 |
| g | SCOTICO | m | 9.29 |
| h | GRADONATURA | m | 4.81 |
| i | ANTICAPILLARE | m | 7.10 |



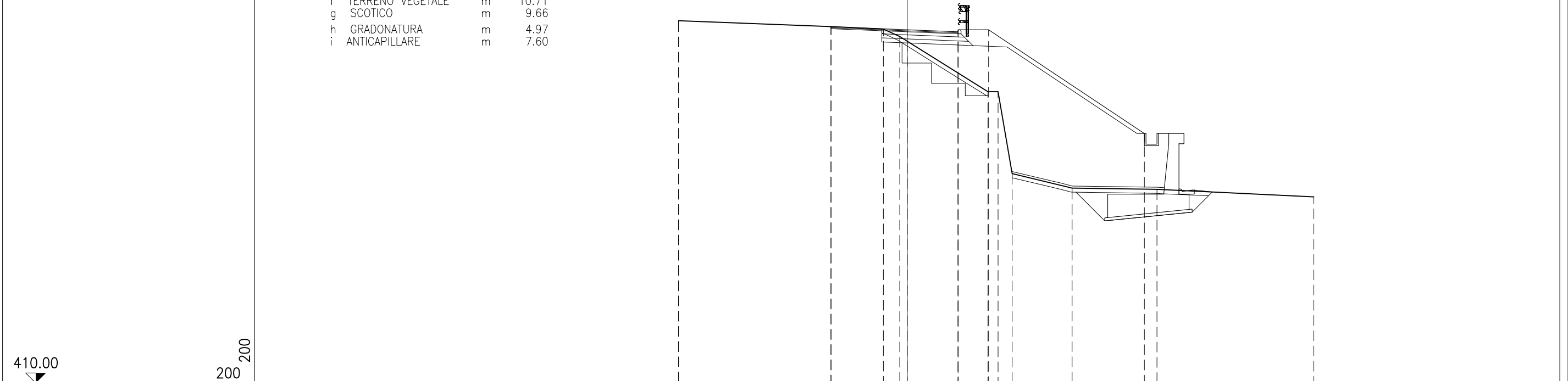
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|----------------------|--|--------|------|--------|------|--------|--------|--------|--------|--------|--------|------|--------|------|--------|--------|--------|
| PROGRESSIVE TERRENO | | 427.78 | | 427.57 | | 427.44 | 427.17 | | 424.35 | 424.35 | 419.62 | | 419.61 | | 419.43 | 419.53 | 419.46 |
| PARZIALI TERRENO | | | 7.50 | | 2.61 | 0.72 | | 4.29 | 0.50 | 1.20 | | 6.78 | | 2.89 | 1.28 | | 3.48 |
| QUOTE TERRENO | | 427.78 | | 427.57 | | 427.44 | 427.17 | | 424.35 | 424.35 | 419.62 | | 419.61 | | 419.43 | 419.53 | 419.46 |
| PROGRESSIVE PROGETTO | | | | 427.56 | | 427.41 | | 427.31 | 427.41 | | 422.30 | | 422.30 | | | | |
| PARZIALI PROGETTO | | | | | 3.75 | | 2.50 | 1.50 | | 7.66 | | | | | | | |
| QUOTE PROGETTO | | | | 427.56 | | 427.41 | | 427.31 | 427.41 | | 422.30 | | 422.30 | | | | |

PROFILO RAMPA B

SEZIONE 12

PROGRESSIVA 196.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 39.23 |
| B | SCAVO | mq | 0.51 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.27 |
| e | MISTO GRANULARE | m | 4.48 |
| f | TERRENO VEGETALE | m | 10.71 |
| g | SCOTICO | m | 9.66 |
| h | GRADONATURA | m | 4.97 |
| i | ANTICAPILLARE | m | 7.60 |



