



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.3 "Borro Inferno"

BORRO INFERNO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



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MODELLAZIONE HEC-RAS 5.0.3 "Borro Inferno"

BORRO INFERNO

MODELLAZIONE PER TR=30 anni

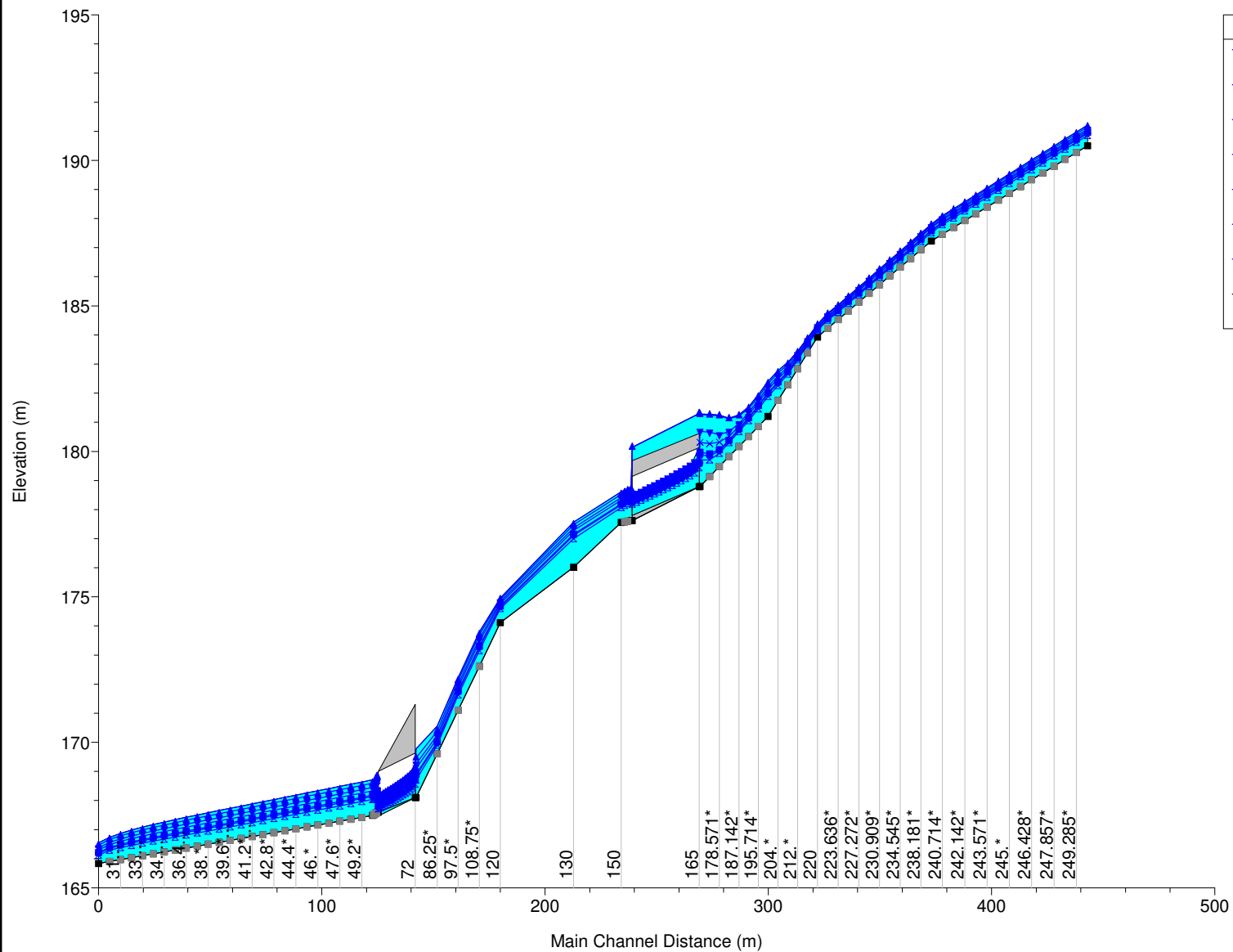
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Borro inferno rilievo Plan: 1) Tr30D0.5_2Ls_SA 2) Tr30D1_2Ls_SA 3) Tr30D1.5_2Ls_SA 4) Tr30D2_2Ls_SA 5) Tr30D3_2Ls_SA 6) Tr30D3.5_2Ls_SA 7) Tr30D5_2Ls_SA

Legend

WS Max WS - Tr30D0.5_2Ls_SA
WS Max WS - Tr30D1_2Ls_SA
WS Max WS - Tr30D1.5_2Ls_SA
WS Max WS - Tr30D2_2Ls_SA
WS Max WS - Tr30D3_2Ls_SA
WS Max WS - Tr30D3.5_2Ls_SA
WS Max WS - Tr30D5_2Ls_SA
Ground





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MODELLAZIONE HEC-RAS 5.0.3 "Borro Inferno"

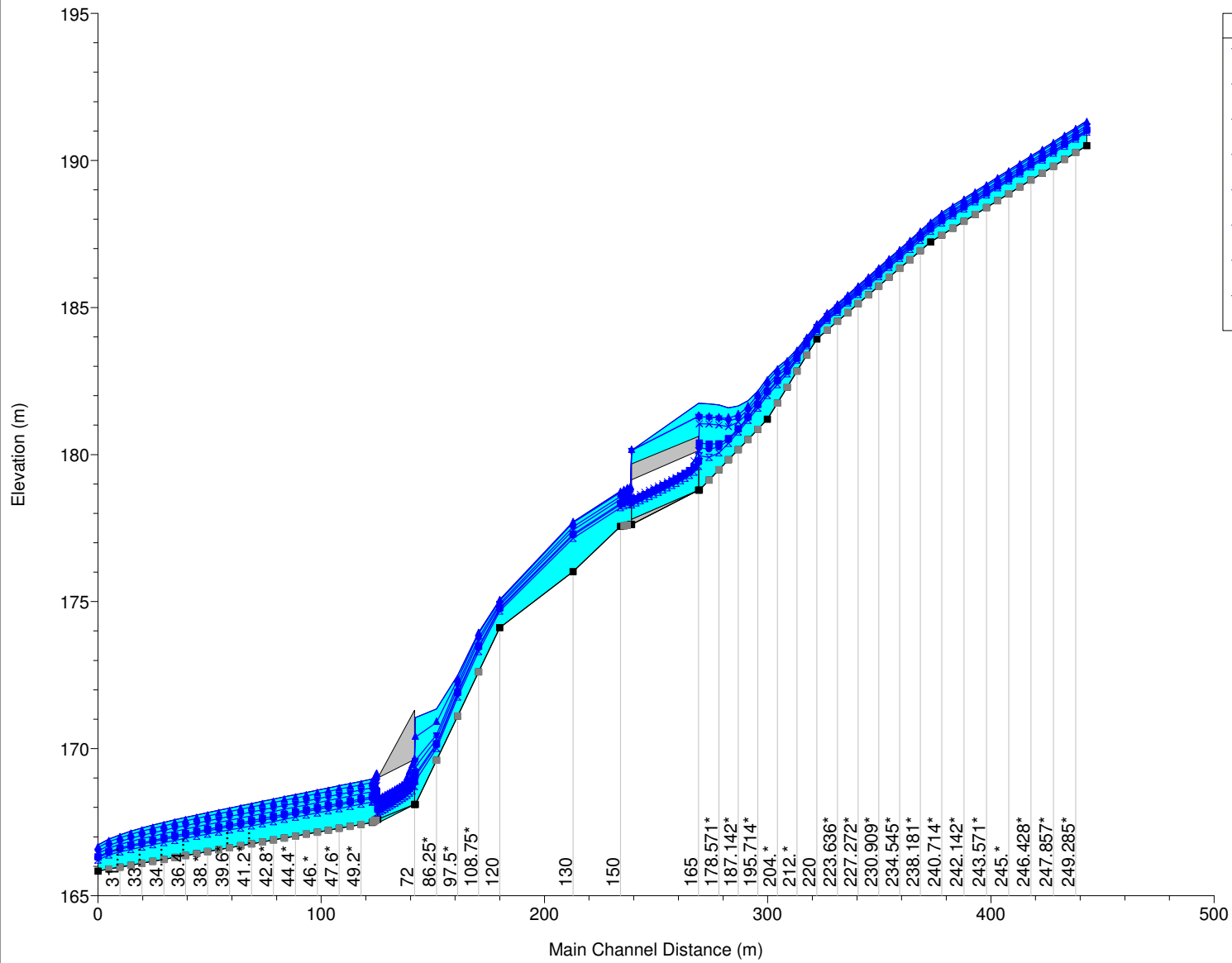
BORRO INFERNO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Borro inferno rilievo Plan: 1) Tr200D0.5_2LS_SA 2) Tr200D1_2LS_SA 3) Tr200D1.5_2LS_SA 4) Tr200D2_2LS_SA 5) Tr200D3_2LS_SA 6) Tr200D3.5_2LS_SA 7) Tr200D5_2LS_SA





ALLEGATI

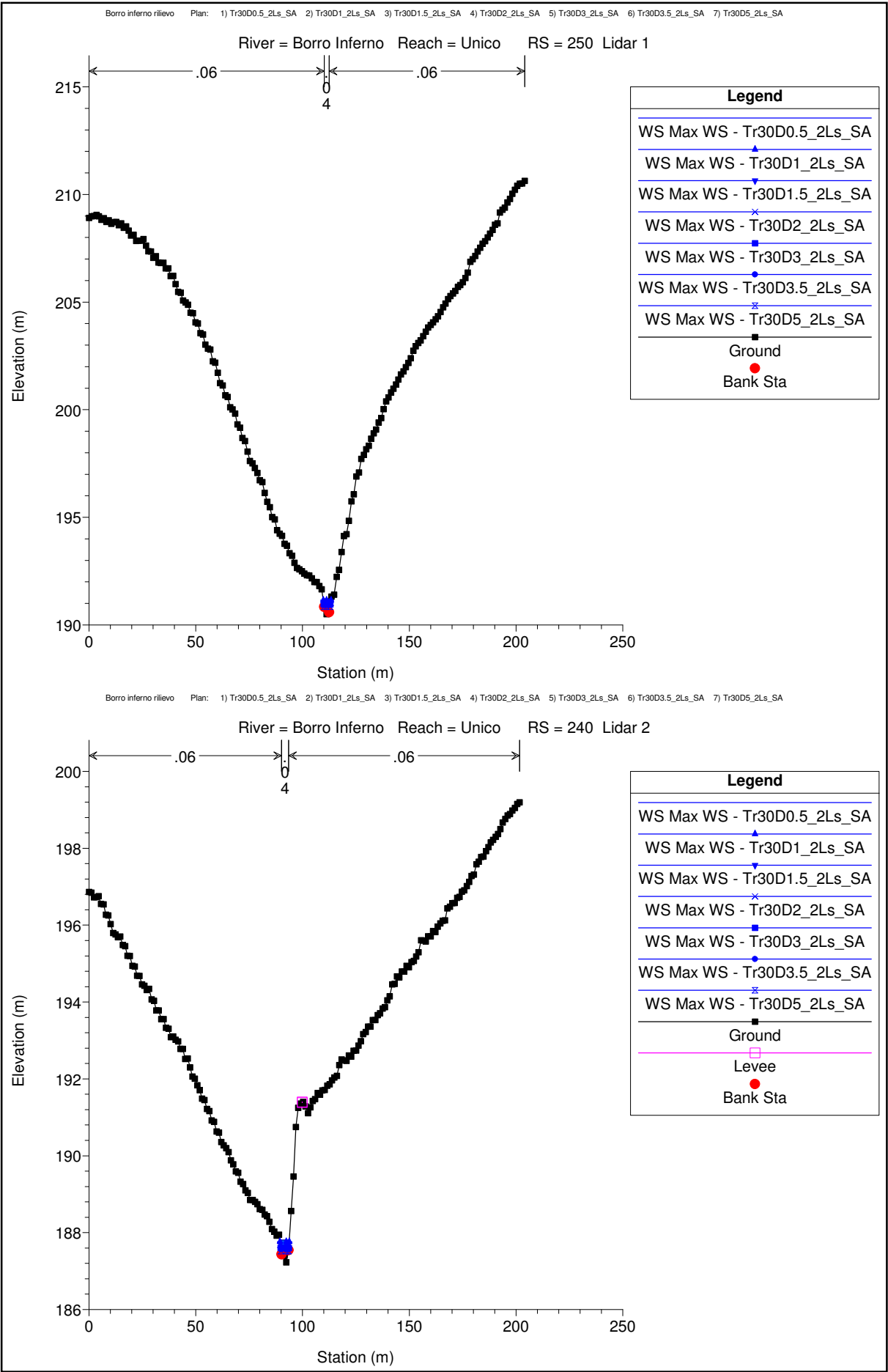
MODELLAZIONE HEC-RAS 5.0.3 "Borro Inferno"

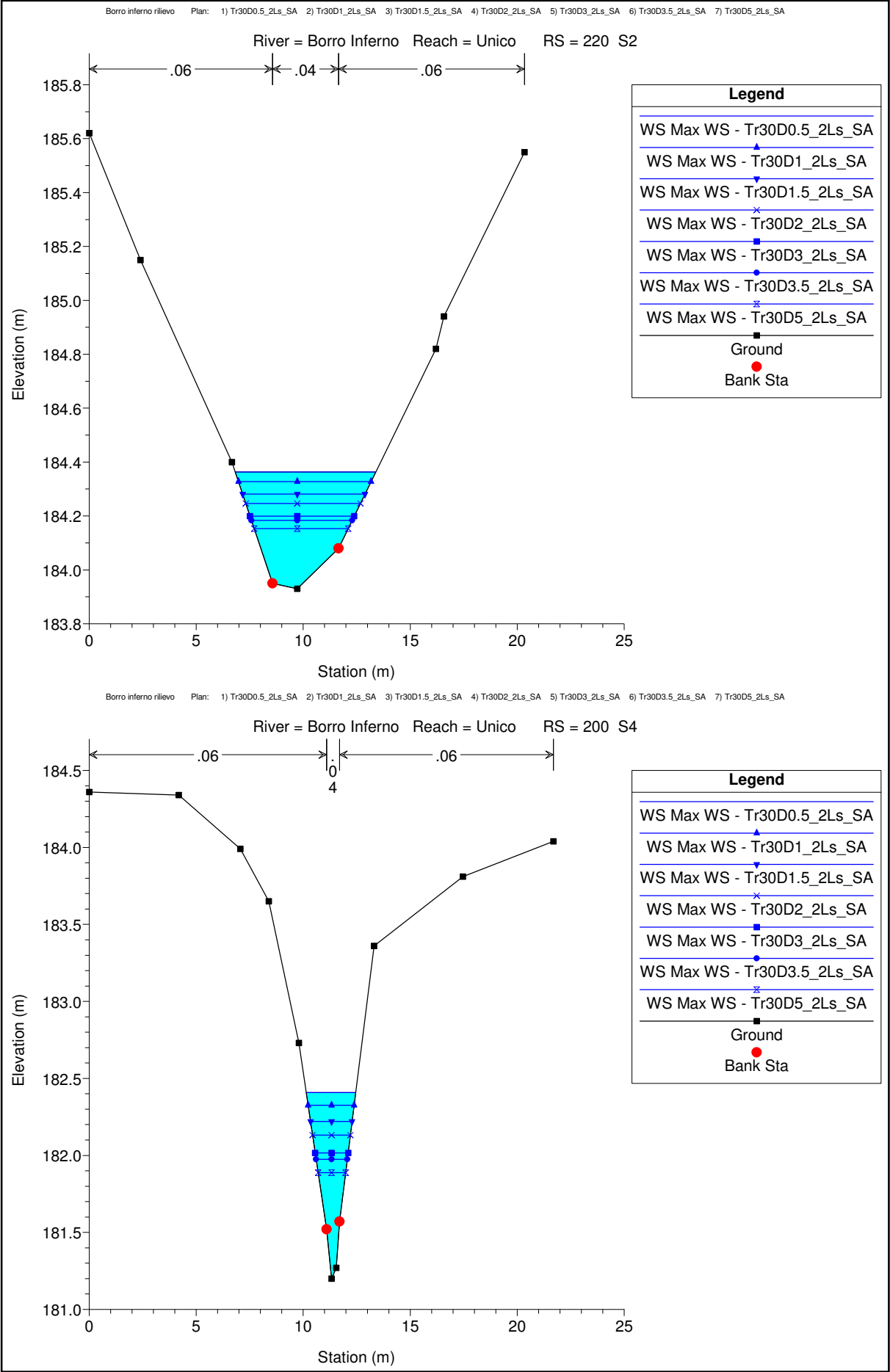
BORRO INFERNO

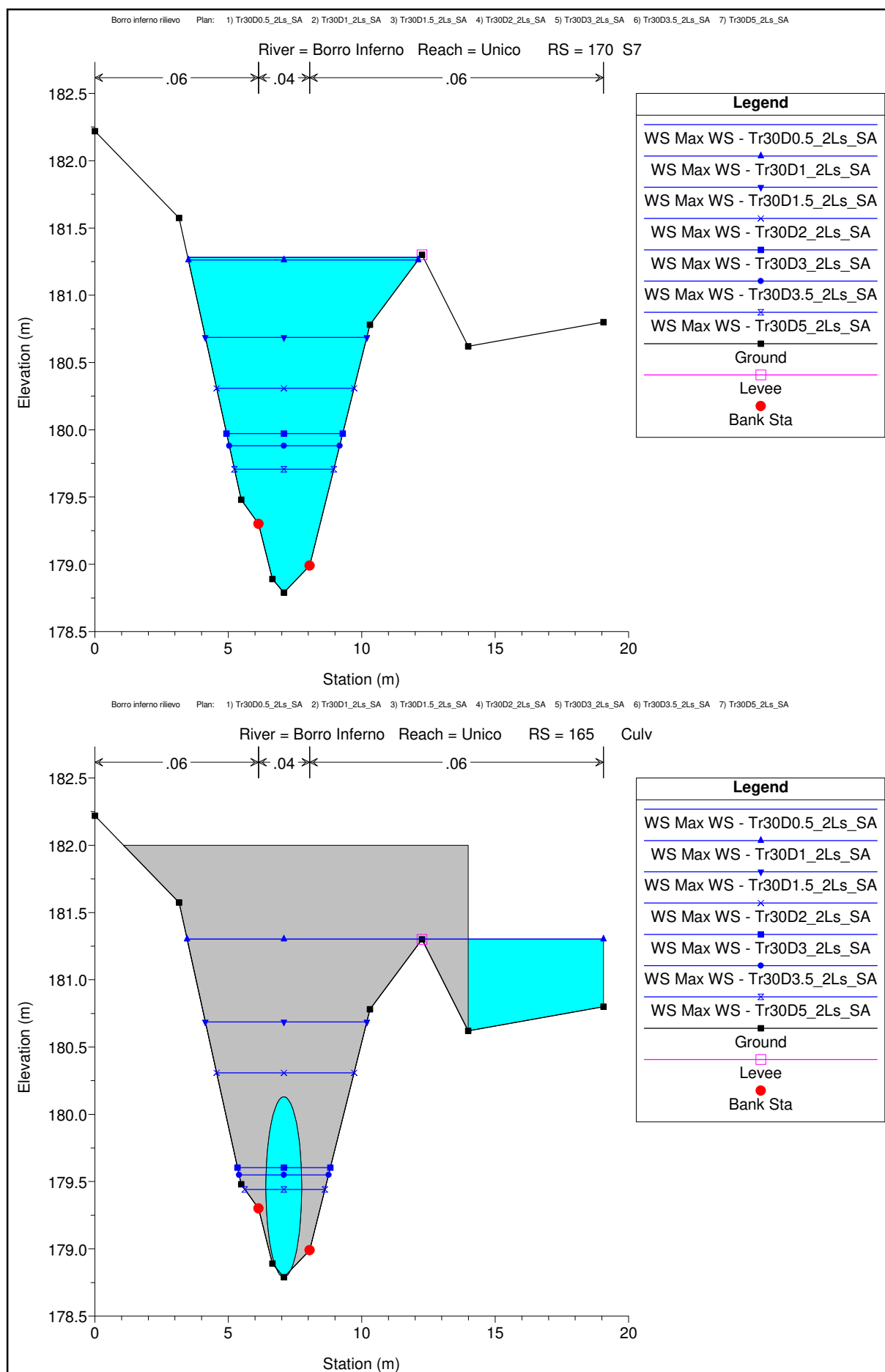
MODELLAZIONE PER TR=30 anni

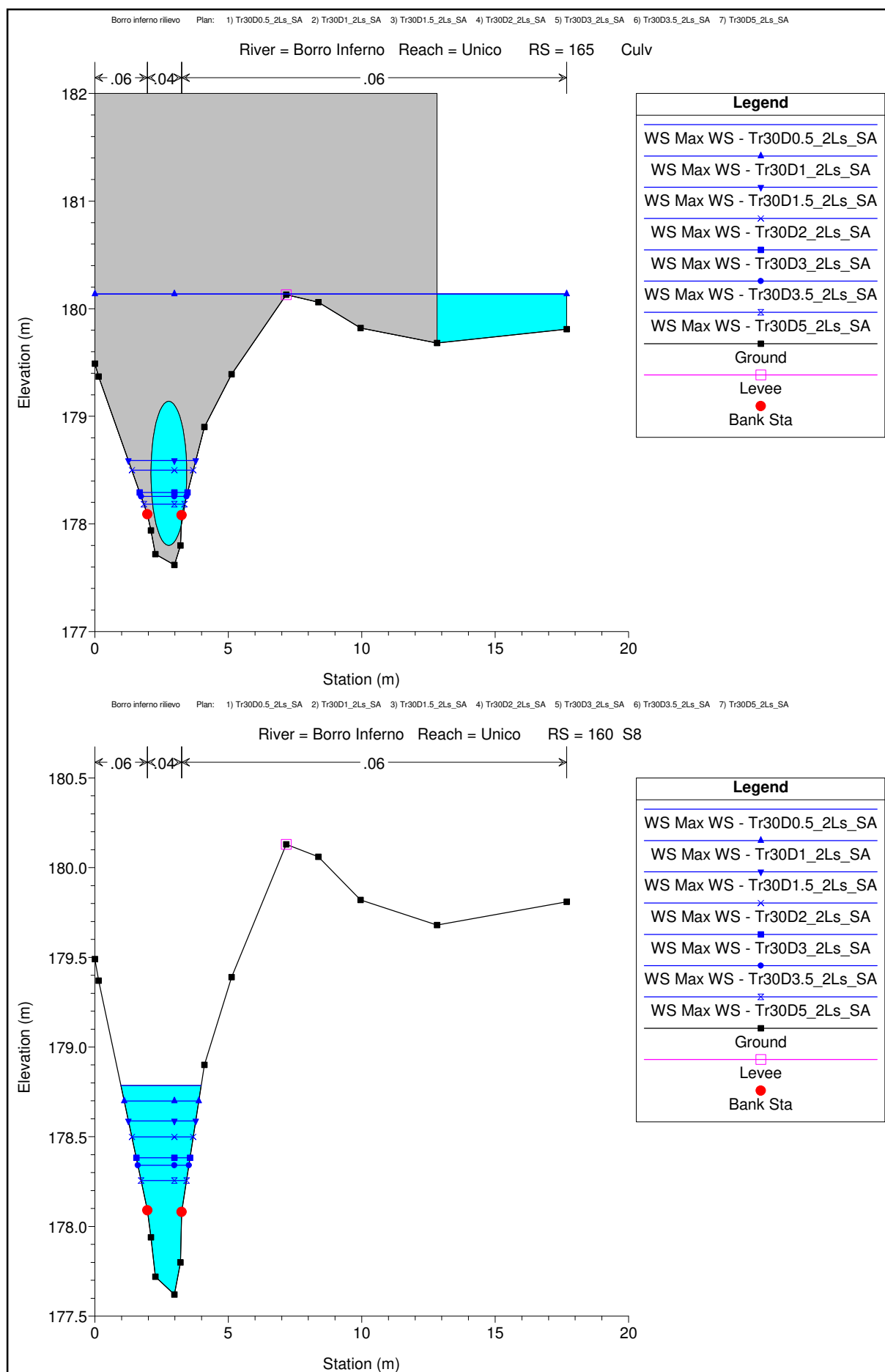
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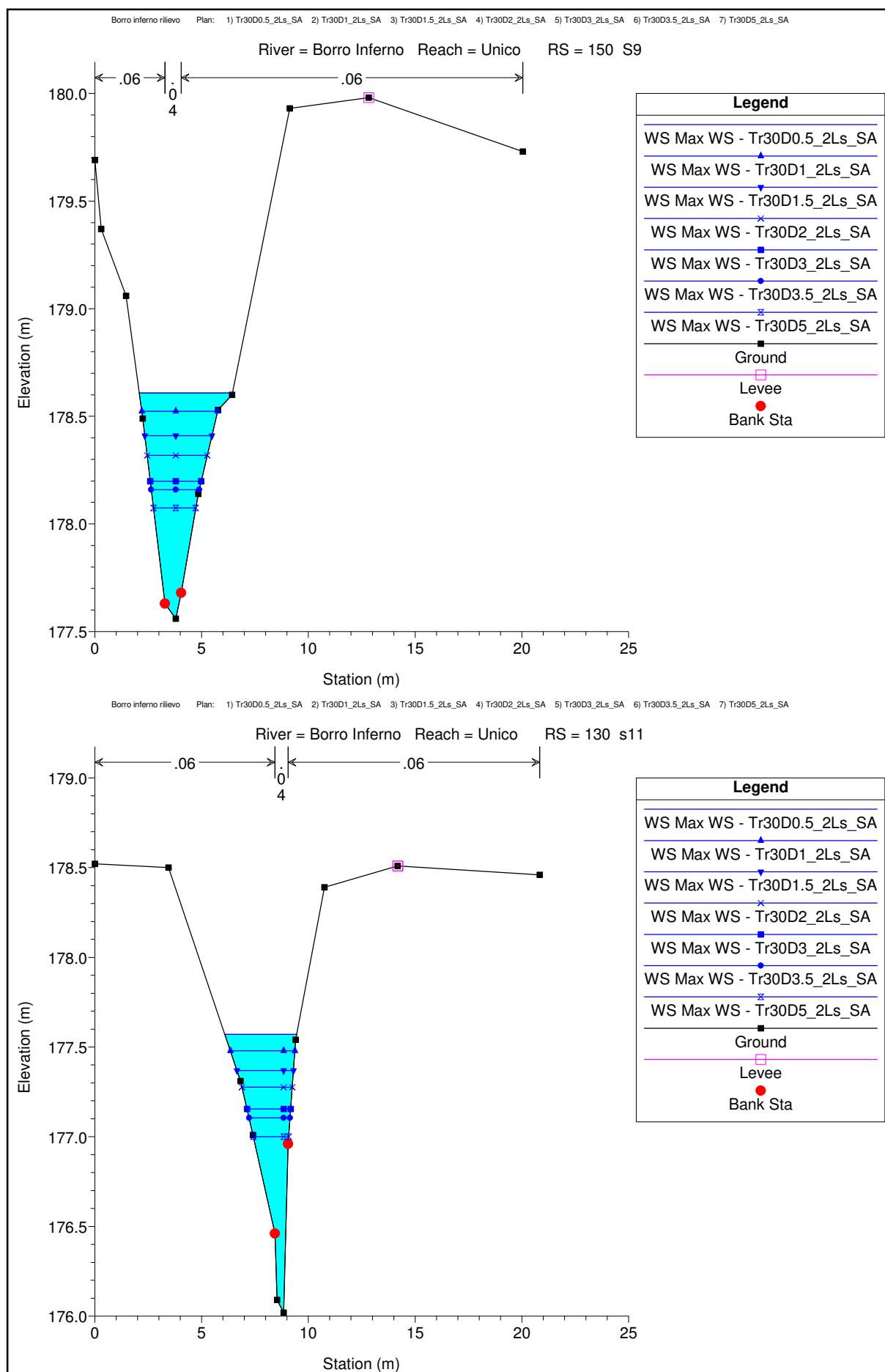
Sezioni Trasversali (da monte verso valle)

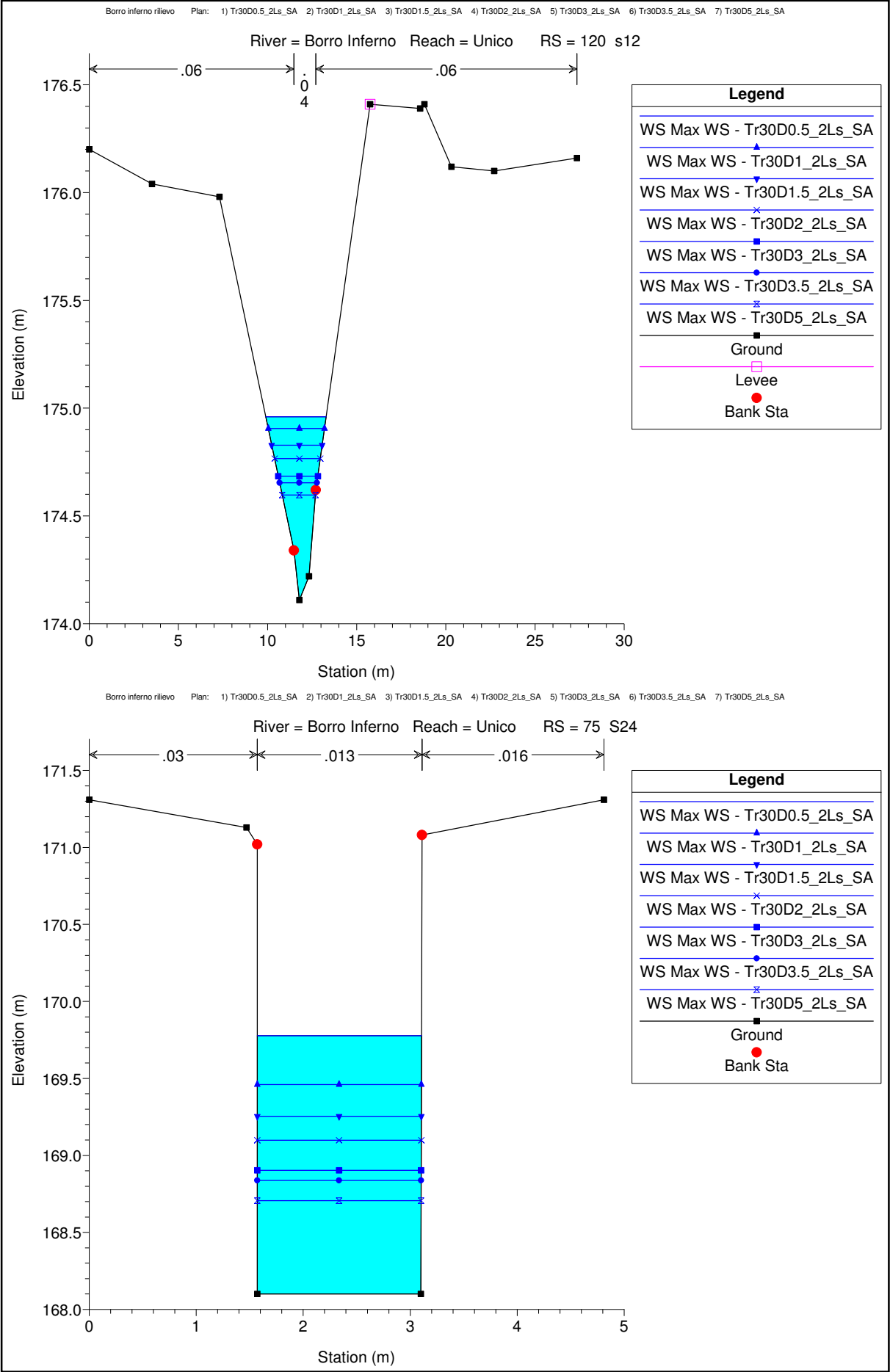


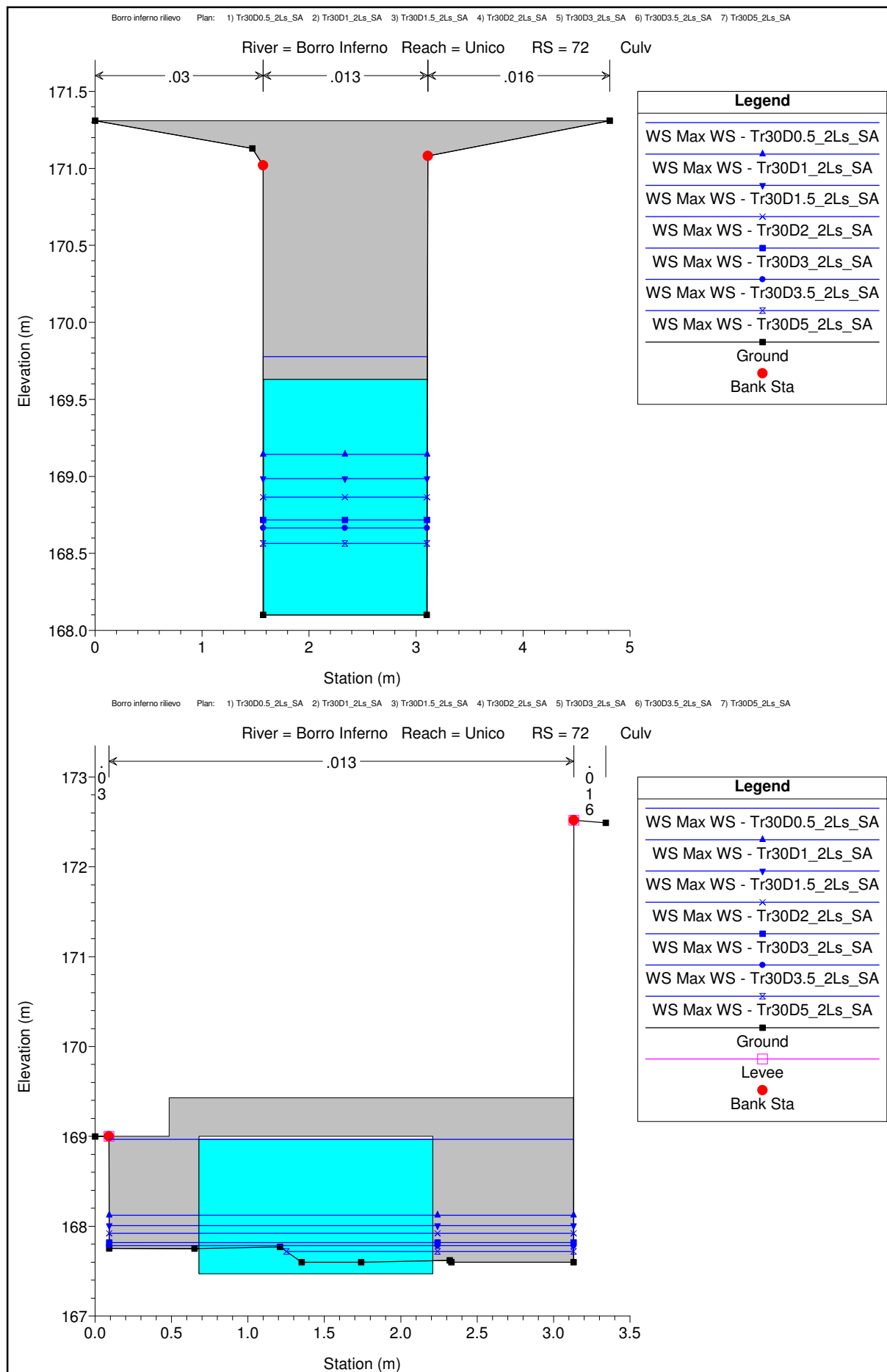


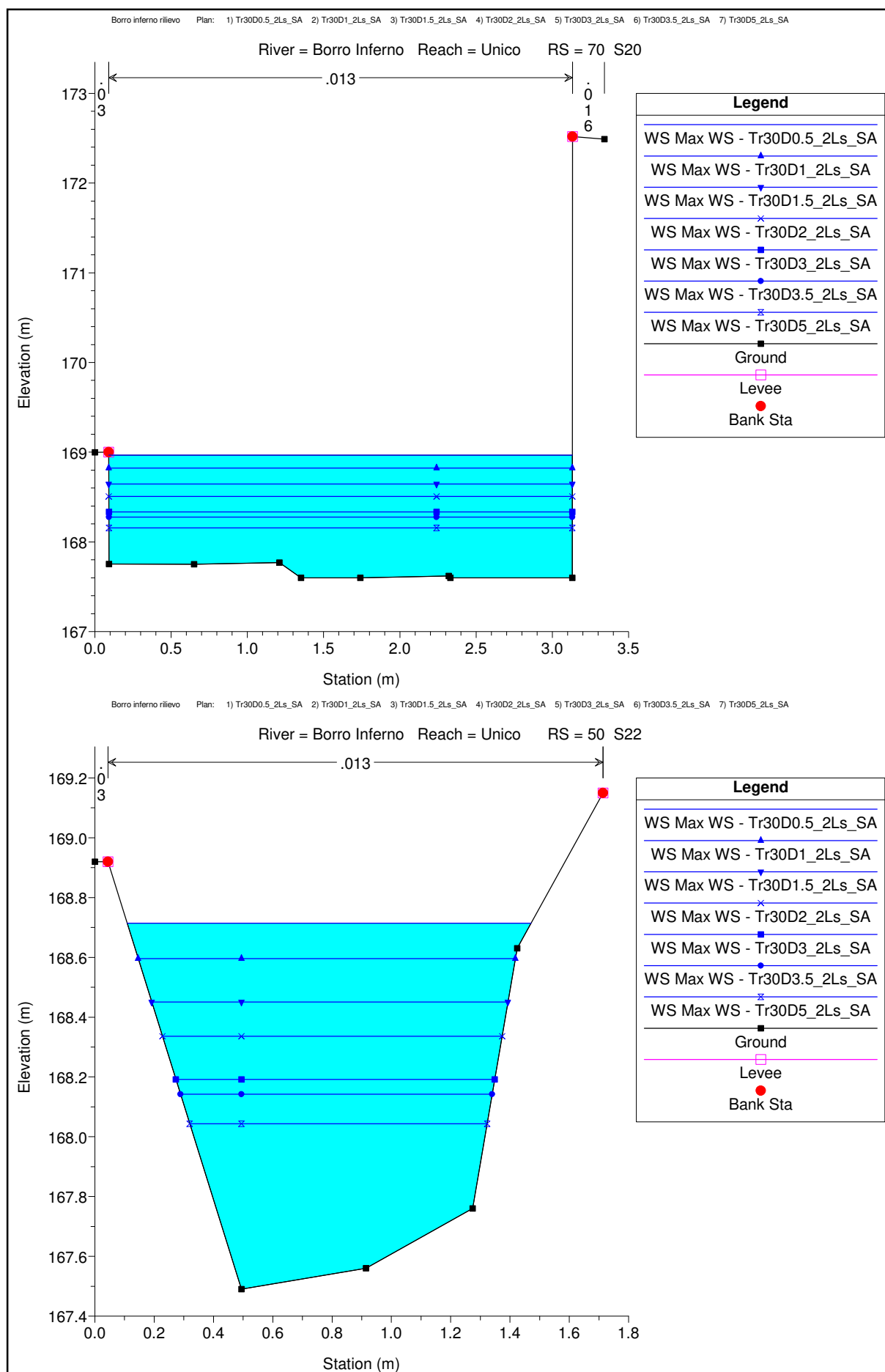


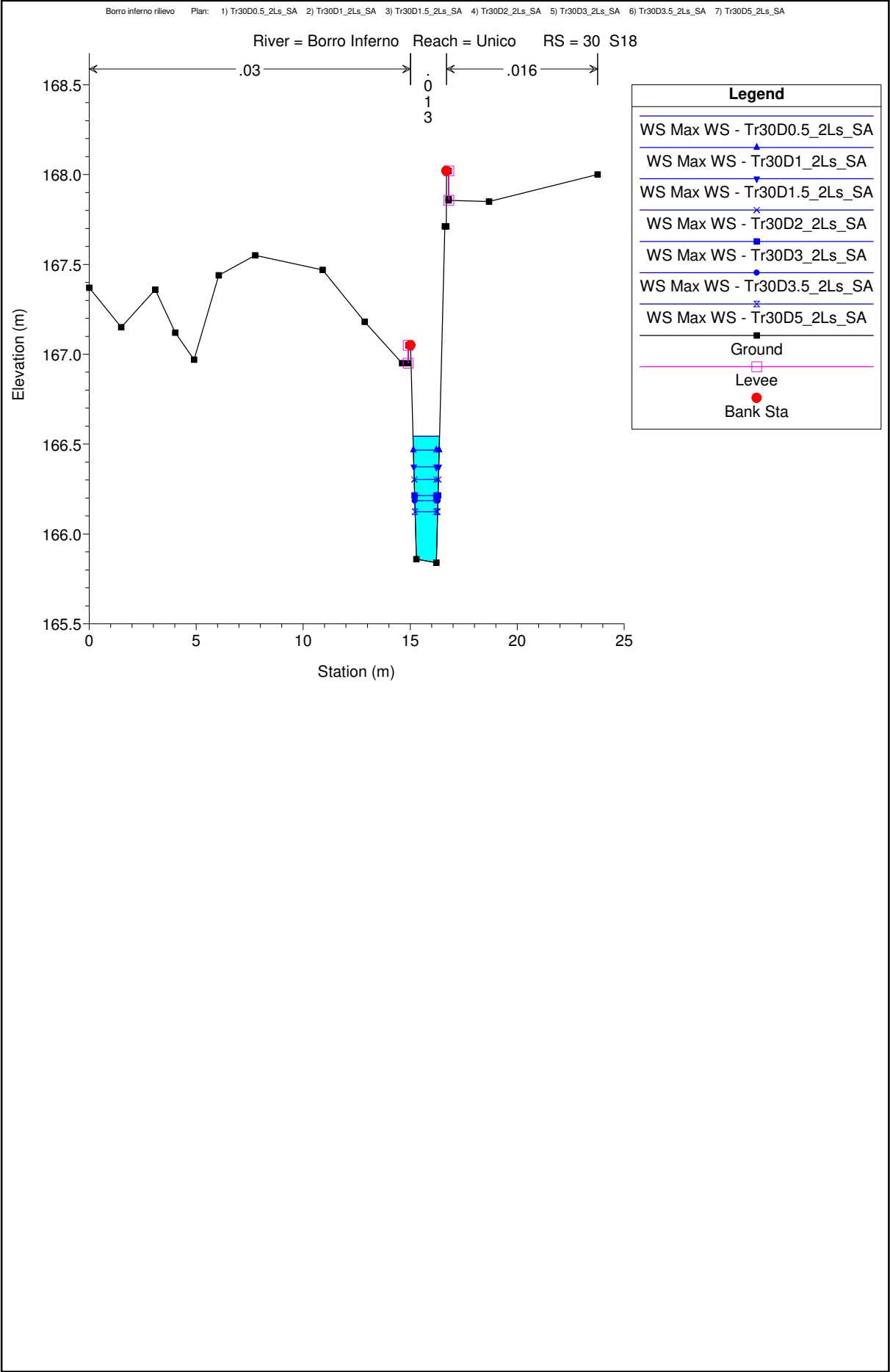














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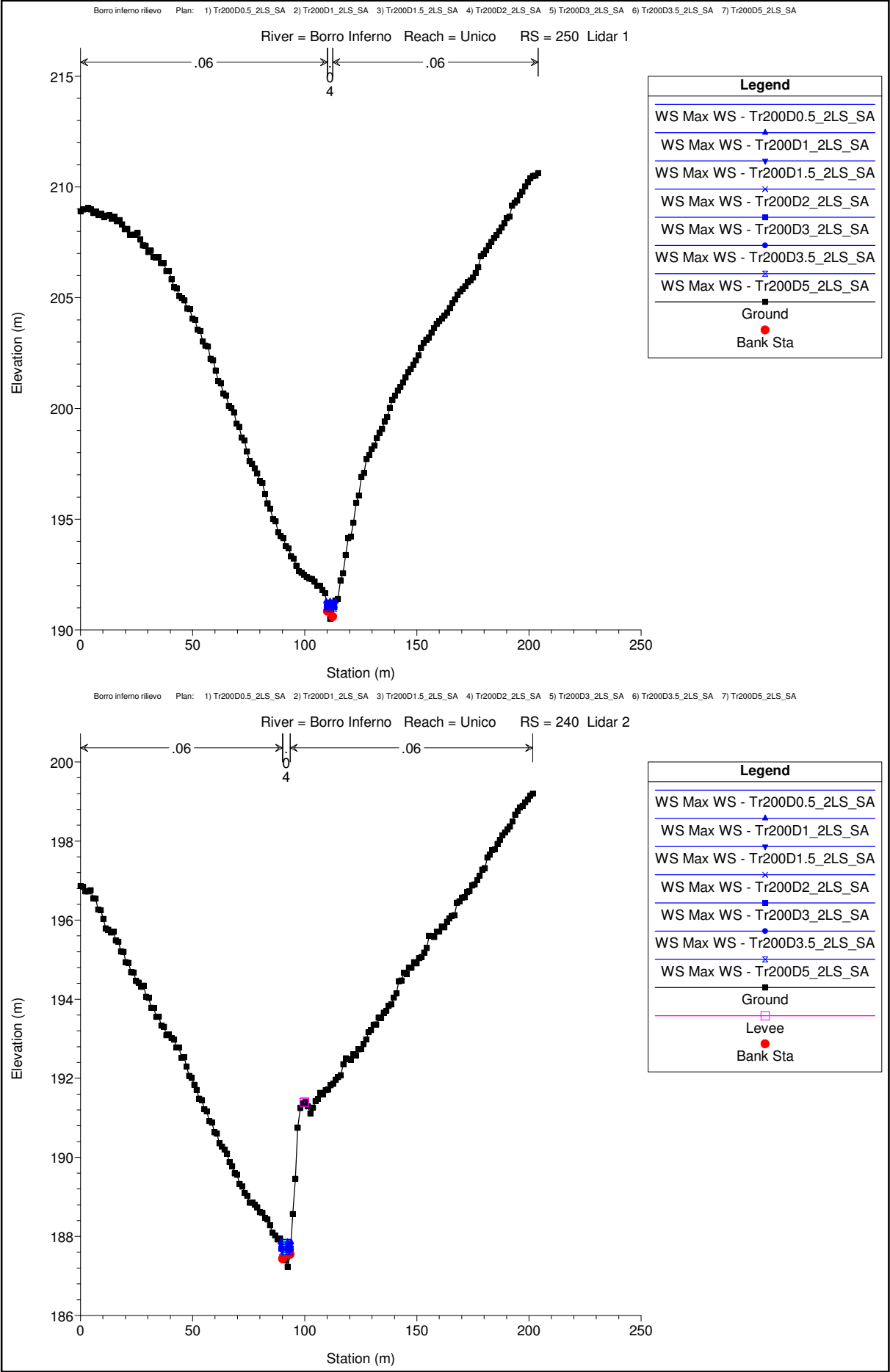
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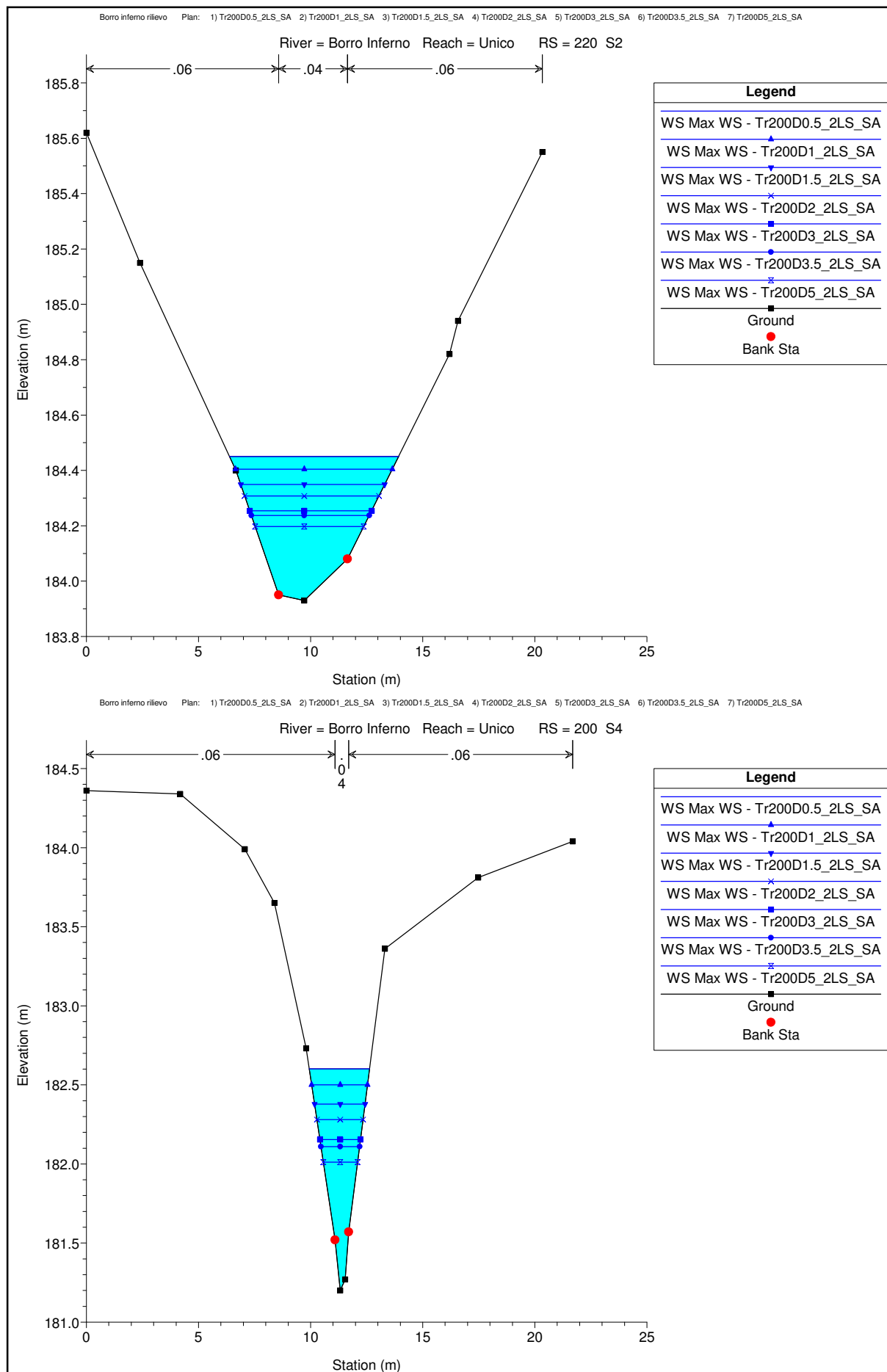
BORRO INFERNO

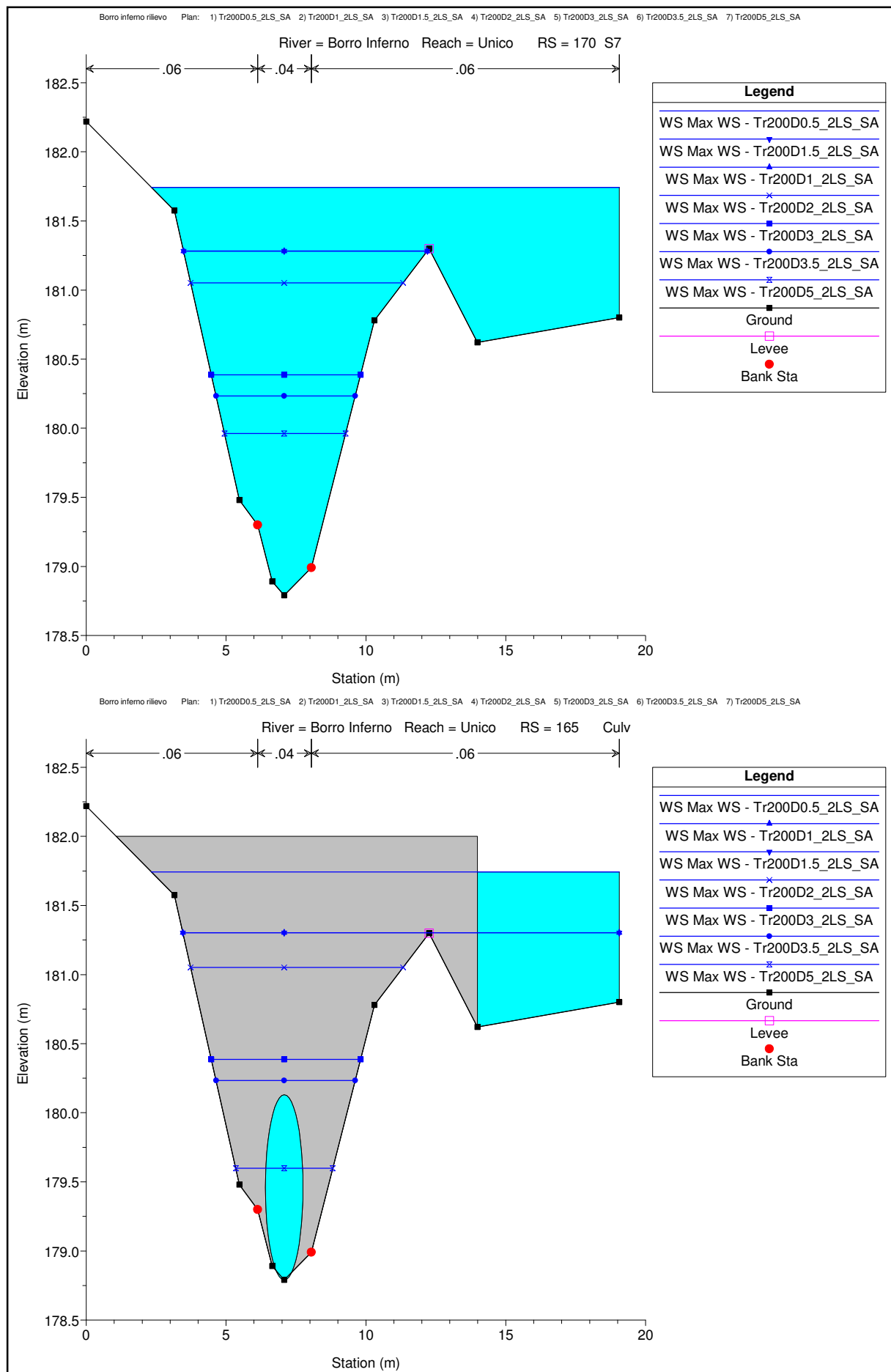
MODELLAZIONE PER TR=200 anni

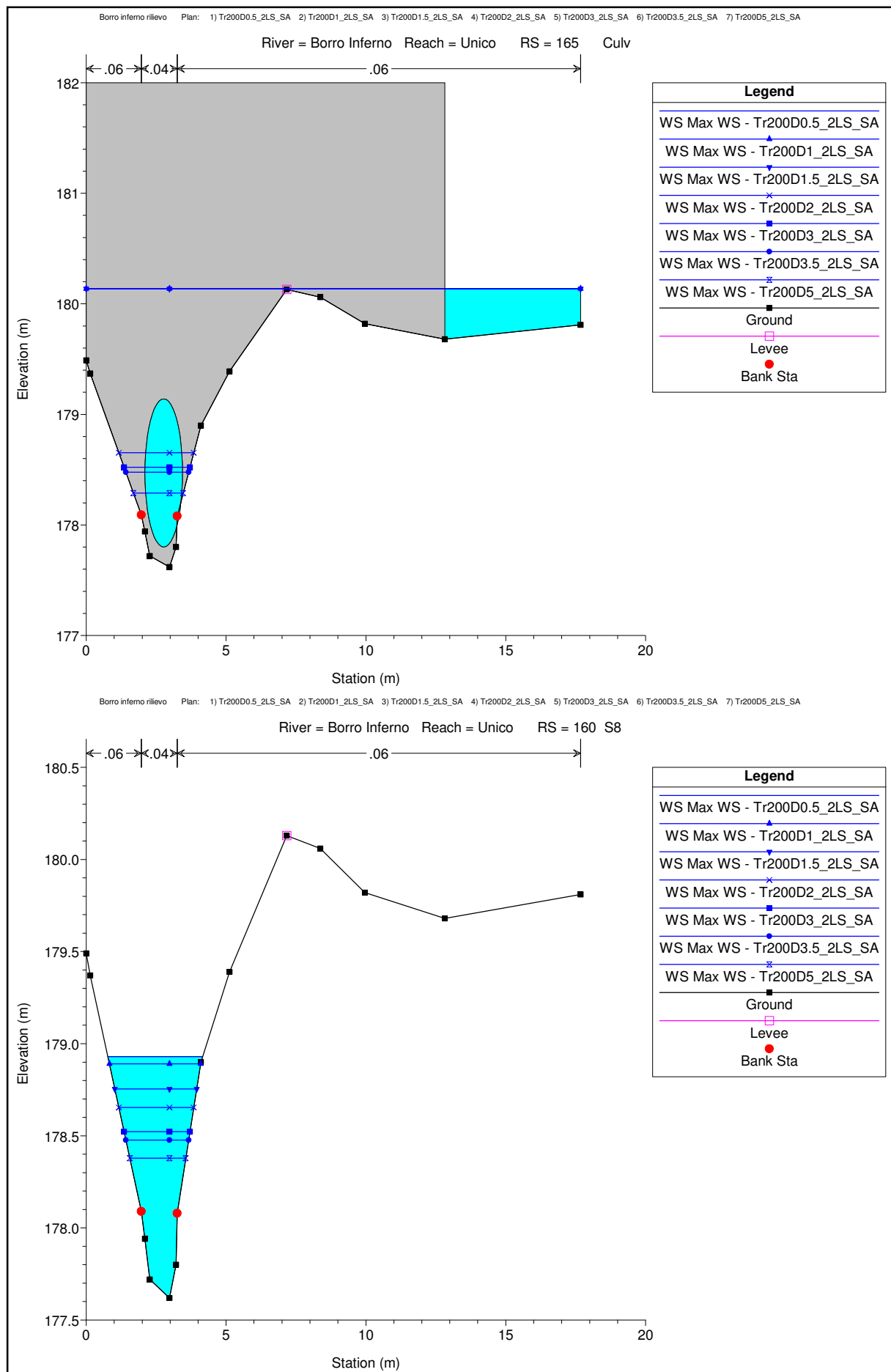
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