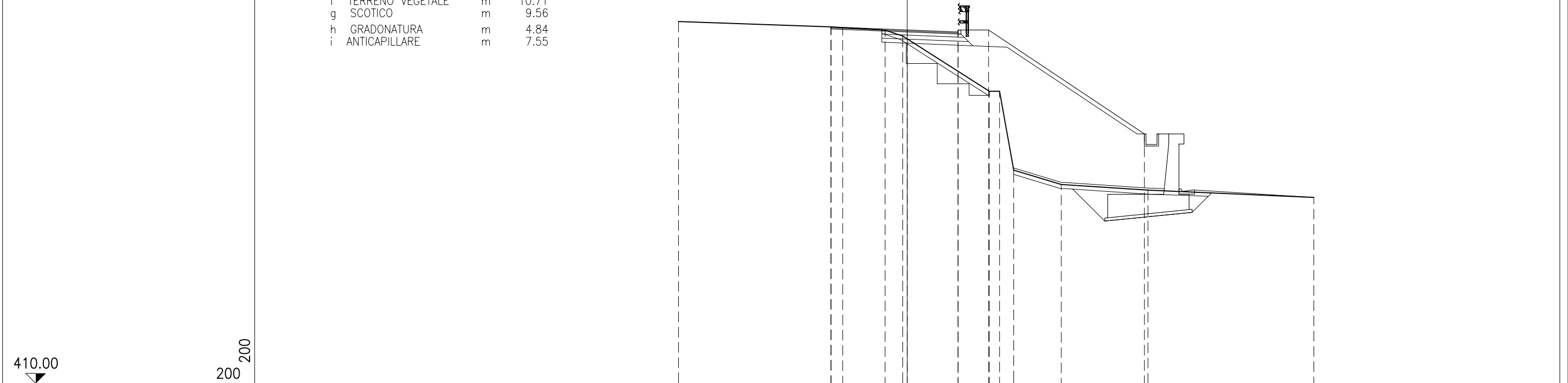
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|----------------------|--|--------|------|--------|--------|--------|------|--------|--------|--------|--------|--------|--|--------|
| PROGRESSIVE TERRENO | | -11.25 | | 3.75 | 1.17 | 0.37 | | 3.97 | 4.47 | 5.16 | 8.11 | 12.28 | | 20.00 |
| PARZIALI TERRENO | | | 7.50 | | 2.58 | 0.80 | | 4.34 | 0.50 | 0.69 | 2.95 | 4.17 | | 7.72 |
| QUOTE TERRENO | | 427.84 | | 427.55 | 427.43 | 427.06 | | 424.34 | 424.34 | 420.31 | 419.60 | 419.54 | | 419.17 |
| PROGRESSIVE PROGETTO | | | | 3.75 | | 0.00 | | 2.50 | 4.00 | | | 11.66 | | |
| PARZIALI PROGETTO | | | | | 3.75 | | 2.50 | 1.50 | | | 7.66 | | | |
| QUOTE PROGETTO | | | | 427.54 | | 427.39 | | 427.39 | 427.29 | 427.39 | | 422.28 | | |

PROFILO RAMPA B

SEZIONE 13

PROGRESSIVA 216.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 37.84 |
| B | SCAVO | mq | 0.61 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.27 |
| e | MISTO GRANULARE | m | 4.48 |
| f | TERRENO VEGETALE | m | 10.71 |
| g | SCOTICO | m | 9.56 |
| h | GRADONATURA | m | 4.84 |
| i | ANTICAPILLARE | m | 7.55 |