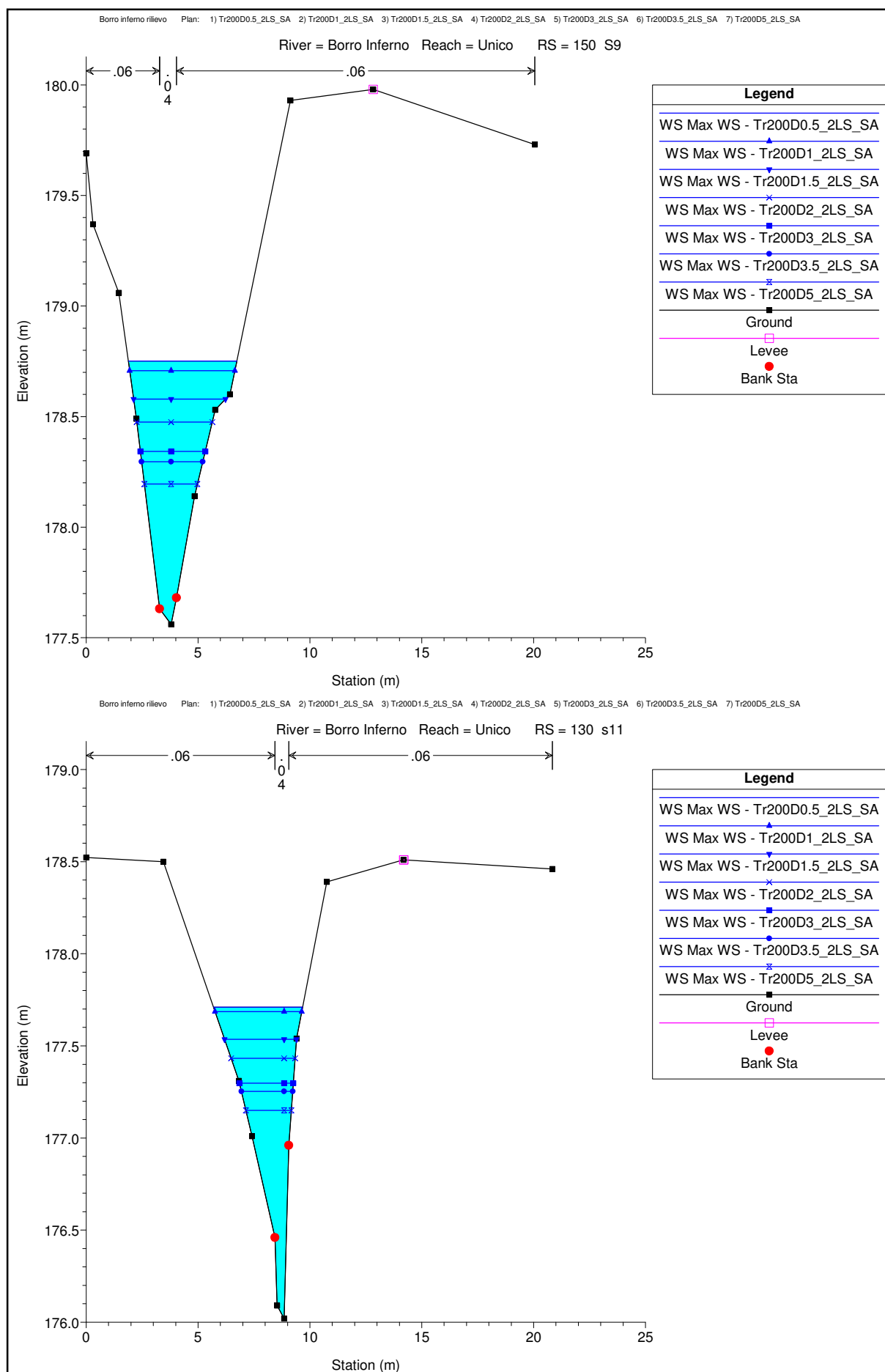
Sezioni Trasversali (da monte verso valle)

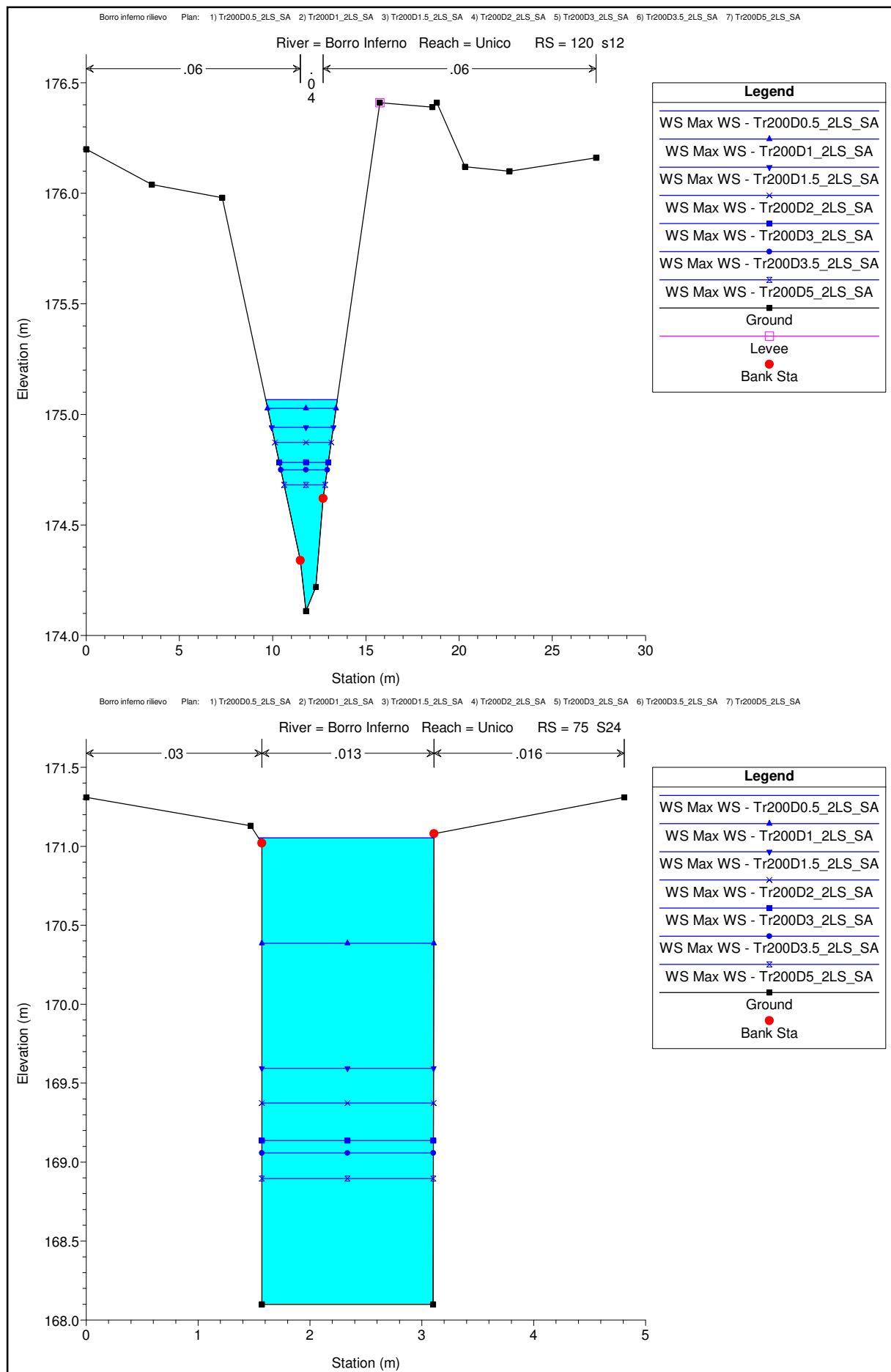


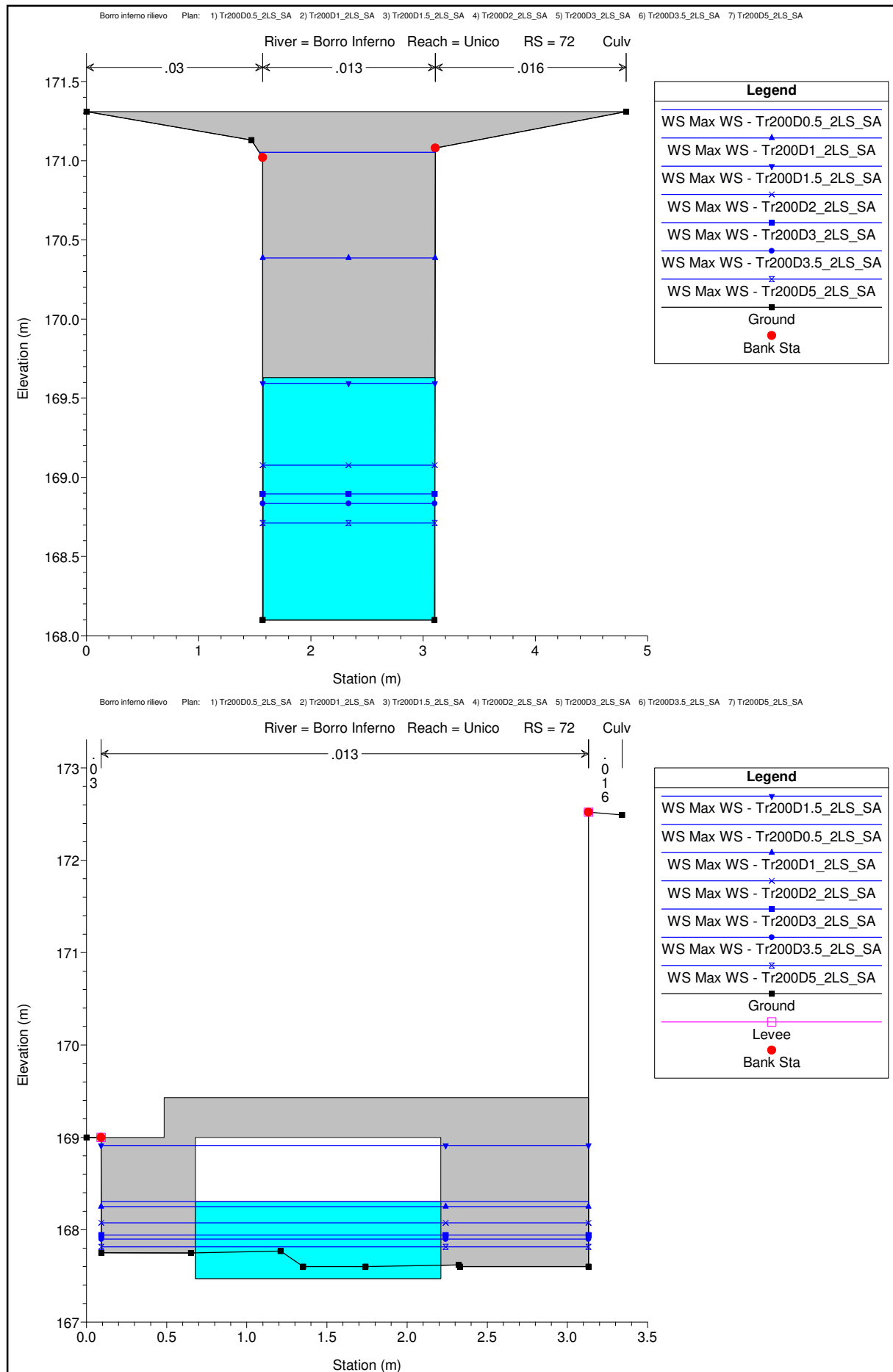


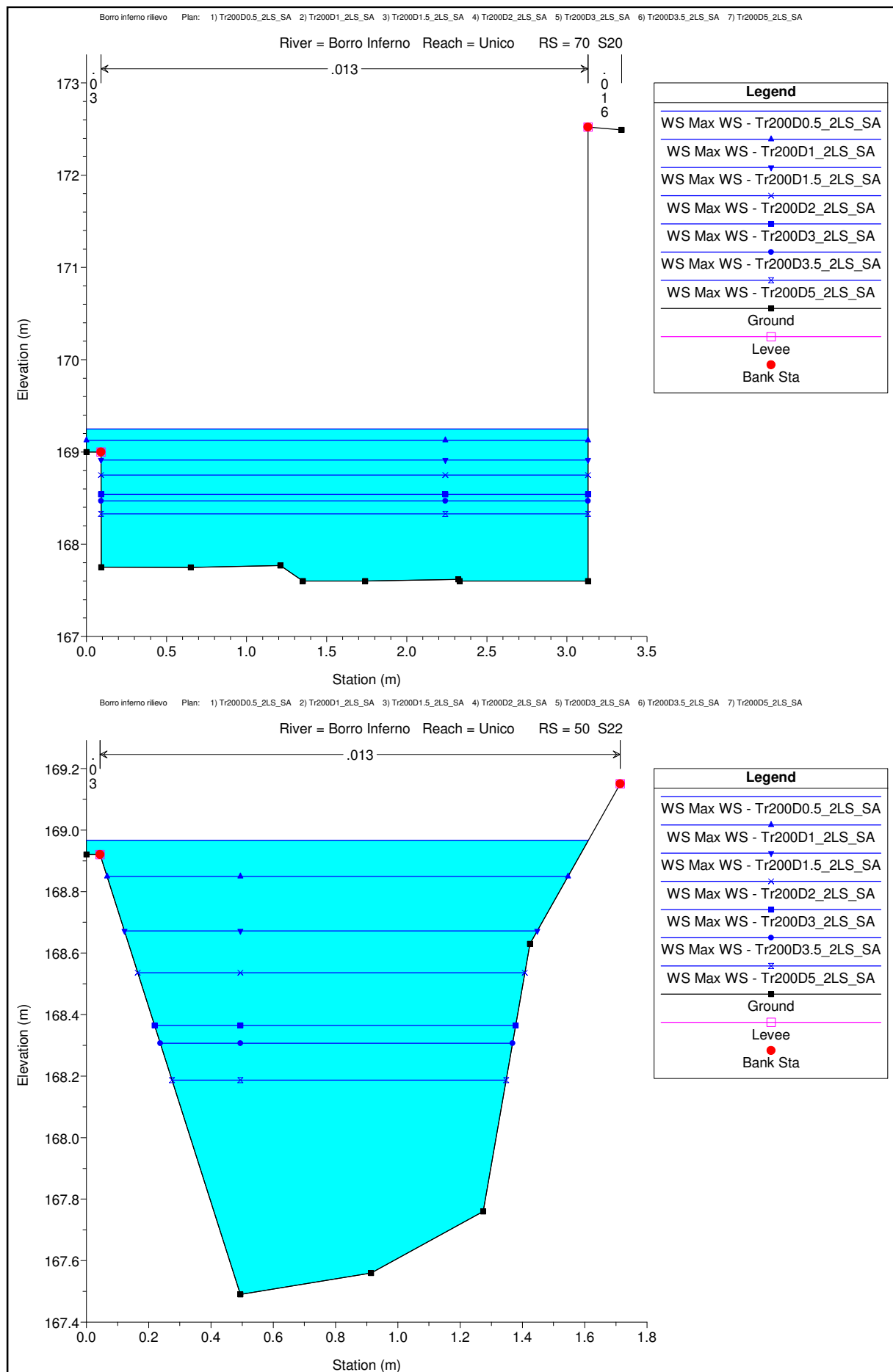


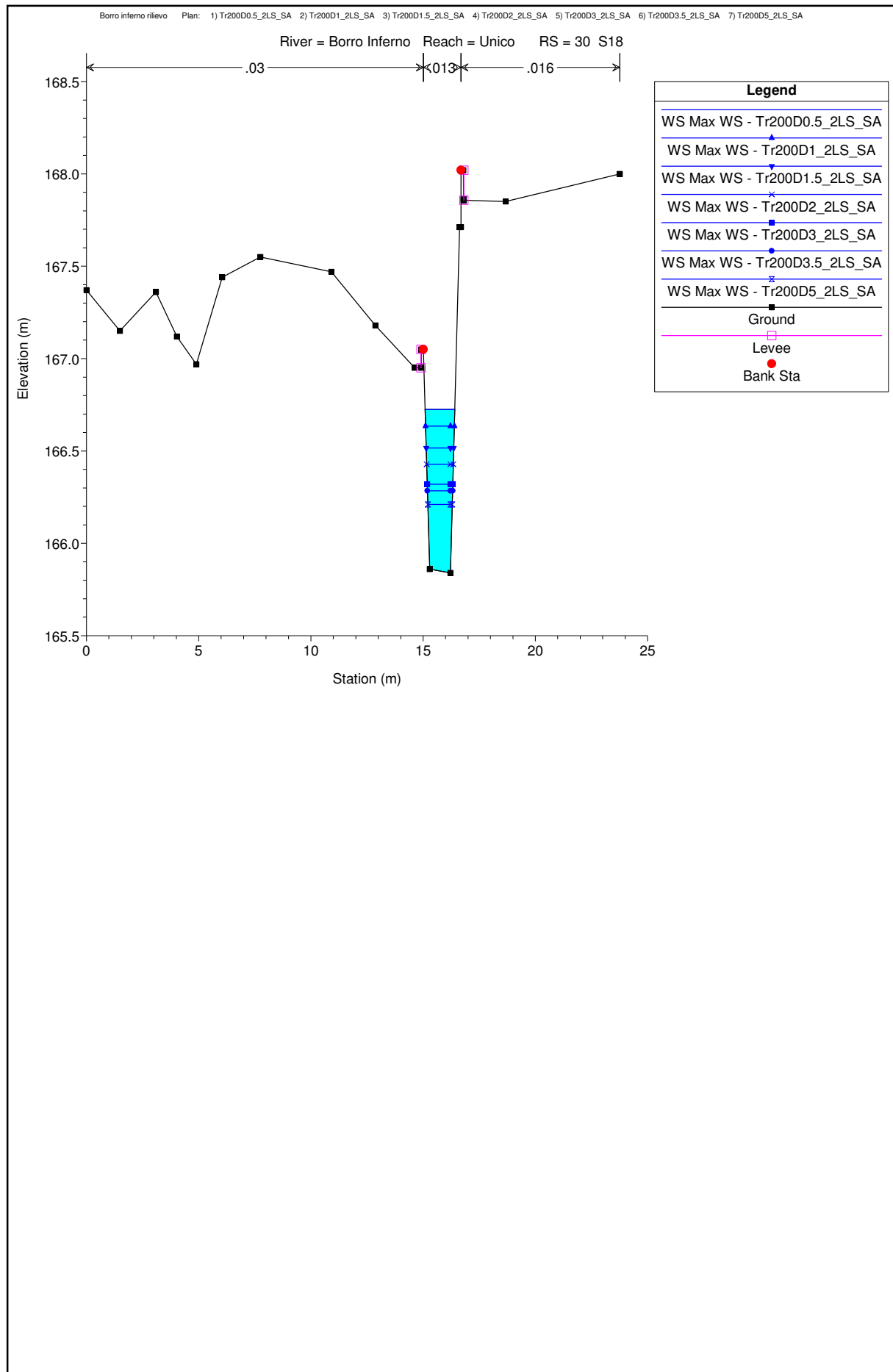














ALLEGATI

MODELLAZIONE HEC-RAS 5.0.3 "Borro Inferno"

BORRO INFERNO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Borro Inferno Reach: Unico Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Unico	250	Max WS	Tr30D0.5 2Ls_SA	6.12	190.50	191.21	191.48	191.94	0.050304	3.95	1.81	3.85	1.62
Unico	250	Max WS	Tr30D1 2Ls_SA	5.13	190.50	191.15	191.30	191.81	0.052503	3.75	1.57	3.65	1.63
Unico	250	Max WS	Tr30D1.5 2Ls_SA	4.00	190.50	191.07	191.25	191.64	0.054357	3.45	1.30	3.42	1.61
Unico	250	Max WS	Tr30D2 2Ls_SA	3.21	190.50	191.02	191.16	191.50	0.053564	3.16	1.12	3.26	1.57
Unico	250	Max WS	Tr30D3 2Ls_SA	2.32	190.50	190.96	191.06	191.31	0.048434	2.70	0.93	3.08	1.45
Unico	250	Max WS	Tr30D3.5 2Ls_SA	2.04	190.50	190.93	191.02	191.26	0.050824	2.61	0.84	2.99	1.47
Unico	250	Max WS	Tr30D5 2Ls_SA	1.52	190.50	190.85	190.95	191.18	0.072524	2.59	0.62	2.75	1.67
Unico	240	Max WS	Tr30D0.5 2Ls_SA	6.11	187.23	187.81	188.08	188.57	0.076817	3.95	1.67	4.50	1.91
Unico	240	Max WS	Tr30D1 2Ls_SA	5.12	187.23	187.77	188.01	188.44	0.076520	3.69	1.49	4.36	1.87
Unico	240	Max WS	Tr30D1.5 2Ls_SA	4.00	187.23	187.72	187.88	188.26	0.073302	3.31	1.28	4.20	1.79
Unico	240	Max WS	Tr30D2 2Ls_SA	3.21	187.23	187.68	187.82	188.12	0.067569	2.96	1.14	4.08	1.69
Unico	240	Max WS	Tr30D3 2Ls_SA	2.32	187.23	187.60	187.73	188.04	0.102991	2.97	0.80	3.81	1.98
Unico	240	Max WS	Tr30D3.5 2Ls_SA	2.04	187.23	187.57	187.70	188.02	0.124047	2.98	0.70	3.71	2.13
Unico	240	Max WS	Tr30D5 2Ls_SA	1.52	187.23	187.52	187.64	187.98	0.180113	3.01	0.51	3.48	2.45
Unico	220	Max WS	Tr30D0.5 2Ls_SA	6.10	183.93	184.36	184.60	185.17	0.106737	4.30	1.78	6.57	2.22
Unico	220	Max WS	Tr30D1 2Ls_SA	5.12	183.93	184.33	184.54	185.06	0.108666	4.06	1.56	6.19	2.20
Unico	220	Max WS	Tr30D1.5 2Ls_SA	4.00	183.93	184.28	184.47	184.92	0.112305	3.75	1.28	5.71	2.19
Unico	220	Max WS	Tr30D2 2Ls_SA	3.21	183.93	184.25	184.41	184.80	0.113121	3.47	1.09	5.35	2.15
Unico	220	Max WS	Tr30D3 2Ls_SA	2.32	183.93	184.20	184.34	184.65	0.117939	3.11	0.85	4.87	2.13
Unico	220	Max WS	Tr30D3.5 2Ls_SA	2.04	183.93	184.18	184.31	184.60	0.118947	2.97	0.77	4.70	2.11
Unico	220	Max WS	Tr30D5 2Ls_SA	1.52	183.93	184.15	184.25	184.49	0.116044	2.64	0.64	4.39	2.03
Unico	200	Max WS	Tr30D0.5 2Ls_SA	6.09	181.20	182.41	182.89	183.98	0.110877	6.45	1.40	2.31	1.98
Unico	200	Max WS	Tr30D1 2Ls_SA	5.12	181.20	182.33	182.76	183.78	0.110678	6.10	1.21	2.15	1.95
Unico	200	Max WS	Tr30D1.5 2Ls_SA	4.00	181.20	182.22	182.62	183.50	0.108496	5.61	0.99	1.94	1.90
Unico	200	Max WS	Tr30D2 2Ls_SA	3.21	181.20	182.13	182.49	183.28	0.108207	5.22	0.83	1.77	1.86
Unico	200	Max WS	Tr30D3 2Ls_SA	2.32	181.20	182.02	182.32	182.98	0.106413	4.67	0.64	1.54	1.80
Unico	200	Max WS	Tr30D3.5 2Ls_SA	2.04	181.20	181.97	182.26	182.87	0.105741	4.47	0.58	1.46	1.78
Unico	200	Max WS	Tr30D5 2Ls_SA	1.52	181.20	181.89	182.13	182.63	0.103584	4.01	0.46	1.29	1.72
Unico	180			Lat Struct									
Unico	170	Max WS	Tr30D0.5 2Ls_SA	5.43	178.79	181.28		181.30	0.000363	0.79	11.17	8.71	0.17
Unico	170	Max WS	Tr30D1 2Ls_SA	5.10	178.79	181.26		181.28	0.000333	0.76	10.99	8.61	0.16
Unico	170	Max WS	Tr30D1.5 2Ls_SA	4.00	178.79	180.69		180.72	0.000628	0.86	6.83	6.05	0.21
Unico	170	Max WS	Tr30D2 2Ls_SA	3.21	178.79	180.31		180.35	0.001047	0.94	4.72	5.16	0.26
Unico	170	Max WS	Tr30D3 2Ls_SA	2.32	178.79	179.97		180.01	0.001604	0.97	3.11	4.36	0.30
Unico	170	Max WS	Tr30D3.5 2Ls_SA	2.04	178.79	179.88		179.92	0.001752	0.95	2.73	4.14	0.31
Unico	170	Max WS	Tr30D5 2Ls_SA	1.52	178.79	179.71		179.74	0.002093	0.91	2.04	3.73	0.33
Unico	165			Culvert									
Unico	160	Max WS	Tr30D0.5 2Ls_SA	6.09	177.62	178.79	178.99	179.49	0.036464	3.96	1.94	3.01	1.24
Unico	160	Max WS	Tr30D1 2Ls_SA	5.10	177.62	178.70	178.88	179.33	0.035808	3.70	1.69	2.79	1.21
Unico	160	Max WS	Tr30D1.5 2Ls_SA	4.00	177.62	178.59	178.73	179.13	0.035231	3.39	1.39	2.52	1.17
Unico	160	Max WS	Tr30D2 2Ls_SA	3.21	177.62	178.50	178.61	178.97	0.034527	3.11	1.18	2.30	1.14
Unico	160	Max WS	Tr30D3 2Ls_SA	2.32	177.62	178.38	178.46	178.75	0.033360	2.73	0.93	2.01	1.09
Unico	160	Max WS	Tr30D3.5 2Ls_SA	2.04	177.62	178.34	178.39	178.68	0.032677	2.59	0.85	1.91	1.07
Unico	160	Max WS	Tr30D5 2Ls_SA	1.52	177.62	178.26	178.28	178.52	0.031283	2.29	0.69	1.70	1.02
Unico	150	Max WS	Tr30D0.5 2Ls_SA	6.09	177.56	178.61	178.87	179.42	0.040466	4.91	2.19	4.37	1.56
Unico	150	Max WS	Tr30D1 2Ls_SA	5.10	177.56	178.52	178.79	179.26	0.040062	4.60	1.85	3.56	1.53
Unico	150	Max WS	Tr30D1.5 2Ls_SA	4.00	177.56	178.41	178.68	179.10	0.042910	4.36	1.47	3.15	1.55
Unico	150	Max WS	Tr30D2 2Ls_SA	3.21	177.56	178.32	178.53	178.97	0.045489	4.15	1.20	2.82	1.57
Unico	150	Max WS	Tr30D3 2Ls_SA	2.32	177.56	178.20	178.39	178.79	0.049741	3.84	0.88	2.39	1.59
Unico	150	Max WS	Tr30D3.5 2Ls_SA	2.04	177.56	178.16	178.34	178.71	0.050199	3.69	0.79	2.25	1.58
Unico	150	Max WS	Tr30D5 2Ls_SA	1.52	177.56	178.07	178.24	178.56	0.053444	3.40	0.61	1.98	1.58
Unico	130	Max WS	Tr30D0.5 2Ls_SA	6.09	176.02	177.57	177.71	178.08	0.057625	3.76	2.14	3.37	1.04
Unico	130	Max WS	Tr30D1 2Ls_SA	5.10	176.02	177.48	177.60	177.95	0.057778	3.59	1.84	3.02	1.03
Unico	130	Max WS	Tr30D1.5 2Ls_SA	3.99	176.02	177.37	177.46	177.78	0.055190	3.30	1.53	2.65	0.99
Unico	130	Max WS	Tr30D2 2Ls_SA	3.21	176.02	177.28	177.33	177.64	0.053366	3.07	1.30	2.35	0.96
Unico	130	Max WS	Tr30D3 2Ls_SA	2.32	176.02	177.16	177.19	177.46	0.049716	2.72	1.03	2.05	0.91
Unico	130	Max WS	Tr30D3.5 2Ls_SA	2.04	176.02	177.10	177.13	177.39	0.049766	2.63	0.93	1.92	0.90
Unico	130	Max WS	Tr30D5 2Ls_SA	1.52	176.02	177.00	177.01	177.24	0.048907	2.39	0.75	1.66	0.87
Unico	120	Max WS	Tr30D0.5 2Ls_SA	6.09	174.11	174.96	175.35	176.27	0.103385	5.58	1.45	3.39	2.13
Unico	120	Max WS	Tr30D1 2Ls_SA	5.10	174.11	174.91	175.26	176.07	0.100082	5.20	1.27	3.16	2.07
Unico	120	Max WS	Tr30D1.5 2Ls_SA	3.99	174.11	174.83	175.14	175.85	0.101057	4.80	1.04	2.83	2.04
Unico	120	Max WS	Tr30D2 2Ls_SA	3.21	174.11	174.77	175.05	175.67	0.102287	4.47	0.87	2.56	2.01
Unico	120	Max WS	Tr30D3 2Ls_SA	2.32	174.11	174.68	174.92	175.43	0.103387	3.99	0.68	2.22	1.96
Unico	120	Max WS	Tr30D3.5 2Ls_SA	2.04	174.11	174.65	174.87	175.34	0.104571	3.83	0.61	2.09	1.95
Unico	120	Max WS	Tr30D5 2Ls_SA	1.52	174.11	174.60	174.77	175.16	0.099727	3.41	0.50	1.86	1.86
Unico	110			Lat Struct									
Unico	75	Max WS	Tr30D0.5 2Ls_SA	6.08	168.10	169.78		170.06	0.002227	2.37	2.57	1.54	0.58
Unico	75	Max WS	Tr30D1 2Ls_SA	5.10	168.10	169.46		169.77	0.002623	2.45	2.08	1.53	0.67
Unico	75	Max WS	Tr30D1.5 2Ls_SA	3.99	168.10	169.25		169.51	0.002423	2.26	1.77	1.53	0.67
Unico	75	Max WS	Tr30D2 2Ls_SA	3.21	168.10	169.10		169.32	0.002273	2.10	1.53	1.53	0.67
Unico	75	Max WS	Tr30D3 2Ls_SA	2.32	168.10	168.90		169.08	0.002095	1.89	1.23	1.53	0.67
Unico	75	Max WS	Tr30D3.5 2Ls_SA	2.04	168.10	168.84		169.00	0.002037	1.81	1.13	1.53	0.67
Unico	75	Max WS	Tr30D5 2Ls_SA	1.52	168.10	168.71		168.84	0.001927	1.64	0.93	1.53	0.67
Unico	72			Culvert									
Unico	70	Max WS	Tr30D0.5 2Ls_SA	6.08	167.60	168.97		169.09	0.000651	1.54	3.96	3.04	0.43
Unico	70	Max WS	Tr30D1 2Ls_SA	5.10	167.60	168.82		168.93	0.000629	1.45	3.52	3.04	0.43
Unico	70	Max WS	Tr30D1.5 2Ls_SA	3.99	167.60	168.64		168.74	0.000614	1.34	2.98	3.04	0.43
Unico	70	Max WS	Tr30D2 2Ls_SA	3.21	167.60	168.51		168.59	0.000612	1.25	2.56	3.04	0.44
Unico	70	Max WS	Tr30D3 2Ls_SA	2.32	167.60	168.33		168.40	0.000618	1.14	2.04	3.04	0.44
Unico	70	Max WS	Tr30D3.5 2Ls_SA	2.04	167.60	168.28		168.34	0.000626	1.10	1.86	3.04	0.45

HEC-RAS River: Borro Inferno Reach: Unico Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Unico	70	Max WS	Tr30D5_2Ls_SA	1.52	167.60	168.16		168.21	0.000662	1.01	1.50	3.04	0.46
Unico	69			Lat Struct									
Unico	50	Max WS	Tr30D0.5_2Ls_SA	6.08	167.49	168.71	169.14	170.04	0.015628	5.09	1.19	1.36	1.74
Unico	50	Max WS	Tr30D1_2Ls_SA	5.10	167.49	168.60	168.99	169.82	0.015572	4.91	1.04	1.27	1.73
Unico	50	Max WS	Tr30D1.5_2Ls_SA	3.99	167.49	168.45	168.81	169.55	0.015517	4.65	0.86	1.20	1.75
Unico	50	Max WS	Tr30D2_2Ls_SA	3.21	167.49	168.34	168.65	169.33	0.015502	4.43	0.73	1.15	1.78
Unico	50	Max WS	Tr30D3_2Ls_SA	2.32	167.49	168.19	168.46	169.05	0.015474	4.10	0.57	1.08	1.81
Unico	50	Max WS	Tr30D3.5_2Ls_SA	2.04	167.49	168.14	168.40	168.95	0.015450	3.98	0.51	1.05	1.82
Unico	50	Max WS	Tr30D5_2Ls_SA	1.52	167.49	168.04	168.26	168.74	0.015421	3.70	0.41	1.00	1.85
Unico	30	Max WS	Tr30D0.5_2Ls_SA	6.07	165.84	166.54	167.44	169.86	0.050221	8.07	0.75	1.24	3.31
Unico	30	Max WS	Tr30D1_2Ls_SA	5.10	165.84	166.47	167.34	169.51	0.050195	7.73	0.66	1.21	3.34
Unico	30	Max WS	Tr30D1.5_2Ls_SA	3.99	165.84	166.37	166.97	169.07	0.050146	7.27	0.55	1.17	3.38
Unico	30	Max WS	Tr30D2_2Ls_SA	3.21	165.84	166.30	166.83	168.71	0.050213	6.87	0.47	1.13	3.42
Unico	30	Max WS	Tr30D3_2Ls_SA	2.32	165.84	166.21	166.65	168.23	0.050462	6.29	0.37	1.09	3.46
Unico	30	Max WS	Tr30D3.5_2Ls_SA	2.04	165.84	166.18	166.59	168.06	0.050217	6.06	0.34	1.08	3.47
Unico	30	Max WS	Tr30D5_2Ls_SA	1.52	165.84	166.12	166.47	167.72	0.051048	5.59	0.27	1.05	3.51



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.3 "Borro Inferno"

BORRO INFERNO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Borro Inferno Reach: Unico Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Unico	250	Max WS	Tr200D0.5_2LS_SA	8.82	190.50	191.35	191.65	192.32	0.051976	4.59	2.36	4.63	1.70
Unico	250	Max WS	Tr200D1_2LS_SA	7.33	190.50	191.28	191.57	192.09	0.049098	4.19	2.08	4.05	1.63
Unico	250	Max WS	Tr200D1.5_2LS_SA	5.72	190.50	191.19	191.45	191.89	0.050882	3.87	1.72	3.77	1.62
Unico	250	Max WS	Tr200D2_2LS_SA	4.63	190.50	191.12	191.30	191.74	0.053603	3.63	1.45	3.55	1.63
Unico	250	Max WS	Tr200D3_2LS_SA	3.40	190.50	191.03	191.18	191.54	0.054019	3.23	1.17	3.30	1.58
Unico	250	Max WS	Tr200D3.5_2LS_SA	3.02	190.50	191.01	191.14	191.46	0.052492	3.06	1.09	3.23	1.55
Unico	250	Max WS	Tr200D5_2LS_SA	2.29	190.50	190.96	191.06	191.31	0.048184	2.68	0.93	3.07	1.45
Unico	240	Max WS	Tr200D0.5_2LS_SA	8.81	187.23	187.92	188.24	188.87	0.070300	4.42	2.22	4.88	1.90
Unico	240	Max WS	Tr200D1_2LS_SA	7.32	187.23	187.86	188.17	188.72	0.074374	4.19	1.92	4.67	1.91
Unico	240	Max WS	Tr200D1.5_2LS_SA	5.72	187.23	187.79	188.05	188.52	0.076744	3.85	1.60	4.44	1.89
Unico	240	Max WS	Tr200D2_2LS_SA	4.63	187.23	187.74	187.97	188.36	0.075616	3.53	1.40	4.29	1.84
Unico	240	Max WS	Tr200D3_2LS_SA	3.40	187.23	187.69	187.83	188.16	0.069133	3.05	1.17	4.11	1.72
Unico	240	Max WS	Tr200D3.5_2LS_SA	3.02	187.23	187.66	187.80	188.11	0.075065	2.99	1.06	4.02	1.76
Unico	240	Max WS	Tr200D5_2LS_SA	2.29	187.23	187.60	187.73	188.04	0.105022	2.97	0.79	3.80	2.00
Unico	220	Max WS	Tr200D0.5_2LS_SA	8.80	183.93	184.45	184.74	185.44	0.102726	4.83	2.40	7.54	2.25
Unico	220	Max WS	Tr200D1_2LS_SA	7.32	183.93	184.40	184.67	185.30	0.104587	4.56	2.07	7.00	2.23
Unico	220	Max WS	Tr200D1.5_2LS_SA	5.72	183.93	184.35	184.58	185.13	0.108254	4.22	1.69	6.42	2.22
Unico	220	Max WS	Tr200D2_2LS_SA	4.63	183.93	184.31	184.51	185.00	0.110021	3.93	1.44	5.99	2.20
Unico	220	Max WS	Tr200D3_2LS_SA	3.40	183.93	184.25	184.42	184.83	0.113670	3.55	1.13	5.44	2.17
Unico	220	Max WS	Tr200D3.5_2LS_SA	3.02	183.93	184.24	184.39	184.77	0.112640	3.39	1.04	5.26	2.13
Unico	220	Max WS	Tr200D5_2LS_SA	2.29	183.93	184.20	184.33	184.65	0.118359	3.10	0.84	4.85	2.13
Unico	200	Max WS	Tr200D0.5_2LS_SA	8.80	181.20	182.60	183.18	184.46	0.112080	7.23	1.88	2.69	2.05
Unico	200	Max WS	Tr200D1_2LS_SA	7.32	181.20	182.50	183.03	184.22	0.112317	6.85	1.61	2.49	2.02
Unico	200	Max WS	Tr200D1.5_2LS_SA	5.72	181.20	182.38	182.85	183.90	0.110495	6.31	1.33	2.25	1.97
Unico	200	Max WS	Tr200D2_2LS_SA	4.63	181.20	182.28	182.70	183.66	0.110072	5.90	1.12	2.06	1.93
Unico	200	Max WS	Tr200D3_2LS_SA	3.40	181.20	182.15	182.52	183.33	0.108544	5.33	0.87	1.81	1.88
Unico	200	Max WS	Tr200D3.5_2LS_SA	3.02	181.20	182.11	182.45	183.21	0.107051	5.10	0.79	1.73	1.85
Unico	200	Max WS	Tr200D5_2LS_SA	2.29	181.20	182.01	182.32	182.96	0.106307	4.65	0.63	1.53	1.80
Unico	180		Lat Struct										
Unico	170	Max WS	Tr200D0.5_2LS_SA	7.92	178.79	181.74		181.76	0.000231	0.71	21.97	16.73	0.14
Unico	170	Max WS	Tr200D1_2LS_SA	5.17	178.79	181.28		181.30	0.000330	0.76	11.16	8.71	0.16
Unico	170	Max WS	Tr200D1.5_2LS_SA	5.17	178.79	181.28		181.30	0.000328	0.76	11.18	8.72	0.16
Unico	170	Max WS	Tr200D2_2LS_SA	4.63	178.79	181.05		181.07	0.000404	0.78	9.29	7.59	0.17
Unico	170	Max WS	Tr200D3_2LS_SA	3.40	178.79	180.39		180.42	0.000948	0.93	5.13	5.34	0.25
Unico	170	Max WS	Tr200D3.5_2LS_SA	3.02	178.79	180.23		180.27	0.001155	0.95	4.33	4.98	0.27
Unico	170	Max WS	Tr200D5_2LS_SA	2.29	178.79	179.96		180.00	0.001620	0.97	3.07	4.33	0.30
Unico	165		Culvert										
Unico	160	Max WS	Tr200D0.5_2LS_SA	8.08	177.62	178.93	179.21	179.78	0.038246	4.42	2.40	3.39	1.30
Unico	160	Max WS	Tr200D1_2LS_SA	7.55	177.62	178.89	179.16	179.71	0.038275	4.32	2.27	3.26	1.29
Unico	160	Max WS	Tr200D1.5_2LS_SA	5.72	177.62	178.75	178.95	179.43	0.036090	3.86	1.85	2.93	1.23
Unico	160	Max WS	Tr200D2_2LS_SA	4.63	177.62	178.65	178.82	179.25	0.035700	3.58	1.56	2.68	1.20
Unico	160	Max WS	Tr200D3_2LS_SA	3.40	177.62	178.52	178.64	179.01	0.034719	3.18	1.23	2.36	1.15
Unico	160	Max WS	Tr200D3.5_2LS_SA	3.02	177.62	178.48	178.58	178.92	0.034242	3.04	1.13	2.24	1.13
Unico	160	Max WS	Tr200D5_2LS_SA	2.29	177.62	178.38	178.45	178.74	0.033299	2.72	0.92	2.00	1.09
Unico	150	Max WS	Tr200D0.5_2LS_SA	8.08	177.56	178.75	179.02	179.59	0.037808	5.18	2.84	4.85	1.55
Unico	150	Max WS	Tr200D1_2LS_SA	7.55	177.56	178.71	178.99	179.56	0.039629	5.17	2.64	4.71	1.57
Unico	150	Max WS	Tr200D1.5_2LS_SA	5.72	177.56	178.58	178.84	179.37	0.040491	4.81	2.06	4.11	1.56
Unico	150	Max WS	Tr200D2_2LS_SA	4.63	177.56	178.48	178.74	179.19	0.041344	4.51	1.68	3.38	1.54
Unico	150	Max WS	Tr200D3_2LS_SA	3.40	177.56	178.34	178.61	179.00	0.044684	4.20	1.26	2.90	1.56
Unico	150	Max WS	Tr200D3.5_2LS_SA	3.02	177.56	178.30	178.51	178.93	0.046069	4.08	1.13	2.74	1.57
Unico	150	Max WS	Tr200D5_2LS_SA	2.29	177.56	178.19	178.39	178.78	0.049761	3.82	0.87	2.37	1.59
Unico	130	Max WS	Tr200D0.5_2LS_SA	8.07	176.02	177.71	177.88	178.29	0.060487	4.12	2.65	3.99	1.08
Unico	130	Max WS	Tr200D1_2LS_SA	7.50	176.02	177.69	177.83	178.23	0.056914	3.95	2.55	3.88	1.05
Unico	130	Max WS	Tr200D1.5_2LS_SA	5.72	176.02	177.54	177.67	178.03	0.058036	3.71	2.02	3.22	1.04
Unico	130	Max WS	Tr200D2_2LS_SA	4.63	176.02	177.43	177.54	177.89	0.057223	3.49	1.71	2.86	1.02
Unico	130	Max WS	Tr200D3_2LS_SA	3.40	176.02	177.30	177.37	177.68	0.054201	3.13	1.35	2.41	0.97
Unico	130	Max WS	Tr200D3.5_2LS_SA	3.02	176.02	177.25	177.31	177.61	0.052417	2.99	1.25	2.30	0.95
Unico	130	Max WS	Tr200D5_2LS_SA	2.29	176.02	177.15	177.19	177.45	0.049642	2.71	1.02	2.04	0.91
Unico	120	Max WS	Tr200D0.5_2LS_SA	8.07	174.11	175.07	175.50	176.56	0.102055	6.09	1.83	3.84	2.17
Unico	120	Max WS	Tr200D1_2LS_SA	7.42	174.11	175.03	175.45	176.50	0.105910	6.00	1.68	3.67	2.19
Unico	120	Max WS	Tr200D1.5_2LS_SA	5.72	174.11	174.94	175.31	176.19	0.101809	5.44	1.38	3.31	2.11
Unico	120	Max WS	Tr200D2_2LS_SA	4.63	174.11	174.87	175.21	175.98	0.101262	5.05	1.17	3.02	2.06
Unico	120	Max WS	Tr200D3_2LS_SA	3.40	174.11	174.78	175.07	175.71	0.101135	4.54	0.91	2.64	2.01
Unico	120	Max WS	Tr200D3.5_2LS_SA	3.02	174.11	174.75	175.02	175.62	0.102647	4.38	0.83	2.49	2.00
Unico	120	Max WS	Tr200D5_2LS_SA	2.29	174.11	174.68	174.91	175.42	0.103451	3.98	0.67	2.20	1.96
Unico	110		Lat Struct										
Unico	75	Max WS	Tr200D0.5_2LS_SA	8.78	168.10	171.05		171.24	0.001222	1.94	4.53	1.57	0.36
Unico	75	Max WS	Tr200D1_2LS_SA	7.38	168.10	170.39		170.61	0.001566	2.10	3.51	1.54	0.44
Unico	75	Max WS	Tr200D1.5_2LS_SA	5.72	168.10	169.59		169.91	0.002608	2.50	2.29	1.53	0.65
Unico	75	Max WS	Tr200D2_2LS_SA	4.63	168.10	169.37		169.66	0.002539	2.37	1.95	1.53	0.67
Unico	75	Max WS	Tr200D3_2LS_SA	3.40	168.10	169.14		169.37	0.002310	2.14	1.59	1.53	0.67
Unico	75	Max WS	Tr200D3.5_2LS_SA	3.02	168.10	169.06		169.27	0.002236	2.06	1.47	1.53	0.67
Unico	75	Max WS	Tr200D5_2LS_SA	2.29	168.10	168.90		169.08	0.002090	1.88	1.22	1.53	0.67
Unico	72		Culvert										
Unico	70	Max WS	Tr200D0.5_2LS_SA	8.78	167.60	169.25		169.42	0.000754	1.82	4.85	3.13	0.46
Unico	70	Max WS	Tr200D1_2LS_SA	7.38	167.60	169.13		169.27	0.000678	1.66	4.46	3.13	0.44
Unico	70	Max WS	Tr200D1.5_2LS_SA	5.72	167.60	168.91		169.03	0.000642	1.50	3.80	3.04	0.43
Unico	70	Max WS	Tr200D2_2LS_SA	4.63	167.60	168.75		168.85	0.000621	1.40	3.30	3.04	0.43
Unico	70	Max WS	Tr200D3_2LS_SA	3.40	167.60	168.54		168.62	0.000612	1.27	2.67	3.04	0.43
Unico	70	Max WS	Tr200D3.5_2LS_SA	3.02	167.60	168.47		168.55	0.000614	1.23	2.45	3.04	0.44
Unico	70	Max WS	Tr200D5_2LS_SA	2.29	167.60	168.33		168.39	0.000619	1.13	2.02	3.04	0.44
Unico	69		Lat Struct										
Unico	50	Max WS	Tr200D0.5_2LS_SA	8.68	167.49	168.97	169.44	170.53	0.015787	5.54	1.57	1.61	1.77

HEC-RAS River: Borro Inferno Reach: Unico Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Unico	50	Max WS	Tr200D1_2LS_SA	7.35	167.49	168.85	169.29	170.28	0.015670	5.30	1.39	1.48	1.75
Unico	50	Max WS	Tr200D1.5_2LS_SA	5.72	167.49	168.67	169.08	169.96	0.015600	5.03	1.14	1.33	1.73
Unico	50	Max WS	Tr200D2_2LS_SA	4.63	167.49	168.54	168.92	169.71	0.015545	4.80	0.96	1.24	1.74
Unico	50	Max WS	Tr200D3_2LS_SA	3.40	167.49	168.36	168.69	169.39	0.015507	4.48	0.76	1.16	1.77
Unico	50	Max WS	Tr200D3.5_2LS_SA	3.02	167.49	168.31	168.61	169.28	0.015493	4.36	0.69	1.13	1.78
Unico	50	Max WS	Tr200D5_2LS_SA	2.29	167.49	168.19	168.46	169.04	0.015470	4.09	0.56	1.07	1.81
Unico	30	Max WS	Tr200D0.5_2LS_SA	8.63	165.84	166.73	167.63	170.63	0.050108	8.75	0.99	1.32	3.24
Unico	30	Max WS	Tr200D1_2LS_SA	7.32	165.84	166.63	167.47	170.25	0.050146	8.43	0.87	1.28	3.27
Unico	30	Max WS	Tr200D1.5_2LS_SA	5.72	165.84	166.52	167.42	169.74	0.050151	7.95	0.72	1.23	3.32
Unico	30	Max WS	Tr200D2_2LS_SA	4.63	165.84	166.43	167.27	169.34	0.050275	7.55	0.61	1.19	3.36
Unico	30	Max WS	Tr200D3_2LS_SA	3.40	165.84	166.32	166.87	168.80	0.050325	6.98	0.49	1.14	3.41
Unico	30	Max WS	Tr200D3.5_2LS_SA	3.02	165.84	166.28	166.79	168.61	0.050180	6.75	0.45	1.13	3.42
Unico	30	Max WS	Tr200D5_2LS_SA	2.29	165.84	166.21	166.65	168.22	0.050426	6.27	0.37	1.09	3.46



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

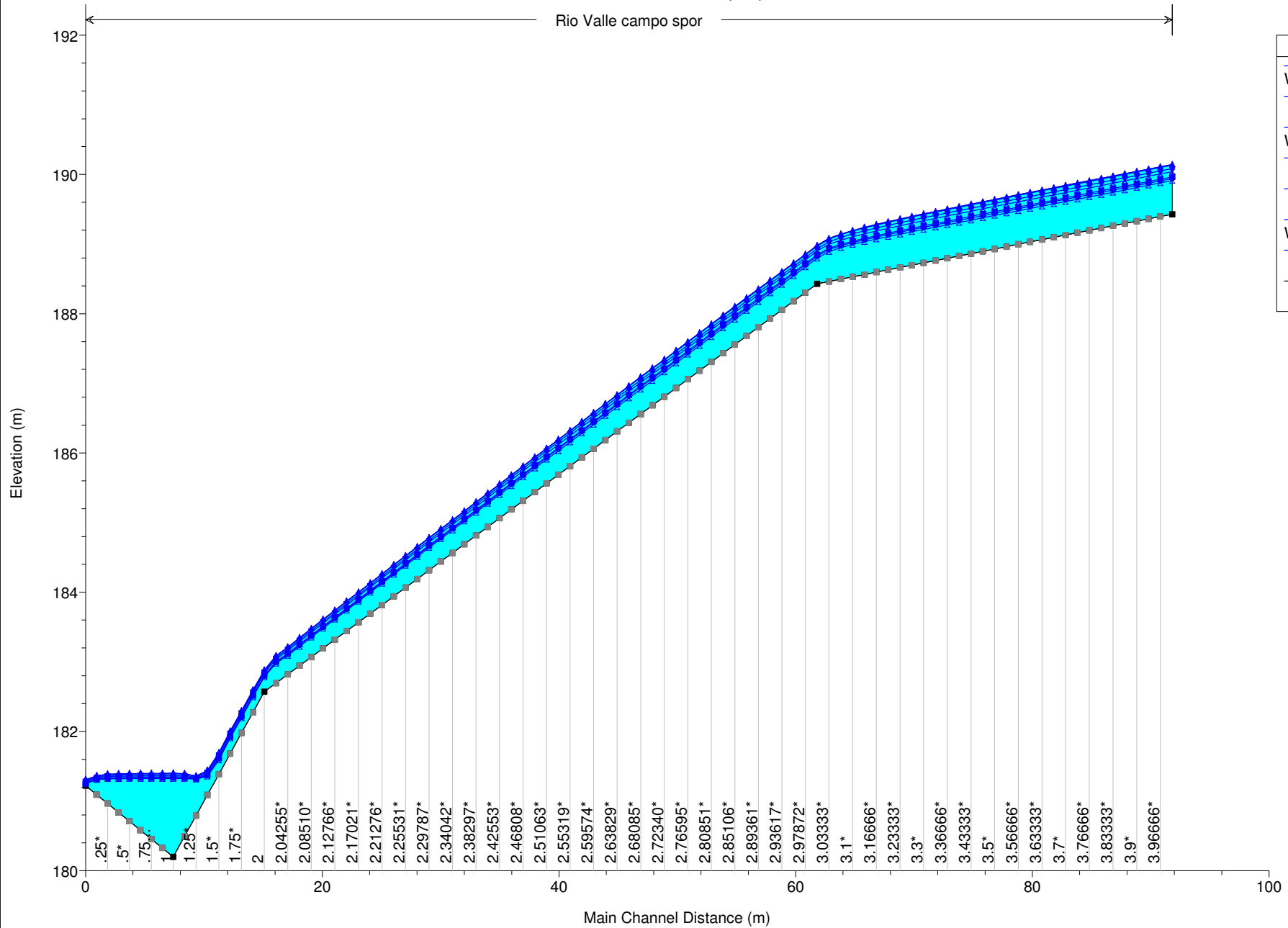
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Campo sportivo Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5
Geom: campo sportivo

Rio Valle campo spor



Legend	
WS Max WS - 30h0.5	▲
WS Max WS - 30h1	▼
WS Max WS - 30h1.5	×
WS Max WS - 30h2	■
WS Max WS - 30h3	●
WS Max WS - 30h3.5	+
WS Max WS - 30h5	—
Ground	■



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

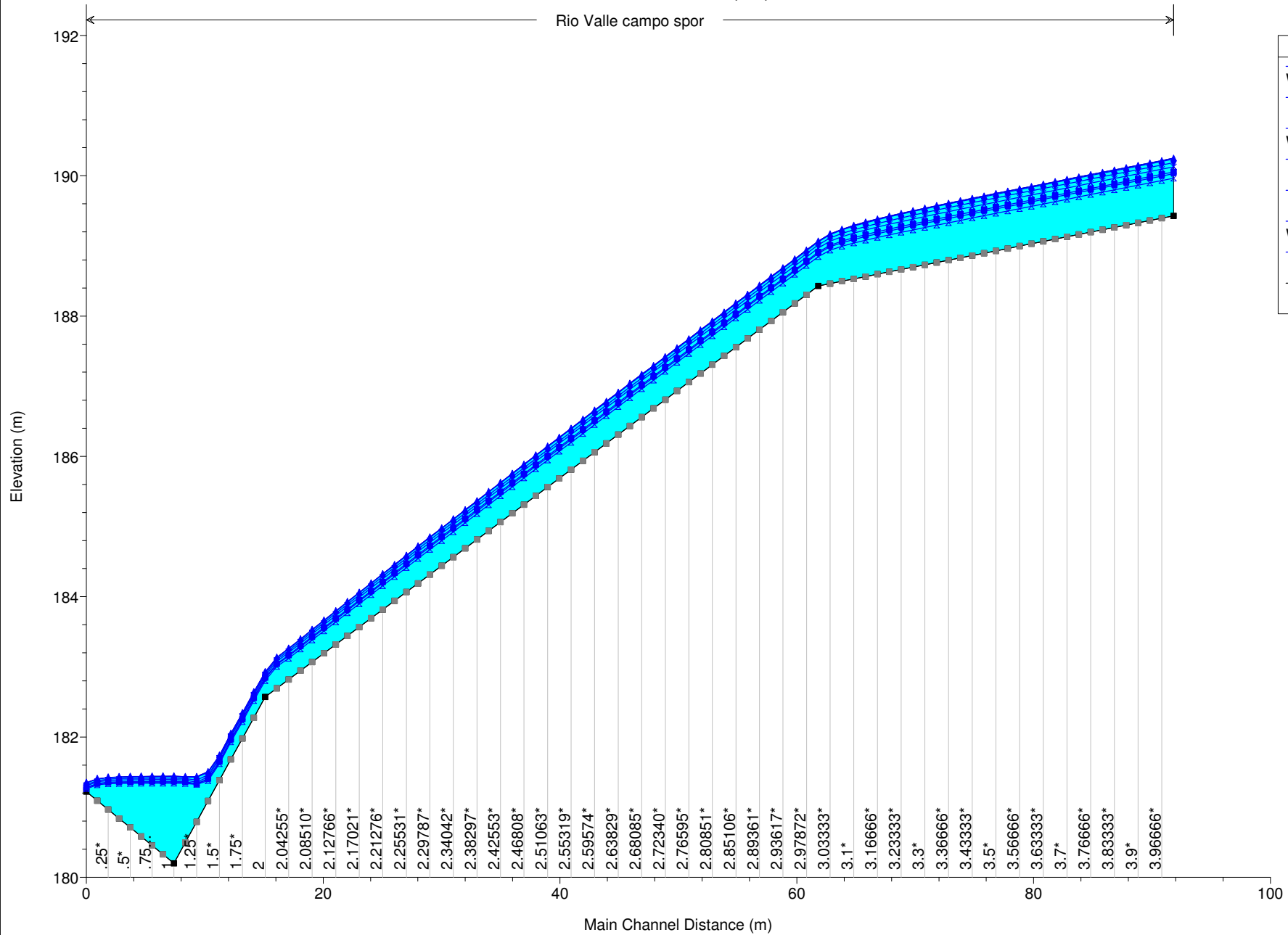
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Campo sportivo Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5
Geom: campo sportivo

Rio Valle campo spor



Legend	
WS Max WS - 200h0.5	▲
WS Max WS - 200h1	▼
WS Max WS - 200h1.5	×
WS Max WS - 200h2	■
WS Max WS - 200h3	●
WS Max WS - 200h3.5	×
WS Max WS - 200h5	■
Ground	■



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

MODELLAZIONE PER TR=30 anni

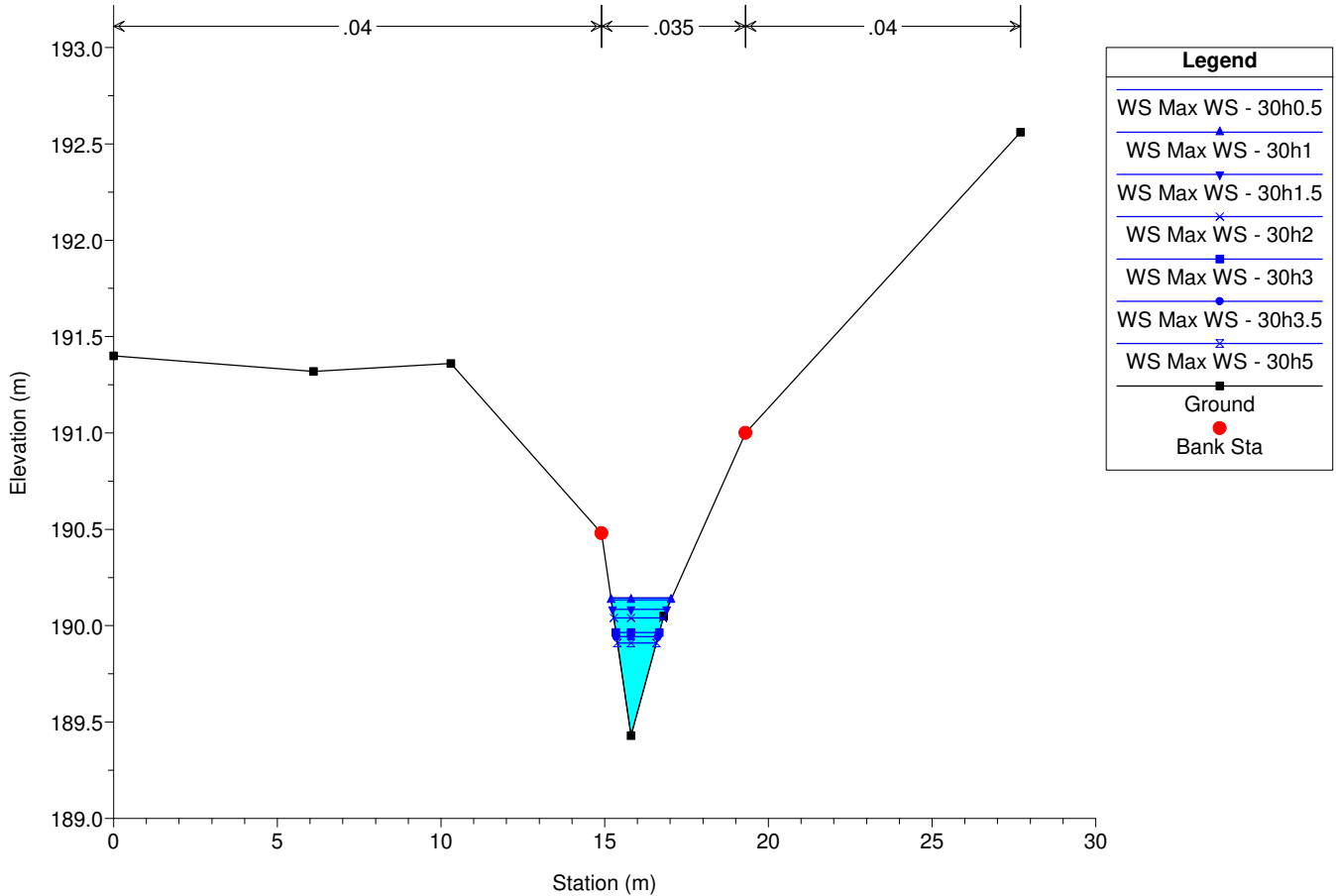
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Campo sportivo Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: campo sportivo

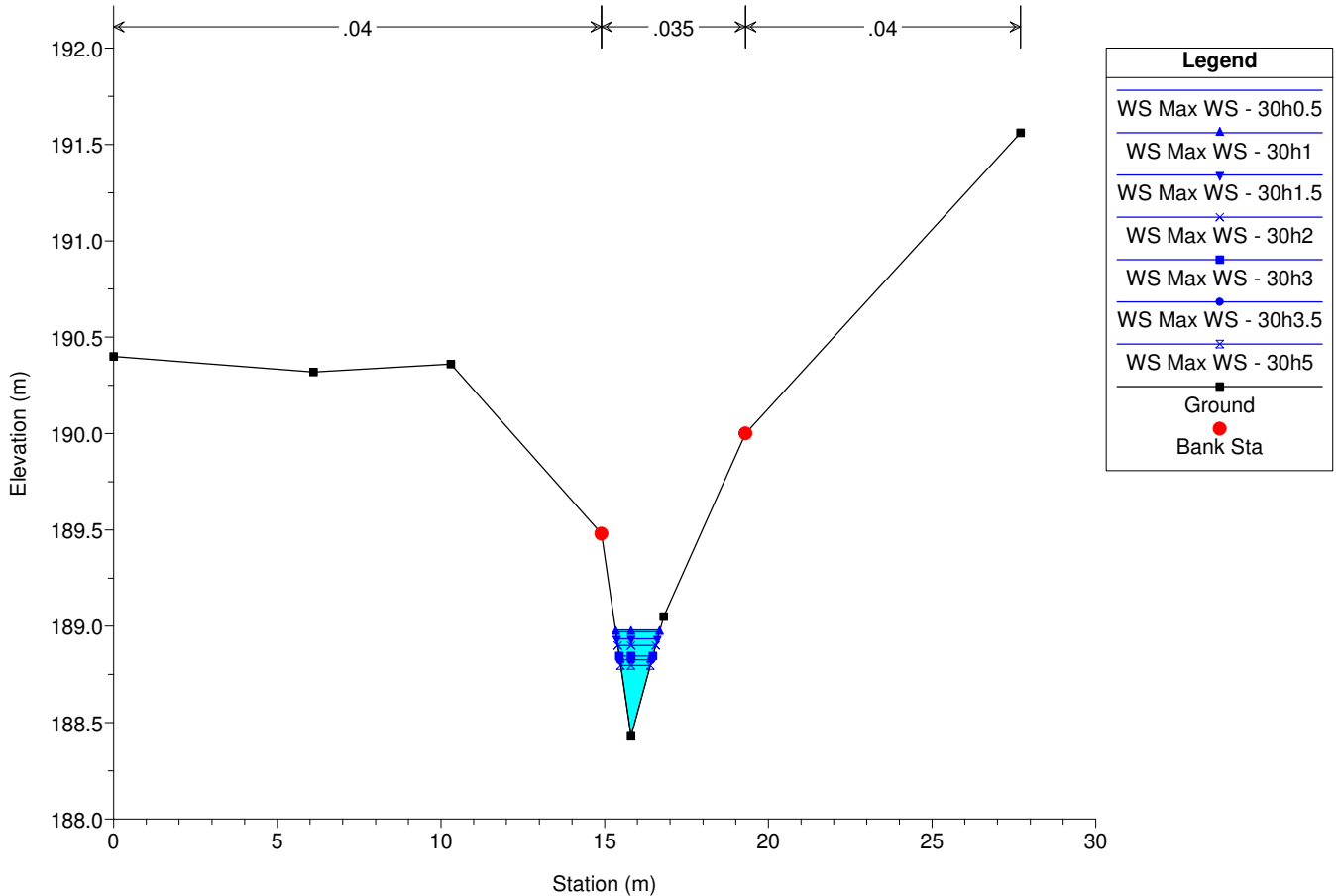
River = Rio Reach = Valle campo spor RS = 4 S4 - COPIA DELLA SEZ. 3 (Quote alzate di 1 m)



Campo sportivo Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: campo sportivo

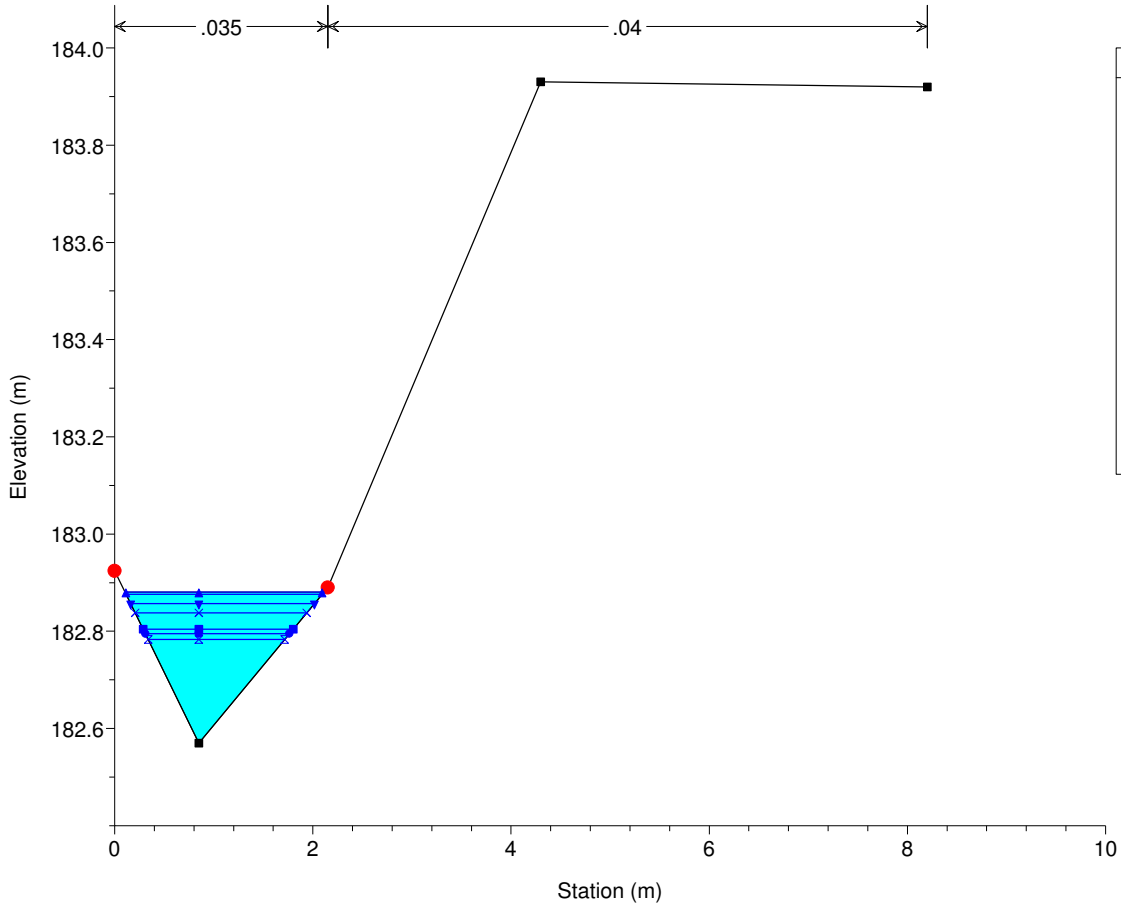
River = Rio Reach = Valle campo spor RS = 3 S3 - Rilievo CBTC 2008



Campo sportivo Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: campo sportivo

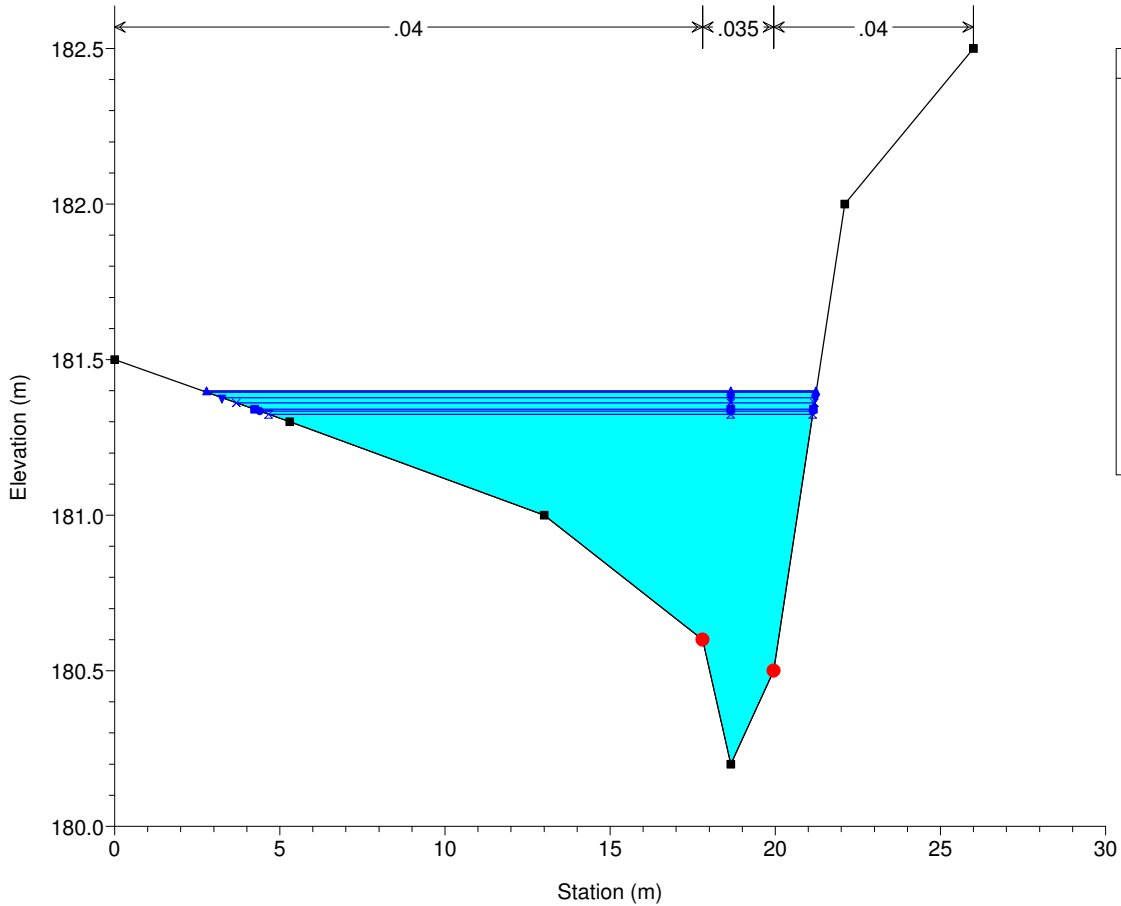
River = Rio Reach = Valle campo spor RS = 2 S2 - Rilievo CBTC 2008



Campo sportivo Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: campo sportivo

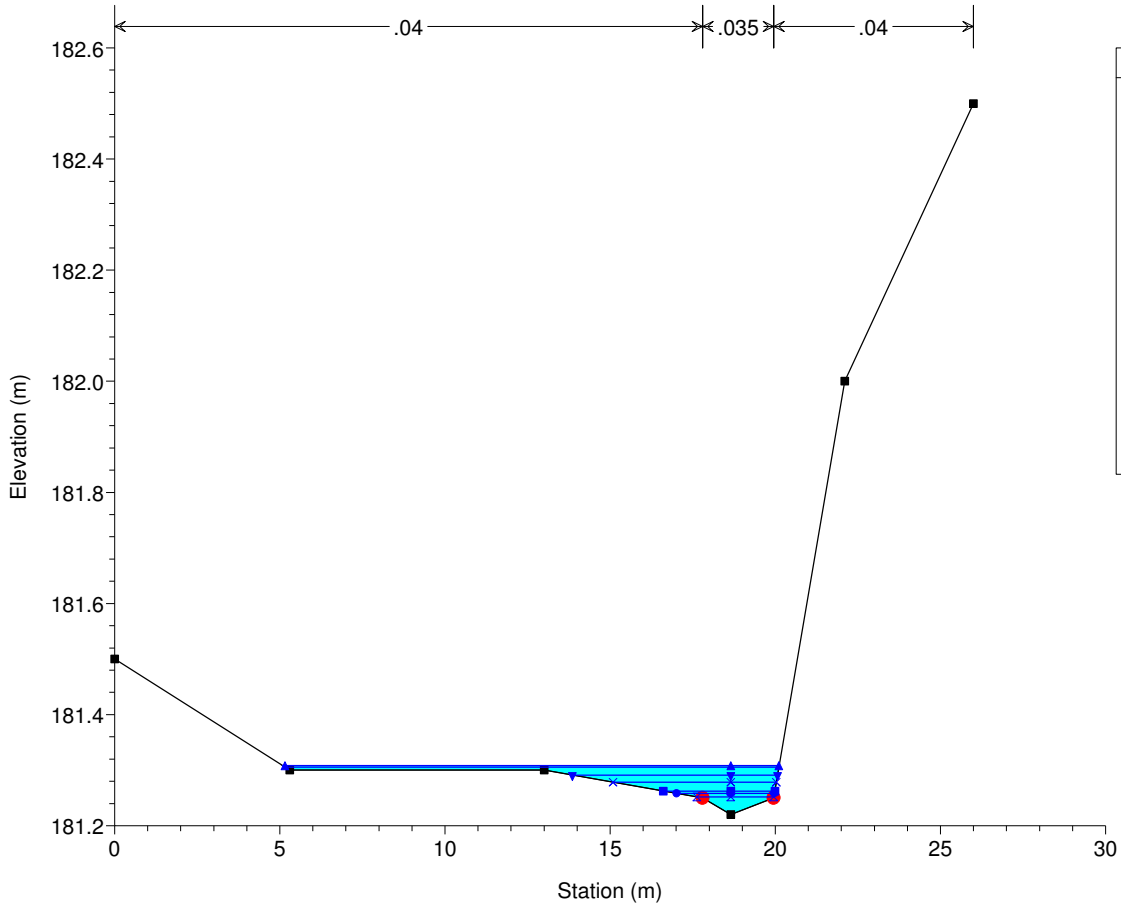
River = Rio Reach = Valle campo spor RS = 1 S1 - IPOTIZZATA



Campo sportivo Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: campo sportivo

River = Rio Reach = Valle campo spor RS = 0 IPOTIZZATA



Legend

WS Max WS - 30h0.5

WS Max WS - 30h1

WS Max WS - 30h1.5

WS Max WS - 30h2

WS Max WS - 30h3

WS Max WS - 30h3.5

WS Max WS - 30h5

Ground

Bank Sta



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

MODELLAZIONE PER TR=200 anni

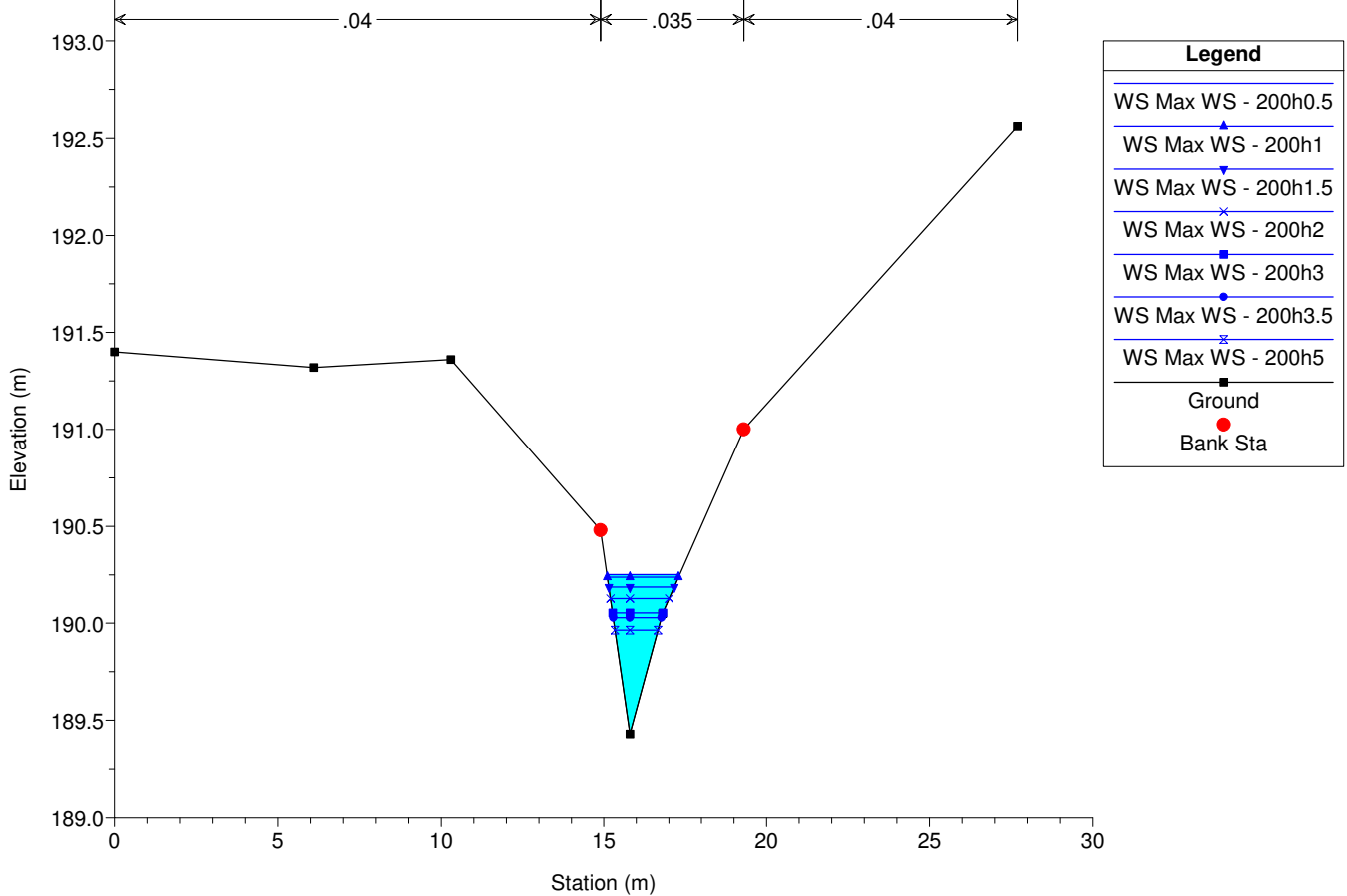
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Campo sportivo Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: campo sportivo

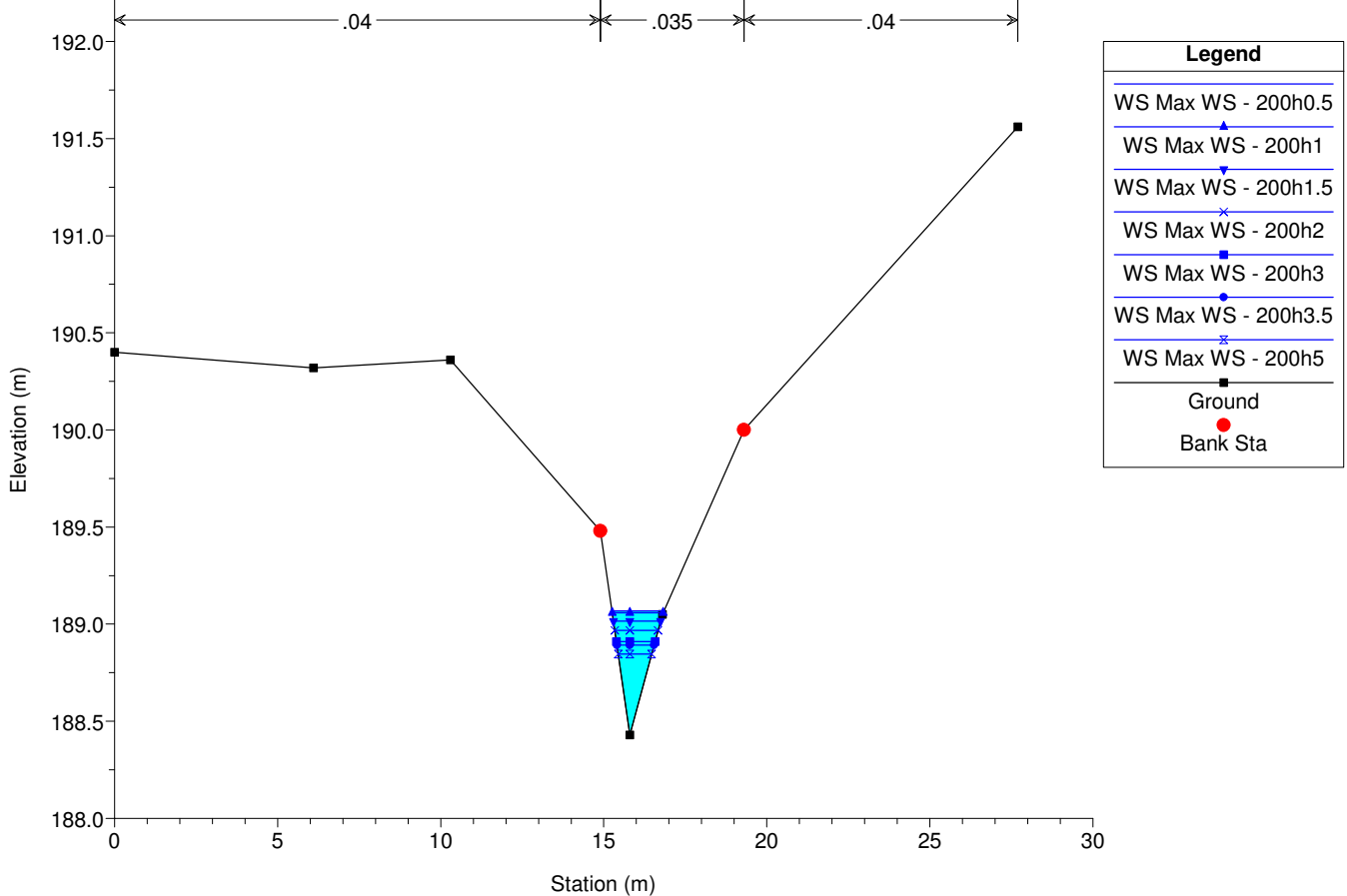
River = Rio Reach = Valle campo spor RS = 4 S4 - COPIA DELLA SEZ. 3 (Quote alzate di 1 m)



Campo sportivo Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: campo sportivo

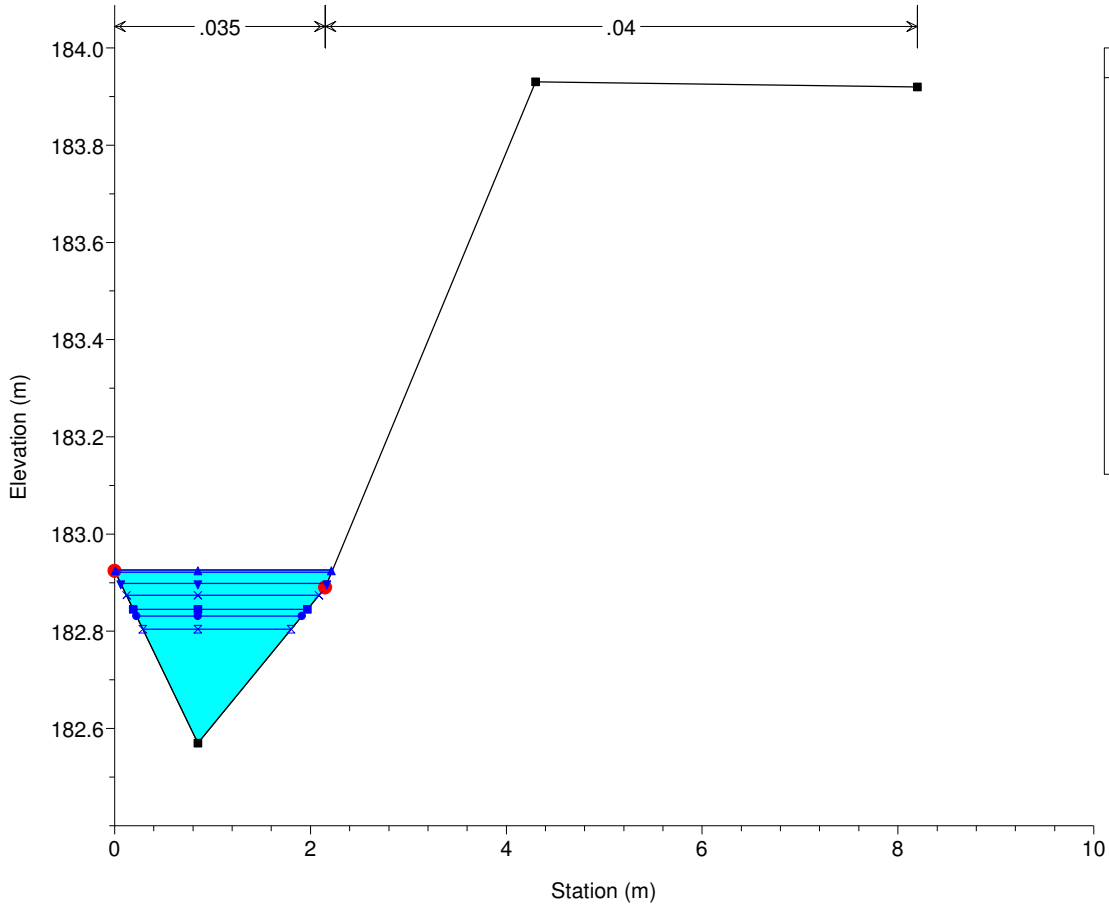
River = Rio Reach = Valle campo spor RS = 3 S3 - Rilievo CBTC 2008



Campo sportivo Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: campo sportivo

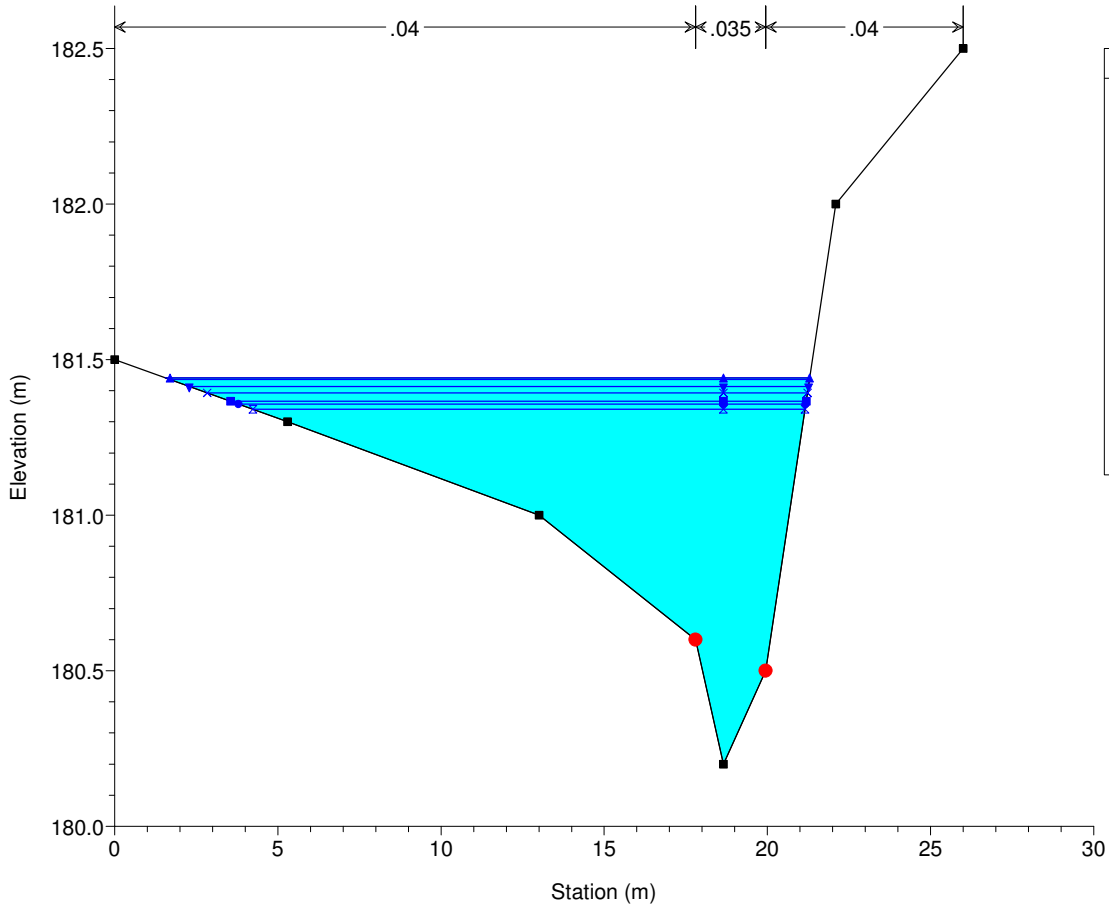
River = Rio Reach = Valle campo spor RS = 2 S2 - Rilievo CBTC 2008



Campo sportivo Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: campo sportivo

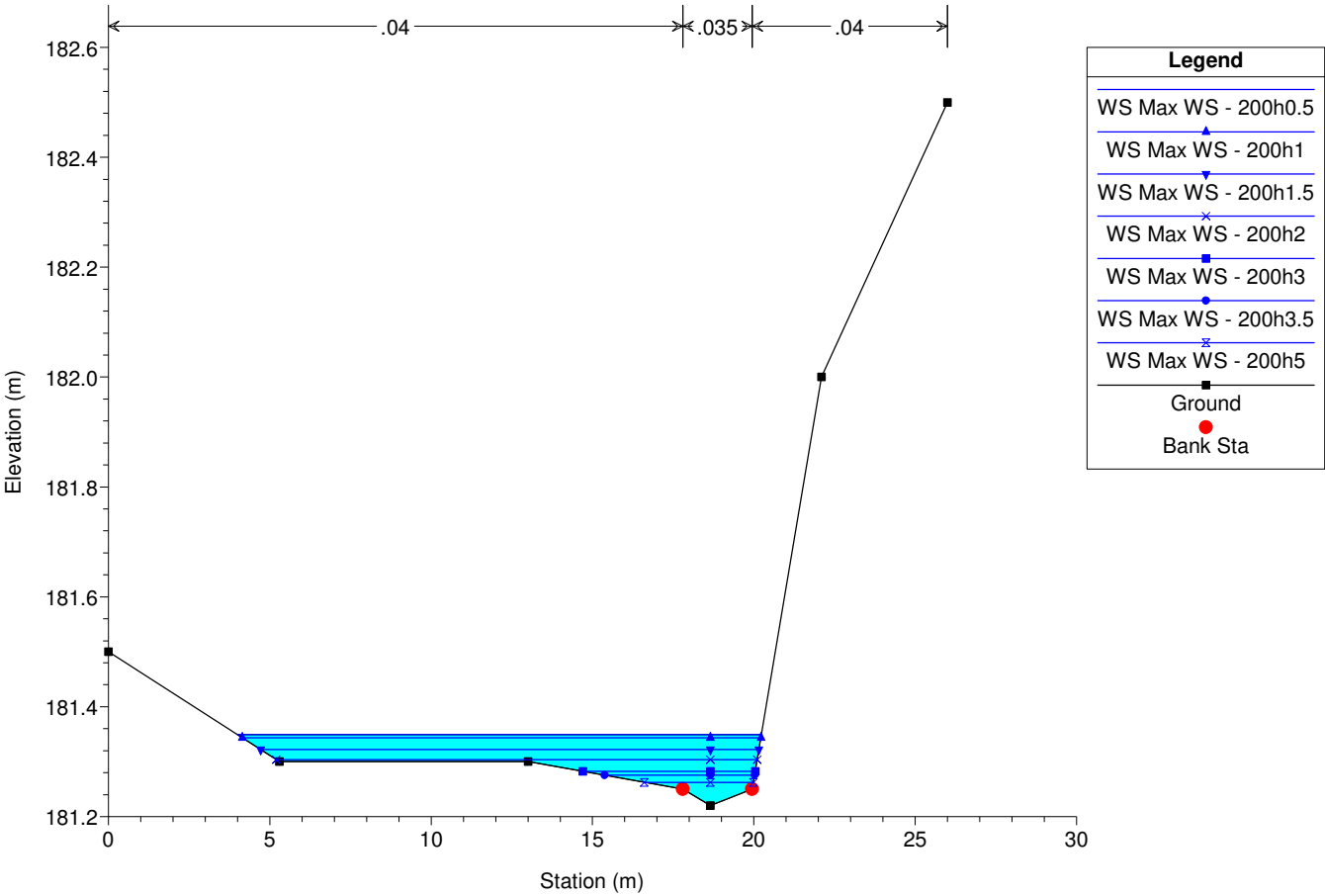
River = Rio Reach = Valle campo spor RS = 1 S1 - IPOTIZZATA



Campo sportivo Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: campo sportivo

River = Rio Reach = Valle campo spor RS = 0 IPOTIZZATA





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Reach: Valle campo spor Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Valle campo spor	4	Max WS	30h0.5	1.40	189.43	190.14	190.20	190.39	0.034739	2.20	0.63	1.86	1.20
Valle campo spor	4	Max WS	30h1	1.35	189.43	190.13	190.19	190.38	0.034987	2.19	0.62	1.82	1.21
Valle campo spor	4	Max WS	30h1.5	1.12	189.43	190.08	190.13	190.31	0.035343	2.12	0.53	1.65	1.19
Valle campo spor	4	Max WS	30h2	0.92	189.43	190.04	190.08	190.24	0.033824	2.00	0.46	1.51	1.15
Valle campo spor	4	Max WS	30h3	0.67	189.43	189.97	190.00	190.15	0.036195	1.89	0.35	1.32	1.17
Valle campo spor	4	Max WS	30h3.5	0.60	189.43	189.94	189.97	190.12	0.036517	1.85	0.32	1.27	1.17
Valle campo spor	4	Max WS	30h5	0.50	189.43	189.91	189.93	190.07	0.035760	1.75	0.29	1.19	1.14
Valle campo spor	3	Max WS	30h0.5	1.40	188.43	188.98	189.20	189.69	0.136292	3.74	0.37	1.36	2.28
Valle campo spor	3	Max WS	30h1	1.35	188.43	188.97	189.19	189.68	0.137566	3.72	0.36	1.34	2.28
Valle campo spor	3	Max WS	30h1.5	1.12	188.43	188.93	189.13	189.58	0.139198	3.57	0.31	1.25	2.27
Valle campo spor	3	Max WS	30h2	0.92	188.43	188.90	189.08	189.48	0.135087	3.36	0.27	1.16	2.21
Valle campo spor	3	Max WS	30h3	0.67	188.43	188.85	189.00	189.35	0.139264	3.14	0.21	1.03	2.20
Valle campo spor	3	Max WS	30h3.5	0.60	188.43	188.83	188.97	189.32	0.145484	3.10	0.19	0.98	2.23
Valle campo spor	3	Max WS	30h5	0.50	188.43	188.80	188.93	189.26	0.150856	3.01	0.17	0.91	2.24
Valle campo spor	2.11			Lat Struct									
Valle campo spor	2	Max WS	30h0.5	1.40	182.57	182.88	183.09	183.90	0.314641	4.48	0.31	2.01	3.63
Valle campo spor	2	Max WS	30h1	1.35	182.57	182.88	183.08	183.88	0.314950	4.44	0.30	1.98	3.62
Valle campo spor	2	Max WS	30h1.5	1.12	182.57	182.86	183.04	183.76	0.308859	4.21	0.27	1.85	3.55
Valle campo spor	2	Max WS	30h2	0.92	182.57	182.84	183.00	183.64	0.299779	3.97	0.23	1.73	3.46
Valle campo spor	2	Max WS	30h3	0.67	182.57	182.80	182.95	183.53	0.324326	3.77	0.18	1.52	3.52
Valle campo spor	2	Max WS	30h3.5	0.60	182.57	182.80	182.93	183.48	0.321641	3.66	0.16	1.46	3.48
Valle campo spor	2	Max WS	30h5	0.50	182.57	182.78	182.91	183.37	0.300489	3.41	0.15	1.38	3.33
Valle campo spor	1	Max WS	30h0.5	1.40	180.20	181.40		181.40	0.000120	0.31	7.71	18.56	0.10
Valle campo spor	1	Max WS	30h1	1.35	180.20	181.40		181.40	0.000114	0.30	7.64	18.45	0.09
Valle campo spor	1	Max WS	30h1.5	1.12	180.20	181.38		181.38	0.000087	0.26	7.32	17.96	0.08
Valle campo spor	1	Max WS	30h2	0.92	180.20	181.36		181.36	0.000064	0.22	7.03	17.51	0.07
Valle campo spor	1	Max WS	30h3	0.67	180.20	181.34		181.34	0.000038	0.17	6.67	16.92	0.05
Valle campo spor	1	Max WS	30h3.5	0.60	180.20	181.33		181.33	0.000032	0.15	6.57	16.75	0.05
Valle campo spor	1	Max WS	30h5	0.50	180.20	181.32		181.32	0.000023	0.13	6.40	16.47	0.04
Valle campo spor	0	Max WS	30h0.5	1.40	181.22	181.31	181.39	182.54	1.373330	5.87	0.39	15.04	6.91
Valle campo spor	0	Max WS	30h1	1.35	181.22	181.31	181.38	182.83	1.698282	6.35	0.34	14.95	7.64
Valle campo spor	0	Max WS	30h1.5	1.12	181.22	181.29	181.38	183.36	2.865329	7.08	0.20	6.22	9.55
Valle campo spor	0	Max WS	30h2	0.92	181.22	181.28	181.36	184.42	5.686293	8.40	0.13	4.95	12.88
Valle campo spor	0	Max WS	30h3	0.67	181.22	181.26	181.35	187.09	17.585530	10.89	0.07	3.39	21.00
Valle campo spor	0	Max WS	30h3.5	0.60	181.22	181.26	181.35	188.26	25.937100	11.82	0.05	2.97	24.79
Valle campo spor	0	Max WS	30h5	0.50	181.22	181.25	181.34	191.03	54.830600	13.86	0.04	2.33	34.16



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Campo Sportivo"

RIO PRESSO CAMPO SPORTIVO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Reach: Valle campo spor Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Valle campo spor	4	Max WS	200h0.5	2.05	189.43	190.25	190.32	190.55	0.034938	2.40	0.85	2.23	1.24
Valle campo spor	4	Max WS	200h1	1.96	189.43	190.24	190.30	190.53	0.034920	2.38	0.82	2.19	1.24
Valle campo spor	4	Max WS	200h1.5	1.61	189.43	190.19	190.24	190.44	0.033685	2.25	0.72	2.01	1.20
Valle campo spor	4	Max WS	200h2	1.32	189.43	190.13	190.18	190.37	0.035104	2.19	0.60	1.80	1.21
Valle campo spor	4	Max WS	200h3	0.98	189.43	190.05	190.09	190.27	0.034342	2.04	0.48	1.54	1.17
Valle campo spor	4	Max WS	200h3.5	0.87	189.43	190.03	190.06	190.23	0.033409	1.96	0.44	1.48	1.14
Valle campo spor	4	Max WS	200h5	0.67	189.43	189.97	190.00	190.15	0.036195	1.89	0.35	1.32	1.17
Valle campo spor	3	Max WS	200h0.5	2.05	188.43	189.07	189.32	189.92	0.134432	4.08	0.50	1.59	2.32
Valle campo spor	3	Max WS	200h1	1.96	188.43	189.06	189.30	189.88	0.132848	4.02	0.49	1.56	2.30
Valle campo spor	3	Max WS	200h1.5	1.61	188.43	189.02	189.24	189.75	0.130100	3.81	0.42	1.44	2.25
Valle campo spor	3	Max WS	200h2	1.32	188.43	188.97	189.18	189.67	0.137964	3.71	0.36	1.33	2.28
Valle campo spor	3	Max WS	200h3	0.98	188.43	188.91	189.09	189.51	0.136962	3.43	0.29	1.19	2.23
Valle campo spor	3	Max WS	200h3.5	0.87	188.43	188.89	189.06	189.44	0.132727	3.29	0.26	1.14	2.18
Valle campo spor	3	Max WS	200h5	0.67	188.43	188.85	189.00	189.35	0.139263	3.14	0.21	1.03	2.20
Valle campo spor	2.11			Lat Struct									
Valle campo spor	2	Max WS	200h0.5	2.04	182.57	182.93	183.19	184.20	0.301334	5.00	0.41	2.22	3.67
Valle campo spor	2	Max WS	200h1	1.95	182.57	182.92	183.17	184.15	0.299026	4.91	0.40	2.21	3.64
Valle campo spor	2	Max WS	200h1.5	1.61	182.57	182.90	183.12	183.98	0.302132	4.61	0.35	2.11	3.60
Valle campo spor	2	Max WS	200h2	1.32	182.57	182.87	183.07	183.87	0.315249	4.42	0.30	1.96	3.62
Valle campo spor	2	Max WS	200h3	0.98	182.57	182.85	183.01	183.66	0.294654	4.00	0.24	1.78	3.44
Valle campo spor	2	Max WS	200h3.5	0.87	182.57	182.83	182.99	183.62	0.306815	3.94	0.22	1.69	3.48
Valle campo spor	2	Max WS	200h5	0.67	182.57	182.80	182.95	183.53	0.324327	3.77	0.18	1.52	3.52
Valle campo spor	1	Max WS	200h0.5	2.04	180.20	181.44		181.45	0.000202	0.41	8.53	19.76	0.13
Valle campo spor	1	Max WS	200h1	1.95	180.20	181.44		181.44	0.000191	0.40	8.42	19.60	0.12
Valle campo spor	1	Max WS	200h1.5	1.61	180.20	181.41		181.42	0.000146	0.34	7.99	18.97	0.11
Valle campo spor	1	Max WS	200h2	1.32	180.20	181.39		181.40	0.000111	0.29	7.60	18.39	0.09
Valle campo spor	1	Max WS	200h3	0.98	180.20	181.37		181.37	0.000071	0.23	7.12	17.64	0.07
Valle campo spor	1	Max WS	200h3.5	0.87	180.20	181.36		181.36	0.000059	0.21	6.96	17.39	0.07
Valle campo spor	1	Max WS	200h5	0.67	180.20	181.34		181.34	0.000038	0.17	6.67	16.92	0.05
Valle campo spor	0	Max WS	200h0.5	2.04	181.22	181.35	181.41	181.61	0.207052	3.06	1.02	16.23	2.89
Valle campo spor	0	Max WS	200h1	1.95	181.22	181.34	181.41	181.64	0.248214	3.24	0.94	16.07	3.14
Valle campo spor	0	Max WS	200h1.5	1.61	181.22	181.32	181.39	181.92	0.617323	4.40	0.59	15.44	4.77
Valle campo spor	0	Max WS	200h2	1.32	181.22	181.30	181.38	183.00	1.890857	6.60	0.32	14.91	8.03
Valle campo spor	0	Max WS	200h3	0.98	181.22	181.28	181.37	184.02	4.507444	7.93	0.15	5.35	11.64
Valle campo spor	0	Max WS	200h3.5	0.87	181.22	181.28	181.36	184.76	6.826131	8.76	0.12	4.65	13.94
Valle campo spor	0	Max WS	200h5	0.67	181.22	181.26	181.35	187.09	17.583480	10.89	0.07	3.39	21.00



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Capalle"

RIO DI CAPALLE

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Capalle"

RIO DI CAPALLE

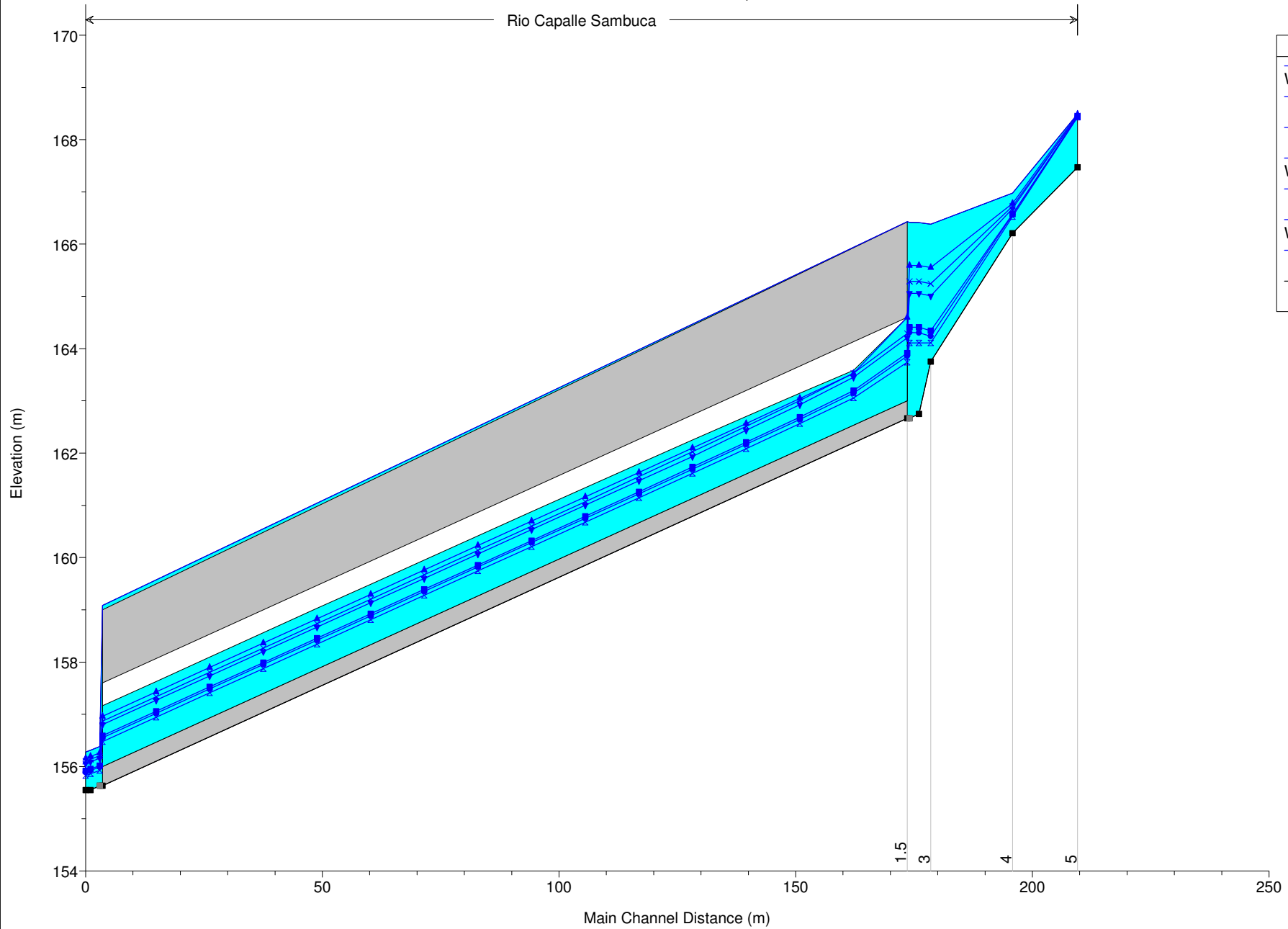
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Capalle Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5
Geom: Capalle

Rio Capalle Sambuca



Legend	
WS Max WS - 30h0.5	▲
WS Max WS - 30h1	×
WS Max WS - 30h2	▼
WS Max WS - 30h1.5	■
WS Max WS - 30h3	●
WS Max WS - 30h3.5	+
WS Max WS - 30h5	■
Ground	■



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Capalle"

RIO DI CAPALLE

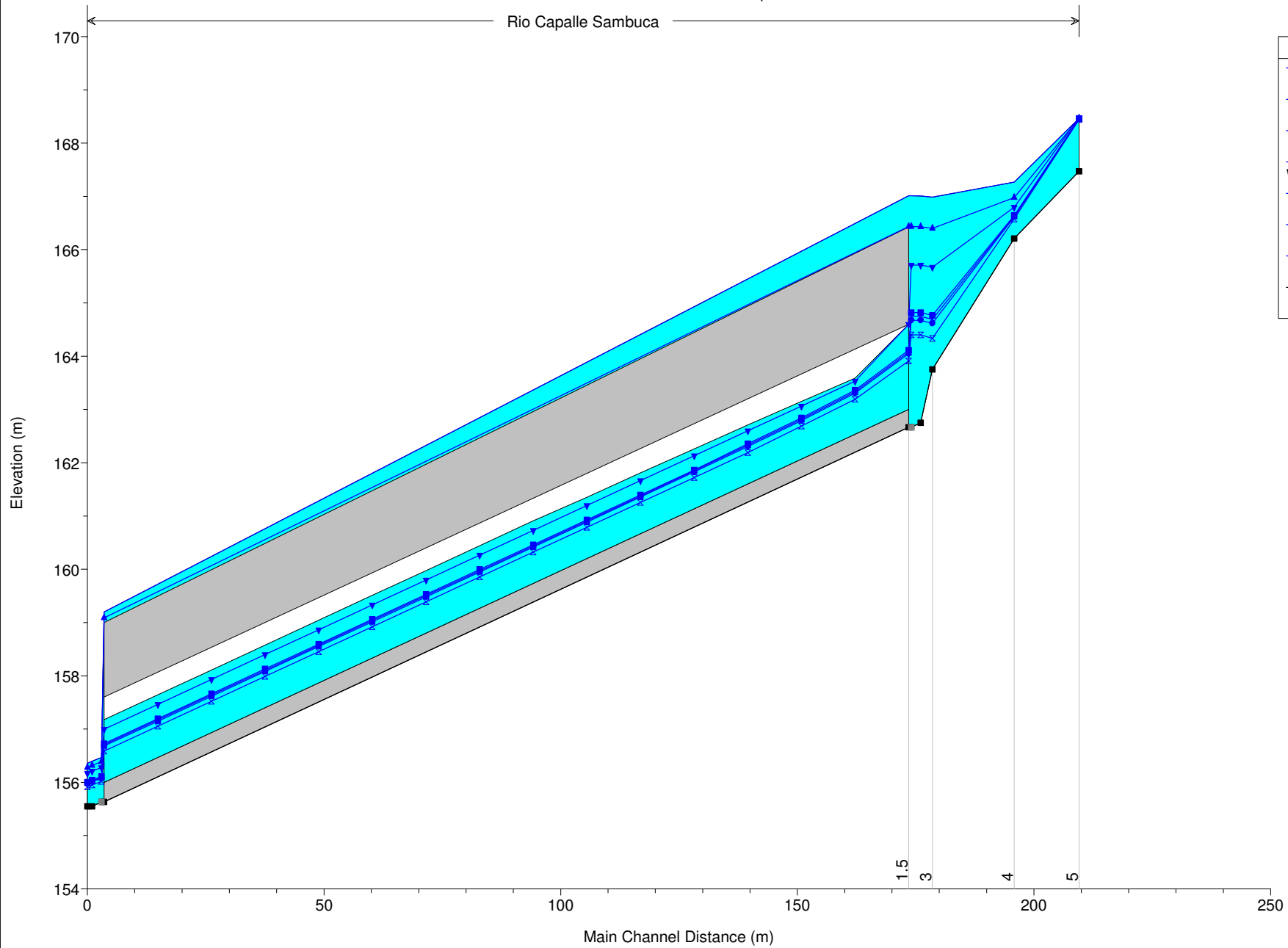
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Capalle Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) Tr 200 h 3 6) 200h3.5 7) 200h5
Geom: Capalle

Rio Capalle Sambuca



Legend	
WS Max WS - 200h0.5	▲
WS Max WS - 200h1	▼
WS Max WS - 200h1.5	■
WS Max WS - Tr 200 h 3	×
WS Max WS - 200h2	●
WS Max WS - 200h3.5	+
WS Max WS - 200h5	■
Ground	■