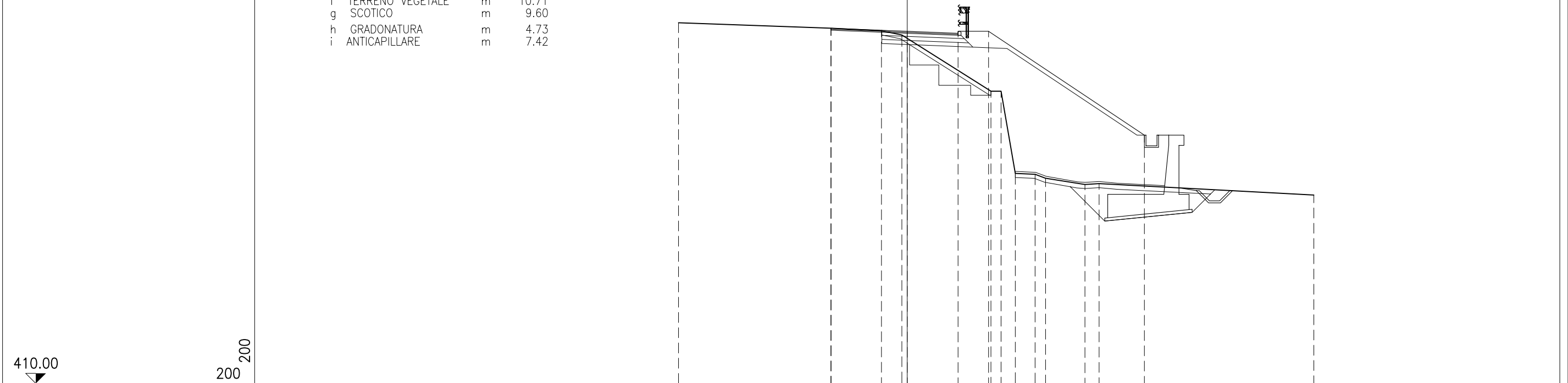
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|----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROGRESSIVE TERRENO | | 427.80 | | 427.53 | 427.50 | 427.37 | 427.08 | | 424.37 | 424.37 | 420.49 | 419.78 | 419.51 | 419.15 |
| PARZIALI TERRENO | | 7.50 | 0.58 | 2.08 | 0.87 | 4.26 | 0.50 | 0.70 | 2.34 | 4.27 | 8.15 | | | 20.00 |
| QUOTE TERRENO | | 427.80 | 427.53 | 427.50 | 427.37 | 427.08 | | 424.37 | 424.37 | 420.49 | 419.78 | 419.51 | 419.15 | |
| PROGRESSIVE PROGETTO | | | 3.75 | | 0.00 | | 2.50 | 4.00 | | | | 11.66 | | |
| PARZIALI PROGETTO | | | 3.75 | 2.50 | 1.50 | 7.66 | | | | | | | | |
| QUOTE PROGETTO | | | 427.53 | 427.38 | 427.38 | 427.28 | 427.38 | 422.27 | | | | | | |

PROFILO RAMPA B

SEZIONE 14

PROGRESSIVA 239.39

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 35.80 |
| B | SCAVO | mq | 0.71 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.27 |
| e | MISTO GRANULARE | m | 4.48 |
| f | TERRENO VEGETALE | m | 10.71 |
| g | SCOTICO | m | 9.60 |
| h | GRADONATURA | m | 4.73 |
| i | ANTICAPILLARE | m | 7.42 |