ALLEGATI

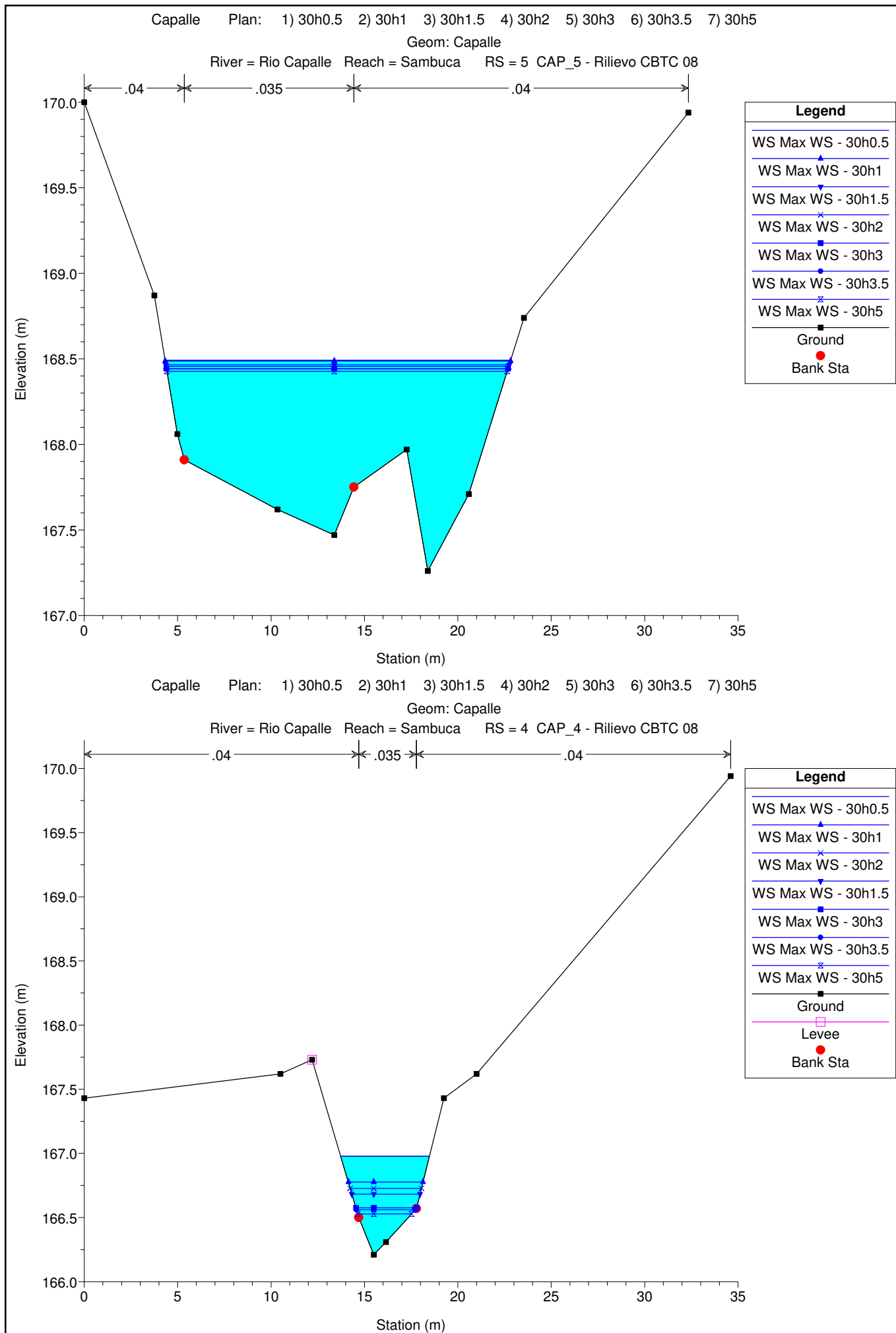
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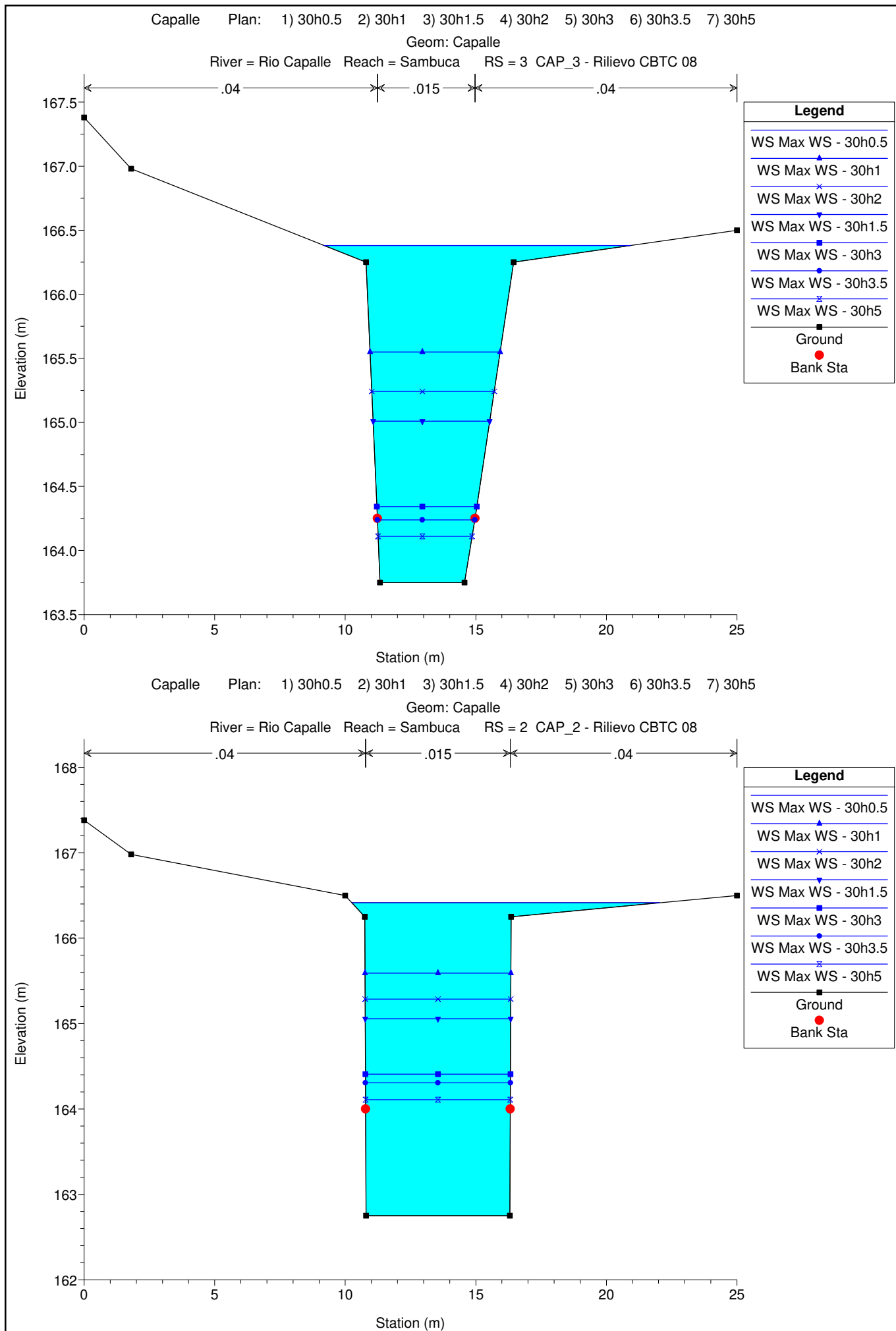
RIO DI CAPALLE

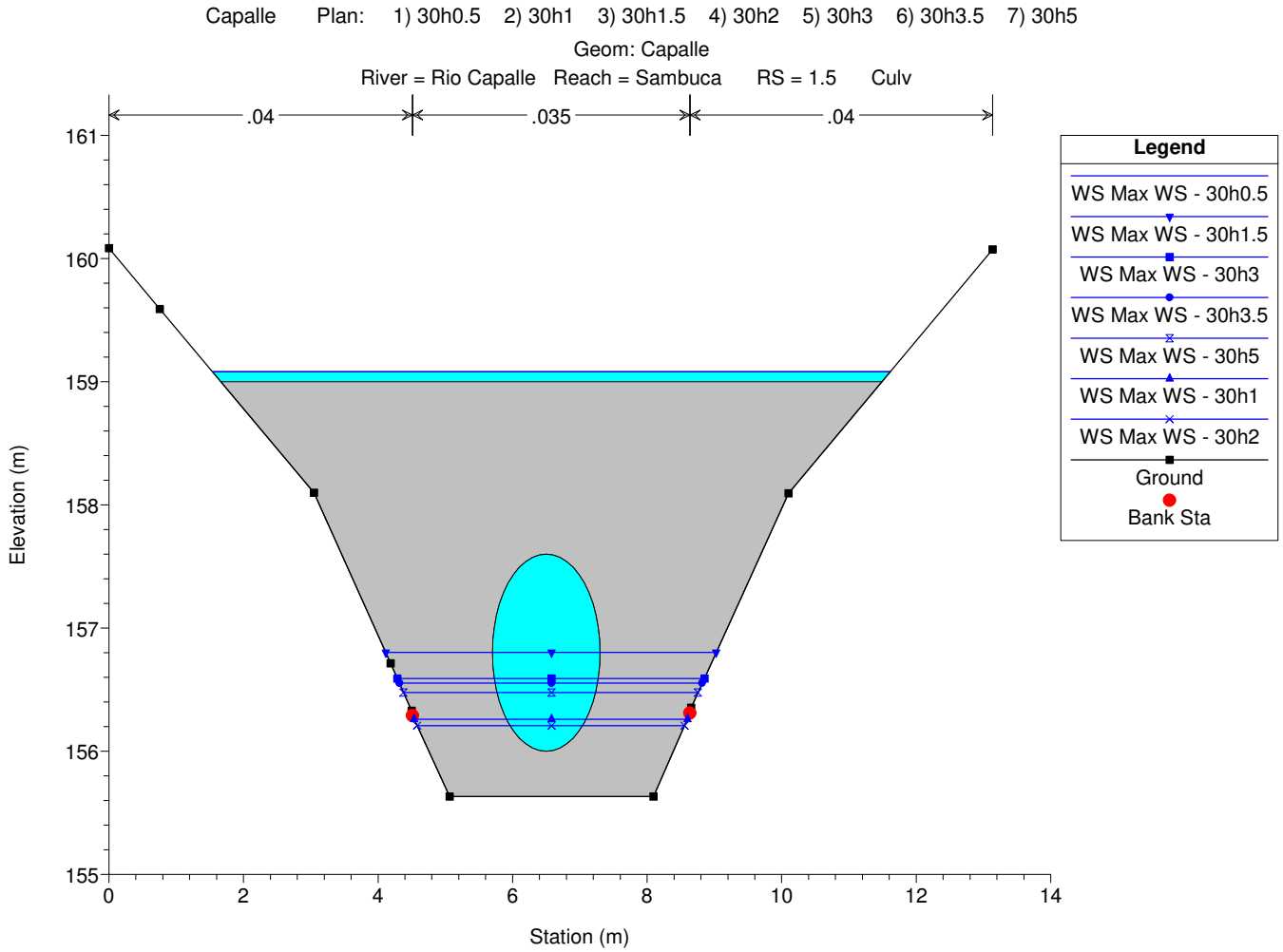
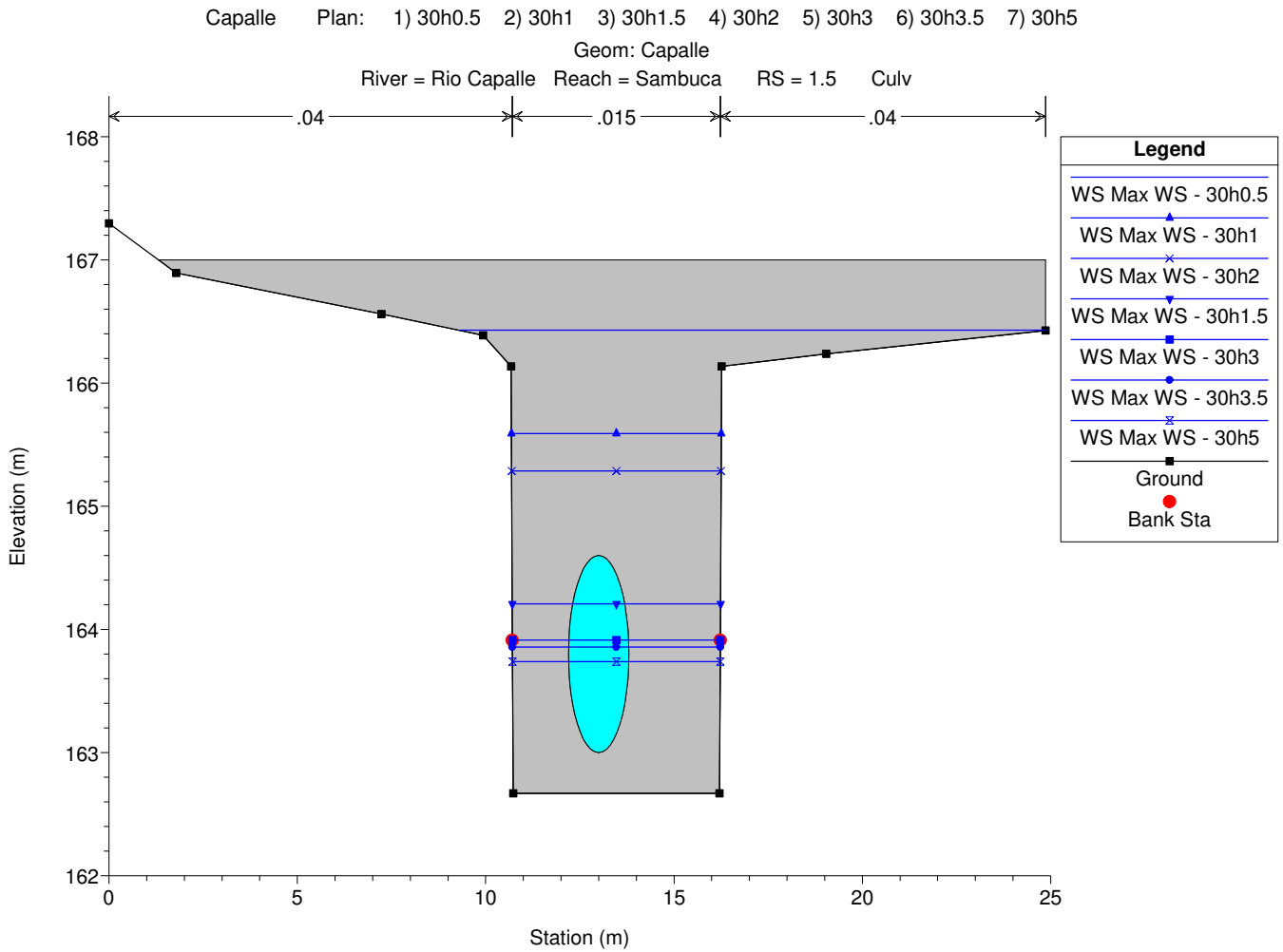
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)









ALLEGATI

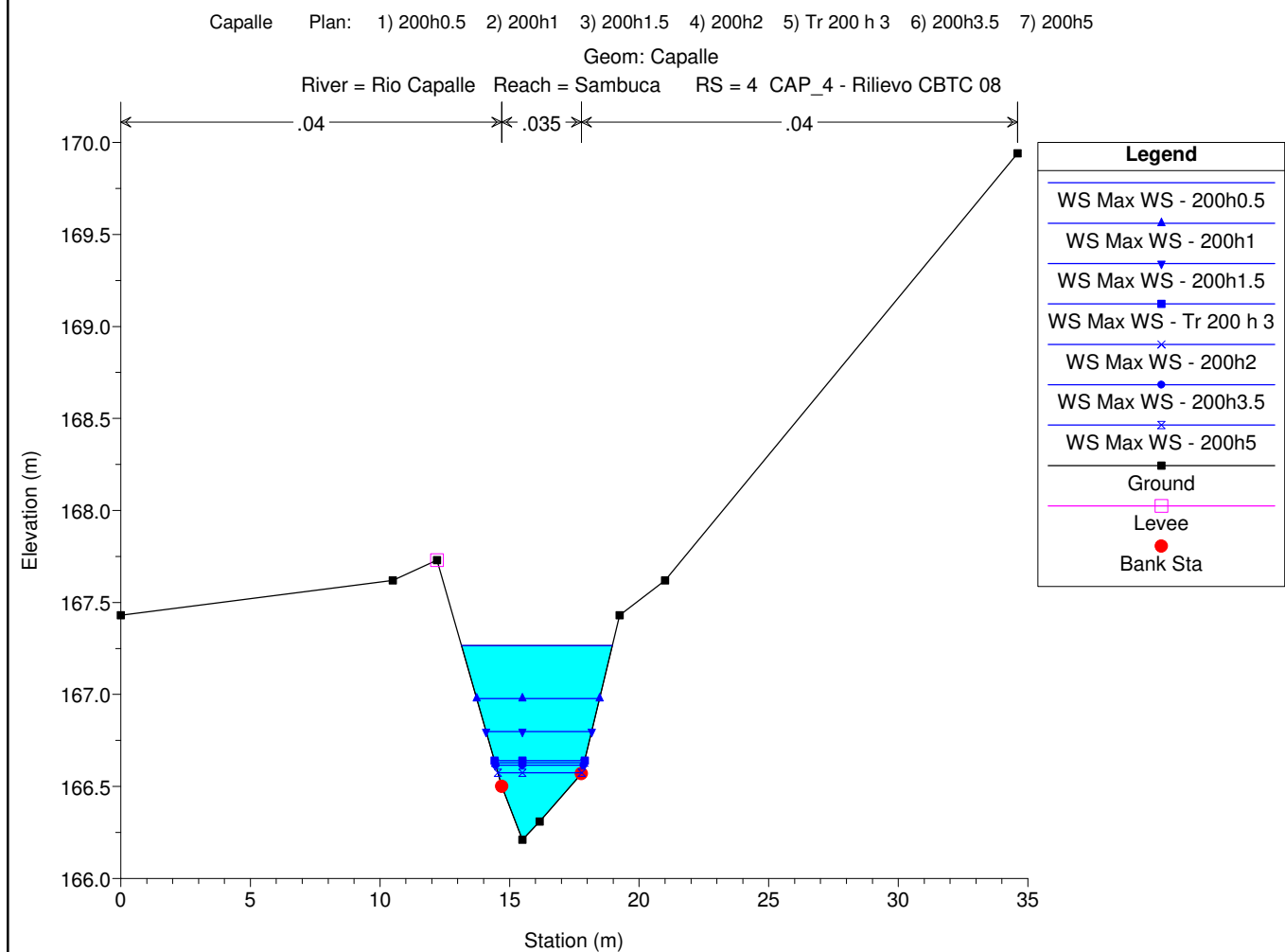
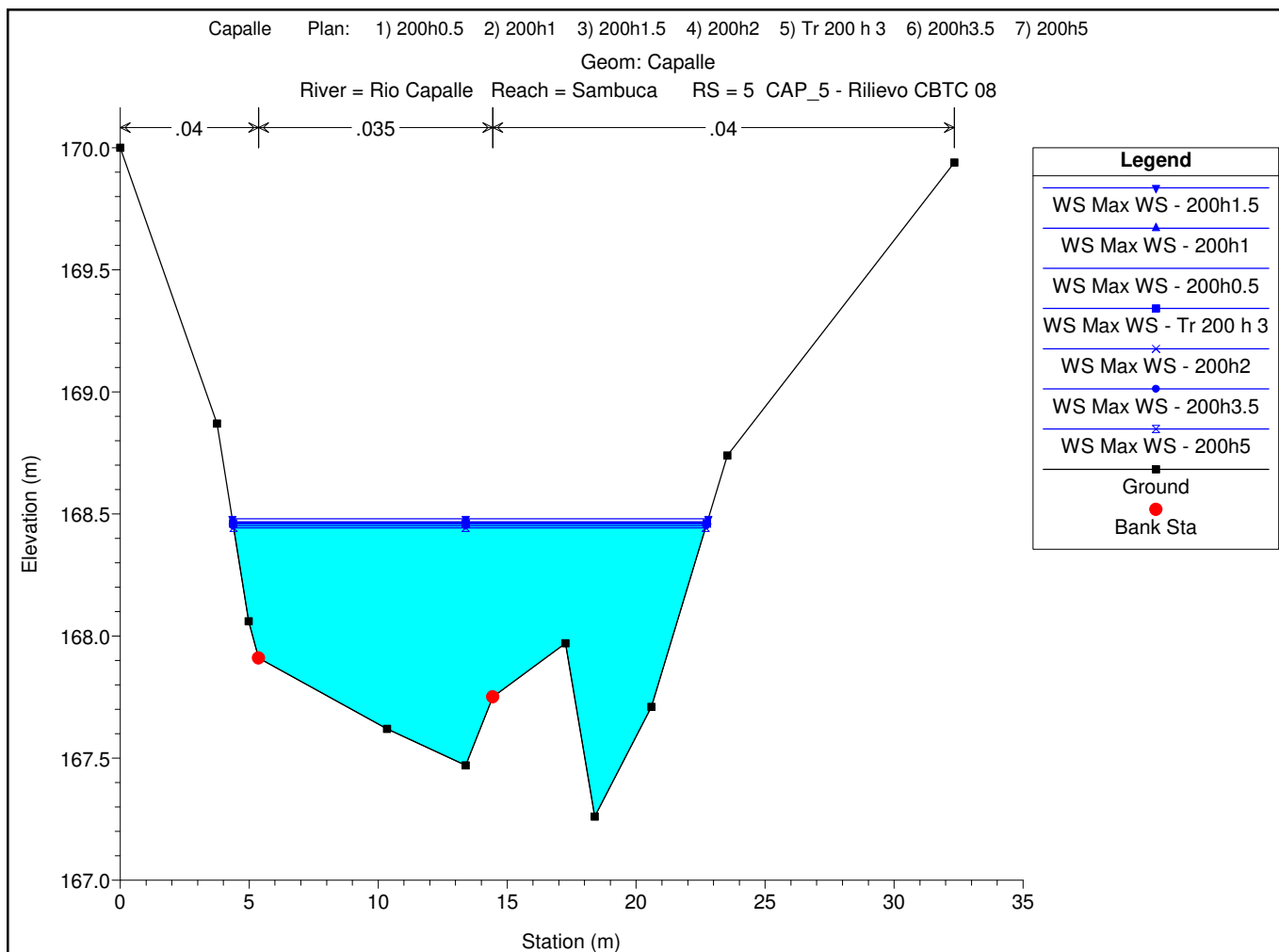
MODELLAZIONE HEC-RAS 4.1.0 "Capalle"

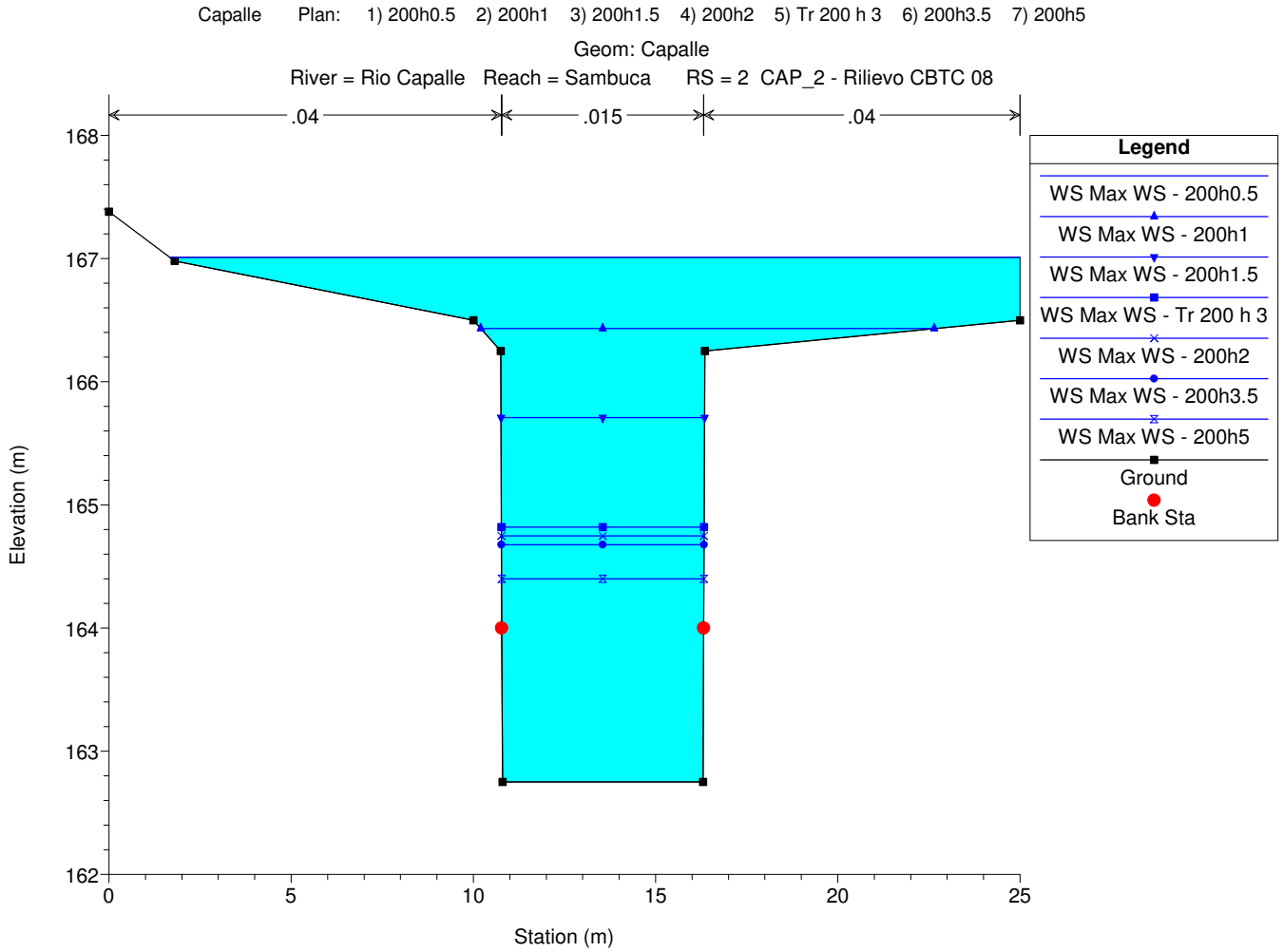
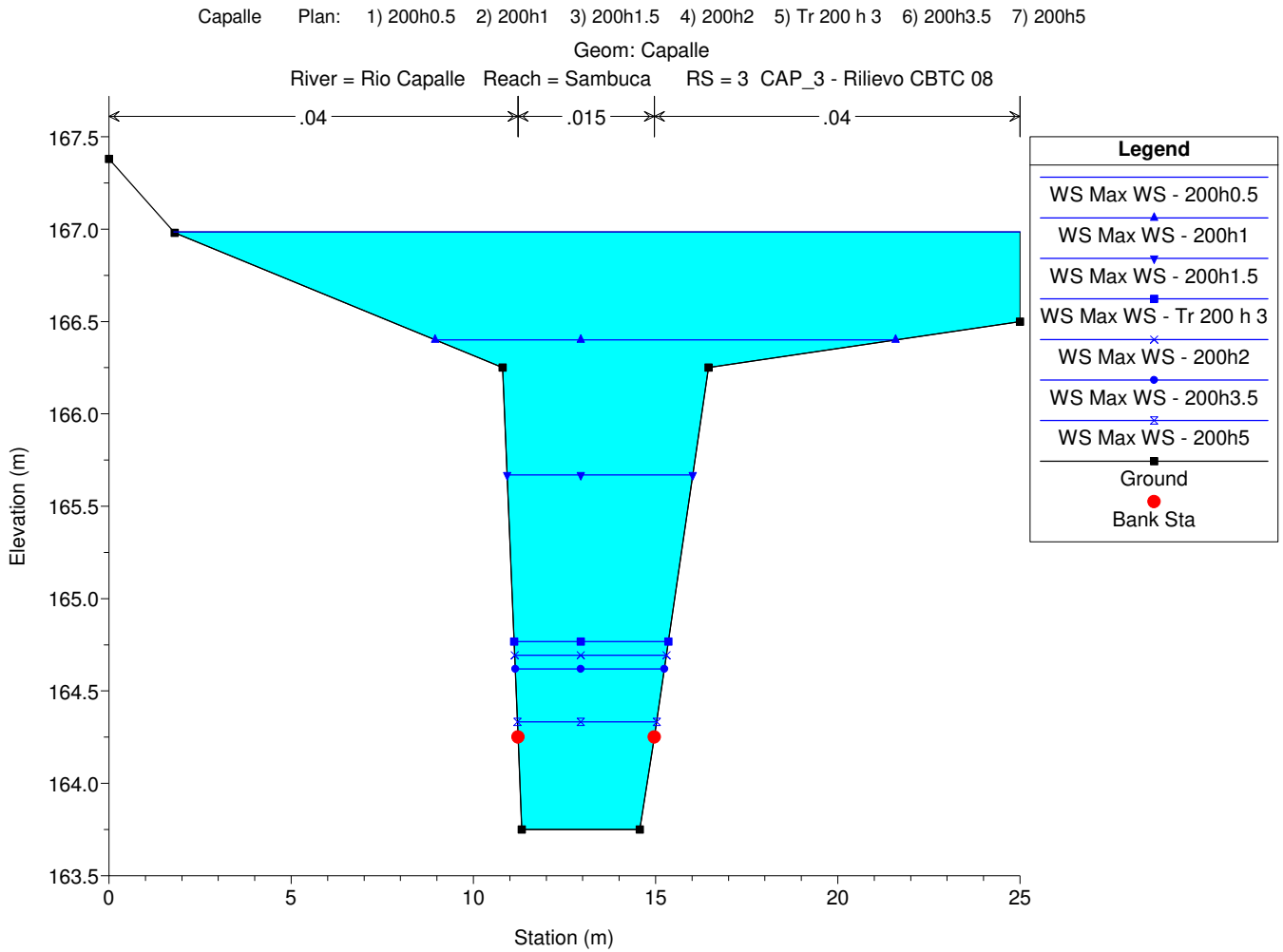
RIO DI CAPALLE

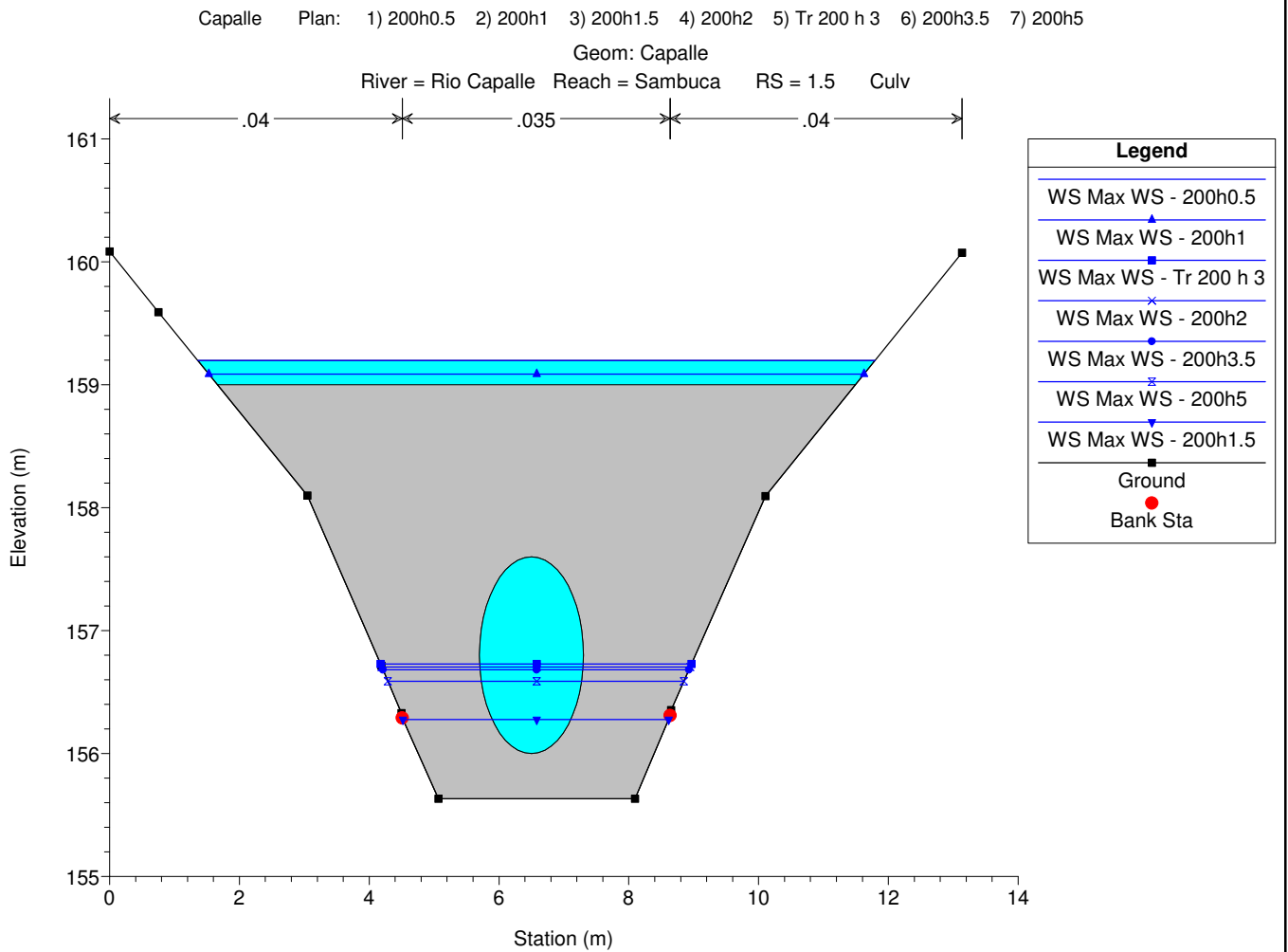
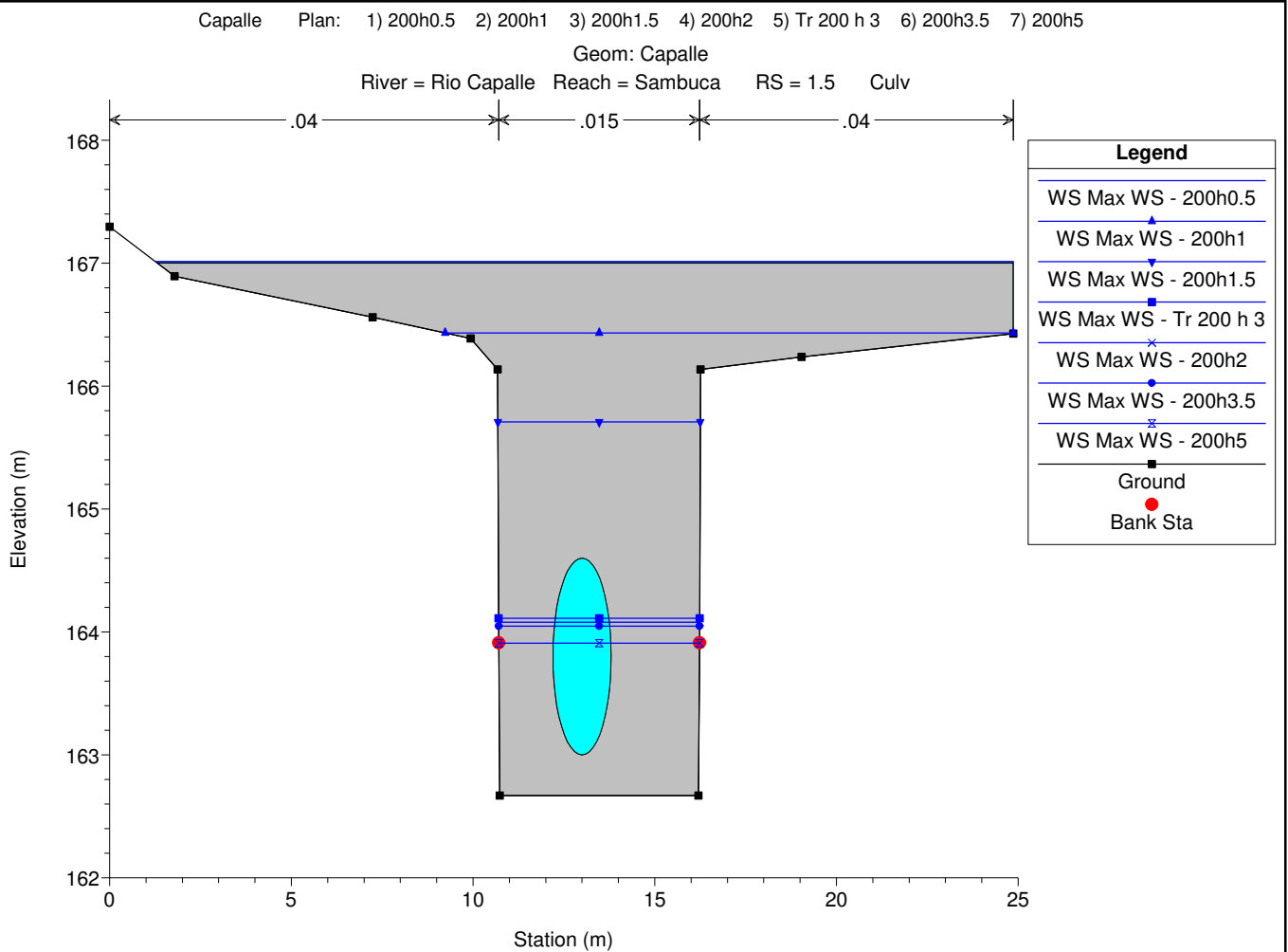
MODELLAZIONE PER TR=200 anni

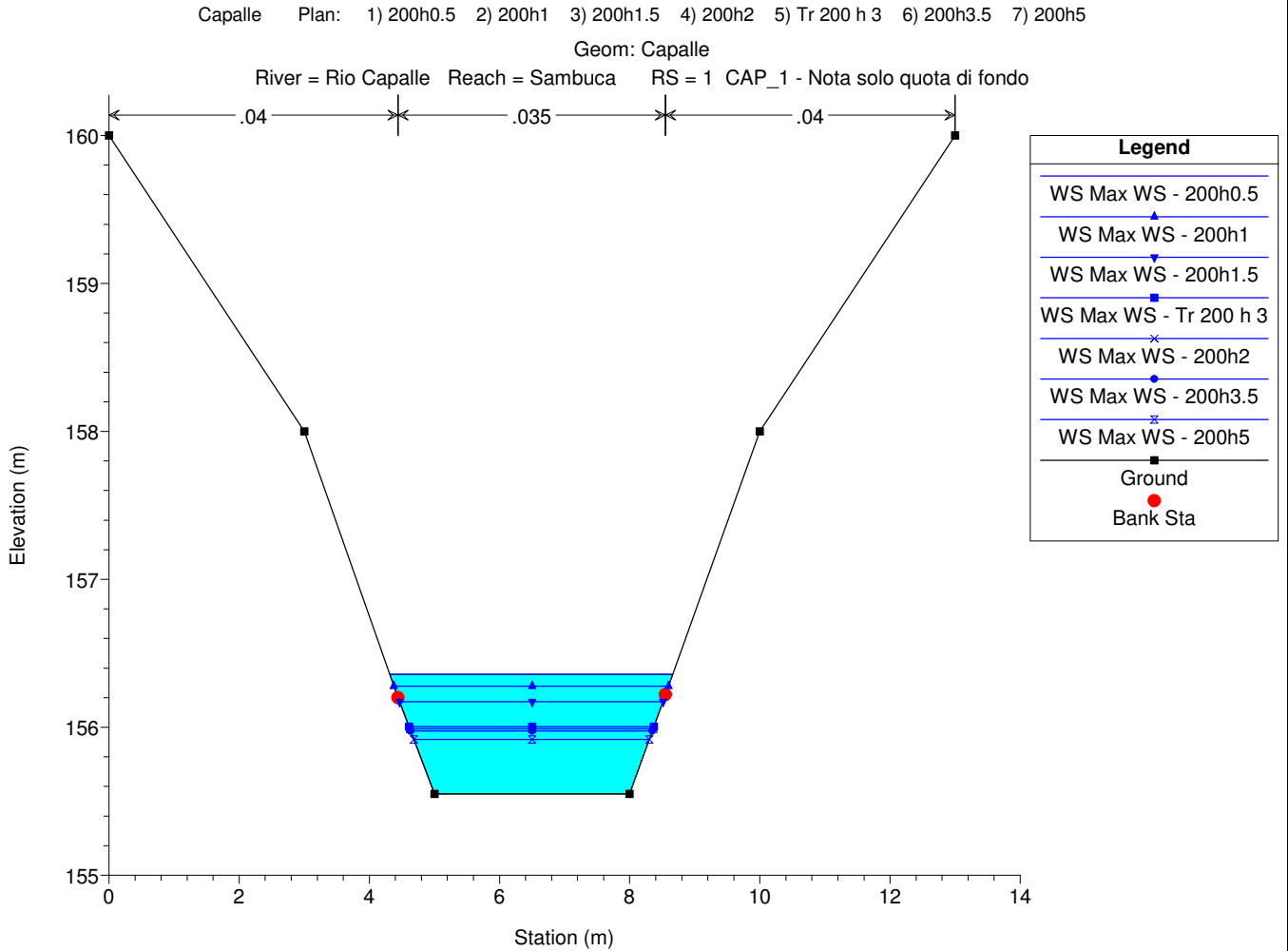
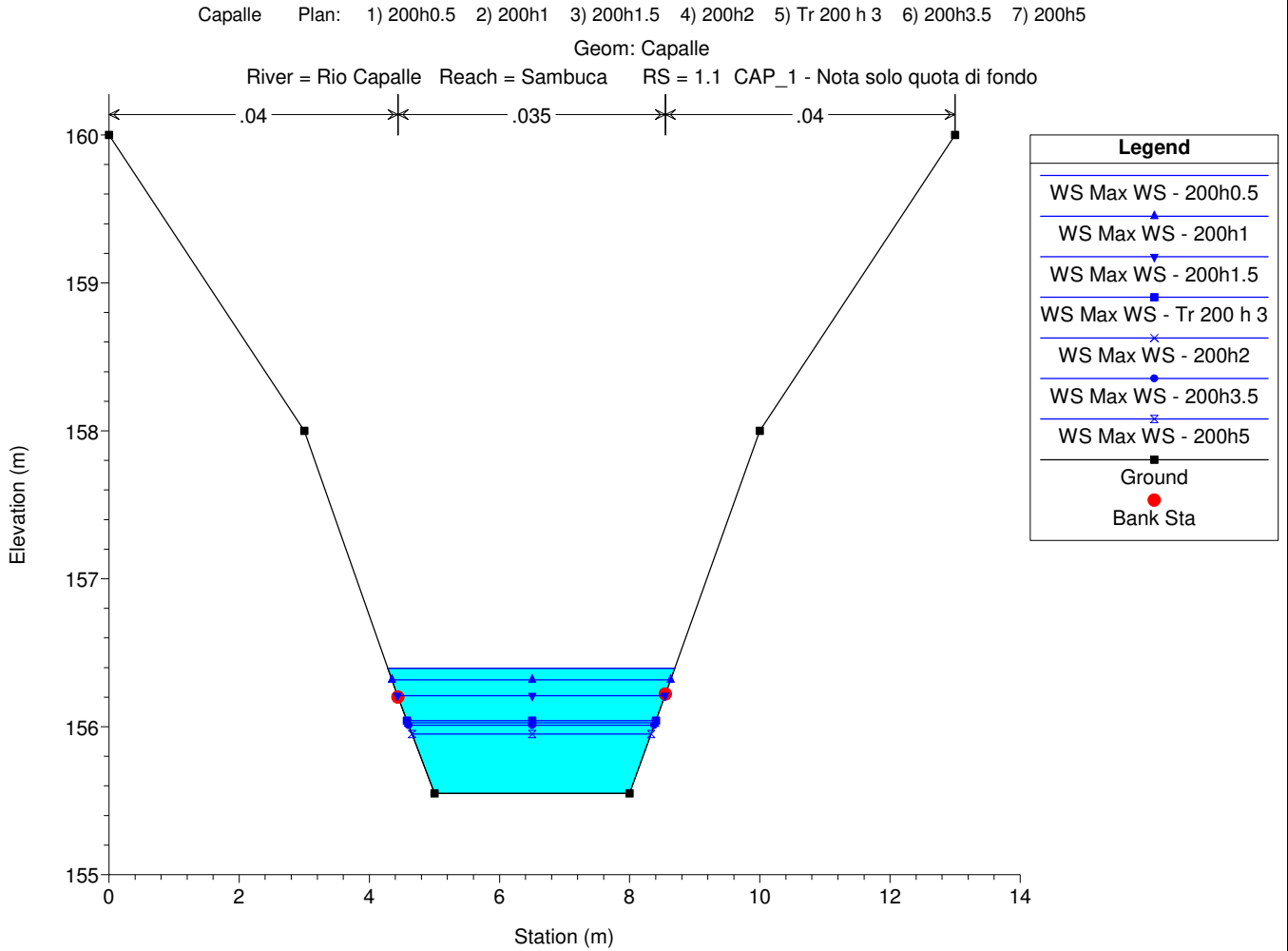
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)











ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Capalle"

RIO DI CAPALLE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Capalle Reach: Sambuca Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Sambuca	5	Max WS	30h0.5	3.16	167.47	168.49		168.49	0.000111	0.26	13.62	18.50	0.09
Sambuca	5	Max WS	30h1	2.89	167.47	168.49		168.49	0.000094	0.24	13.56	18.49	0.09
Sambuca	5	Max WS	30h1.5	2.67	167.47	168.47		168.47	0.000088	0.23	13.15	18.39	0.08
Sambuca	5	Max WS	30h2	2.86	167.47	168.46		168.46	0.000105	0.25	12.96	18.34	0.09
Sambuca	5	Max WS	30h3	2.12	167.47	168.44		168.44	0.000061	0.19	12.73	18.29	0.07
Sambuca	5	Max WS	30h3.5	2.05	167.47	168.44		168.44	0.000058	0.18	12.72	18.29	0.07
Sambuca	5	Max WS	30h5	2.13	167.47	168.43		168.43	0.000066	0.19	12.45	18.22	0.07
Sambuca	4	Max WS	30h0.5	10.71	166.21	166.98	167.38	168.34	0.071563	5.34	2.22	4.75	2.20
Sambuca	4	Max WS	30h1	7.48	166.21	166.78	167.19	168.50	0.150894	5.90	1.34	4.00	2.99
Sambuca	4	Max WS	30h1.5	5.55	166.21	166.68	167.05	168.39	0.210251	5.83	0.98	3.65	3.37
Sambuca	4	Max WS	30h2	6.37	166.21	166.73	167.11	168.40	0.173829	5.80	1.15	3.81	3.14
Sambuca	4	Max WS	30h3	3.22	166.21	166.58	166.86	168.01	0.313546	5.31	0.61	3.24	3.83
Sambuca	4	Max WS	30h3.5	2.85	166.21	166.56	166.82	167.87	0.308921	5.08	0.56	3.15	3.76
Sambuca	4	Max WS	30h5	2.16	166.21	166.53	166.75	167.63	0.303622	4.65	0.47	2.88	3.66
Sambuca	3.5			Lat Struct									
Sambuca	3	Max WS	30h0.5	10.51	163.75	166.38		166.44	0.000087	1.06	12.28	11.75	0.21
Sambuca	3	Max WS	30h1	7.47	163.75	165.55		165.61	0.000161	1.11	7.41	4.98	0.27
Sambuca	3	Max WS	30h1.5	5.55	163.75	165.01		165.08	0.000307	1.20	4.86	4.46	0.35
Sambuca	3	Max WS	30h2	6.37	163.75	165.24		165.31	0.000225	1.16	5.92	4.69	0.31
Sambuca	3	Max WS	30h3	3.22	163.75	164.34		164.46	0.001440	1.54	2.09	3.83	0.66
Sambuca	3	Max WS	30h3.5	2.85	163.75	164.24		164.38	0.002204	1.67	1.70	3.73	0.79
Sambuca	3	Max WS	30h5	2.14	163.75	164.11	164.10	164.26	0.003325	1.74	1.23	3.60	0.95
Sambuca	2	Max WS	30h0.5	10.46	162.75	166.41		166.43	0.000017	0.52	20.86	11.78	0.09
Sambuca	2	Max WS	30h1	7.47	162.75	165.59		165.60	0.000021	0.48	15.75	5.58	0.09
Sambuca	2	Max WS	30h1.5	5.55	162.75	165.06		165.07	0.000023	0.44	12.77	5.57	0.09
Sambuca	2	Max WS	30h2	6.37	162.75	165.29		165.30	0.000022	0.45	14.04	5.57	0.09
Sambuca	2	Max WS	30h3	3.22	162.75	164.41		164.41	0.000023	0.35	9.16	5.55	0.09
Sambuca	2	Max WS	30h3.5	2.85	162.75	164.31		164.31	0.000023	0.33	8.59	5.55	0.09
Sambuca	2	Max WS	30h5	2.15	162.75	164.11		164.11	0.000020	0.29	7.51	5.54	0.08
Sambuca	1.5			Culvert									
Sambuca	1.1	Max WS	30h0.5	10.42	155.55	156.31	156.51	157.03	0.035267	3.76	2.78	4.28	1.46
Sambuca	1.1	Max WS	30h1	7.46	155.55	156.19	156.33	156.74	0.034663	3.29	2.27	4.08	1.41
Sambuca	1.1	Max WS	30h1.5	5.55	155.55	156.09	156.21	156.54	0.033887	2.97	1.87	3.91	1.37
Sambuca	1.1	Max WS	30h2	6.37	155.55	156.14	156.26	156.63	0.033614	3.09	2.06	3.99	1.37
Sambuca	1.1	Max WS	30h3	3.22	155.55	155.95	156.02	156.24	0.030458	2.39	1.35	3.68	1.26
Sambuca	1.1	Max WS	30h3.5	2.85	155.55	155.92	155.98	156.19	0.030979	2.31	1.24	3.63	1.26
Sambuca	1.1	Max WS	30h5	2.15	155.55	155.86	155.91	156.09	0.032227	2.12	1.01	3.52	1.26
Sambuca	1	Max WS	30h0.5	10.42	155.55	156.28	156.51	157.08	0.042757	3.98	2.62	4.22	1.59
Sambuca	1	Max WS	30h1	7.46	155.55	156.15	156.33	156.79	0.042291	3.52	2.12	4.02	1.55
Sambuca	1	Max WS	30h1.5	5.55	155.55	156.05	156.21	156.58	0.042989	3.22	1.73	3.85	1.53
Sambuca	1	Max WS	30h2	6.37	155.55	156.10	156.26	156.67	0.041821	3.33	1.91	3.93	1.52
Sambuca	1	Max WS	30h3	3.22	155.55	155.92	156.02	156.27	0.041203	2.64	1.22	3.62	1.45
Sambuca	1	Max WS	30h3.5	2.85	155.55	155.89	155.98	156.23	0.043258	2.57	1.11	3.57	1.48
Sambuca	1	Max WS	30h5	2.15	155.55	155.83	155.91	156.12	0.047927	2.41	0.89	3.46	1.52



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Capalle"

RIO DI CAPALLE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Capalle Reach: Sambuca Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Sambuca	5	Max WS	200h0.5	3.30	167.47	168.47		168.47	0.000134	0.28	13.15	18.39	0.10
Sambuca	5	Max WS	200h1	3.30	167.47	168.47		168.47	0.000133	0.28	13.18	18.40	0.10
Sambuca	5	Max WS	200h1.5	2.88	167.47	168.48		168.48	0.000096	0.24	13.42	18.45	0.09
Sambuca	5	Max WS	200h2	2.47	167.47	168.46		168.46	0.000077	0.21	13.05	18.37	0.08
Sambuca	5	Max WS	Tr 200 h 3	2.50	167.47	168.46		168.46	0.000079	0.22	13.08	18.37	0.08
Sambuca	5	Max WS	200h3.5	2.48	167.47	168.45		168.45	0.000081	0.22	12.89	18.33	0.08
Sambuca	5	Max WS	200h5	2.17	167.47	168.44		168.45	0.000064	0.19	12.74	18.29	0.07
Sambuca	4	Max WS	200h0.5	15.09	166.21	167.27	167.64	168.27	0.033149	4.72	3.74	5.83	1.60
Sambuca	4	Max WS	200h1	10.53	166.21	166.98	167.37	168.29	0.069185	5.25	2.22	4.75	2.17
Sambuca	4	Max WS	200h1.5	7.89	166.21	166.80	167.21	168.50	0.139299	5.87	1.43	4.08	2.90
Sambuca	4	Max WS	200h2	4.44	166.21	166.63	166.97	168.30	0.267906	5.75	0.79	3.44	3.68
Sambuca	4	Max WS	Tr 200 h 3	4.70	166.21	166.64	166.99	168.34	0.255034	5.79	0.83	3.48	3.62
Sambuca	4	Max WS	200h3.5	4.18	166.21	166.62	166.94	168.26	0.280392	5.69	0.75	3.39	3.73
Sambuca	4	Max WS	200h5	3.19	166.21	166.57	166.86	168.00	0.314197	5.30	0.61	3.24	3.83
Sambuca	3.5			Lat Struct									
Sambuca	3	Max WS	200h0.5	14.42	163.75	166.98		167.04	0.000067	1.07	23.81	23.22	0.19
Sambuca	3	Max WS	200h1	10.50	163.75	166.40		166.45	0.000085	1.05	12.51	12.63	0.21
Sambuca	3	Max WS	200h1.5	7.89	163.75	165.67		165.73	0.000144	1.10	8.02	5.10	0.26
Sambuca	3	Max WS	200h2	4.44	163.75	164.69		164.78	0.000536	1.30	3.50	4.16	0.44
Sambuca	3	Max WS	Tr 200 h 3	4.70	163.75	164.77		164.85	0.000461	1.27	3.81	4.23	0.41
Sambuca	3	Max WS	200h3.5	4.18	163.75	164.62		164.71	0.000632	1.34	3.19	4.09	0.47
Sambuca	3	Max WS	200h5	3.19	163.75	164.33		164.46	0.001487	1.55	2.06	3.82	0.67
Sambuca	2	Max WS	200h0.5	13.43	162.75	167.01		167.02	0.000016	0.55	31.84	23.33	0.09
Sambuca	2	Max WS	200h1	10.49	162.75	166.43		166.45	0.000017	0.51	21.07	12.44	0.09
Sambuca	2	Max WS	200h1.5	7.89	162.75	165.71		165.72	0.000020	0.48	16.41	5.59	0.09
Sambuca	2	Max WS	200h2	4.44	162.75	164.75		164.76	0.000024	0.40	11.05	5.56	0.09
Sambuca	2	Max WS	Tr 200 h 3	4.70	162.75	164.82		164.83	0.000024	0.41	11.45	5.56	0.09
Sambuca	2	Max WS	200h3.5	4.18	162.75	164.68		164.68	0.000024	0.39	10.65	5.56	0.09
Sambuca	2	Max WS	200h5	3.19	162.75	164.40		164.41	0.000023	0.35	9.12	5.55	0.09
Sambuca	1.5			Culvert									
Sambuca	1.1	Max WS	200h0.5	12.56	155.55	156.40	156.63	157.22	0.034800	4.03	3.14	4.41	1.48
Sambuca	1.1	Max WS	200h1	10.48	155.55	156.32	156.52	157.04	0.035221	3.77	2.79	4.28	1.46
Sambuca	1.1	Max WS	200h1.5	7.89	155.55	156.21	156.36	156.79	0.035220	3.37	2.34	4.11	1.42
Sambuca	1.1	Max WS	200h2	4.44	155.55	156.03	156.12	156.41	0.033378	2.74	1.62	3.80	1.34
Sambuca	1.1	Max WS	Tr 200 h 3	4.70	155.55	156.04	156.14	156.44	0.033665	2.80	1.68	3.83	1.35
Sambuca	1.1	Max WS	200h3.5	4.18	155.55	156.01	156.10	156.38	0.033049	2.68	1.56	3.77	1.33
Sambuca	1.1	Max WS	200h5	3.19	155.55	155.95	156.01	156.24	0.030347	2.38	1.34	3.68	1.26
Sambuca	1	Max WS	200h0.5	12.56	155.55	156.36	156.63	157.28	0.041272	4.25	2.97	4.35	1.60
Sambuca	1	Max WS	200h1	10.48	155.55	156.28	156.52	157.09	0.042680	3.99	2.63	4.22	1.59
Sambuca	1	Max WS	200h1.5	7.89	155.55	156.17	156.36	156.83	0.042968	3.60	2.19	4.05	1.56
Sambuca	1	Max WS	200h2	4.44	155.55	155.99	156.12	156.45	0.043472	3.00	1.48	3.74	1.52
Sambuca	1	Max WS	Tr 200 h 3	4.70	155.55	156.00	156.14	156.48	0.043484	3.06	1.54	3.77	1.53
Sambuca	1	Max WS	200h3.5	4.18	155.55	155.97	156.10	156.41	0.043336	2.93	1.42	3.71	1.51
Sambuca	1	Max WS	200h5	3.19	155.55	155.92	156.01	156.27	0.041001	2.63	1.21	3.62	1.45



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Cimitero"

RIO PRESSO CIMITERO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Cimitero"

RIO PRESSO CIMITERO

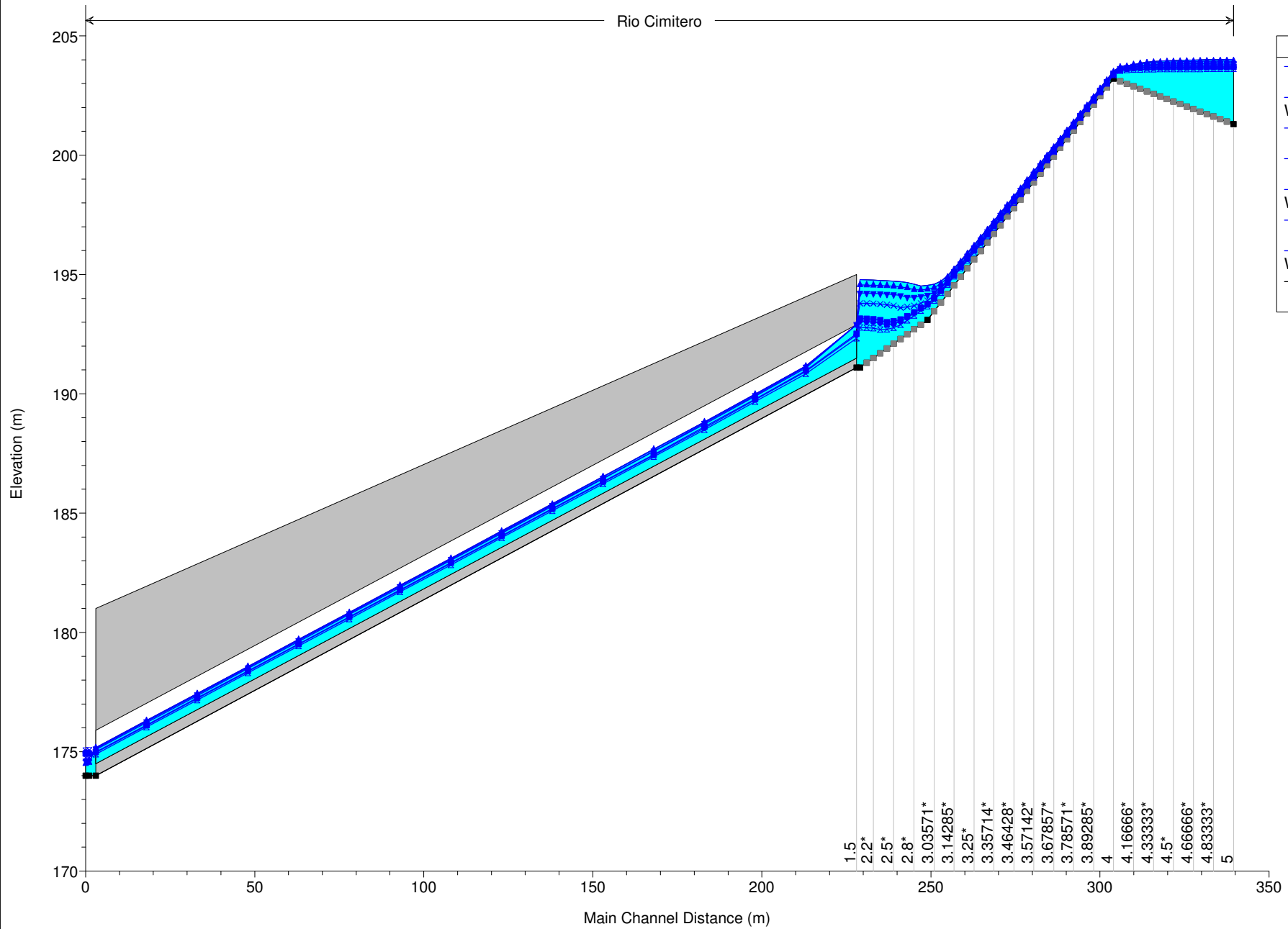
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Cimitero Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5
Geom: cimitero

Rio Cimitero



Legend	
WS Max WS - 30h5	✕
WS Max WS - 30h3.5	●
WS Max WS - 30h3	■
WS Max WS - 30h2	✕
WS Max WS - 30h1.5	▼
WS Max WS - 30h1	▲
WS Max WS - 30h0.5	■
Ground	—



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Cimitero"

RIO PRESSO CIMITERO

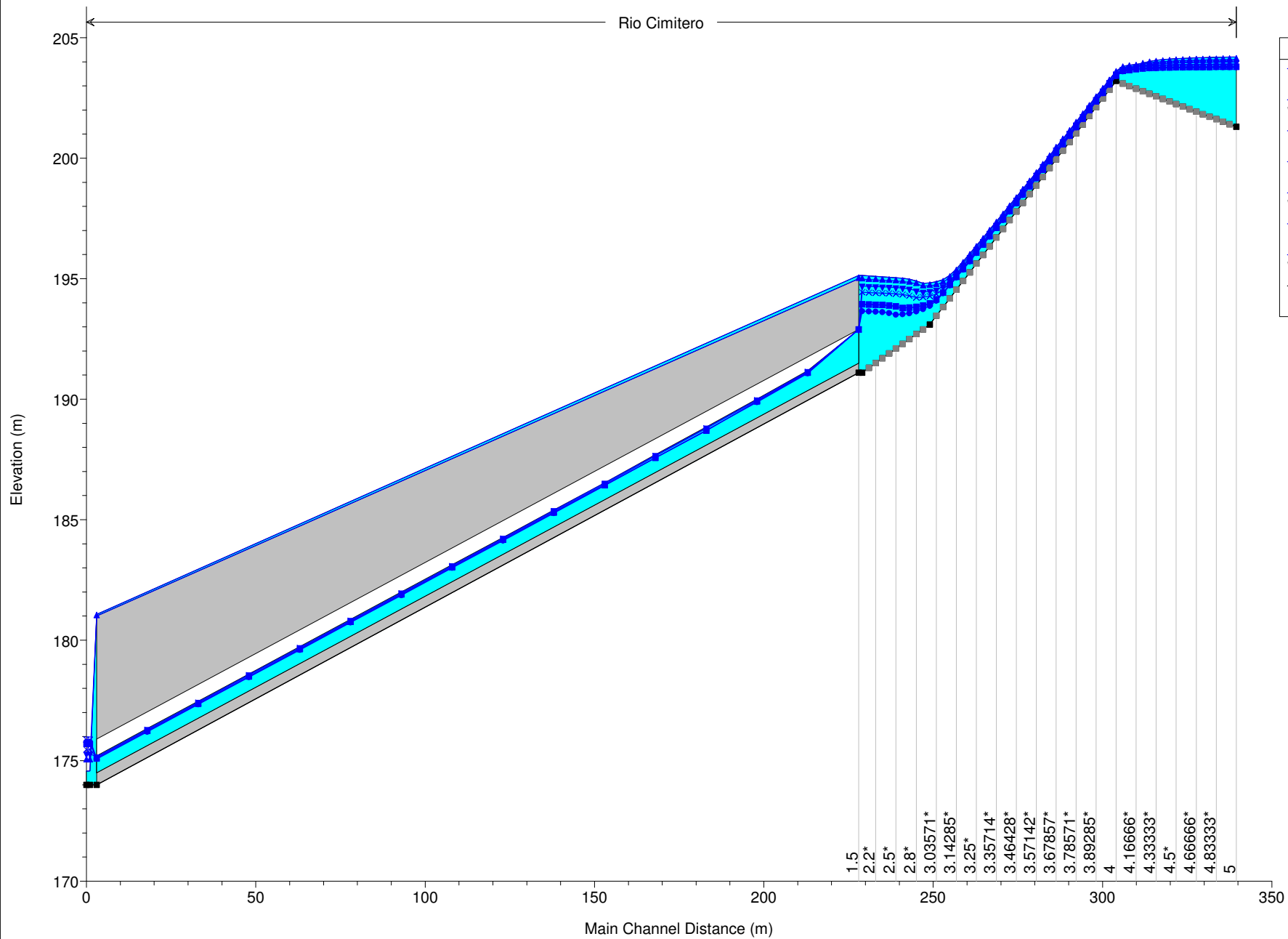
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5
Geom: cimitero

Rio Cimitero



Legend	
WS Max WS - 200h5	✕
WS Max WS - 200h3.5	●
WS Max WS - 200h3	■
WS Max WS - 200h2	✕
WS Max WS - 200h1.5	▼
WS Max WS - 200h1	▲
WS Max WS - 200h0.5	■
Ground	—



ALLEGATI

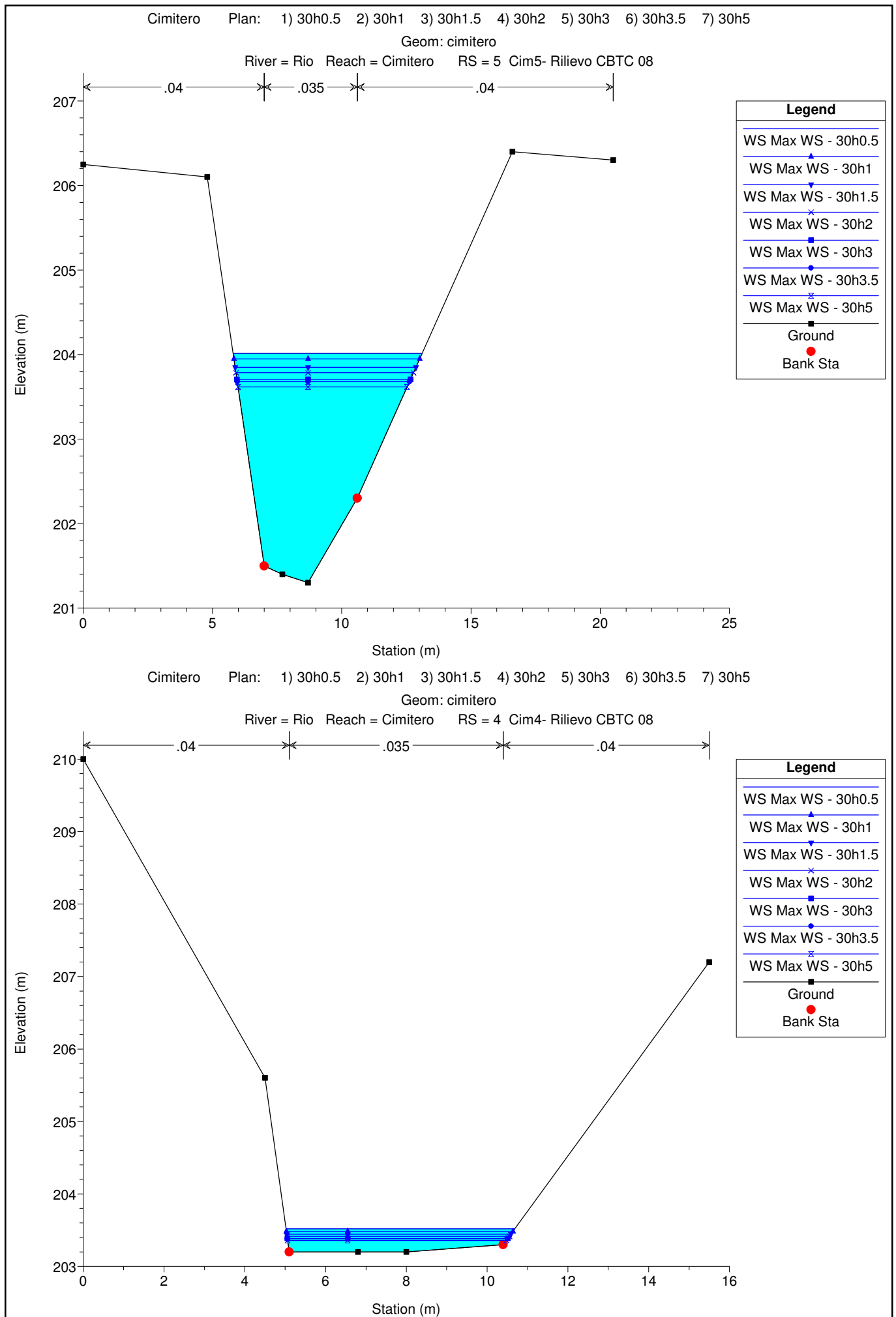
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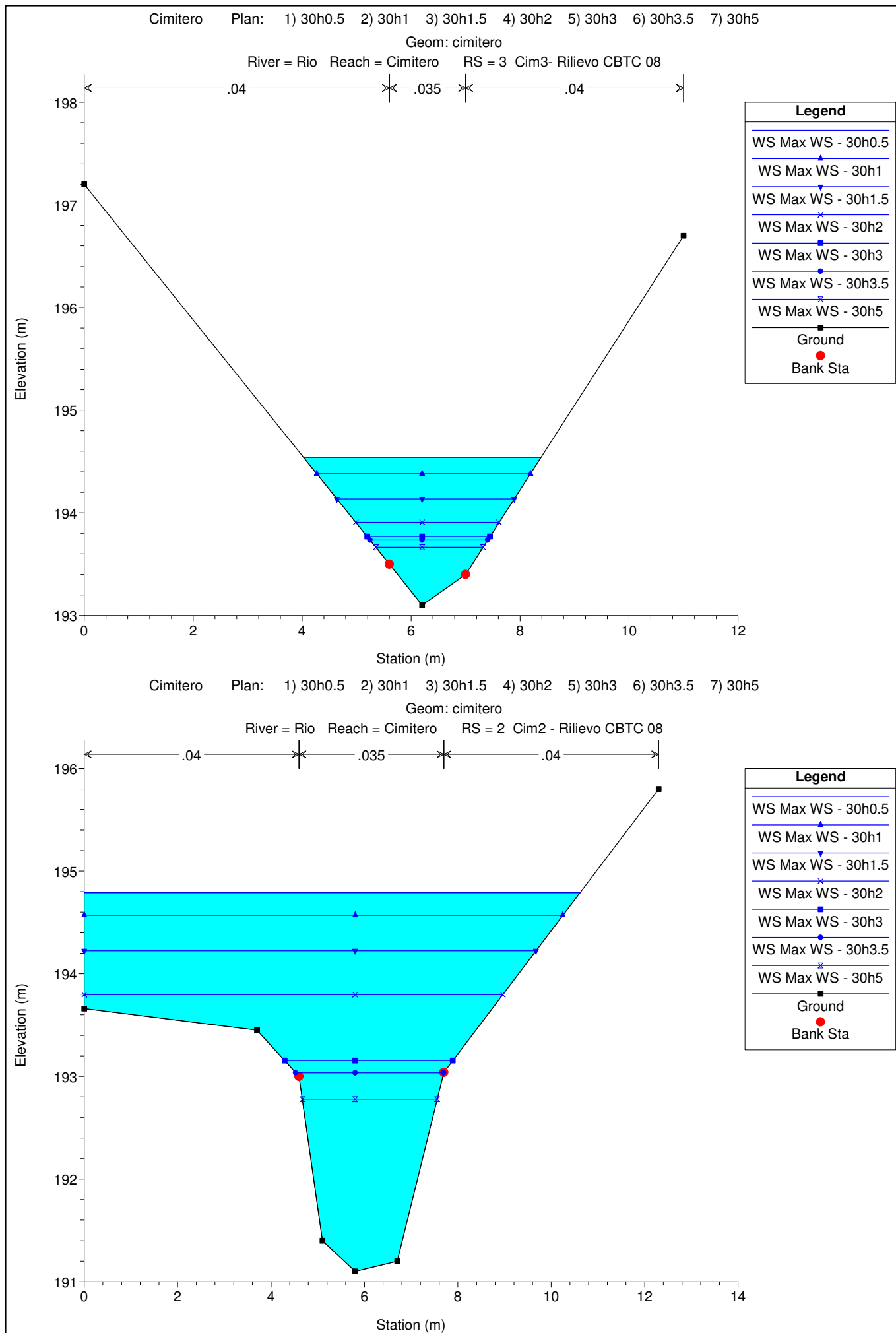
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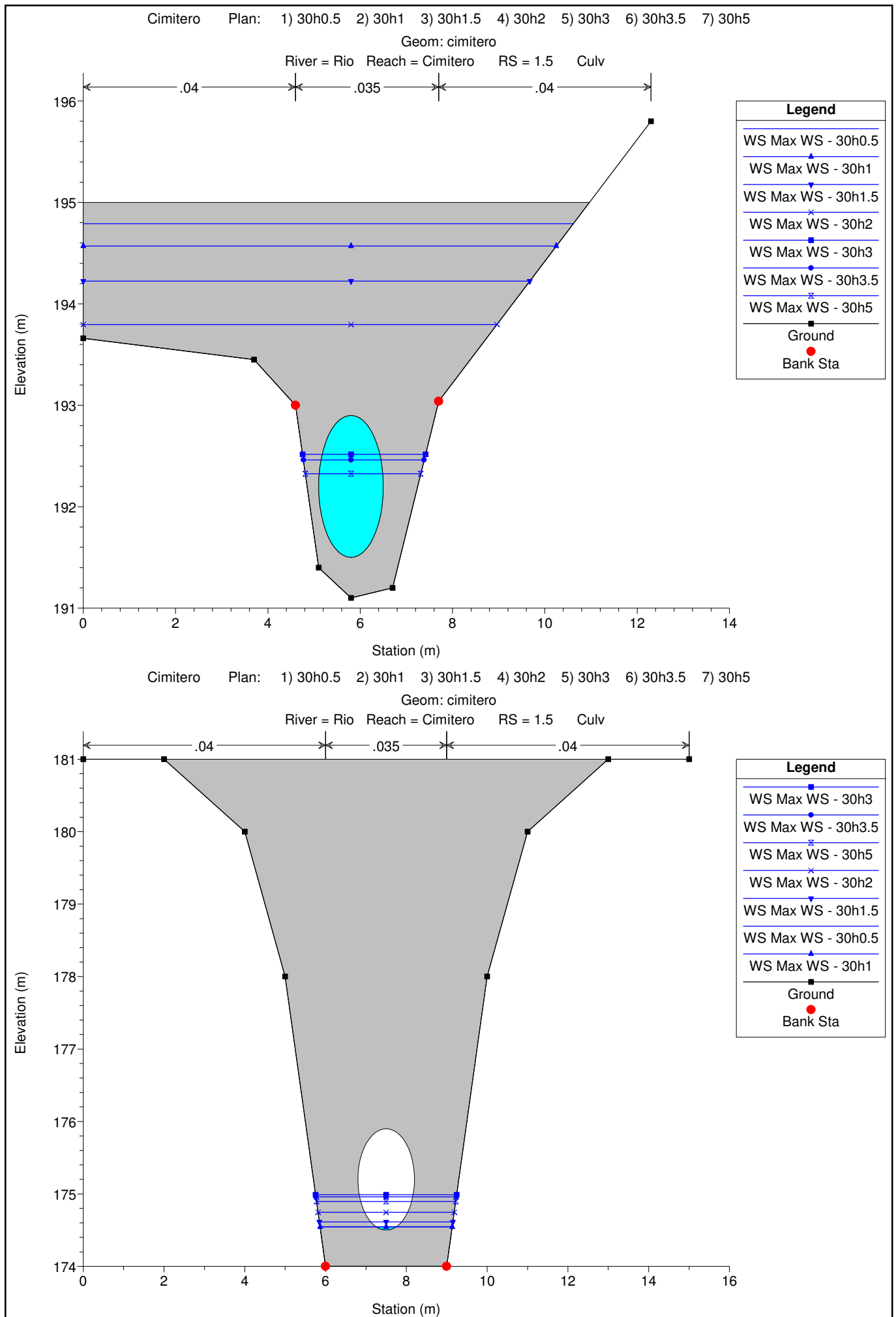
MODELLAZIONE PER TR=30 anni

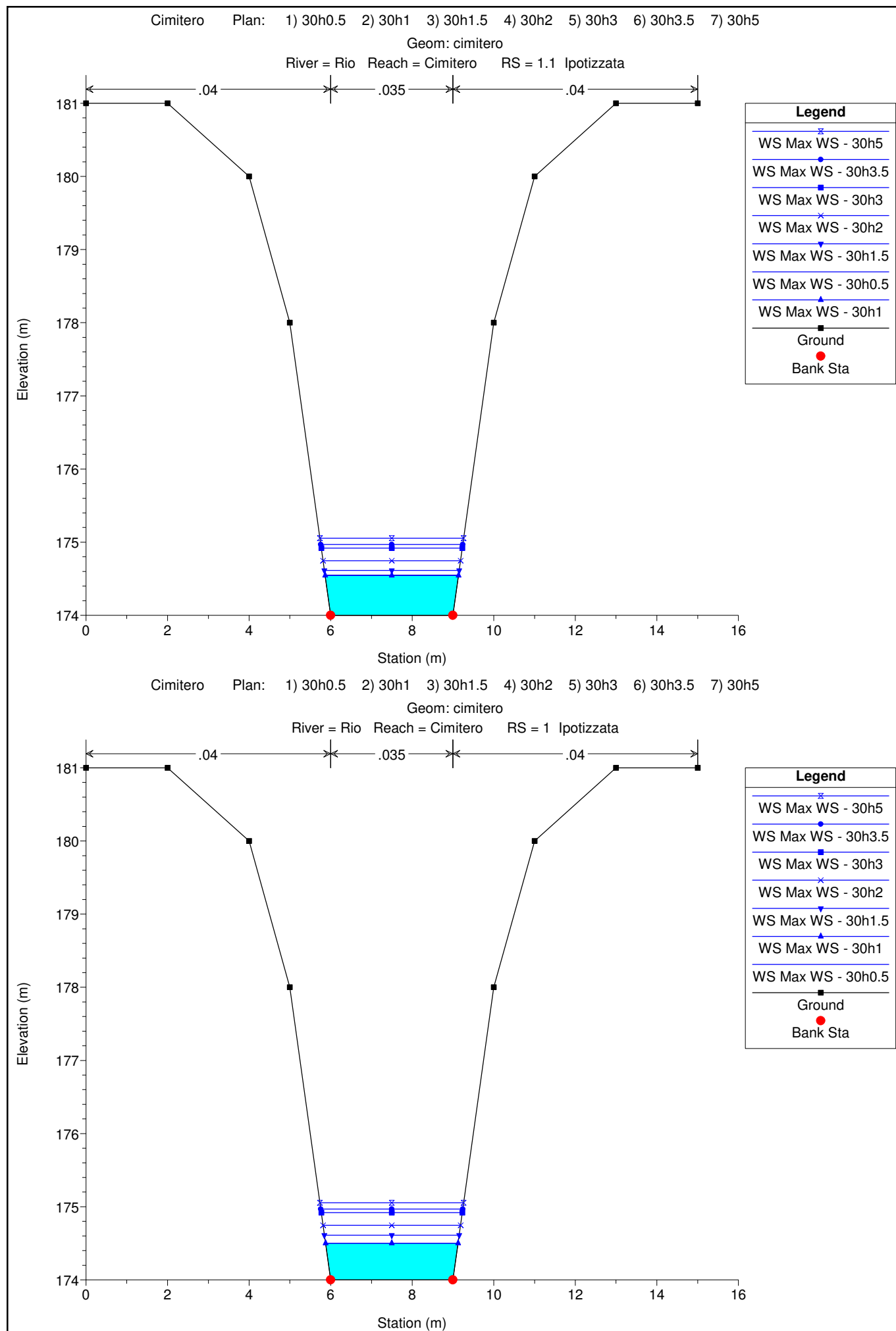
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)











ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Cimitero"

RIO PRESSO CIMITERO

MODELLAZIONE PER TR=200 anni

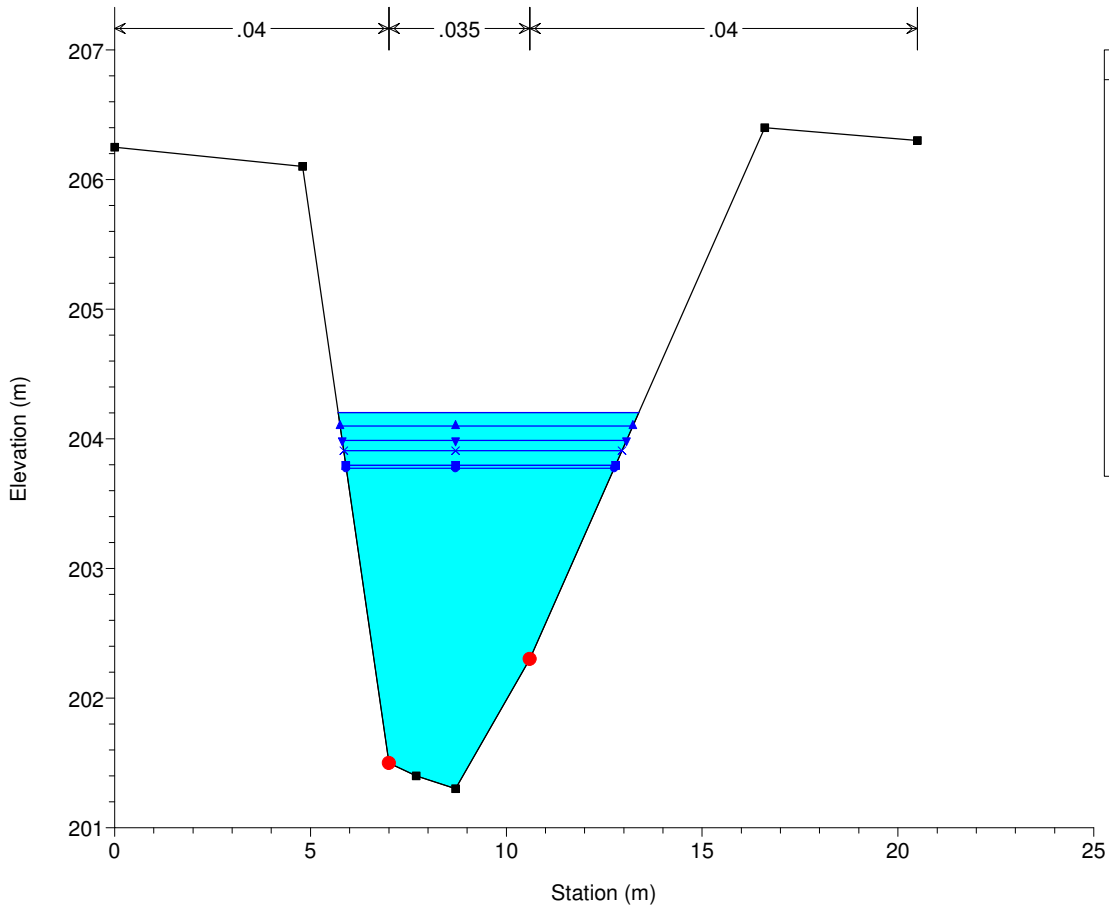
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: cimitero

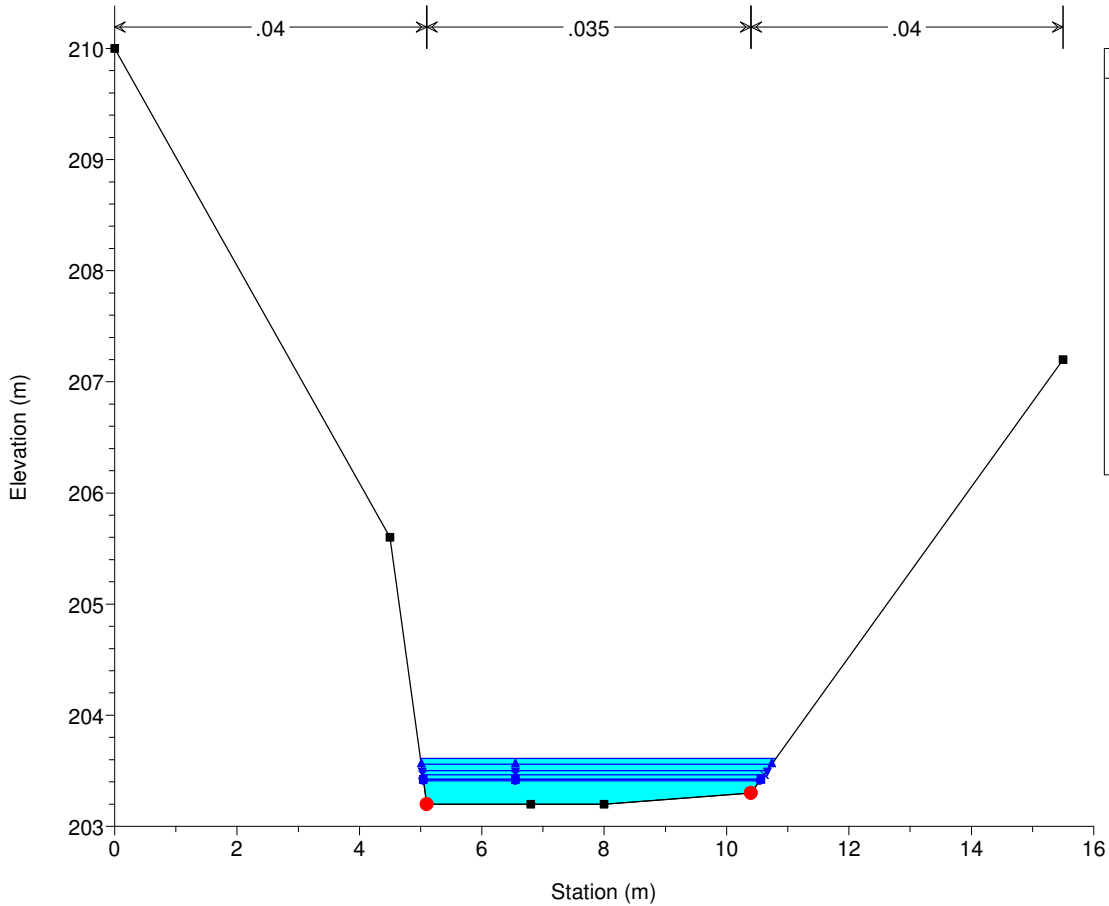
River = Rio Reach = Cimitero RS = 5 Cim5- Rilievo CBTC 08



Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: cimitero

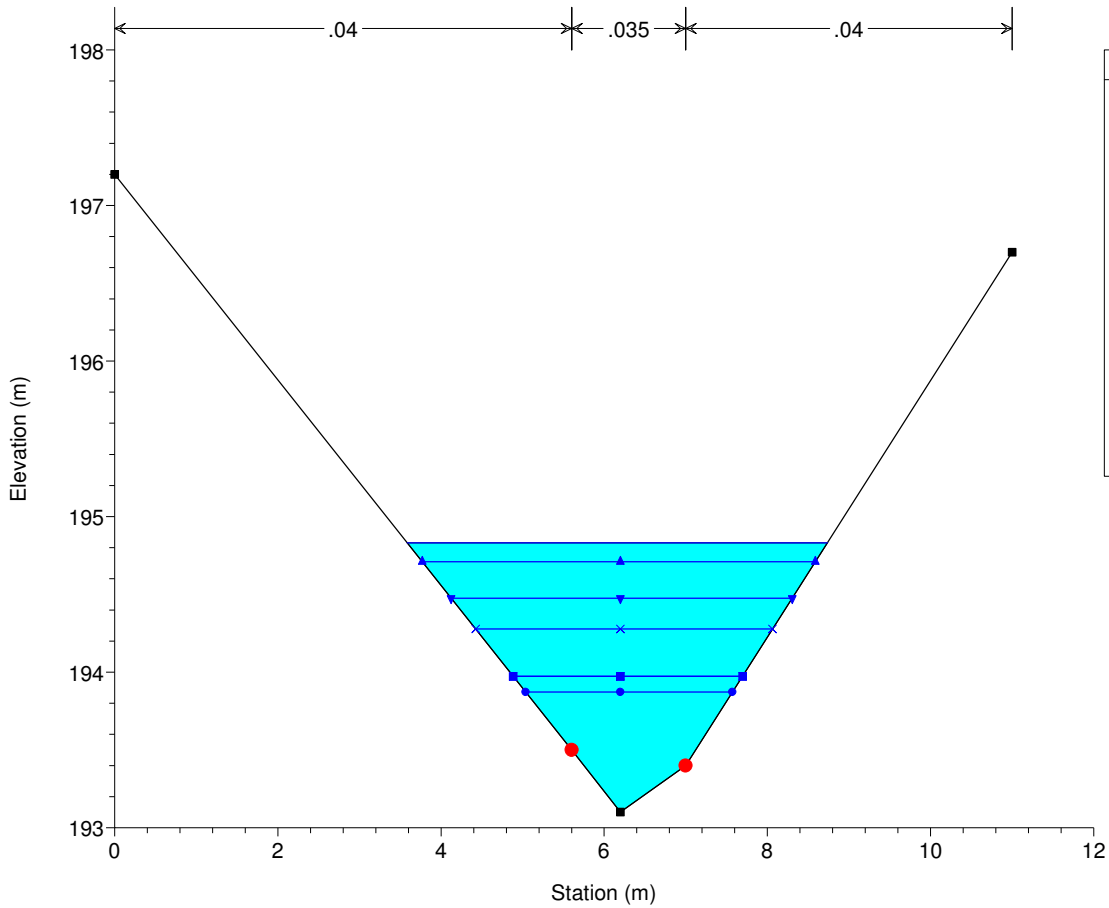
River = Rio Reach = Cimitero RS = 4 Cim4- Rilievo CBTC 08



Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: cimitero

River = Rio Reach = Cimitero RS = 3 Cim3- Rilievo CBTC 08

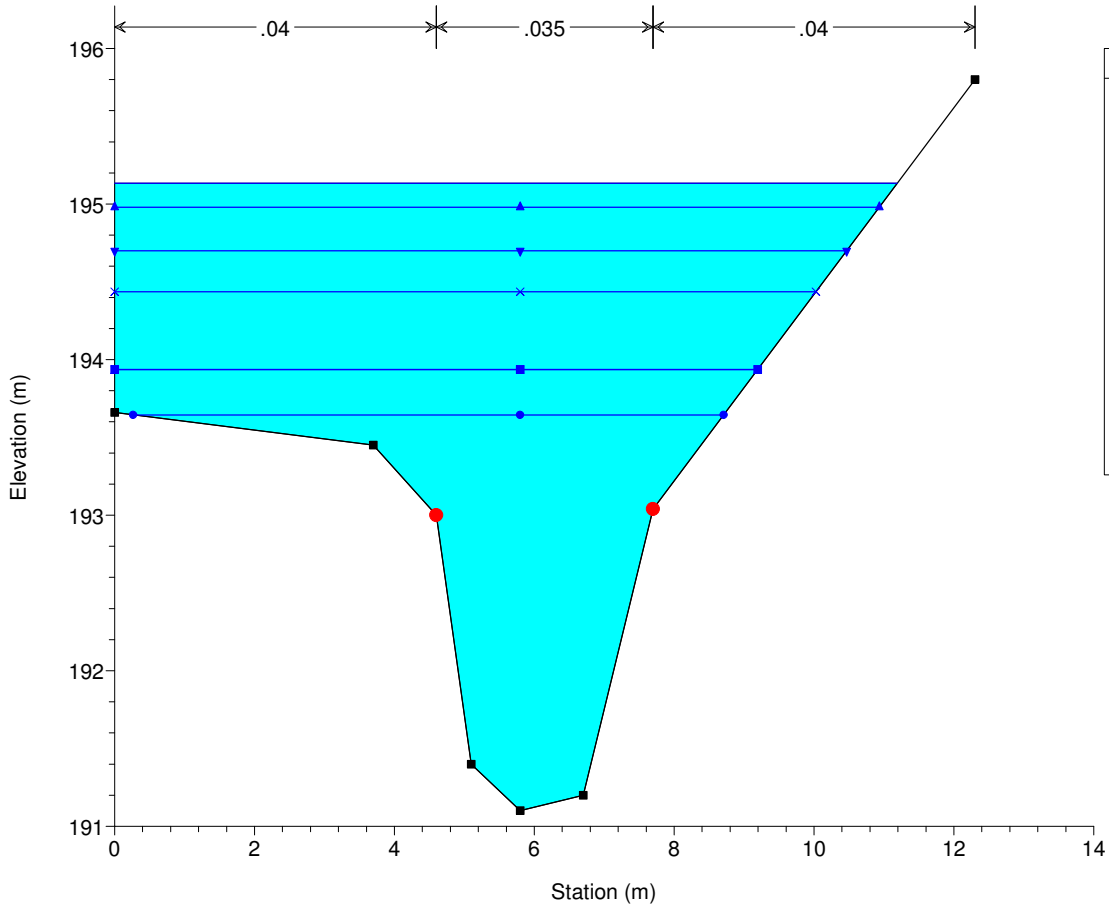


Legend	
WS Max WS - 200h0.5	▲
WS Max WS - 200h1	▼
WS Max WS - 200h1.5	×
WS Max WS - 200h2	■
WS Max WS - 200h3	■
WS Max WS - 200h5	×
WS Max WS - 200h3.5	●
Ground	■
Bank Sta	●

Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: cimitero

River = Rio Reach = Cimitero RS = 2 Cim2 - Rilievo CBTC 08

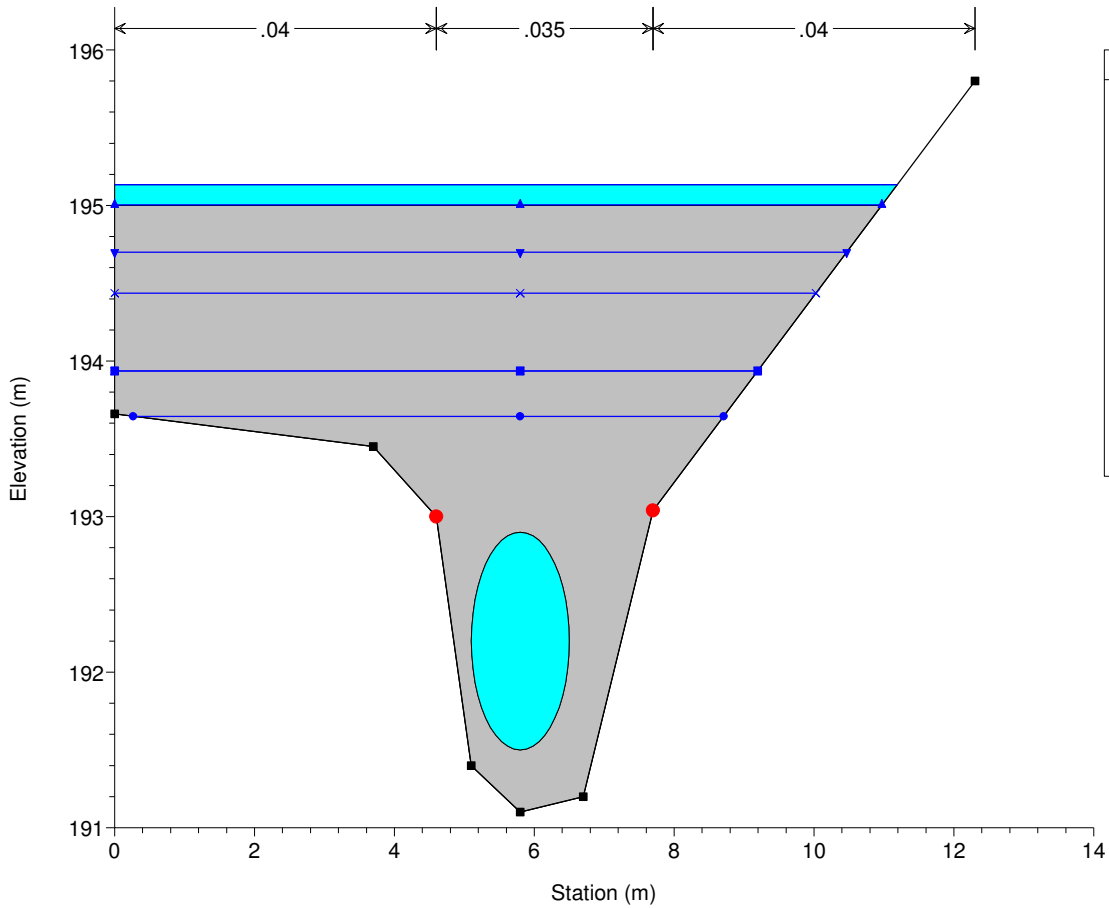


Legend	
WS Max WS - 200h0.5	▲
WS Max WS - 200h1	▼
WS Max WS - 200h1.5	×
WS Max WS - 200h2	■
WS Max WS - 200h3	■
WS Max WS - 200h5	×
WS Max WS - 200h3.5	●
Ground	■
Bank Sta	●

Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: cimitero

River = Rio Reach = Cimitero RS = 1.5 Culv

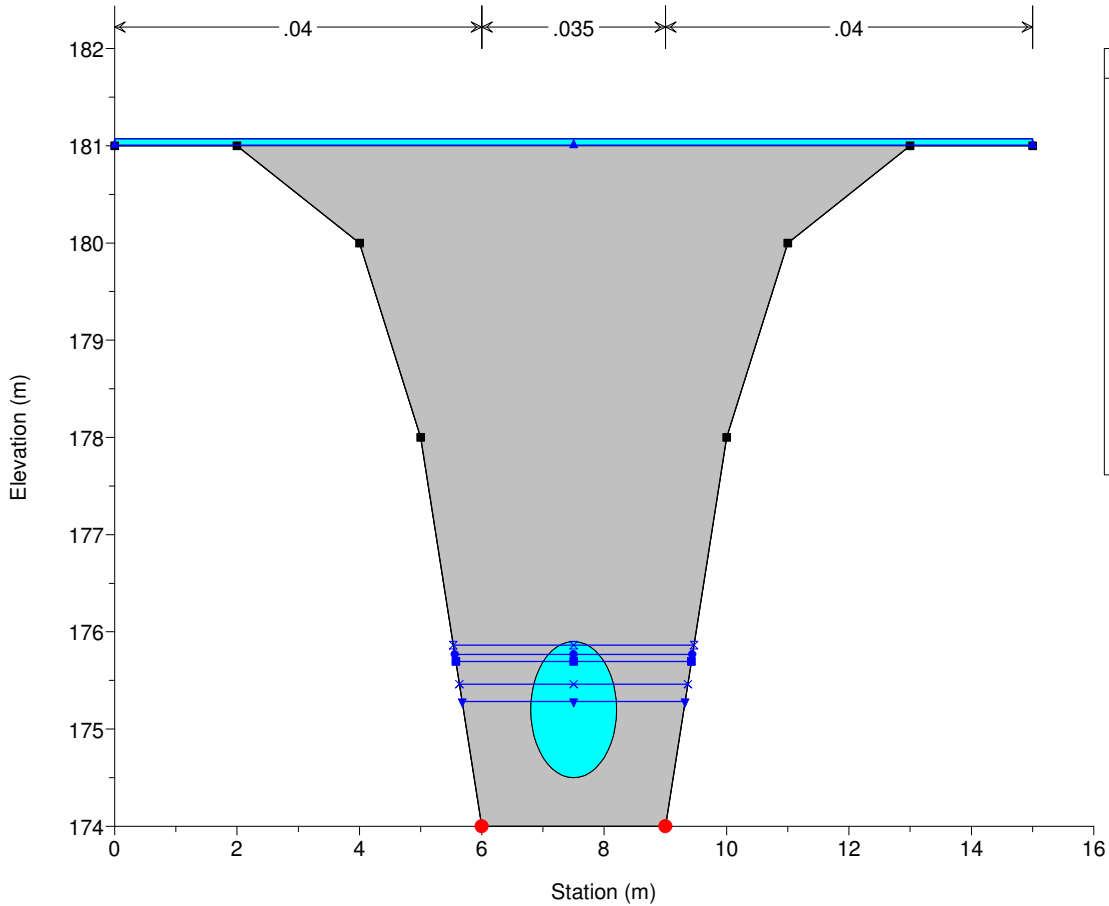


Legend	
WS Max WS - 200h0.5	▲
WS Max WS - 200h1	▼
WS Max WS - 200h1.5	×
WS Max WS - 200h2	■
WS Max WS - 200h3	●
WS Max WS - 200h5	●
WS Max WS - 200h3.5	●
Ground	■
Bank Sta	●

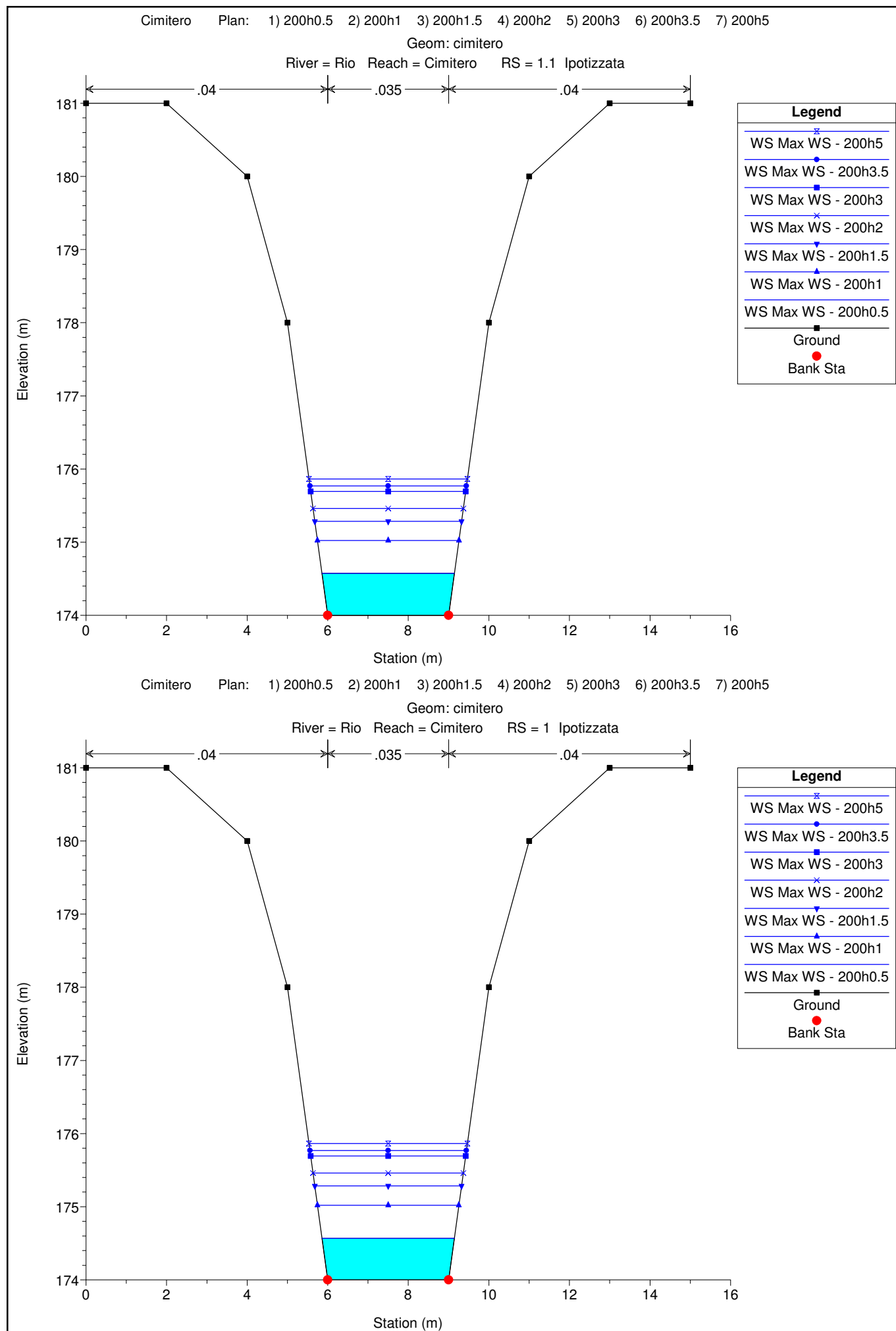
Cimitero Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: cimitero

River = Rio Reach = Cimitero RS = 1.5 Culv



Legend	
WS Max WS - 200h0.5	▲
WS Max WS - 200h1	▼
WS Max WS - 200h5	×
WS Max WS - 200h3.5	■
WS Max WS - 200h3	●
WS Max WS - 200h2	×
WS Max WS - 200h1.5	▼
Ground	■
Bank Sta	●





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Cimitero"

RIO PRESSO CIMITERO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Reach: Cimitero Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cimitero	5	Max WS	30h0.5	9.78	201.30	204.02		204.06	0.000393	0.97	12.33	7.31	0.20
Cimitero	5	Max WS	30h1	8.20	201.30	203.95		203.98	0.000307	0.84	11.86	7.19	0.18
Cimitero	5	Max WS	30h1.5	6.37	201.30	203.85		203.87	0.000218	0.69	11.15	6.99	0.15
Cimitero	5	Max WS	30h2	5.12	201.30	203.78		203.80	0.000158	0.58	10.70	6.86	0.12
Cimitero	5	Max WS	30h3	3.67	201.30	203.71		203.71	0.000093	0.43	10.17	6.71	0.09
Cimitero	5	Max WS	30h3.5	3.28	201.30	203.68		203.69	0.000078	0.39	9.98	6.66	0.09
Cimitero	5	Max WS	30h5	2.44	201.30	203.62		203.62	0.000048	0.30	9.57	6.54	0.07
Cimitero	4	Max WS	30h0.5	9.87	203.20	203.52	203.92	205.48	0.240714	6.23	1.61	5.67	3.65
Cimitero	4	Max WS	30h1	8.20	203.20	203.48	203.84	205.25	0.258576	5.91	1.41	5.61	3.70
Cimitero	4	Max WS	30h1.5	6.37	203.20	203.44	203.74	204.94	0.271148	5.43	1.19	5.55	3.69
Cimitero	4	Max WS	30h2	5.12	203.20	203.42	203.68	204.67	0.272227	4.98	1.04	5.51	3.62
Cimitero	4	Max WS	30h3	3.67	203.20	203.38	203.59	204.31	0.251690	4.26	0.87	5.46	3.38
Cimitero	4	Max WS	30h3.5	3.28	203.20	203.38	203.56	204.19	0.239407	4.01	0.82	5.44	3.27
Cimitero	4	Max WS	30h5	2.44	203.20	203.36	203.50	203.94	0.200704	3.38	0.73	5.42	2.93
Cimitero	3	Max WS	30h0.5	9.86	193.10	194.54	194.67	195.14	0.015871	3.90	3.39	4.36	1.11
Cimitero	3	Max WS	30h1	8.19	193.10	194.38	194.54	195.00	0.019171	3.92	2.72	3.92	1.19
Cimitero	3	Max WS	30h1.5	6.35	193.10	194.14	194.39	194.92	0.031596	4.26	1.85	3.26	1.46
Cimitero	3	Max WS	30h2	5.12	193.10	193.91	194.26	195.10	0.068159	5.09	1.17	2.63	2.04
Cimitero	3	Max WS	30h3	3.67	193.10	193.77	194.10	194.92	0.087345	4.90	0.83	2.25	2.22
Cimitero	3	Max WS	30h3.5	3.28	193.10	193.74	194.05	194.82	0.090061	4.75	0.76	2.16	2.23
Cimitero	3	Max WS	30h5	2.44	193.10	193.66	193.93	194.56	0.090943	4.27	0.61	1.97	2.18
Cimitero	2.65			Lat Struct									
Cimitero	2	Max WS	30h0.5	6.62	191.10	194.79		194.80	0.000116	0.45	18.26	10.62	0.08
Cimitero	2	Max WS	30h1	6.31	191.10	194.57		194.58	0.000151	0.49	15.95	10.25	0.09
Cimitero	2	Max WS	30h1.5	5.80	191.10	194.22		194.24	0.000239	0.57	12.51	9.67	0.11
Cimitero	2	Max WS	30h2	5.10	191.10	193.80		193.82	0.000460	0.70	8.53	8.96	0.15
Cimitero	2	Max WS	30h3	3.67	191.10	193.16		193.19	0.000937	0.79	4.69	3.60	0.21
Cimitero	2	Max WS	30h3.5	3.28	191.10	193.04		193.07	0.000988	0.77	4.28	3.17	0.21
Cimitero	2	Max WS	30h5	2.44	191.10	192.78		192.80	0.000929	0.70	3.51	2.89	0.20
Cimitero	1.5			Culvert									
Cimitero	1.1	Max WS	30h0.5	6.62	174.00	174.55	174.78	175.35	0.043323	3.98	1.72	3.27	1.72
Cimitero	1.1	Max WS	30h1	6.31	174.00	174.54	174.76	175.28	0.040332	3.83	1.71	3.27	1.66
Cimitero	1.1	Max WS	30h1.5	2.00	174.00	174.61		174.67	0.002723	1.08	1.93	3.31	0.44
Cimitero	1.1	Max WS	30h2	2.00	174.00	174.75		174.79	0.001405	0.88	2.38	3.37	0.33
Cimitero	1.1	Max WS	30h3	2.00	174.00	174.92		174.95	0.000697	0.71	2.97	3.46	0.24
Cimitero	1.1	Max WS	30h3.5	2.00	174.00	174.97		174.99	0.000585	0.68	3.14	3.48	0.22
Cimitero	1.1	Max WS	30h5	2.00	174.00	175.05		175.07	0.000441	0.62	3.44	3.53	0.19
Cimitero	1	Max WS	30h0.5	2.00	174.00	174.50	174.35	174.59	0.005384	1.32	1.56	3.25	0.60
Cimitero	1	Max WS	30h1	2.00	174.00	174.50	174.35	174.59	0.005384	1.32	1.56	3.25	0.60
Cimitero	1	Max WS	30h1.5	2.00	174.00	174.61	174.35	174.67	0.002769	1.08	1.92	3.31	0.44
Cimitero	1	Max WS	30h2	2.00	174.00	174.74	174.35	174.78	0.001415	0.88	2.37	3.37	0.33
Cimitero	1	Max WS	30h3	2.00	174.00	174.92	174.35	174.94	0.000698	0.71	2.97	3.46	0.24
Cimitero	1	Max WS	30h3.5	2.00	174.00	174.97	174.35	174.99	0.000586	0.68	3.14	3.48	0.22
Cimitero	1	Max WS	30h5	2.00	174.00	175.05	174.35	175.07	0.000441	0.62	3.44	3.53	0.19



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Cimitero"

RIO PRESSO CIMITERO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Reach: Cimitero Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cimitero	5	Max WS	200h0.5	14.11	201.30	204.20		204.28	0.000616	1.28	13.74	7.68	0.25
Cimitero	5	Max WS	200h1	11.65	201.30	204.10		204.15	0.000491	1.11	12.95	7.48	0.22
Cimitero	5	Max WS	200h1.5	9.09	201.30	203.99		204.03	0.000355	0.92	12.14	7.26	0.19
Cimitero	5	Max WS	200h2	7.37	201.30	203.91		203.93	0.000266	0.77	11.56	7.10	0.16
Cimitero	5	Max WS	200h3	5.43	201.30	203.79		203.81	0.000174	0.61	10.77	6.88	0.13
Cimitero	5	Max WS	200h3.5	4.83	201.30	203.77		203.79	0.000143	0.55	10.62	6.84	0.12
Cimitero	5	Max WS	200h5	5.43	201.30	203.79		203.81	0.000174	0.61	10.77	6.88	0.13
Cimitero	4	Max WS	200h0.5	14.10	203.20	203.61	204.10	205.90	0.196813	6.75	2.14	5.81	3.46
Cimitero	4	Max WS	200h1	11.64	203.20	203.56	204.00	205.68	0.221580	6.48	1.83	5.73	3.58
Cimitero	4	Max WS	200h1.5	9.09	203.20	203.50	203.88	205.38	0.249359	6.09	1.52	5.64	3.68
Cimitero	4	Max WS	200h2	7.37	203.20	203.46	203.80	205.12	0.265091	5.71	1.31	5.58	3.71
Cimitero	4	Max WS	200h3	5.43	203.20	203.42	203.69	204.74	0.273146	5.10	1.08	5.52	3.64
Cimitero	4	Max WS	200h3.5	4.83	203.20	203.41	203.66	204.61	0.269770	4.85	1.00	5.50	3.58
Cimitero	4	Max WS	200h5	5.43	203.20	203.42	203.69	204.74	0.273146	5.10	1.08	5.52	3.64
Cimitero	3	Max WS	200h0.5	14.00	193.10	194.83	194.93	195.45	0.013385	4.11	4.76	5.15	1.05
Cimitero	3	Max WS	200h1	11.64	193.10	194.71	194.79	195.27	0.013051	3.84	4.16	4.82	1.02
Cimitero	3	Max WS	200h1.5	9.09	193.10	194.48	194.61	195.07	0.016843	3.88	3.11	4.18	1.13
Cimitero	3	Max WS	200h2	7.37	193.10	194.28	194.48	194.96	0.023246	4.04	2.33	3.64	1.29
Cimitero	3	Max WS	200h3	5.43	193.10	193.97	194.30	195.00	0.052019	4.76	1.35	2.81	1.81
Cimitero	3	Max WS	200h3.5	4.83	193.10	193.87	194.24	195.10	0.074913	5.15	1.08	2.54	2.12
Cimitero	3	Max WS	200h5	5.43	193.10	193.97	194.30	195.00	0.052019	4.76	1.35	2.81	1.81
Cimitero	2.65			Lat Struct									
Cimitero	2	Max WS	200h0.5	7.94	191.10	195.13		195.14	0.000101	0.45	22.01	11.19	0.08
Cimitero	2	Max WS	200h1	6.92	191.10	194.98		194.99	0.000096	0.43	20.30	10.93	0.08
Cimitero	2	Max WS	200h1.5	6.49	191.10	194.70		194.71	0.000129	0.47	17.29	10.46	0.09
Cimitero	2	Max WS	200h2	6.12	191.10	194.44		194.45	0.000179	0.52	14.59	10.03	0.10
Cimitero	2	Max WS	200h3	5.34	191.10	193.94		193.95	0.000369	0.65	9.79	9.19	0.14
Cimitero	2	Max WS	200h3.5	4.83	191.10	193.64		193.67	0.000583	0.75	7.19	8.45	0.17
Cimitero	2	Max WS	200h5	5.34	191.10	193.94		193.95	0.000369	0.65	9.79	9.19	0.14
Cimitero	1.5			Culvert									
Cimitero	1.1	Max WS	200h0.5	2.00	174.00	174.57		174.64	0.003425	1.15	1.80	3.29	0.49
Cimitero	1.1	Max WS	200h1	2.00	174.00	175.02		175.04	0.000489	0.64	3.33	3.51	0.20
Cimitero	1.1	Max WS	200h1.5	2.00	174.00	175.28		175.30	0.000226	0.51	4.27	3.64	0.14
Cimitero	1.1	Max WS	200h2	2.00	174.00	175.46		175.47	0.000146	0.44	4.92	3.73	0.12
Cimitero	1.1	Max WS	200h3	2.00	174.00	175.69		175.70	0.000088	0.38	5.80	3.85	0.09
Cimitero	1.1	Max WS	200h3.5	2.00	174.00	175.77		175.77	0.000077	0.37	6.09	3.88	0.09
Cimitero	1.1	Max WS	200h5	2.00	174.00	175.86		175.87	0.000064	0.35	6.46	3.93	0.08
Cimitero	1	Max WS	200h0.5	2.00	174.00	174.57	174.35	174.64	0.003513	1.16	1.79	3.28	0.49
Cimitero	1	Max WS	200h1	2.00	174.00	175.02	174.35	175.04	0.000490	0.64	3.32	3.51	0.20
Cimitero	1	Max WS	200h1.5	2.00	174.00	175.28	174.35	175.30	0.000226	0.51	4.26	3.64	0.14
Cimitero	1	Max WS	200h2	2.00	174.00	175.46	174.35	175.47	0.000146	0.44	4.92	3.73	0.12
Cimitero	1	Max WS	200h3	2.00	174.00	175.69	174.35	175.70	0.000088	0.38	5.80	3.85	0.09
Cimitero	1	Max WS	200h3.5	2.00	174.00	175.77	174.35	175.77	0.000077	0.37	6.09	3.88	0.09
Cimitero	1	Max WS	200h5	2.00	174.00	175.86	174.35	175.87	0.000064	0.35	6.46	3.93	0.08