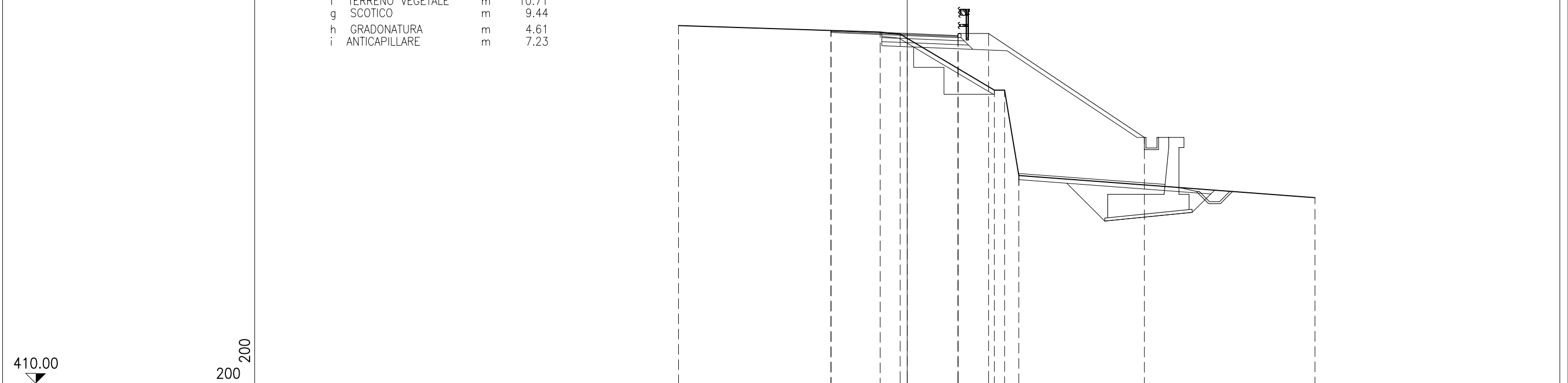
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|----------------------|--|--------|------|--------|------|--------|--------|------|--------|--------|--------|--------|--------|------|--------|--------|-------|--------|
| PROGRESSIVE TERRENO | | 427.74 | | 427.47 | | 427.34 | 427.14 | | 424.37 | 424.37 | 420.33 | 420.28 | 420.09 | | 419.79 | 419.83 | | 419.27 |
| PARZIALI TERRENO | | | 7.50 | | 2.49 | 1.00 | | 4.38 | 0.50 | 0.70 | 0.97 | 0.52 | 1.93 | 0.70 | | | 10.56 | |
| QUOTE TERRENO | | 427.74 | | 427.47 | | 427.34 | 427.14 | | 424.37 | 424.37 | 420.33 | 420.28 | 420.09 | | 419.79 | 419.83 | | 419.27 |
| PROGRESSIVE PROGETTO | | | | 427.47 | | | 427.32 | | 427.32 | 427.32 | | | | | 422.21 | | | |
| PARZIALI PROGETTO | | | | | 3.75 | | 2.50 | 1.50 | | | 7.66 | | | | | | | |
| QUOTE PROGETTO | | | | 427.47 | | | 427.32 | | 427.32 | 427.32 | | | | | 422.21 | | | |

PROFILO RAMPA B

SEZIONE 16

PROGRESSIVA 270.88

| | | | |
|---|------------------|----|-------|
| A | RILEVATO | mq | 32.95 |
| B | SCAVO | mq | 0.90 |
| a | USURA DRENANTE | m | 6.25 |
| b | BINDER | m | 6.25 |
| c | BASE | m | 4.06 |
| d | MISTO CEMENTATO | m | 4.27 |
| e | MISTO GRANULARE | m | 4.48 |
| f | TERRENO VEGETALE | m | 10.71 |
| g | SCOTICO | m | 9.44 |
| h | GRADONATURA | m | 4.61 |
| i | ANTICAPILLARE | m | 7.23 |



| | | | | | | | | | | | | | |
|----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROGRESSIVE TERRENO | | 427.60 | | 427.36 | | 427.28 | 427.18 | | 424.42 | 424.42 | 420.22 | | 419.14 |
| PARZIALI TERRENO | | 7.50 | | 2.42 | 0.98 | | 4.64 | 0.50 | 0.70 | | 14.57 | | 20.06 |
| QUOTE TERRENO | | 427.60 | | 427.36 | 427.28 | 427.18 | | 424.42 | 424.42 | 420.22 | | 419.14 | |
| PROGRESSIVE PROGETTO | | | 427.36 | | 427.21 | | 427.11 | 427.21 | | 422.10 | | | |
| PARZIALI PROGETTO | | | 3.75 | | 3.75 | 2.50 | 1.50 | | 7.66 | | 11.66 | | |
| QUOTE PROGETTO | | | 427.36 | | 427.21 | 427.11 | 427.21 | | 422.10 | | | | |