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

RIO PANIGLIOLE

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

RIO PANIGLIOLE

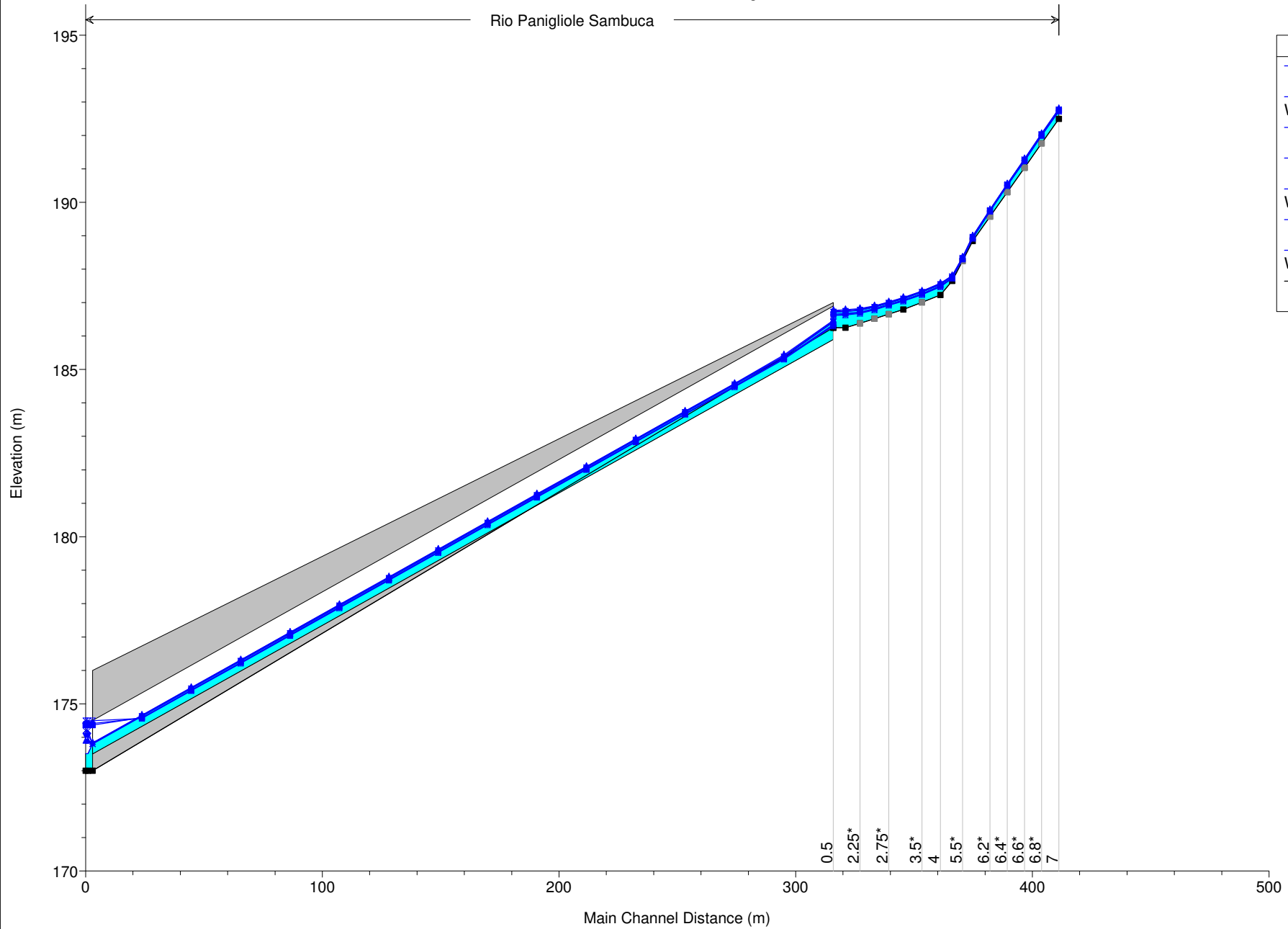
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Panigliole Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5
Geom: Panigliole

Rio Panigliole Sambuca



Legend	
WS Max WS - 30h5	x
WS Max WS - 30h3.5	●
WS Max WS - 30h3	■
WS Max WS - 30h2	x
WS Max WS - 30h1.5	▼
WS Max WS - 30h1	▲
WS Max WS - 30h0.5	■
Ground	—



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

RIO PANIGLIOLE

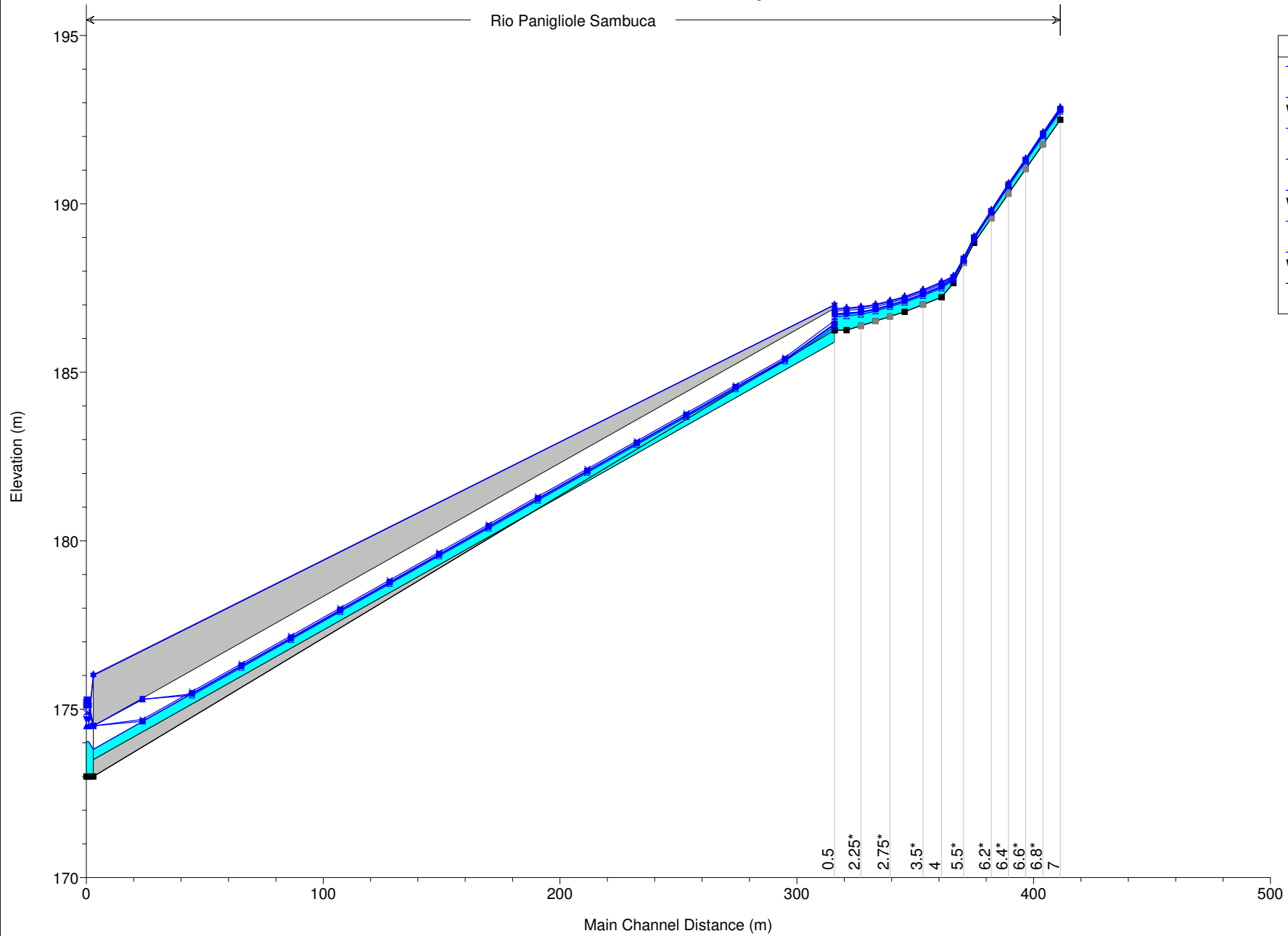
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Panigliole Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5
Geom: Panigliole

Rio Panigliole Sambuca



Legend	
WS Max WS - 200h5	✕
WS Max WS - 200h3.5	●
WS Max WS - 200h3	■
WS Max WS - 200h2	✕
WS Max WS - 200h1.5	▼
WS Max WS - 200h1	▲
WS Max WS - 200h0.5	■
Ground	■



ALLEGATI

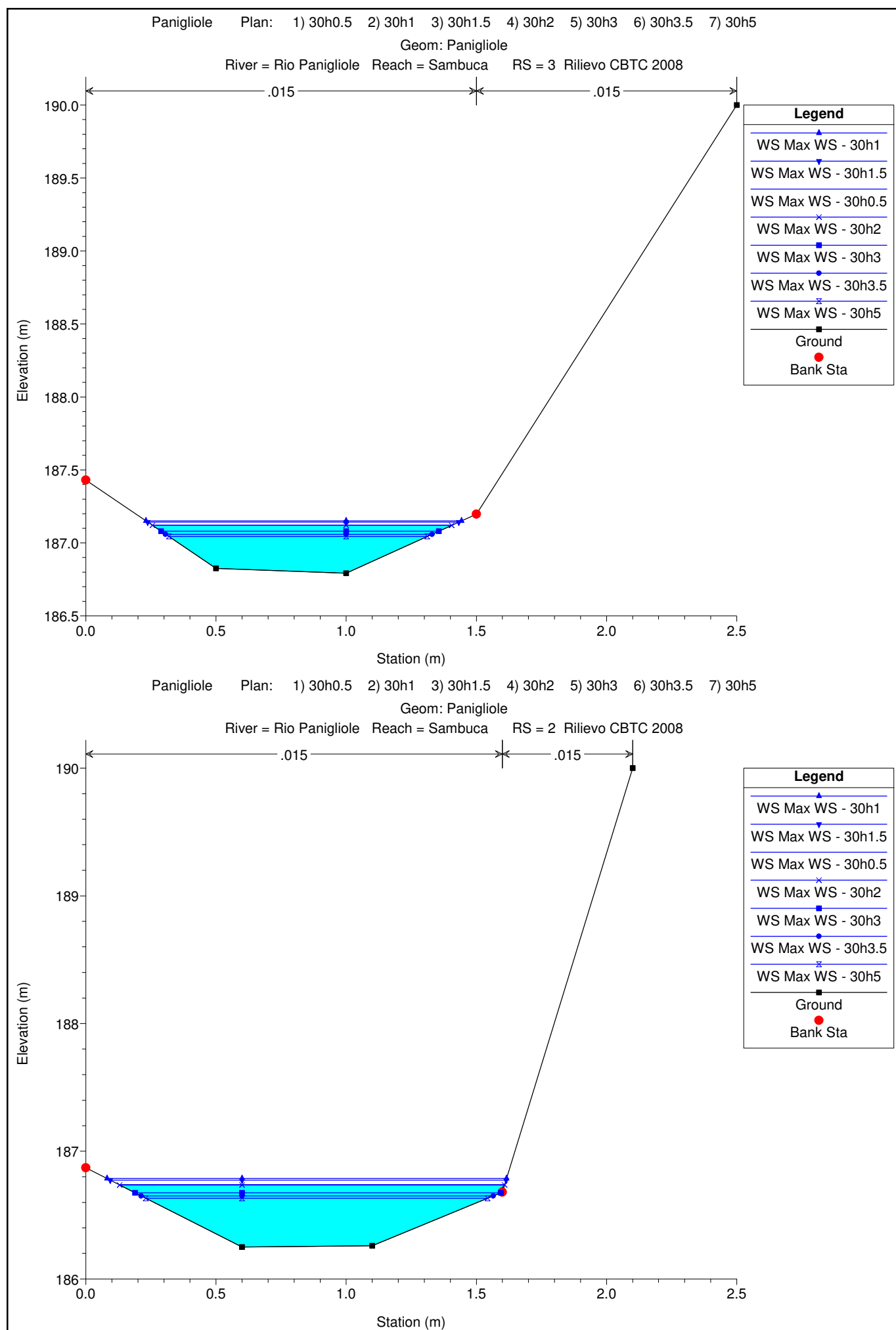
MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

RIO PANIGLIOLE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

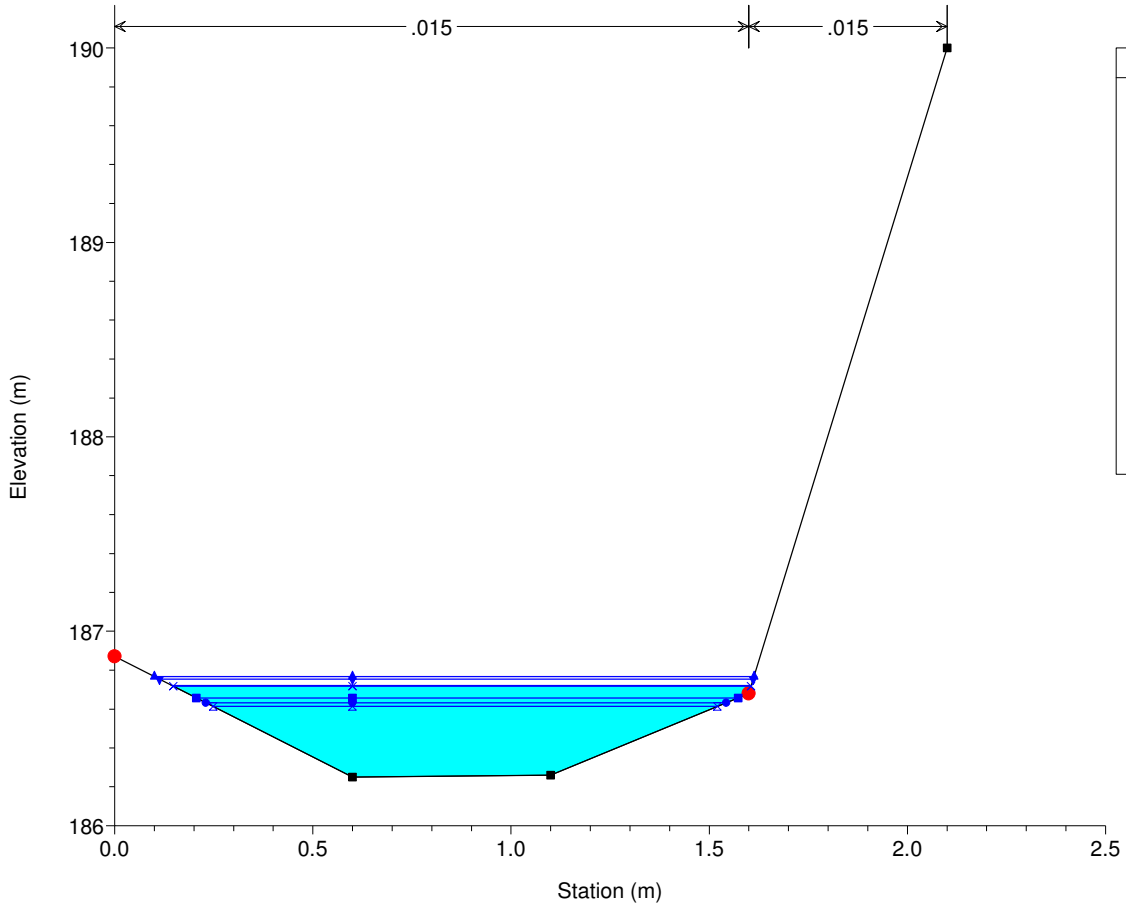
Sezioni Trasversali (da monte verso valle)



Panigliole Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: Panigliole

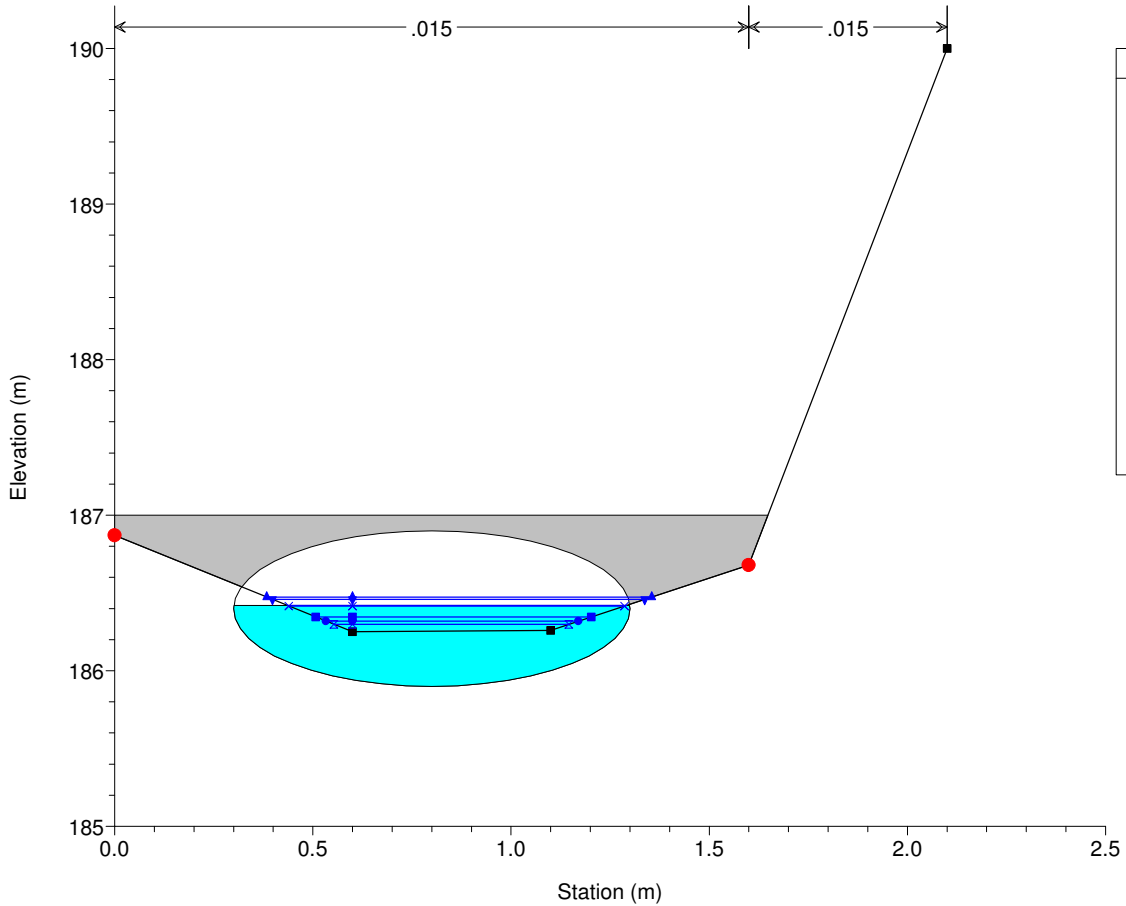
River = Rio Panigliole Reach = Sambuca RS = 1 COPIA DELLA SEZ. 2

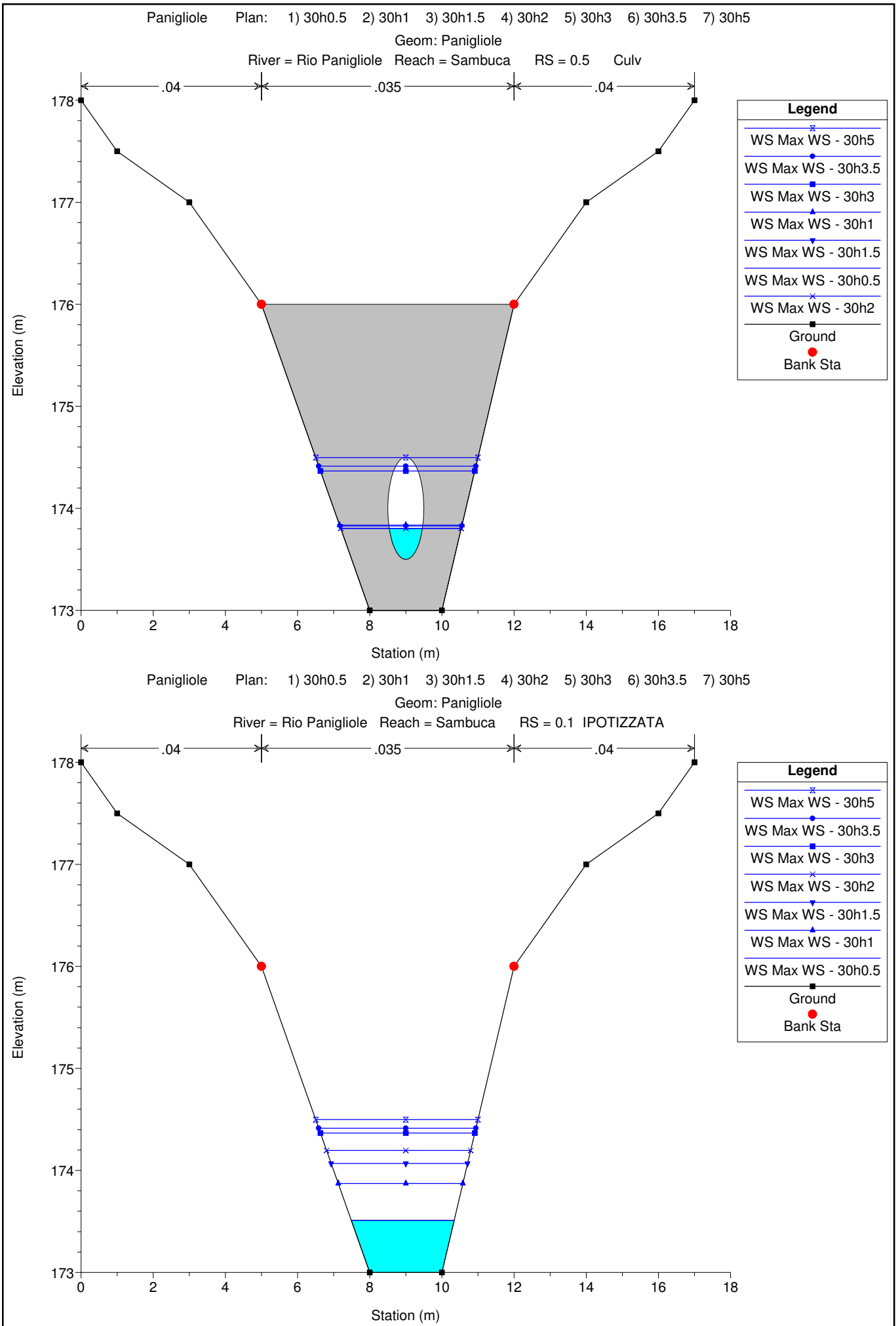


Panigliole Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: Panigliole

River = Rio Panigliole Reach = Sambuca RS = 0.5 Culv

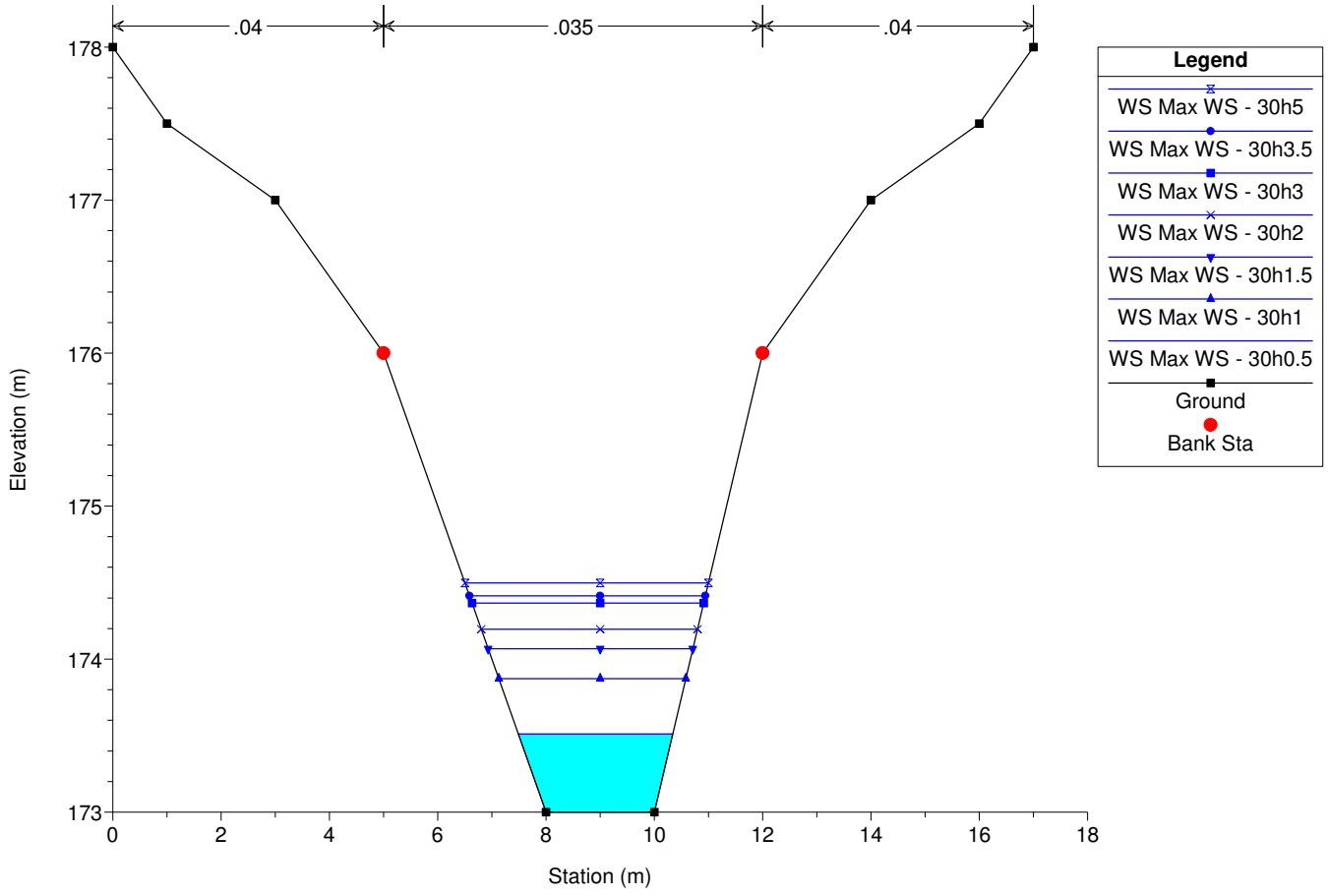




Panigliole Plan: 1) 30h0.5 2) 30h1 3) 30h1.5 4) 30h2 5) 30h3 6) 30h3.5 7) 30h5

Geom: Panigliole

River = Rio Panigliole Reach = Sambuca RS = 0 IPOTIZZATA





ALLEGATI

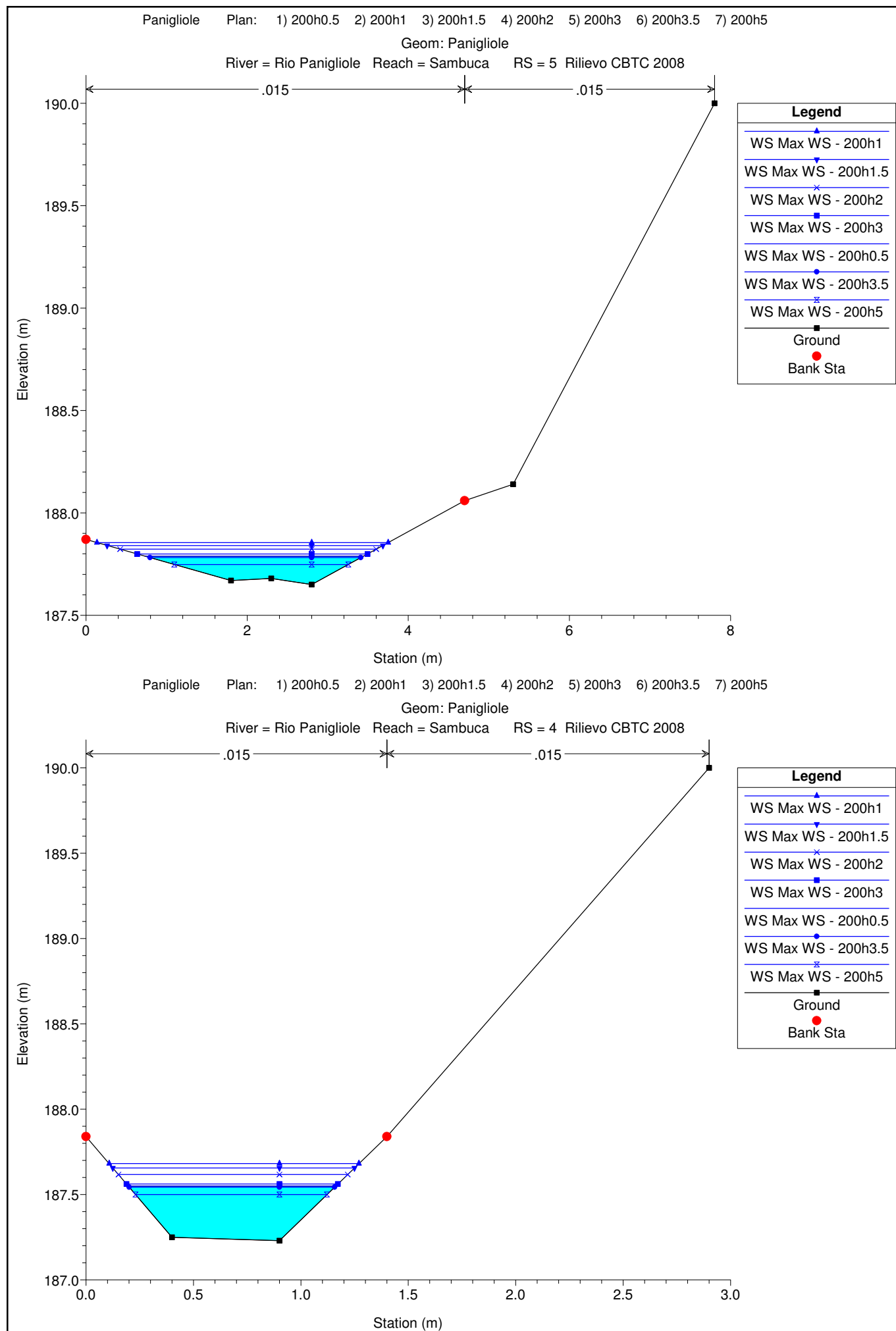
MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

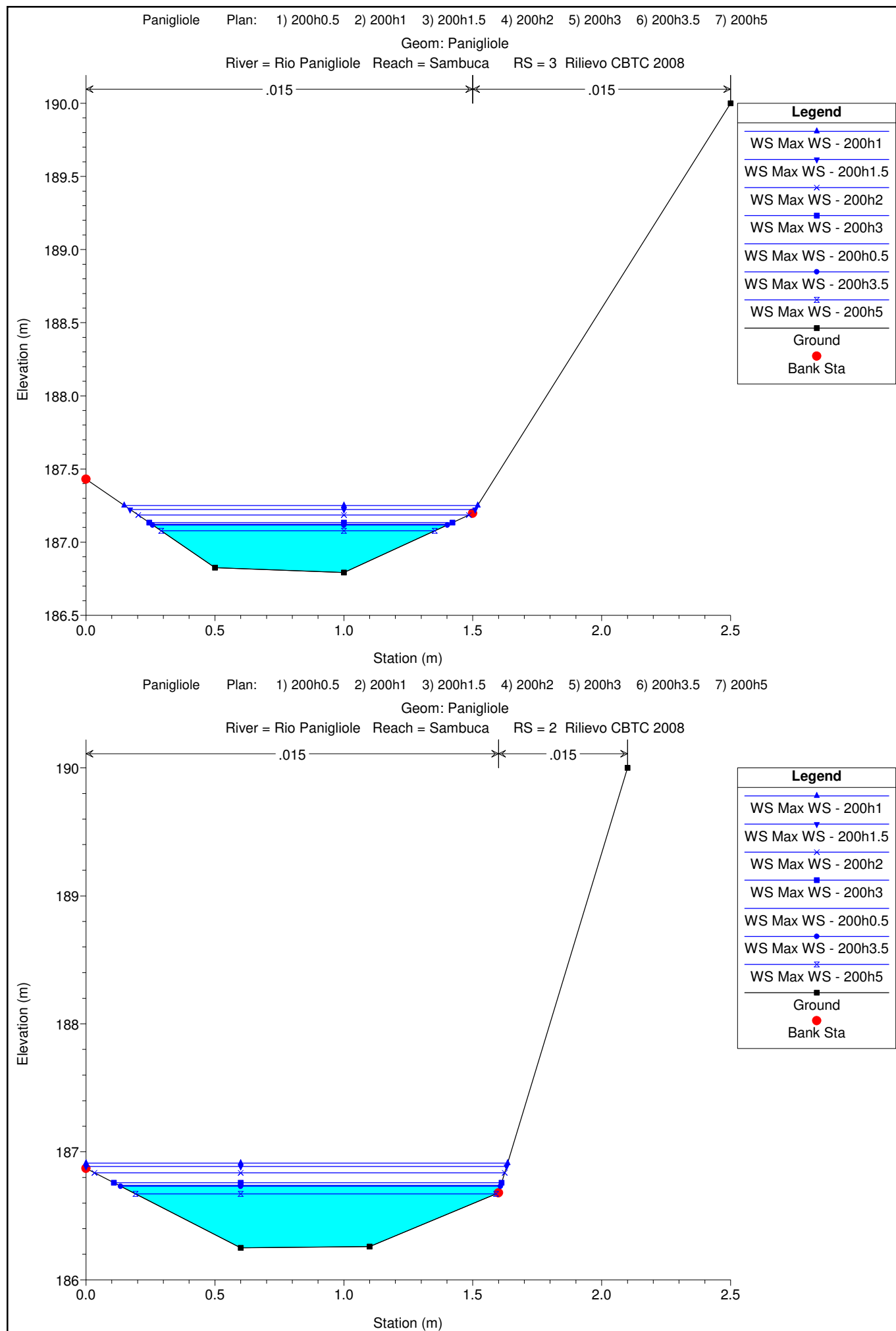
RIO PANIGLIOLE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

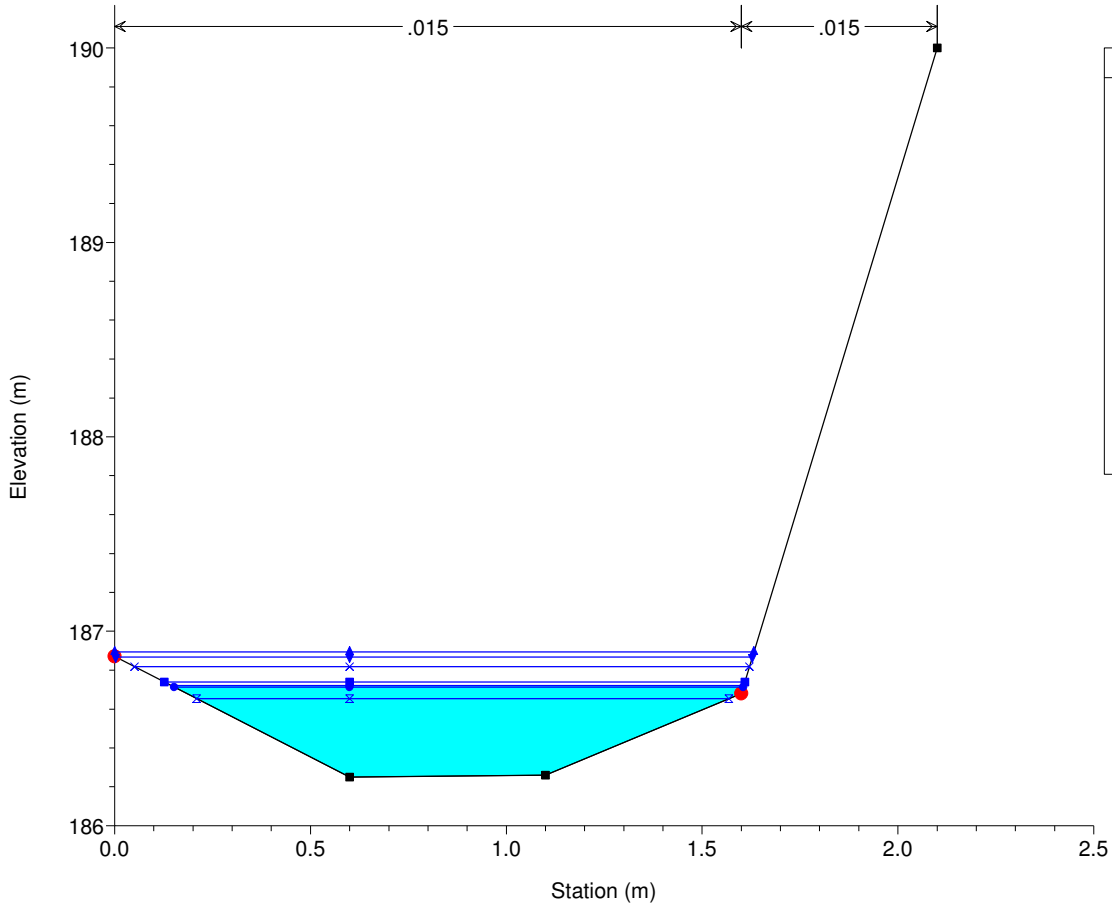




Panigliole Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: Panigliole

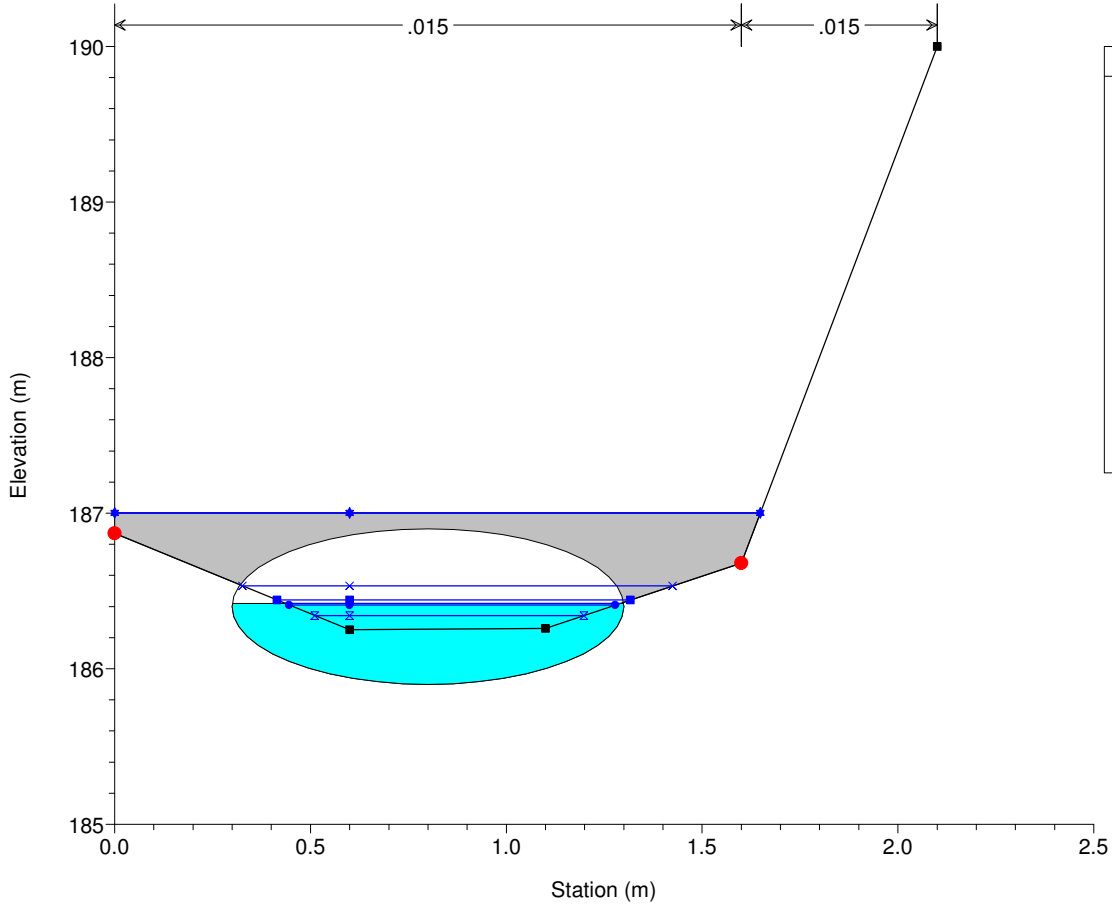
River = Rio Panigliole Reach = Sambuca RS = 1 COPIA DELLA SEZ. 2

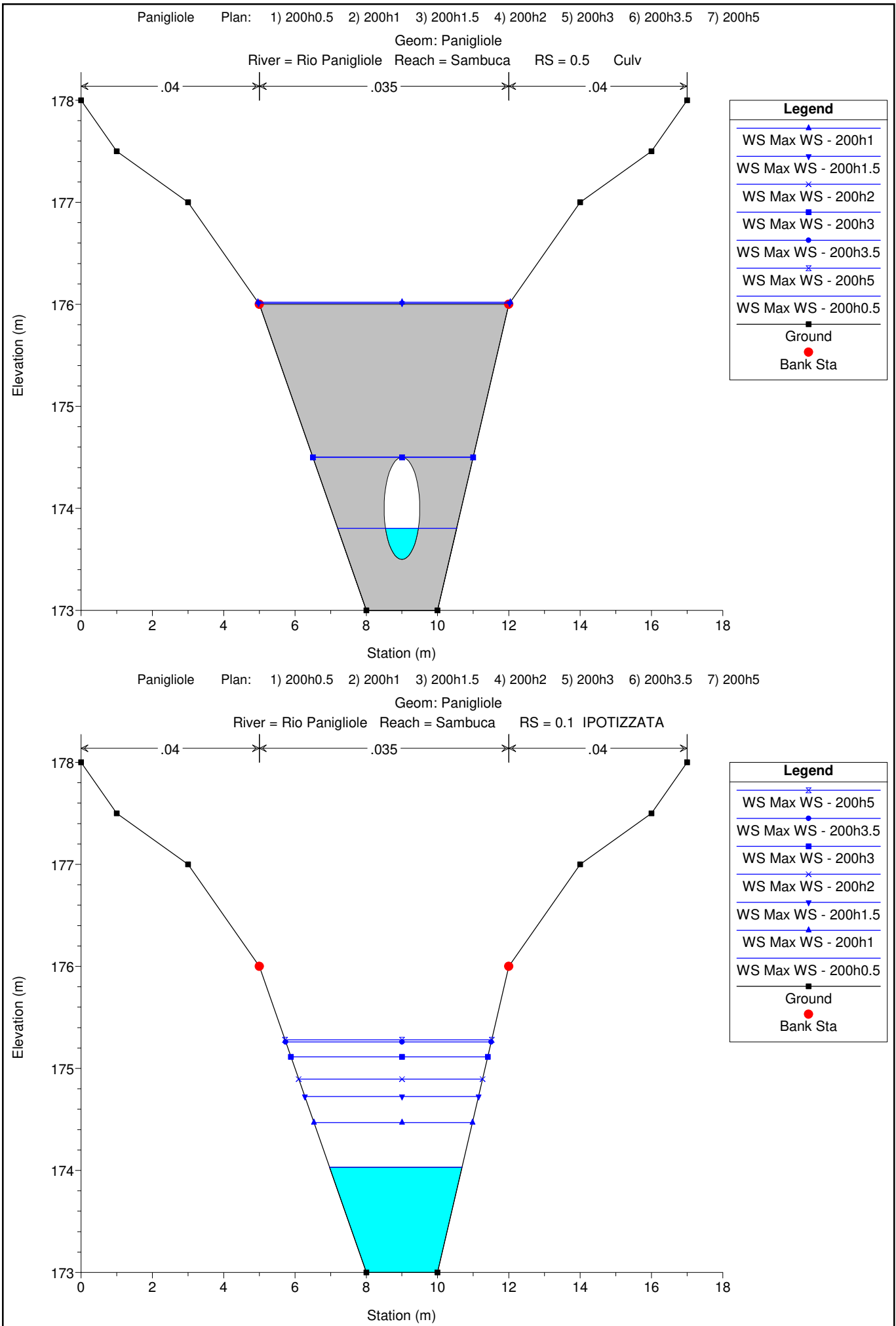


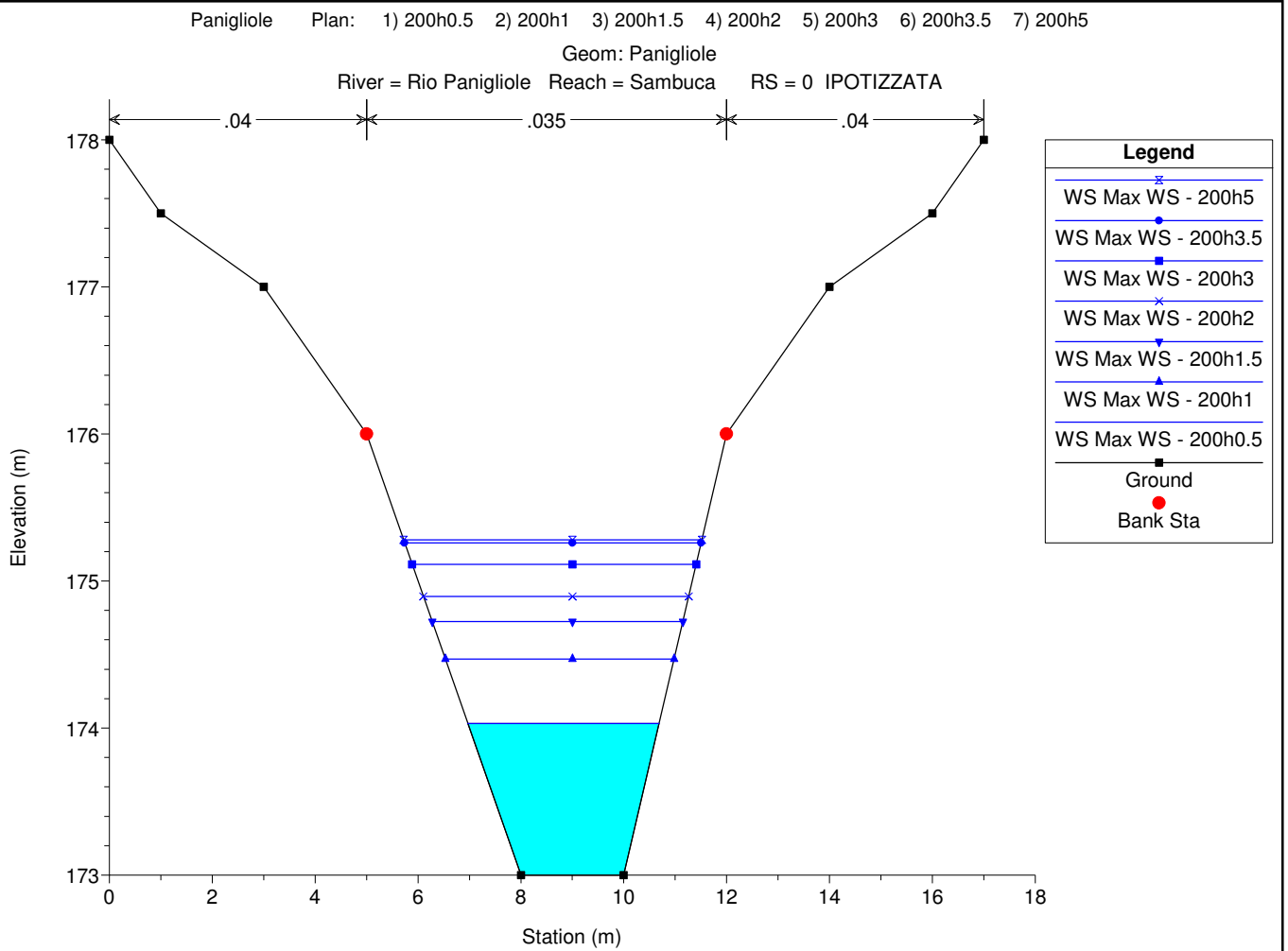
Panigliole Plan: 1) 200h0.5 2) 200h1 3) 200h1.5 4) 200h2 5) 200h3 6) 200h3.5 7) 200h5

Geom: Panigliole

River = Rio Panigliole Reach = Sambuca RS = 0.5 Culv









ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

RIO PANIGLIOLE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Rio Panigliole Reach: Sambuca Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Sambuca	7	Max WS	30h0.5	0.84	192.50	192.78	192.89	193.13	0.116480	2.60	0.32	2.27	2.20
Sambuca	7	Max WS	30h1	1.01	192.50	192.80	192.92	193.19	0.122050	2.77	0.36	2.41	2.28
Sambuca	7	Max WS	30h1.5	0.96	192.50	192.80	192.91	193.17	0.120270	2.72	0.35	2.38	2.26
Sambuca	7	Max WS	30h2	0.82	192.50	192.78	192.88	193.12	0.115566	2.58	0.32	2.26	2.19
Sambuca	7	Max WS	30h3	0.62	192.50	192.75	192.84	193.06	0.122416	2.46	0.25	2.01	2.21
Sambuca	7	Max WS	30h3.5	0.55	192.50	192.74	192.83	193.05	0.135415	2.48	0.22	1.89	2.30
Sambuca	7	Max WS	30h5	0.50	192.50	192.72	192.82	193.04	0.145420	2.48	0.20	1.80	2.37
Sambuca	6.5			Lat Struct									
Sambuca	6	Max WS	30h0.5	0.84	188.84	188.97	189.10	190.42	0.184761	6.70	0.18	2.88	6.36
Sambuca	6	Max WS	30h1	1.01	188.84	188.99	189.13	189.97	0.101764	5.68	0.26	3.48	4.88
Sambuca	6	Max WS	30h1.5	0.96	188.84	188.99	189.12	190.07	0.118677	5.93	0.23	3.31	5.22
Sambuca	6	Max WS	30h2	0.82	188.84	188.97	189.10	190.47	0.194937	6.80	0.17	2.83	6.51
Sambuca	6	Max WS	30h3	0.62	188.84	188.94	189.07	191.49	0.448214	8.48	0.10	2.15	9.40
Sambuca	6	Max WS	30h3.5	0.55	188.84	188.93	189.06	192.22	0.664392	9.41	0.08	1.90	11.18
Sambuca	6	Max WS	30h5	0.50	188.84	188.92	189.05	193.01	0.927603	10.30	0.06	1.71	12.96
Sambuca	5	Max WS	30h0.5	0.84	187.65	187.79	187.91	188.49	0.086837	3.72	0.22	2.70	4.12
Sambuca	5	Max WS	30h1	1.01	187.65	187.81	187.93	188.46	0.067383	3.57	0.28	2.97	3.71
Sambuca	5	Max WS	30h1.5	0.96	187.65	187.81	187.93	188.43	0.066617	3.51	0.27	2.93	3.68
Sambuca	5	Max WS	30h2	0.82	187.65	187.79	187.91	188.51	0.090838	3.76	0.22	2.67	4.20
Sambuca	5	Max WS	30h3	0.62	187.65	187.75	187.88	188.87	0.210562	4.69	0.13	2.18	6.09
Sambuca	5	Max WS	30h3.5	0.55	187.65	187.74	187.87	189.14	0.321470	5.25	0.10	2.01	7.34
Sambuca	5	Max WS	30h5	0.50	187.65	187.73	187.86	189.41	0.452973	5.75	0.09	1.88	8.54
Sambuca	4	Max WS	30h0.5	0.84	187.23	187.55	187.75	188.24	0.030295	3.67	0.23	0.97	2.42
Sambuca	4	Max WS	30h1	1.01	187.23	187.58	187.80	188.35	0.031158	3.90	0.26	1.01	2.46
Sambuca	4	Max WS	30h1.5	0.96	187.23	187.57	187.78	188.32	0.030970	3.84	0.25	1.00	2.45
Sambuca	4	Max WS	30h2	0.82	187.23	187.55	187.74	188.23	0.030146	3.65	0.22	0.96	2.41
Sambuca	4	Max WS	30h3	0.62	187.23	187.50	187.67	188.08	0.030007	3.38	0.18	0.89	2.38
Sambuca	4	Max WS	30h3.5	0.55	187.23	187.48	187.64	188.04	0.031076	3.31	0.17	0.87	2.41
Sambuca	4	Max WS	30h5	0.50	187.23	187.47	187.62	188.01	0.031590	3.25	0.15	0.84	2.43
Sambuca	3.2			Lat Struct									
Sambuca	3	Max WS	30h0.5	0.83	186.79	187.12	187.28	187.64	0.021861	3.20	0.26	1.15	2.15
Sambuca	3	Max WS	30h1	1.00	186.79	187.15	187.32	187.74	0.022892	3.42	0.29	1.21	2.21
Sambuca	3	Max WS	30h1.5	0.96	186.79	187.14	187.31	187.72	0.022716	3.36	0.28	1.19	2.20
Sambuca	3	Max WS	30h2	0.82	186.79	187.12	187.27	187.63	0.021725	3.18	0.26	1.15	2.14
Sambuca	3	Max WS	30h3	0.62	186.79	187.08	187.21	187.51	0.020647	2.89	0.21	1.07	2.06
Sambuca	3	Max WS	30h3.5	0.55	186.79	187.06	187.19	187.48	0.021863	2.86	0.19	1.02	2.11
Sambuca	3	Max WS	30h5	0.50	186.79	187.04	187.17	187.45	0.022608	2.82	0.18	0.99	2.13
Sambuca	2	Max WS	30h0.5	0.83	186.25	186.74		186.88	0.003696	1.69	0.49	1.48	0.93
Sambuca	2	Max WS	30h1	1.00	186.25	186.79		186.95	0.003625	1.78	0.56	1.53	0.94
Sambuca	2	Max WS	30h1.5	0.95	186.25	186.77		186.93	0.003646	1.76	0.54	1.52	0.93
Sambuca	2	Max WS	30h2	0.82	186.25	186.74		186.88	0.003703	1.68	0.49	1.48	0.93
Sambuca	2	Max WS	30h3	0.62	186.25	186.68		186.80	0.003828	1.55	0.40	1.41	0.93
Sambuca	2	Max WS	30h3.5	0.55	186.25	186.65		186.77	0.003827	1.50	0.37	1.35	0.92
Sambuca	2	Max WS	30h5	0.50	186.25	186.63		186.74	0.003809	1.46	0.34	1.31	0.92
Sambuca	1	Max WS	30h0.5	0.83	186.25	186.72		186.88	0.004403	1.79	0.47	1.46	1.01
Sambuca	1	Max WS	30h1	1.00	186.25	186.77		186.95	0.004242	1.88	0.53	1.51	1.01
Sambuca	1	Max WS	30h1.5	0.95	186.25	186.75		186.93	0.004299	1.86	0.51	1.50	1.01
Sambuca	1	Max WS	30h2	0.82	186.25	186.72		186.88	0.004411	1.78	0.46	1.46	1.01
Sambuca	1	Max WS	30h3	0.62	186.25	186.66		186.80	0.004551	1.65	0.38	1.37	1.01
Sambuca	1	Max WS	30h3.5	0.55	186.25	186.63		186.76	0.004609	1.61	0.34	1.31	1.01
Sambuca	1	Max WS	30h5	0.50	186.25	186.61		186.74	0.004653	1.58	0.32	1.27	1.01
Sambuca	0.5			Culvert									
Sambuca	0.1	Max WS	30h0.5	0.50	173.00	173.51		173.52	0.000749	0.40	1.24	2.85	0.20
Sambuca	0.1	Max WS	30h1	0.50	173.00	173.87		173.87	0.000119	0.21	2.38	3.45	0.08
Sambuca	0.1	Max WS	30h1.5	0.50	173.00	174.07		174.07	0.000058	0.16	3.09	3.78	0.06
Sambuca	0.1	Max WS	30h2	0.50	173.00	174.20		174.20	0.000038	0.14	3.58	3.99	0.05
Sambuca	0.1	Max WS	30h3	0.50	173.00	174.37		174.37	0.000024	0.12	4.29	4.28	0.04
Sambuca	0.1	Max WS	30h3.5	0.50	173.00	174.41		174.41	0.000021	0.11	4.49	4.36	0.03
Sambuca	0.1	Max WS	30h5	0.50	173.00	174.50		174.50	0.000017	0.10	4.86	4.50	0.03
Sambuca	0	Max WS	30h0.5	0.50	173.00	173.51	173.18	173.52	0.000752	0.40	1.24	2.85	0.20
Sambuca	0	Max WS	30h1	0.50	173.00	173.87	173.18	173.87	0.000119	0.21	2.38	3.45	0.08
Sambuca	0	Max WS	30h1.5	0.50	173.00	174.07	173.18	174.07	0.000058	0.16	3.09	3.78	0.06
Sambuca	0	Max WS	30h2	0.50	173.00	174.20	173.18	174.20	0.000038	0.14	3.58	3.99	0.05
Sambuca	0	Max WS	30h3	0.50	173.00	174.37	173.18	174.37	0.000024	0.12	4.29	4.28	0.04
Sambuca	0	Max WS	30h3.5	0.50	173.00	174.41	173.18	174.41	0.000021	0.11	4.49	4.36	0.03
Sambuca	0	Max WS	30h5	0.50	173.00	174.50	173.18	174.50	0.000017	0.10	4.86	4.50	0.03



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Panigliole"

RIO PANIGLIOLE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Sambuca	7	Max WS	200h0.5	0.84	192.50	192.78	192.89	193.13	0.116480	2.60	0.32	2.27	2.20
Sambuca	7	Max WS	200h1	1.61	192.50	192.86	193.00	193.35	0.122126	3.12	0.52	2.88	2.35
Sambuca	7	Max WS	200h1.5	1.44	192.50	192.84	192.98	193.32	0.125460	3.06	0.47	2.74	2.36
Sambuca	7	Max WS	200h2	1.21	192.50	192.82	192.95	193.26	0.127359	2.95	0.41	2.56	2.35
Sambuca	7	Max WS	200h3	0.90	192.50	192.79	192.90	193.15	0.118088	2.66	0.34	2.33	2.23
Sambuca	7	Max WS	200h3.5	0.80	192.50	192.78	192.88	193.11	0.114558	2.55	0.31	2.24	2.18
Sambuca	7	Max WS	200h5	0.61	192.50	192.75	192.84	193.06	0.124825	2.46	0.25	1.99	2.23
Sambuca	6.5			Lat Struct									
Sambuca	6	Max WS	200h0.5	0.84	188.84	188.97	189.10	190.42	0.184761	6.70	0.18	2.88	6.36
Sambuca	6	Max WS	200h1	1.61	188.84	189.03	189.20	190.05	0.077353	5.76	0.38	3.67	4.41
Sambuca	6	Max WS	200h1.5	1.44	188.84	189.02	189.18	189.98	0.077625	5.61	0.36	3.66	4.39
Sambuca	6	Max WS	200h2	1.21	188.84	189.01	189.15	190.00	0.093093	5.76	0.30	3.65	4.73
Sambuca	6	Max WS	200h3	0.90	188.84	188.98	189.11	190.24	0.149022	6.33	0.20	3.10	5.78
Sambuca	6	Max WS	200h3.5	0.80	188.84	188.96	189.10	190.53	0.209290	6.93	0.16	2.77	6.72
Sambuca	6	Max WS	200h5	0.61	188.84	188.94	189.07	191.58	0.472939	8.60	0.10	2.12	9.62
Sambuca	5	Max WS	200h0.5	0.84	187.65	187.79	187.91	188.49	0.086837	3.72	0.22	2.70	4.12
Sambuca	5	Max WS	200h1	1.60	187.65	187.85	188.00	188.54	0.051638	3.68	0.44	3.61	3.38
Sambuca	5	Max WS	200h1.5	1.44	187.65	187.84	187.99	188.54	0.057411	3.71	0.39	3.42	3.52
Sambuca	5	Max WS	200h2	1.21	187.65	187.82	187.96	188.52	0.064330	3.69	0.33	3.18	3.67
Sambuca	5	Max WS	200h3	0.90	187.65	187.80	187.92	188.43	0.069572	3.51	0.26	2.86	3.74
Sambuca	5	Max WS	200h3.5	0.80	187.65	187.78	187.91	188.53	0.098088	3.84	0.21	2.62	4.35
Sambuca	5	Max WS	200h5	0.61	187.65	187.75	187.88	188.90	0.222353	4.76	0.13	2.16	6.24
Sambuca	4	Max WS	200h0.5	0.84	187.23	187.55	187.75	188.24	0.030295	3.67	0.23	0.97	2.42
Sambuca	4	Max WS	200h1	1.60	187.23	187.68	187.94	188.65	0.030622	4.36	0.37	1.16	2.48
Sambuca	4	Max WS	200h1.5	1.44	187.23	187.66	187.91	188.57	0.030642	4.24	0.34	1.12	2.47
Sambuca	4	Max WS	200h2	1.21	187.23	187.62	187.85	188.47	0.031016	4.08	0.30	1.07	2.47
Sambuca	4	Max WS	200h3	0.90	187.23	187.56	187.77	188.28	0.030739	3.77	0.24	0.98	2.44
Sambuca	4	Max WS	200h3.5	0.80	187.23	187.54	187.73	188.21	0.029949	3.62	0.22	0.96	2.40
Sambuca	4	Max WS	200h5	0.61	187.23	187.50	187.67	188.08	0.030264	3.38	0.18	0.89	2.39
Sambuca	3.2			Lat Struct									
Sambuca	3	Max WS	200h0.5	0.83	186.79	187.12	187.28	187.64	0.021861	3.20	0.26	1.15	2.15
Sambuca	3	Max WS	200h1	1.60	186.79	187.25	187.46	187.98	0.020467	3.78	0.42	1.37	2.16
Sambuca	3	Max WS	200h1.5	1.44	186.79	187.22	187.43	187.92	0.021562	3.71	0.39	1.34	2.19
Sambuca	3	Max WS	200h2	1.21	186.79	187.19	187.38	187.84	0.022969	3.59	0.34	1.28	2.23
Sambuca	3	Max WS	200h3	0.90	186.79	187.13	187.30	187.69	0.022402	3.29	0.27	1.18	2.18
Sambuca	3	Max WS	200h3.5	0.80	186.79	187.12	187.27	187.62	0.021461	3.14	0.25	1.14	2.12
Sambuca	3	Max WS	200h5	0.61	186.79	187.08	187.21	187.50	0.020838	2.89	0.21	1.06	2.07
Sambuca	2	Max WS	200h0.5	0.83	186.25	186.74		186.88	0.003696	1.69	0.49	1.48	0.93
Sambuca	2	Max WS	200h1	1.59	186.25	186.91	186.90	187.14	0.003705	2.09	0.77	1.63	0.97
Sambuca	2	Max WS	200h1.5	1.43	186.25	186.89	186.87	187.09	0.003574	1.99	0.72	1.63	0.95
Sambuca	2	Max WS	200h2	1.21	186.25	186.84	186.82	187.02	0.003593	1.89	0.64	1.59	0.94
Sambuca	2	Max WS	200h3	0.90	186.25	186.76		186.91	0.003659	1.73	0.52	1.50	0.93
Sambuca	2	Max WS	200h3.5	0.80	186.25	186.73		186.87	0.003674	1.66	0.48	1.47	0.93
Sambuca	2	Max WS	200h5	0.61	186.25	186.67		186.79	0.003825	1.54	0.40	1.40	0.93
Sambuca	1	Max WS	200h0.5	0.83	186.25	186.72		186.88	0.004403	1.79	0.47	1.46	1.01
Sambuca	1	Max WS	200h1	1.56	186.25	186.89		187.13	0.004016	2.13	0.73	1.63	1.01
Sambuca	1	Max WS	200h1.5	1.43	186.25	186.87		187.09	0.004029	2.07	0.69	1.63	1.01
Sambuca	1	Max WS	200h2	1.21	186.25	186.82		187.02	0.004120	1.98	0.61	1.57	1.01
Sambuca	1	Max WS	200h3	0.90	186.25	186.74		186.91	0.004340	1.83	0.49	1.48	1.01
Sambuca	1	Max WS	200h3.5	0.80	186.25	186.71		186.87	0.004386	1.76	0.45	1.45	1.01
Sambuca	1	Max WS	200h5	0.61	186.25	186.65		186.79	0.004567	1.65	0.37	1.36	1.01
Sambuca	0.5			Culvert									
Sambuca	0.1	Max WS	200h0.5	0.50	173.00	174.03		174.03	0.000066	0.17	2.94	3.72	0.06
Sambuca	0.1	Max WS	200h1	0.50	173.00	174.47		174.47	0.000018	0.11	4.74	4.45	0.03
Sambuca	0.1	Max WS	200h1.5	0.50	173.00	174.72		174.72	0.000010	0.08	5.92	4.87	0.02
Sambuca	0.1	Max WS	200h2	0.50	173.00	174.90		174.90	0.000007	0.07	6.79	5.16	0.02
Sambuca	0.1	Max WS	200h3	0.50	173.00	175.11		175.11	0.000005	0.06	7.95	5.52	0.02
Sambuca	0.1	Max WS	200h3.5	0.50	173.00	175.26		175.26	0.000003	0.06	8.78	5.77	0.01
Sambuca	0.1	Max WS	200h5	0.50	173.00	175.28		175.28	0.000003	0.06	8.89	5.80	0.01
Sambuca	0	Max WS	200h0.5	0.50	173.00	174.03	173.18	174.03	0.000066	0.17	2.94	3.72	0.06
Sambuca	0	Max WS	200h1	0.50	173.00	174.47	173.18	174.47	0.000018	0.11	4.74	4.45	0.03
Sambuca	0	Max WS	200h1.5	0.50	173.00	174.72	173.18	174.72	0.000010	0.08	5.92	4.87	0.02
Sambuca	0	Max WS	200h2	0.50	173.00	174.90	173.18	174.90	0.000007	0.07	6.79	5.16	0.02
Sambuca	0	Max WS	200h3	0.50	173.00	175.11	173.18	175.11	0.000005	0.06	7.95	5.52	0.02
Sambuca	0	Max WS	200h3.5	0.50	173.00	175.26	173.18	175.26	0.000003	0.06	8.78	5.77	0.01
Sambuca	0	Max WS	200h5	0.50	173.00	175.28	173.18	175.28	0.000003	0.06	8.89	5.80	0.01



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

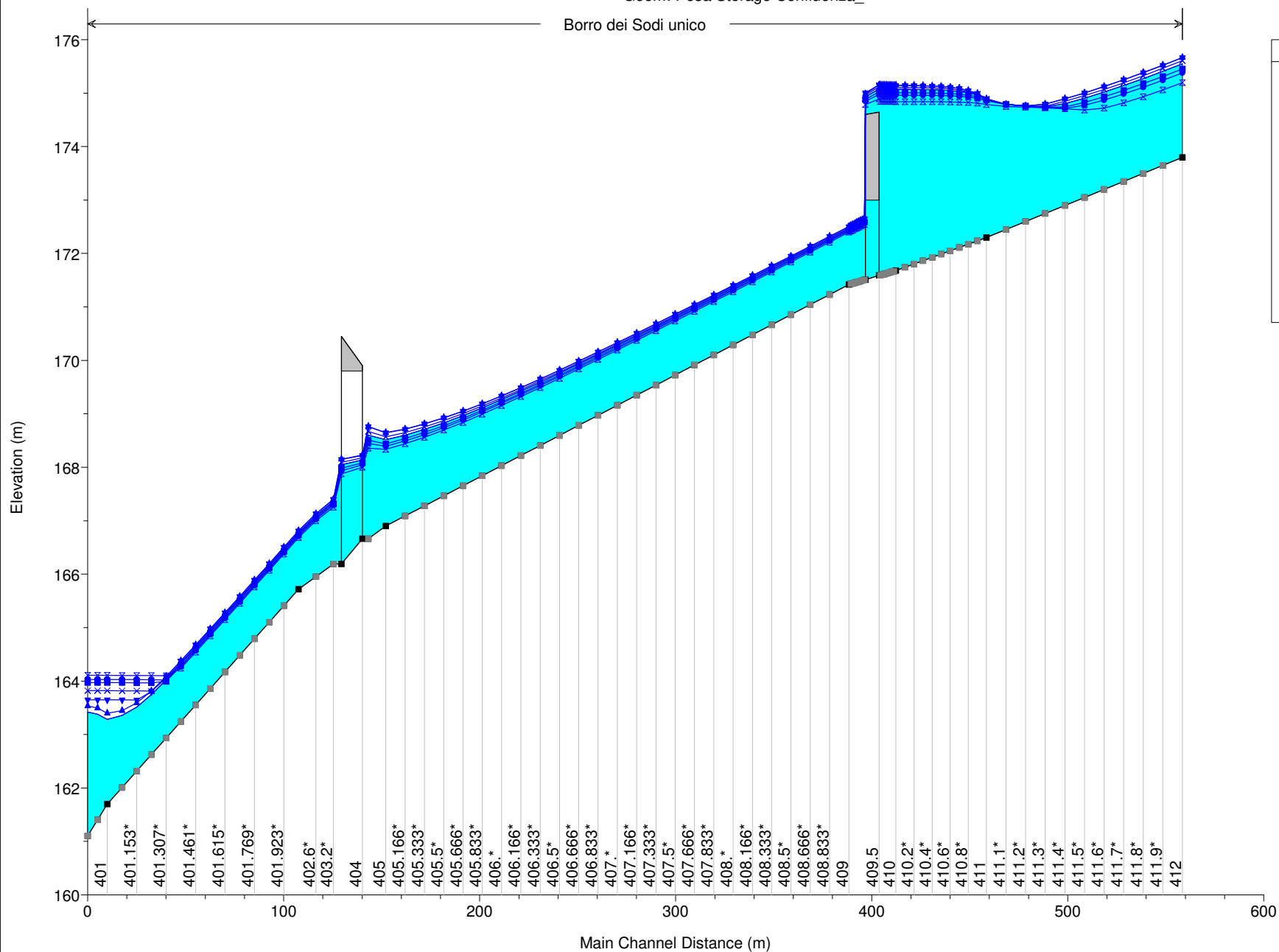
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_
Geom: Pesa Storage Confluenza_

← Borro dei Sodi unico →



Legend	
WS Max WS - Tr30_D5_	✕
WS Max WS - Tr30_D3.5_	●
WS Max WS - Tr30_D3_	■
WS Max WS - Tr30_D2_	✕
WS Max WS - Tr30_D1.5_	▼
WS Max WS - Tr30_D1_	▲
WS Max WS - Tr30_D0.5_	■
Ground	■



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

MODELLAZIONE PER TR=200 anni

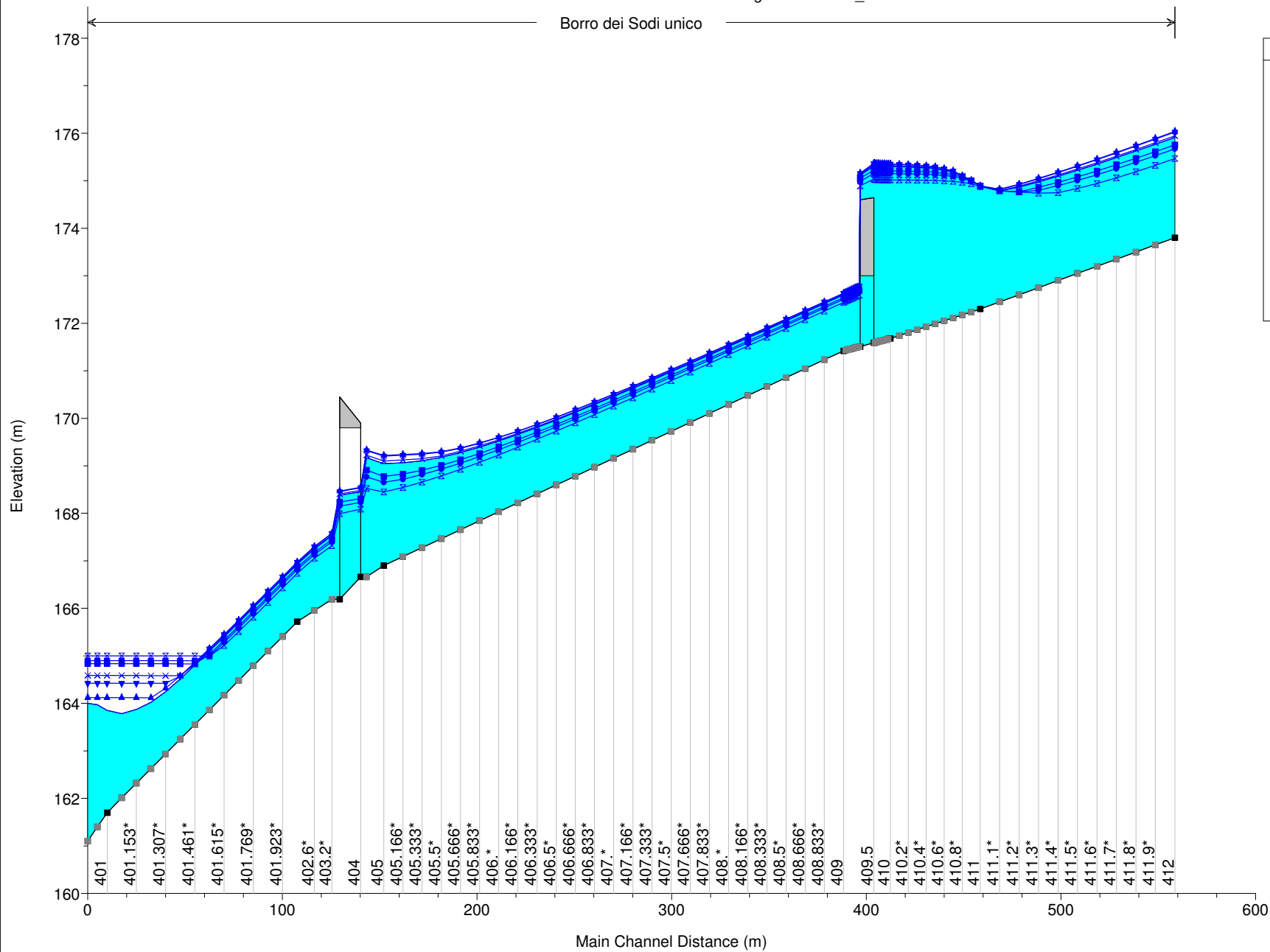
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

Borro dei Sodi unico



Legend

- WS Max WS - Tr200_D5_
- WS Max WS - Tr200_D3.5_
- WS Max WS - Tr200_D3_
- WS Max WS - Tr200_D2_
- WS Max WS - Tr200_D1.5_
- WS Max WS - Tr200_D1_
- WS Max WS - Tr200_D0.5_
- Ground



ALLEGATI

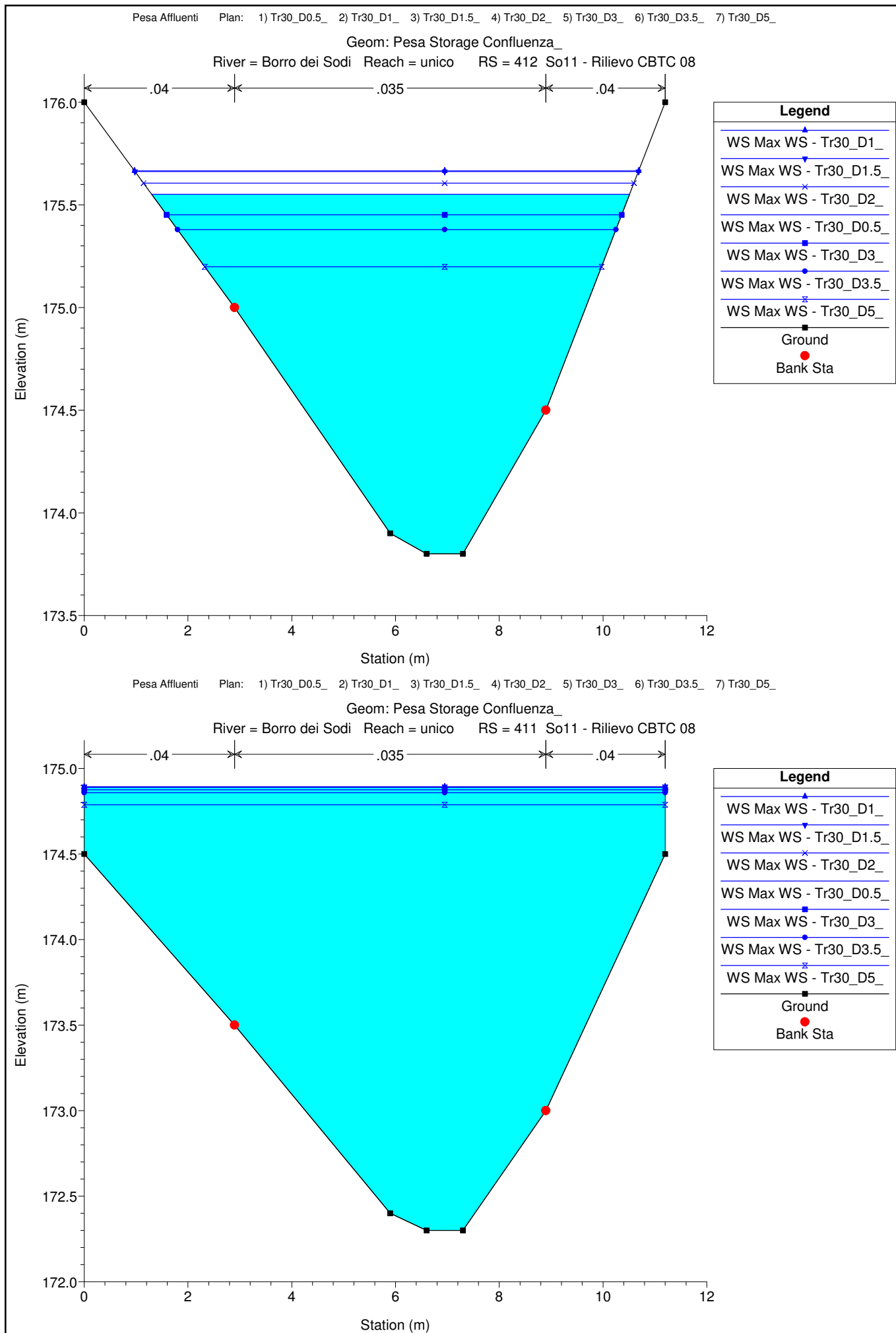
MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

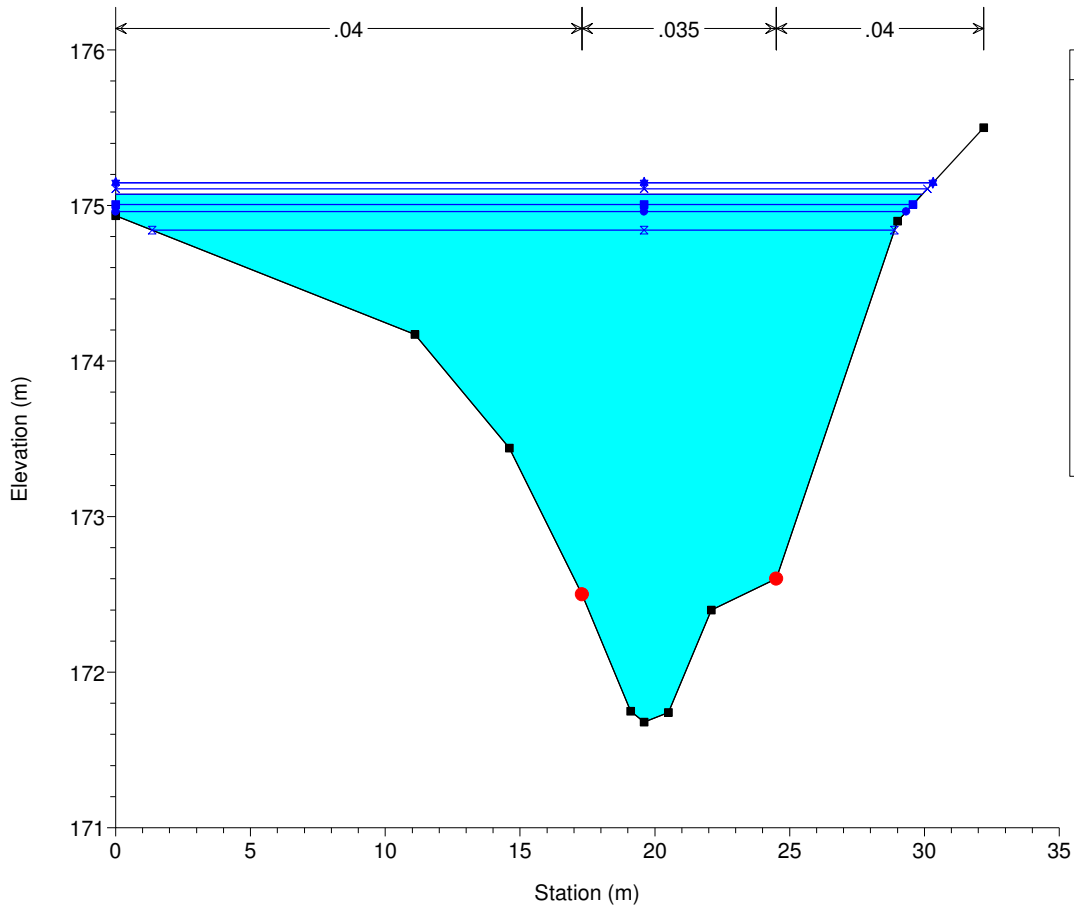
Sezioni Trasversali (da monte verso valle)



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

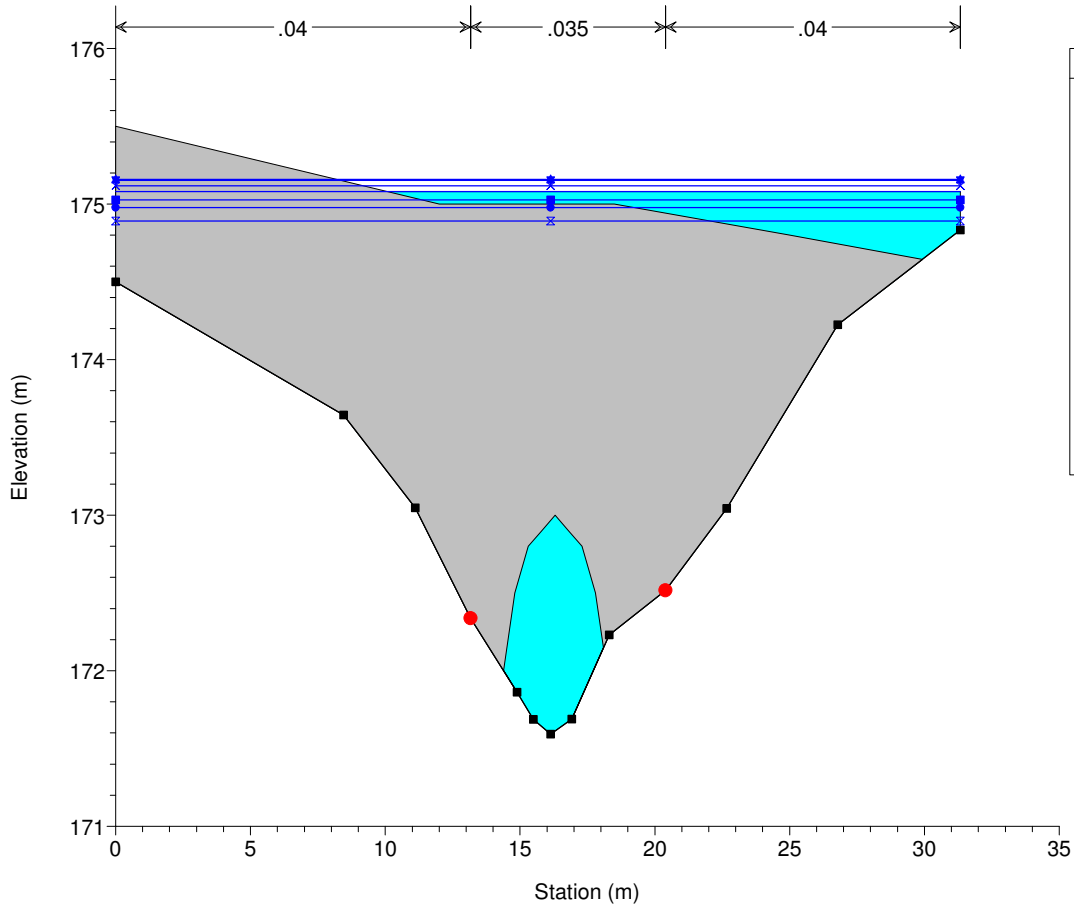
River = Borro dei Sodi Reach = unico RS = 410 So10 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

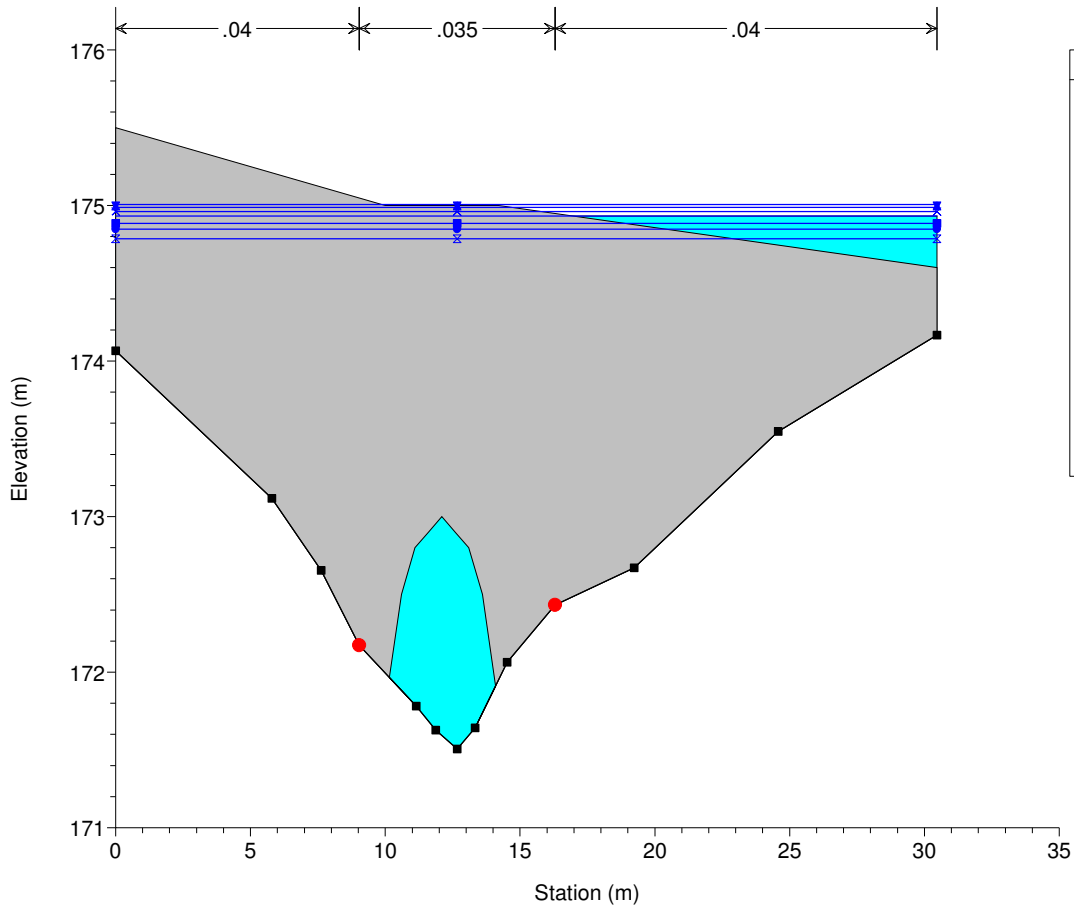
River = Borro dei Sodi Reach = unico RS = 409.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

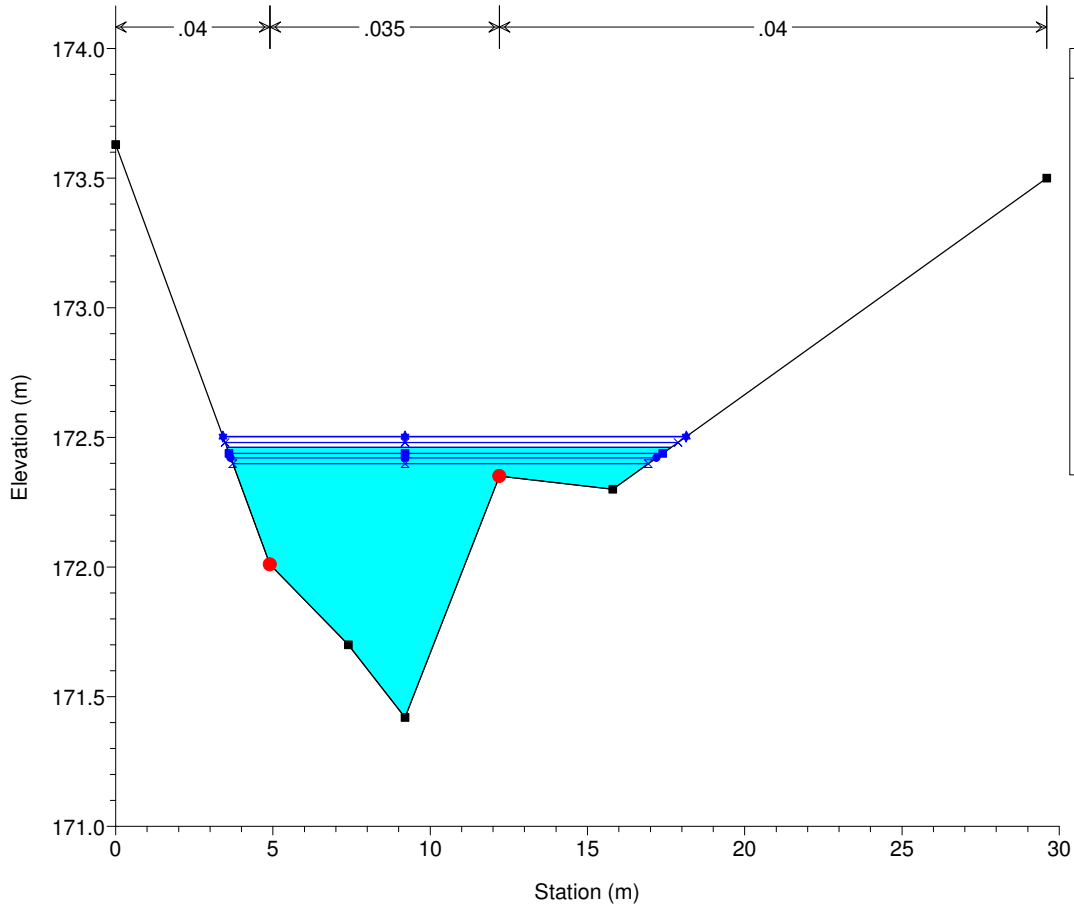
River = Borro dei Sodi Reach = unico RS = 409.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

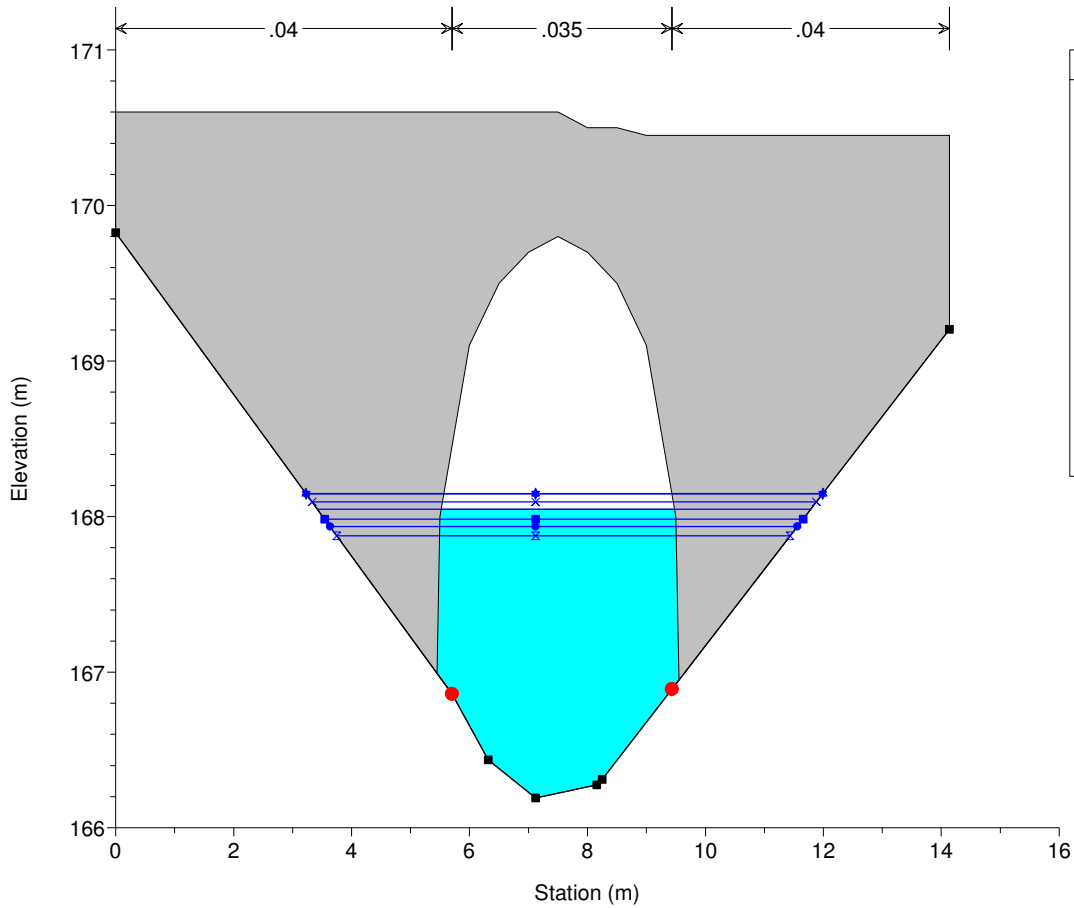
River = Borro dei Sodi Reach = unico RS = 409 So9 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

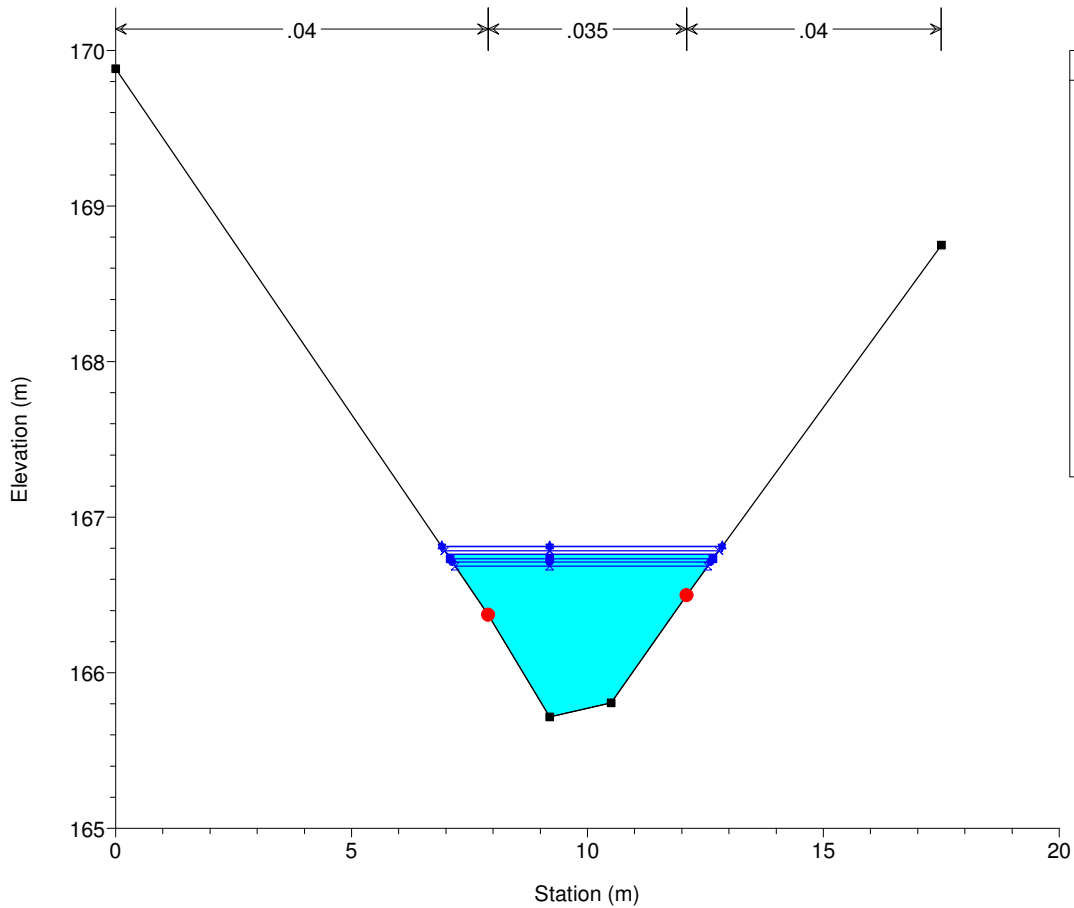
River = Borro dei Sodi Reach = unico RS = 404 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

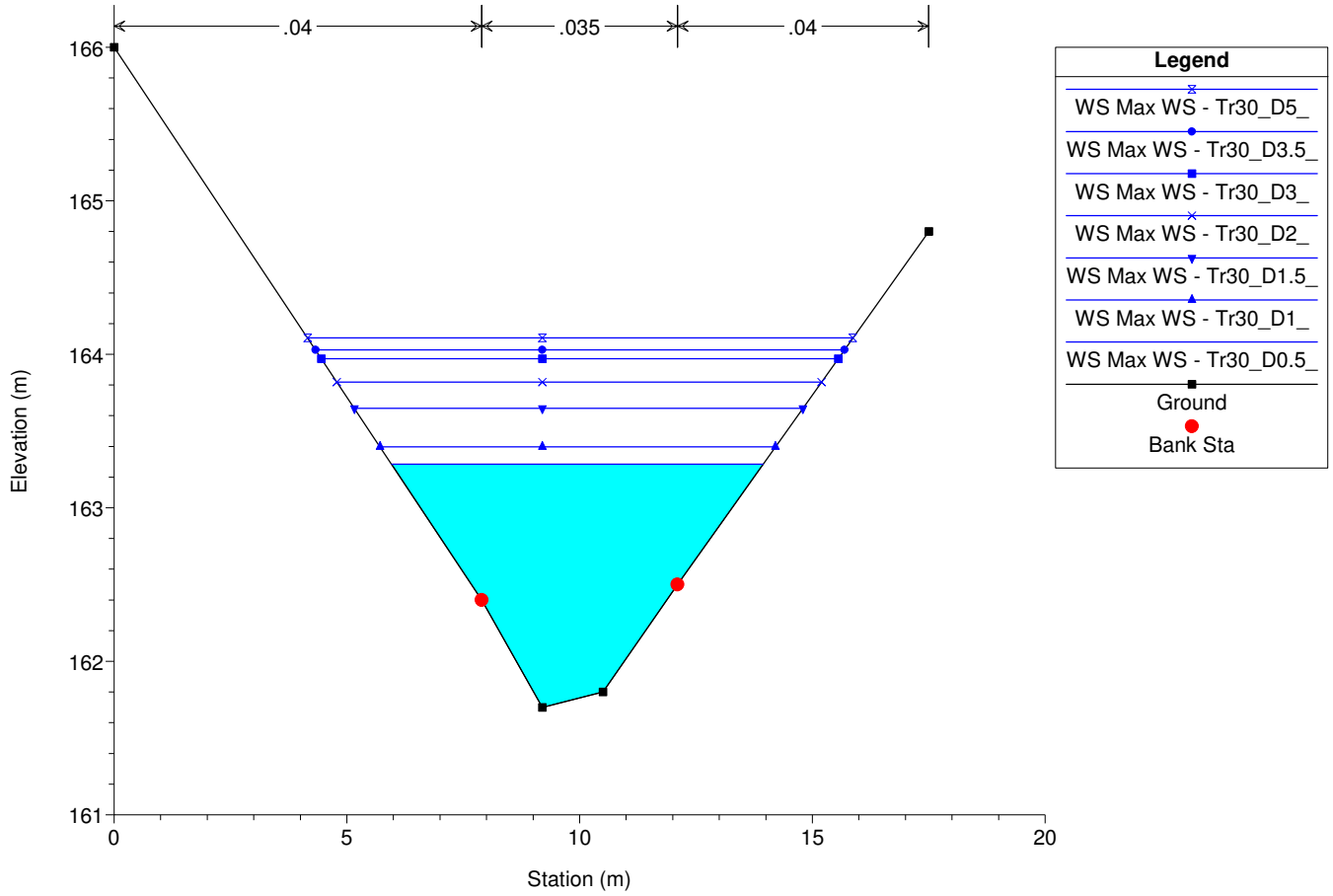
River = Borro dei Sodi Reach = unico RS = 402 So2 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

River = Borro dei Sodi Reach = unico RS = 401 So1 (Copiata dalla 2: abbassata di 4m)





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

MODELLAZIONE PER TR=200 anni

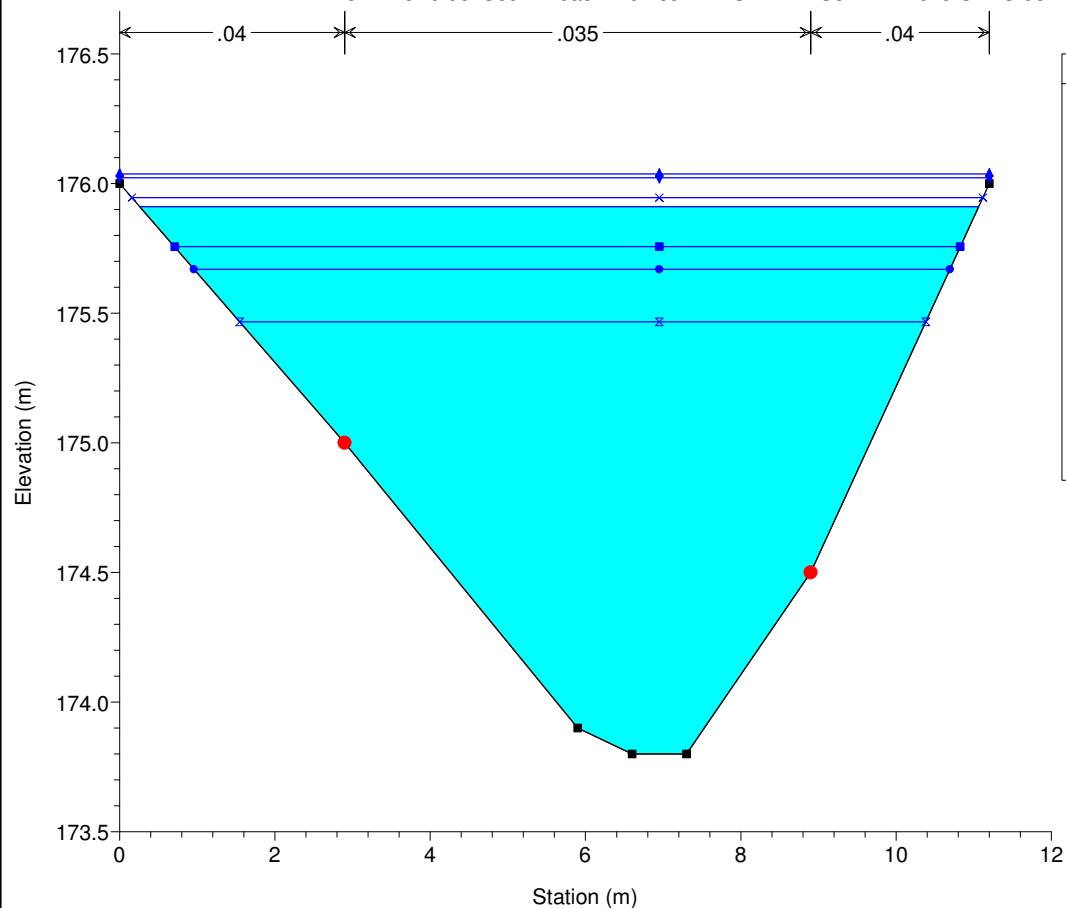
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

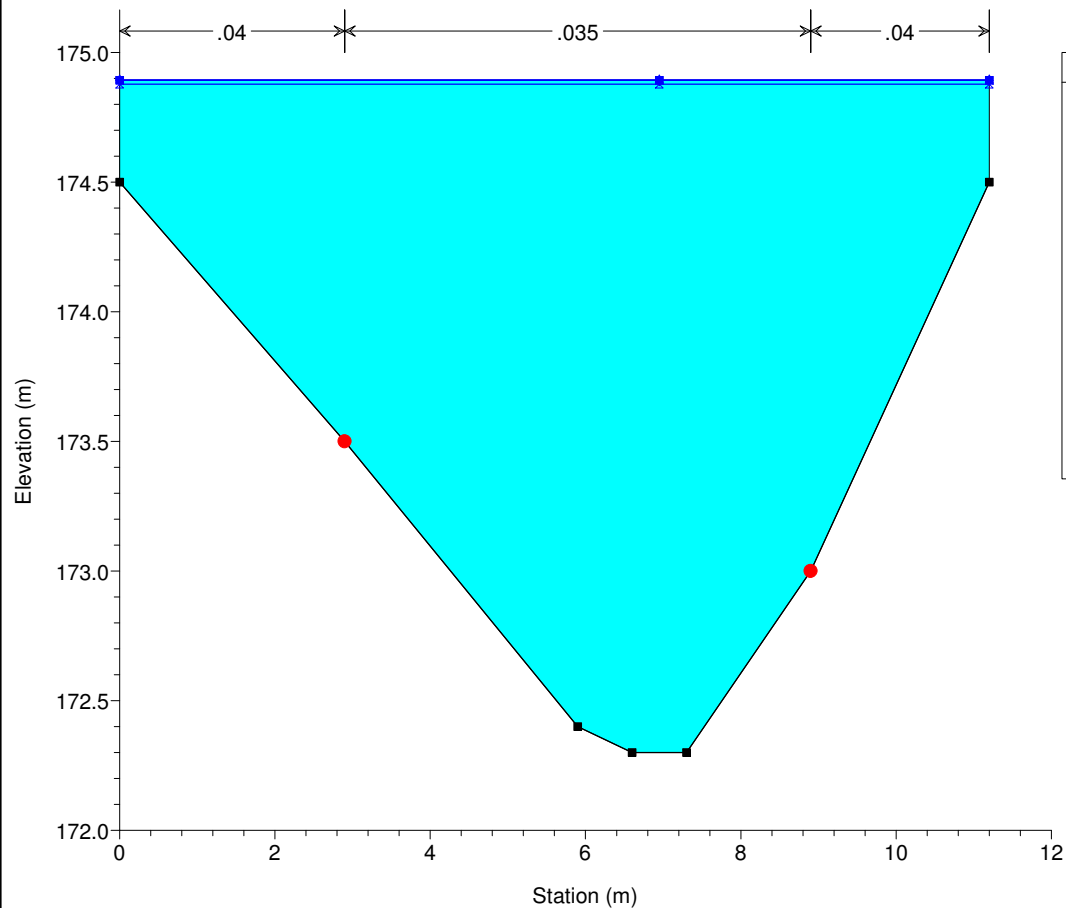
River = Borro dei Sodi Reach = unico RS = 412 So11 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

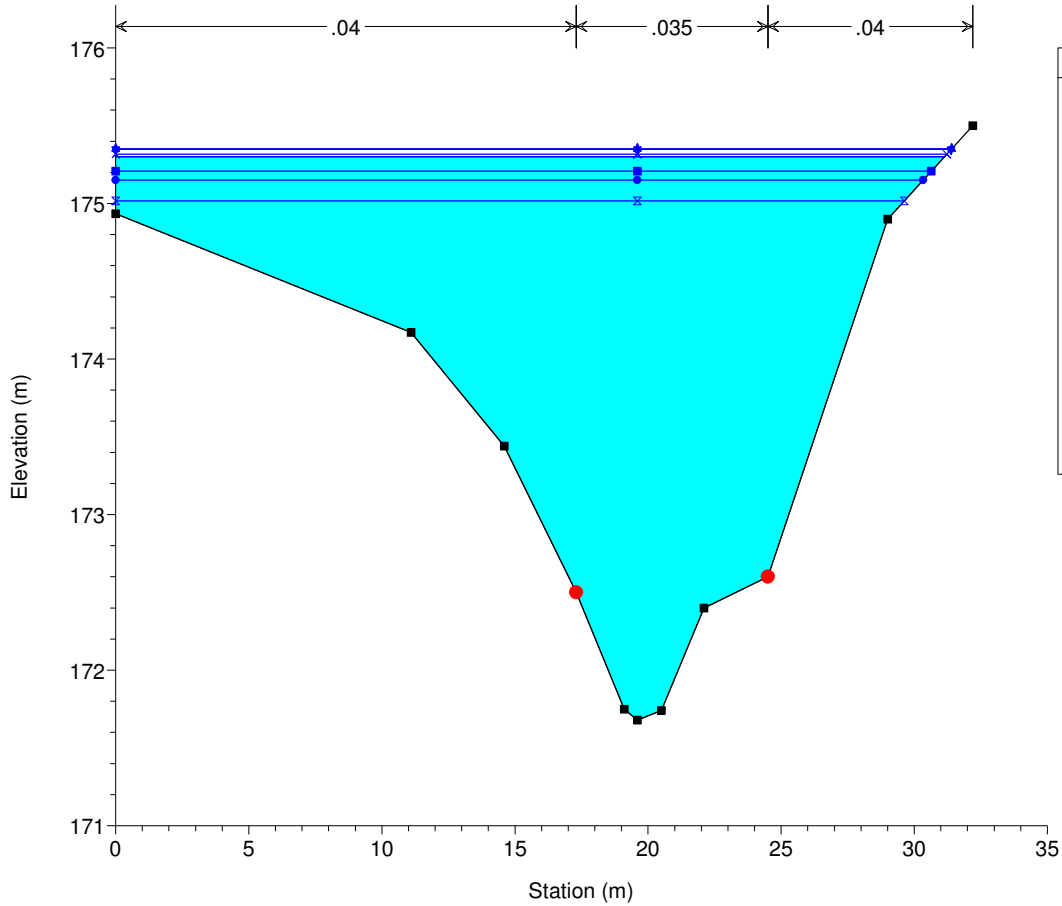
River = Borro dei Sodi Reach = unico RS = 411 So11 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

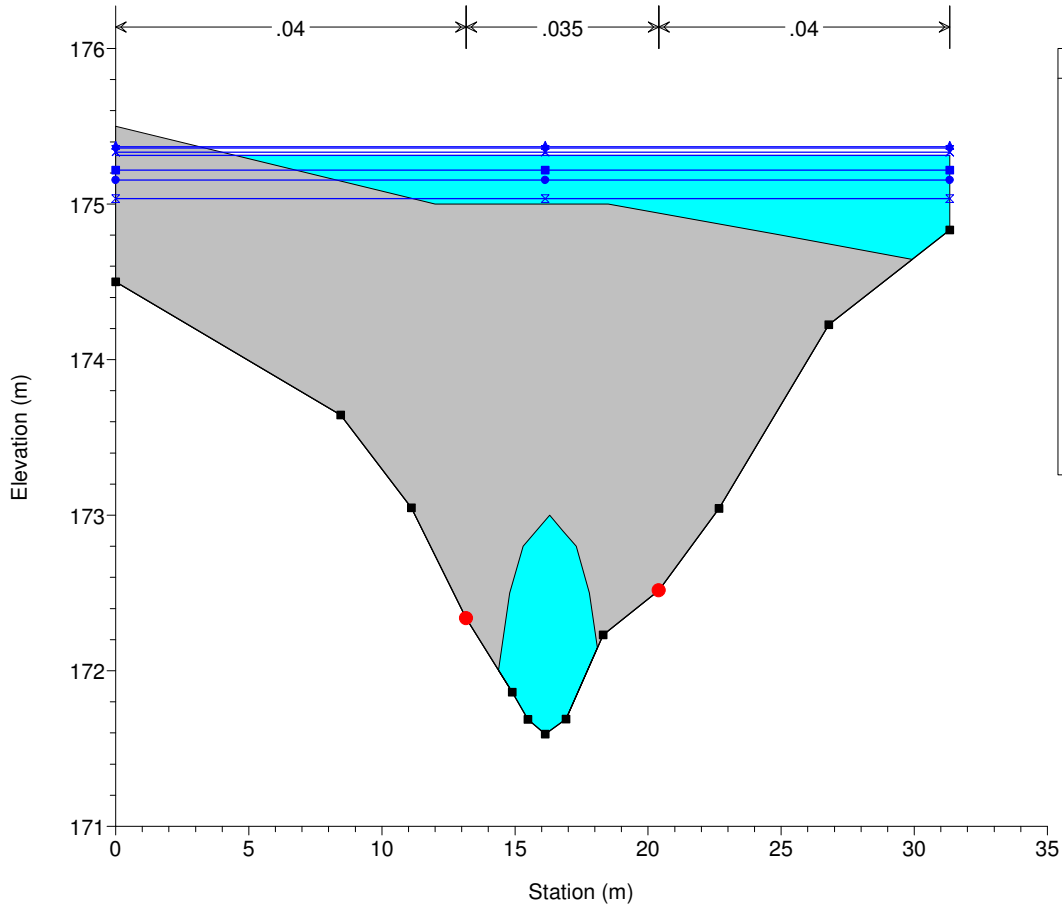
River = Borro dei Sodi Reach = unico RS = 410 So10 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

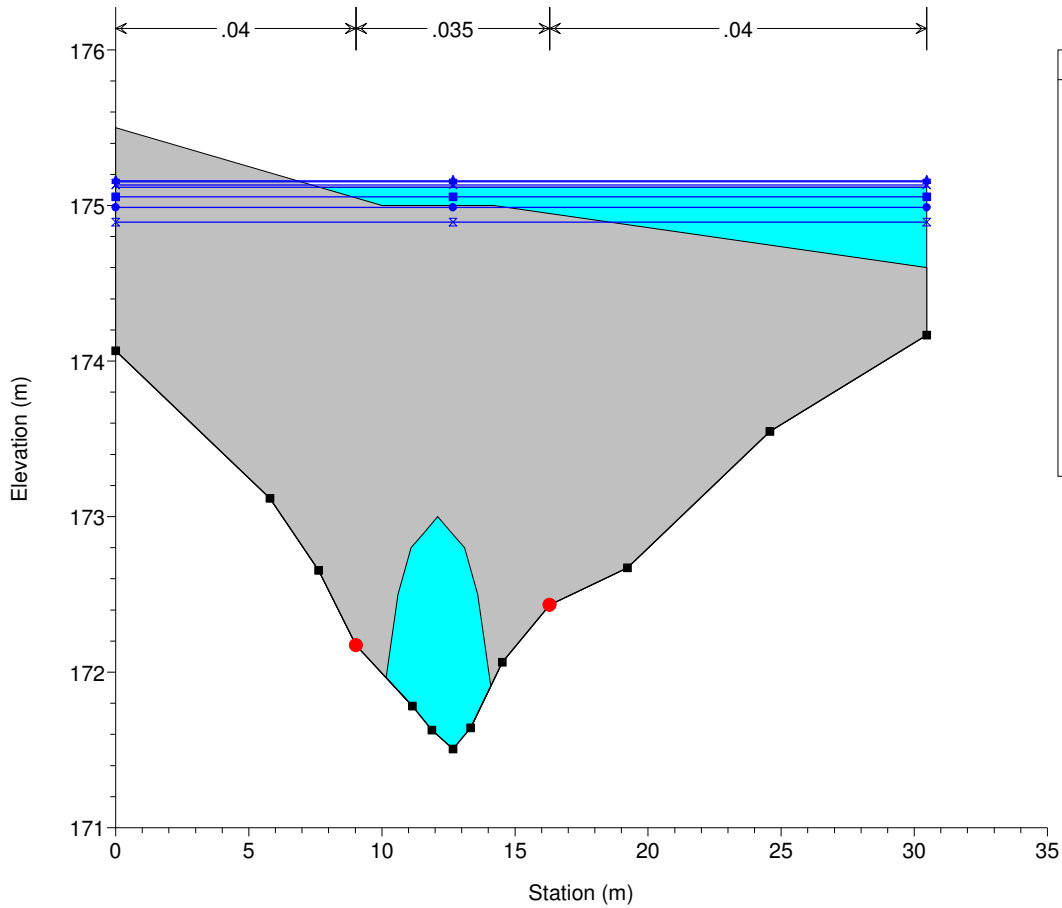
River = Borro dei Sodi Reach = unico RS = 409.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

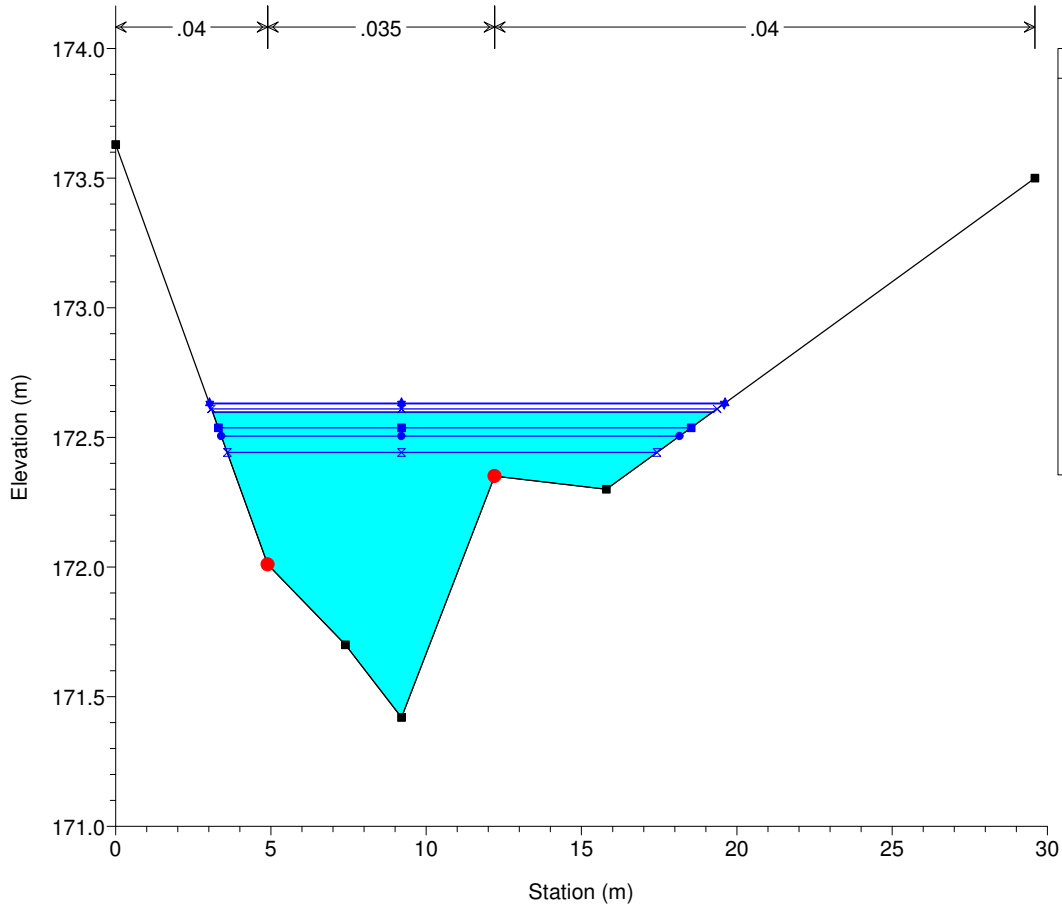
River = Borro dei Sodi Reach = unico RS = 409.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

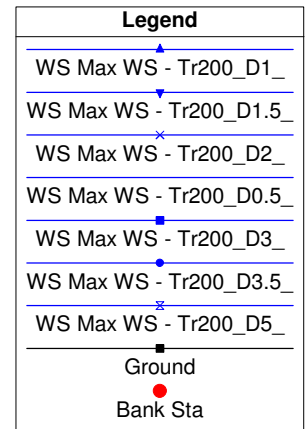
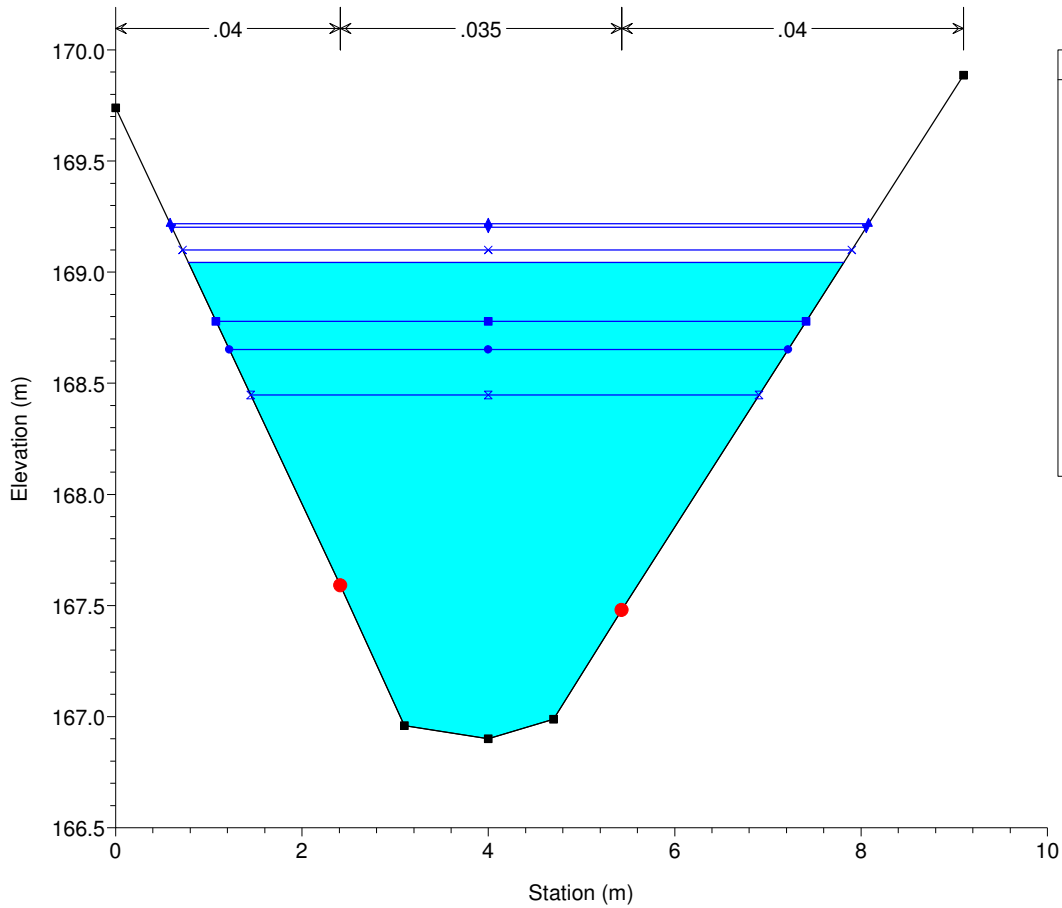
River = Borro dei Sodi Reach = unico RS = 409 So9 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

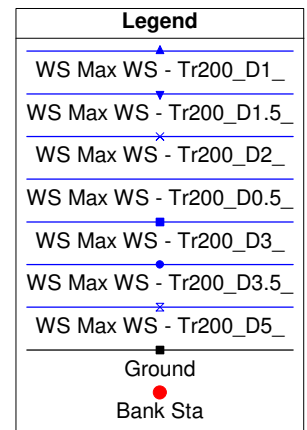
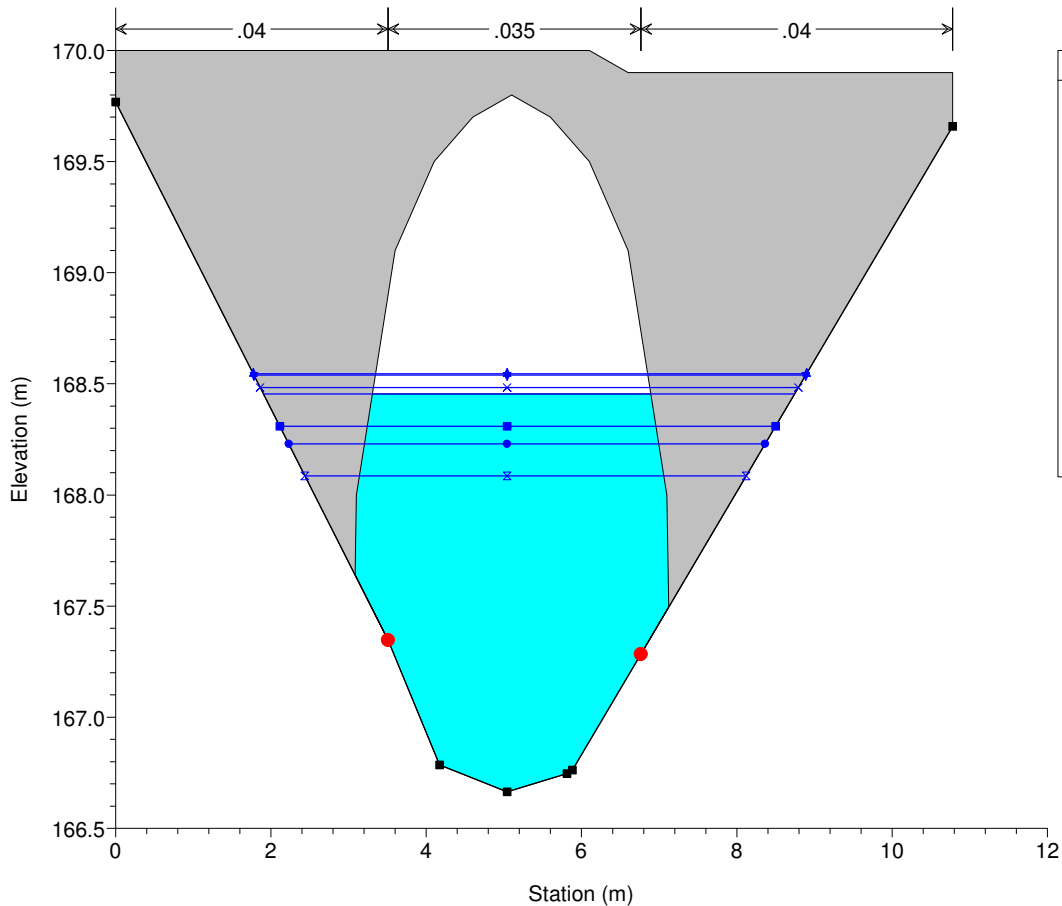
River = Borro dei Sodi Reach = unico RS = 405 So5 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

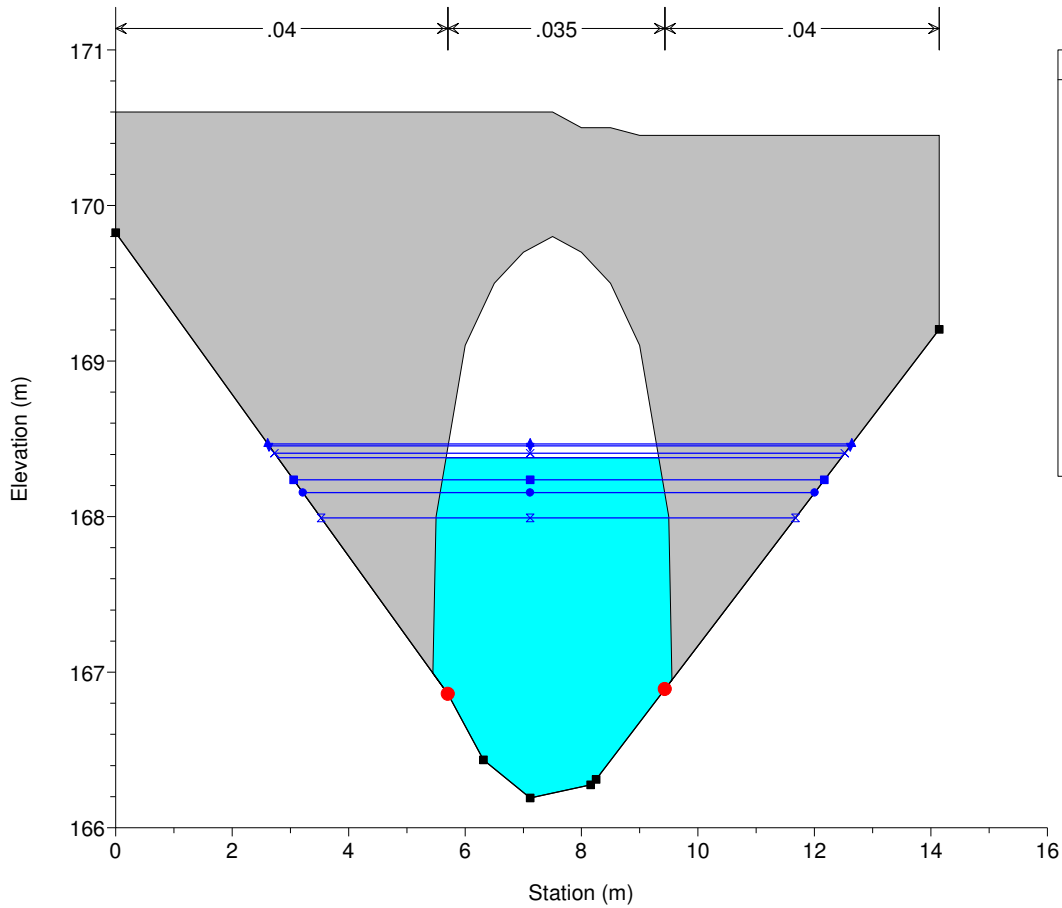
River = Borro dei Sodi Reach = unico RS = 404 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

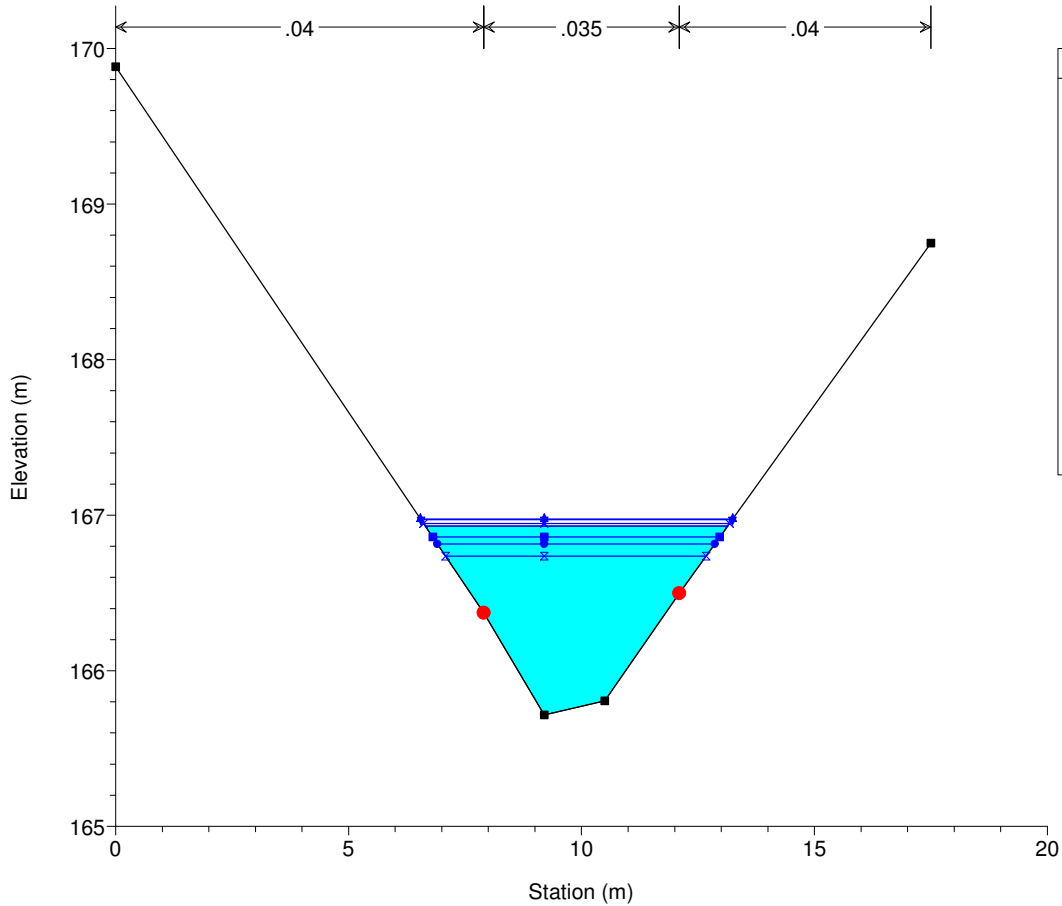
River = Borro dei Sodi Reach = unico RS = 404 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

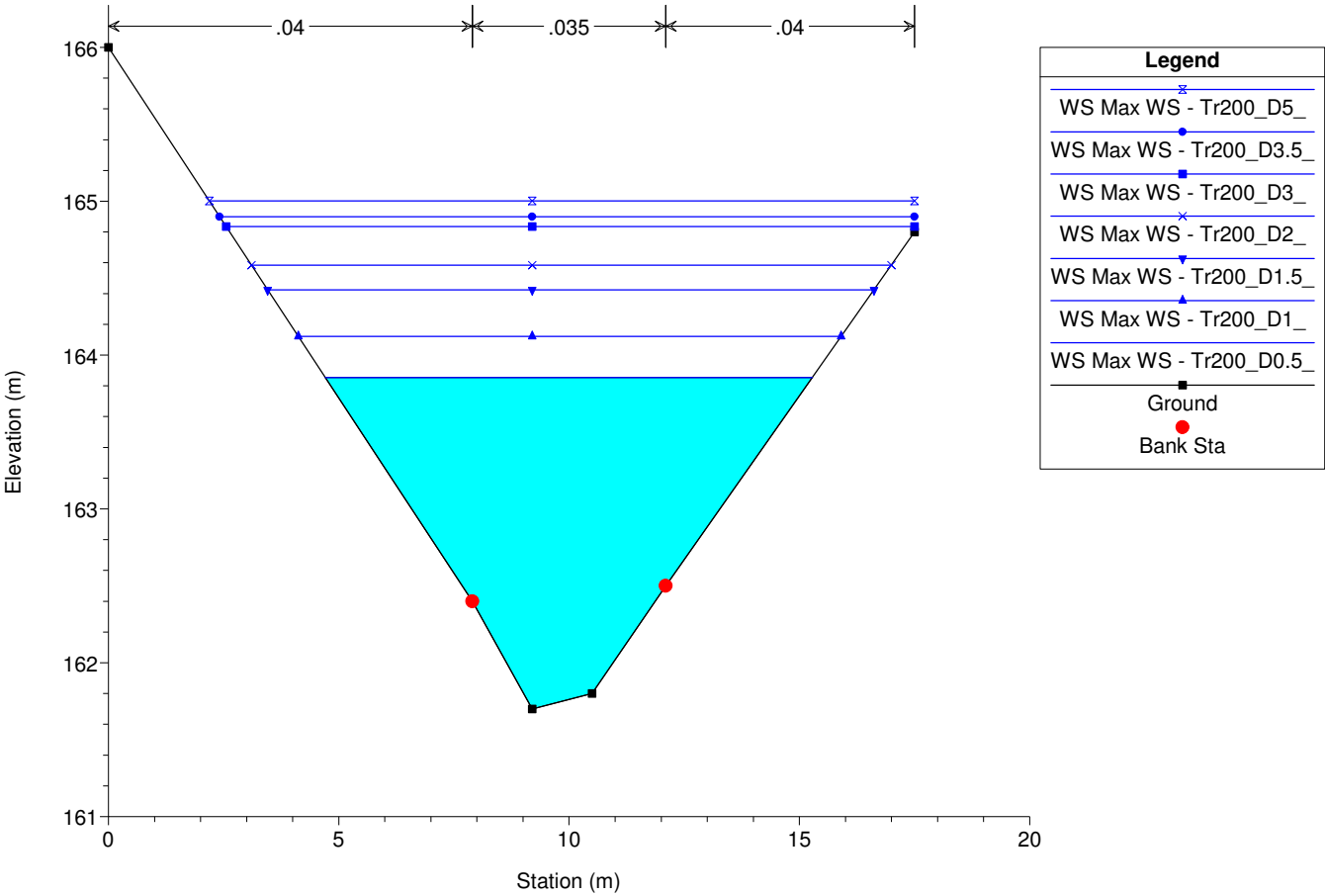
Geom: Pesa Storage Confluenza_

River = Borro dei Sodi Reach = unico RS = 402 So2 - Rilievo CBTC 08



Geom: Pesa Storage Confluenza_

River = Borro dei Sodi Reach = unico RS = 401 So1 (Copiata dalla 2: abbassata di 4m)





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Borro dei Sodi Reach: unico Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	412	Max WS	Tr30_D0.5_	33.68	173.80	175.55	175.69	176.32	0.014316	3.98	9.25	9.21	1.10
unico	412	Max WS	Tr30_D1_	39.24	173.80	175.67	175.84	176.51	0.014378	4.21	10.33	9.72	1.12
unico	412	Max WS	Tr30_D1.5_	39.10	173.80	175.66	175.84	176.51	0.014376	4.20	10.31	9.71	1.12
unico	412	Max WS	Tr30_D2_	36.22	173.80	175.61	175.76	176.41	0.014320	4.08	9.76	9.45	1.11
unico	412	Max WS	Tr30_D3_	29.16	173.80	175.45	175.57	176.14	0.014226	3.76	8.36	8.77	1.08
unico	412	Max WS	Tr30_D3.5_	26.04	173.80	175.38	175.48	176.02	0.014117	3.60	7.73	8.45	1.07
unico	412	Max WS	Tr30_D5_	19.26	173.80	175.20	175.24	175.71	0.014022	3.20	6.28	7.65	1.04
unico	411.66			Lat Struct									
unico	411.65			Lat Struct									
unico	411	Max WS	Tr30_D0.5_	30.32	172.30	174.89		175.06	0.001823	1.97	18.20	11.20	0.43
unico	411	Max WS	Tr30_D1_	30.81	172.30	174.89		175.07	0.001877	2.00	18.22	11.20	0.43
unico	411	Max WS	Tr30_D1.5_	32.44	172.30	174.89		175.09	0.002082	2.10	18.22	11.20	0.46
unico	411	Max WS	Tr30_D2_	30.80	172.30	174.89		175.07	0.001877	2.00	18.22	11.20	0.43
unico	411	Max WS	Tr30_D3_	25.90	172.30	174.88		175.00	0.001367	1.70	18.03	11.20	0.37
unico	411	Max WS	Tr30_D3.5_	22.93	172.30	174.86		174.96	0.001104	1.52	17.84	11.20	0.33
unico	411	Max WS	Tr30_D5_	17.17	172.30	174.79		174.85	0.000703	1.18	17.05	11.20	0.26
unico	410.96			Lat Struct									
unico	410.95			Lat Struct									
unico	410.26			Lat Struct									
unico	410.25			Lat Struct									
unico	410	Max WS	Tr30_D0.5_	17.46	171.68	175.07		175.09	0.000104	0.58	42.91	29.92	0.11
unico	410	Max WS	Tr30_D1_	20.04	171.68	175.15		175.16	0.000121	0.63	45.14	30.32	0.12
unico	410	Max WS	Tr30_D1.5_	19.97	171.68	175.15		175.16	0.000120	0.63	45.09	30.31	0.12
unico	410	Max WS	Tr30_D2_	18.61	171.68	175.11		175.12	0.000111	0.60	43.94	30.10	0.11
unico	410	Max WS	Tr30_D3_	15.86	171.68	175.01		175.02	0.000096	0.55	40.96	29.57	0.10
unico	410	Max WS	Tr30_D3.5_	14.80	171.68	174.96		174.97	0.000091	0.53	39.60	29.33	0.10
unico	410	Max WS	Tr30_D5_	13.21	171.68	174.84		174.85	0.000089	0.51	36.18	27.54	0.10
unico	409.97			Lat Struct									
unico	409.96			Lat Struct									
unico	409.5			Bridge									
unico	409	Max WS	Tr30_D0.5_	15.36	171.42	172.46	172.58	172.89	0.019089	2.97	5.82	14.13	1.16
unico	409	Max WS	Tr30_D1_	17.19	171.42	172.50	172.63	172.95	0.018771	3.06	6.43	14.74	1.16
unico	409	Max WS	Tr30_D1.5_	17.14	171.42	172.50	172.63	172.95	0.018800	3.06	6.41	14.72	1.16
unico	409	Max WS	Tr30_D2_	16.18	171.42	172.48	172.60	172.92	0.018975	3.01	6.09	14.40	1.16
unico	409	Max WS	Tr30_D3_	14.32	171.42	172.44	172.55	172.85	0.019115	2.90	5.49	13.78	1.15
unico	409	Max WS	Tr30_D3.5_	13.60	171.42	172.42	172.53	172.82	0.019073	2.84	5.26	13.54	1.15
unico	409	Max WS	Tr30_D5_	12.66	171.42	172.40	172.50	172.78	0.019019	2.77	4.96	13.21	1.14
unico	405.75			Lat Struct									
unico	405.7			Lat Struct									
unico	405	Max WS	Tr30_D0.5_	15.36	166.90	168.52	168.45	168.98	0.009023	3.17	5.62	5.64	0.85
unico	405	Max WS	Tr30_D1_	17.18	166.90	168.65		169.11	0.008072	3.18	6.38	5.98	0.81
unico	405	Max WS	Tr30_D1.5_	17.14	166.90	168.64		169.10	0.008092	3.18	6.36	5.98	0.81
unico	405	Max WS	Tr30_D2_	16.17	166.90	168.57	168.49	169.04	0.008734	3.19	5.91	5.77	0.84
unico	405	Max WS	Tr30_D3_	14.32	166.90	168.44	168.40	168.91	0.009699	3.17	5.19	5.43	0.87
unico	405	Max WS	Tr30_D3.5_	13.60	166.90	168.39	168.36	168.85	0.009898	3.13	4.95	5.32	0.87
unico	405	Max WS	Tr30_D5_	12.66	166.90	168.34	168.30	168.78	0.010122	3.07	4.65	5.17	0.88
unico	404			Bridge									
unico	403			Lat Struct									
unico	402.9			Lat Struct									
unico	402	Max WS	Tr30_D0.5_	15.36	165.72	166.76	167.11	167.85	0.042107	4.67	3.46	5.71	1.71
unico	402	Max WS	Tr30_D1_	17.18	165.72	166.81	167.19	167.98	0.041837	4.86	3.75	5.94	1.72
unico	402	Max WS	Tr30_D1.5_	17.14	165.72	166.81	167.19	167.98	0.041849	4.86	3.75	5.94	1.72
unico	402	Max WS	Tr30_D2_	16.17	165.72	166.78	167.15	167.91	0.042063	4.76	3.59	5.81	1.72
unico	402	Max WS	Tr30_D3_	14.32	165.72	166.73	167.06	167.77	0.042015	4.55	3.29	5.57	1.70
unico	402	Max WS	Tr30_D3.5_	13.60	165.72	166.71	167.03	167.70	0.041754	4.45	3.18	5.48	1.68
unico	402	Max WS	Tr30_D5_	12.66	165.72	166.69	166.98	167.62	0.041269	4.32	3.04	5.35	1.66
unico	401.6			Lat Struct									
unico	401.55			Lat Struct									
unico	401	Max WS	Tr30_D0.5_	15.93	161.70	163.28		163.60	0.006670	2.63	6.99	7.98	0.74
unico	401	Max WS	Tr30_D1_	2.00	161.70	163.40		163.40	0.000076	0.30	7.93	8.50	0.08
unico	401	Max WS	Tr30_D1.5_	2.00	161.70	163.65		163.65	0.000039	0.24	10.20	9.64	0.06
unico	401	Max WS	Tr30_D2_	2.00	161.70	163.82		163.82	0.000026	0.21	11.92	10.41	0.05
unico	401	Max WS	Tr30_D3_	2.00	161.70	163.97		163.97	0.000019	0.19	13.55	11.10	0.04
unico	401	Max WS	Tr30_D3.5_	2.00	161.70	164.03		164.03	0.000017	0.18	14.20	11.36	0.04
unico	401	Max WS	Tr30_D5_	2.00	161.70	164.11		164.11	0.000014	0.17	15.09	11.72	0.04



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DEI SODI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Borro dei Sodi Reach: unico Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	412	Max WS	Tr200_D0.5	52.87	173.80	175.91	176.16	176.94	0.014517	4.70	12.85	10.81	1.15
unico	412	Max WS	Tr200_D1_	60.70	173.80	176.04	176.30	177.16	0.014537	4.93	14.24	11.20	1.17
unico	412	Max WS	Tr200_D1.5	59.74	173.80	176.02	176.28	177.13	0.014535	4.91	14.08	11.20	1.17
unico	412	Max WS	Tr200_D2_	54.95	173.80	175.95	176.20	177.00	0.014519	4.76	13.23	10.96	1.16
unico	412	Max WS	Tr200_D3_	44.03	173.80	175.76	175.98	176.67	0.014451	4.40	11.23	10.12	1.13
unico	412	Max WS	Tr200_D3.5	39.43	173.80	175.67	175.85	176.52	0.014372	4.22	10.37	9.74	1.12
unico	412	Max WS	Tr200_D5_	29.79	173.80	175.47	175.59	176.17	0.014229	3.79	8.49	8.84	1.09
unico	411.66			Lat Struct									
unico	411.65			Lat Struct									
unico	411	Max WS	Tr200_D0.5	32.10	172.30	174.89		175.09	0.002037	2.08	18.22	11.20	0.45
unico	411	Max WS	Tr200_D1_	32.96	172.30	174.89		175.10	0.002148	2.14	18.22	11.20	0.46
unico	411	Max WS	Tr200_D1.5	32.78	172.30	174.89		175.09	0.002124	2.12	18.22	11.20	0.46
unico	411	Max WS	Tr200_D2_	32.79	172.30	174.89		175.09	0.002125	2.12	18.22	11.20	0.46
unico	411	Max WS	Tr200_D3_	31.49	172.30	174.89		175.08	0.001962	2.04	18.22	11.20	0.44
unico	411	Max WS	Tr200_D3.5	32.06	172.30	174.89		175.09	0.002033	2.08	18.22	11.20	0.45
unico	411	Max WS	Tr200_D5_	26.53	172.30	174.88		175.01	0.001427	1.73	18.06	11.20	0.38
unico	410.96			Lat Struct									
unico	410.95			Lat Struct									
unico	410.26			Lat Struct									
unico	410.25			Lat Struct									
unico	410	Max WS	Tr200_D0.5	26.76	171.68	175.30		175.32	0.000167	0.77	49.86	31.13	0.14
unico	410	Max WS	Tr200_D1_	29.53	171.68	175.35		175.38	0.000188	0.83	51.48	31.41	0.15
unico	410	Max WS	Tr200_D1.5	29.26	171.68	175.35		175.37	0.000186	0.82	51.32	31.39	0.15
unico	410	Max WS	Tr200_D2_	27.66	171.68	175.32		175.34	0.000174	0.79	50.39	31.23	0.14
unico	410	Max WS	Tr200_D3_	22.42	171.68	175.21		175.22	0.000137	0.68	46.98	30.64	0.12
unico	410	Max WS	Tr200_D3.5	20.13	171.68	175.15		175.16	0.000121	0.64	45.23	30.33	0.12
unico	410	Max WS	Tr200_D5_	16.08	171.68	175.02		175.03	0.000097	0.55	41.24	29.62	0.10
unico	409.97			Lat Struct									
unico	409.96			Lat Struct									
unico	409.5			Bridge									
unico	409	Max WS	Tr200_D0.5	21.98	171.42	172.60	172.74	173.10	0.018606	3.31	7.87	16.10	1.18
unico	409	Max WS	Tr200_D1_	23.97	171.42	172.63	172.78	173.16	0.018571	3.40	8.45	16.61	1.19
unico	409	Max WS	Tr200_D1.5	23.78	171.42	172.63	172.78	173.15	0.018586	3.40	8.39	16.56	1.19
unico	409	Max WS	Tr200_D2_	22.64	171.42	172.61	172.76	173.12	0.018553	3.34	8.07	16.28	1.18
unico	409	Max WS	Tr200_D3_	18.88	171.42	172.54	172.67	173.01	0.018839	3.16	6.93	15.22	1.17
unico	409	Max WS	Tr200_D3.5	17.26	171.42	172.51	172.63	172.95	0.018791	3.07	6.45	14.76	1.16
unico	409	Max WS	Tr200_D5_	14.47	171.42	172.44	172.55	172.85	0.019120	2.91	5.54	13.83	1.15
unico	405.75			Lat Struct									
unico	405.7			Lat Struct									
unico	405	Max WS	Tr200_D0.5	21.96	166.90	169.04		169.44	0.005433	3.03	8.96	7.03	0.69
unico	405	Max WS	Tr200_D1_	23.96	166.90	169.22		169.59	0.004590	2.95	10.23	7.50	0.64
unico	405	Max WS	Tr200_D1.5	23.78	166.90	169.20		169.57	0.004657	2.96	10.11	7.46	0.65
unico	405	Max WS	Tr200_D2_	22.62	166.90	169.10		169.49	0.005140	3.01	9.37	7.19	0.68
unico	405	Max WS	Tr200_D3_	18.87	166.90	168.78		169.22	0.007105	3.15	7.19	6.33	0.77
unico	405	Max WS	Tr200_D3.5	17.26	166.90	168.65		169.11	0.008036	3.18	6.41	6.00	0.81
unico	405	Max WS	Tr200_D5_	14.47	166.90	168.45	168.40	168.92	0.009654	3.17	5.24	5.46	0.87
unico	404			Bridge									
unico	403			Lat Struct									
unico	402.9			Lat Struct									
unico	402	Max WS	Tr200_D0.5	21.96	165.72	166.93	167.37	168.31	0.041677	5.32	4.50	6.50	1.76
unico	402	Max WS	Tr200_D1_	23.96	165.72	166.98	167.44	168.44	0.041754	5.49	4.79	6.70	1.77
unico	402	Max WS	Tr200_D1.5	23.78	165.72	166.97	167.44	168.42	0.041753	5.48	4.76	6.69	1.77
unico	402	Max WS	Tr200_D2_	22.62	165.72	166.95	167.40	168.35	0.041733	5.38	4.59	6.57	1.76
unico	402	Max WS	Tr200_D3_	18.87	165.72	166.86	167.26	168.10	0.041211	5.01	4.04	6.16	1.72
unico	402	Max WS	Tr200_D3.5	17.26	165.72	166.81	167.20	167.99	0.041825	4.87	3.77	5.95	1.72
unico	402	Max WS	Tr200_D5_	14.47	165.72	166.74	167.07	167.78	0.042025	4.57	3.32	5.59	1.70
unico	401.6			Lat Struct									
unico	401.55			Lat Struct									
unico	401	Max WS	Tr200_D0.5	23.70	161.70	163.85		164.10	0.003441	2.41	12.28	10.57	0.56
unico	401	Max WS	Tr200_D1_	2.00	161.70	164.12		164.12	0.000014	0.17	15.26	11.78	0.04
unico	401	Max WS	Tr200_D1.5	2.00	161.70	164.42		164.42	0.000008	0.14	19.04	13.16	0.03
unico	401	Max WS	Tr200_D2_	2.00	161.70	164.59		164.59	0.000006	0.13	21.22	13.89	0.03
unico	401	Max WS	Tr200_D3_	2.00	161.70	164.84		164.84	0.000004	0.11	24.84	14.94	0.02
unico	401	Max WS	Tr200_D3.5	2.00	161.70	164.90		164.90	0.000004	0.11	25.81	15.09	0.02
unico	401	Max WS	Tr200_D5_	2.06	161.70	165.00		165.00	0.000003	0.10	27.34	15.31	0.02



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTI

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTA

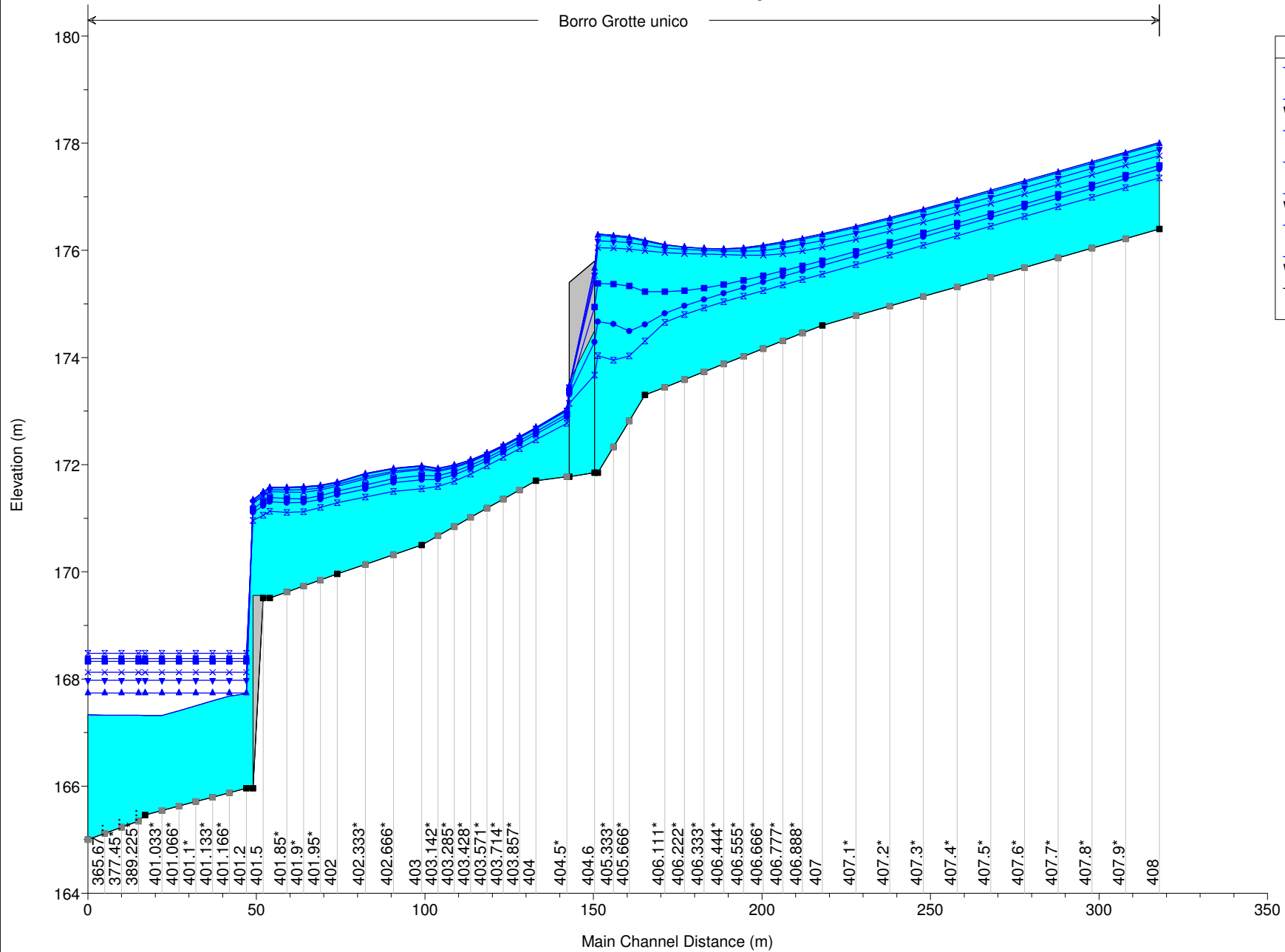
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_
Geom: Pesa Storage Confluenza_

Borro Grotte unico



Legend	
WS Max WS - Tr30_D5_	
WS Max WS - Tr30_D3.5_	
WS Max WS - Tr30_D3_	
WS Max WS - Tr30_D2_	
WS Max WS - Tr30_D1.5_	
WS Max WS - Tr30_D1_	
WS Max WS - Tr30_D0.5_	
Ground	



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTI

MODELLAZIONE PER TR=200 anni

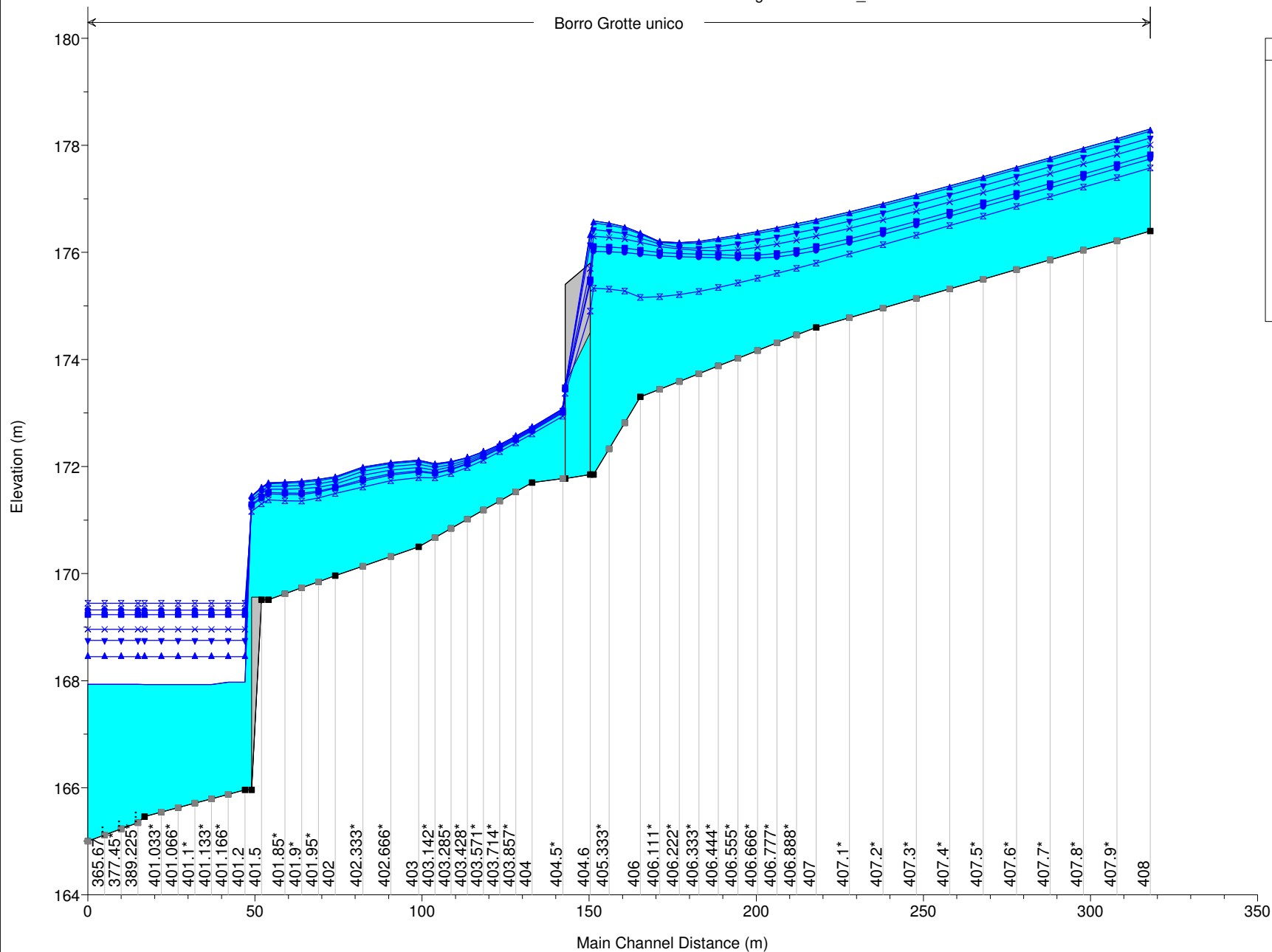
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

Borro Grotte unico



Legend	
WS Max WS - Tr200_D5_	
WS Max WS - Tr200_D3.5_	
WS Max WS - Tr200_D3_	
WS Max WS - Tr200_D2_	
WS Max WS - Tr200_D1.5_	
WS Max WS - Tr200_D1_	
WS Max WS - Tr200_D0.5_	
Ground	



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTI

MODELLAZIONE PER TR=30 anni

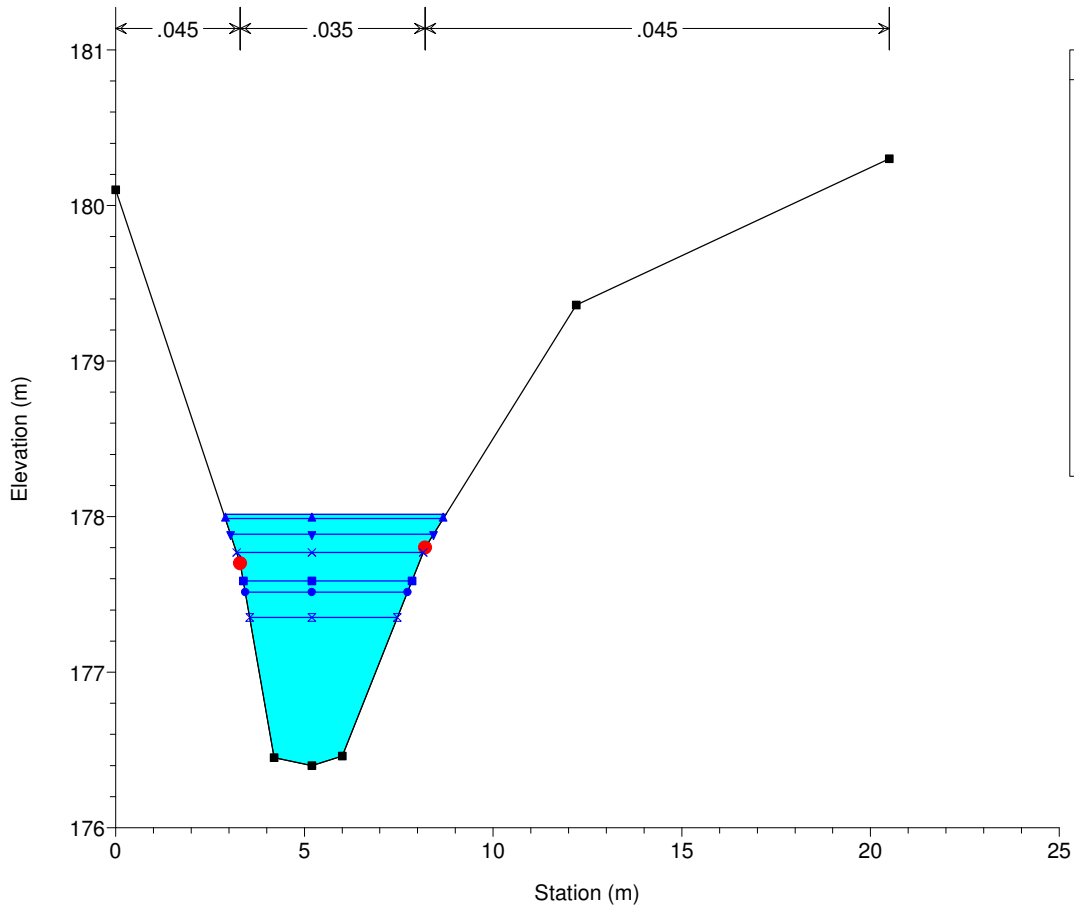
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

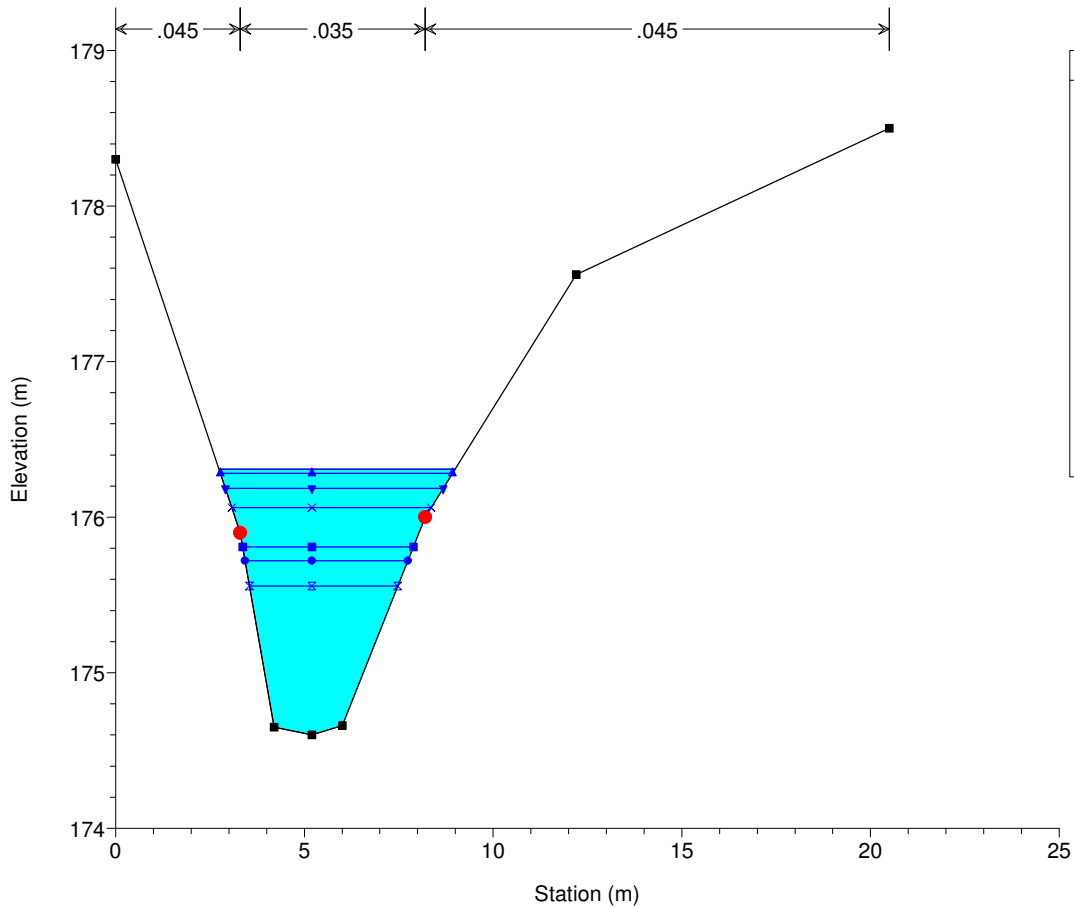
River = Borro Grotte Reach = unico RS = 408



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

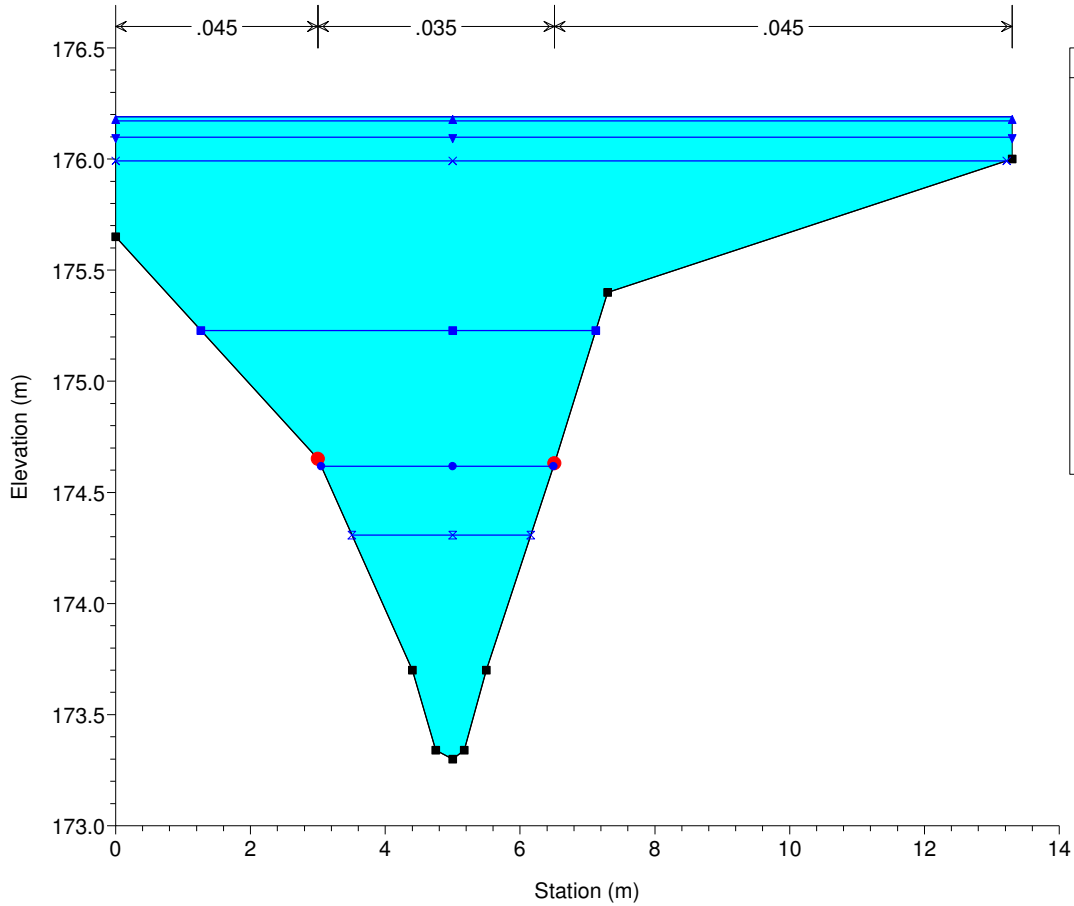
River = Borro Grotte Reach = unico RS = 407 Gr7 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

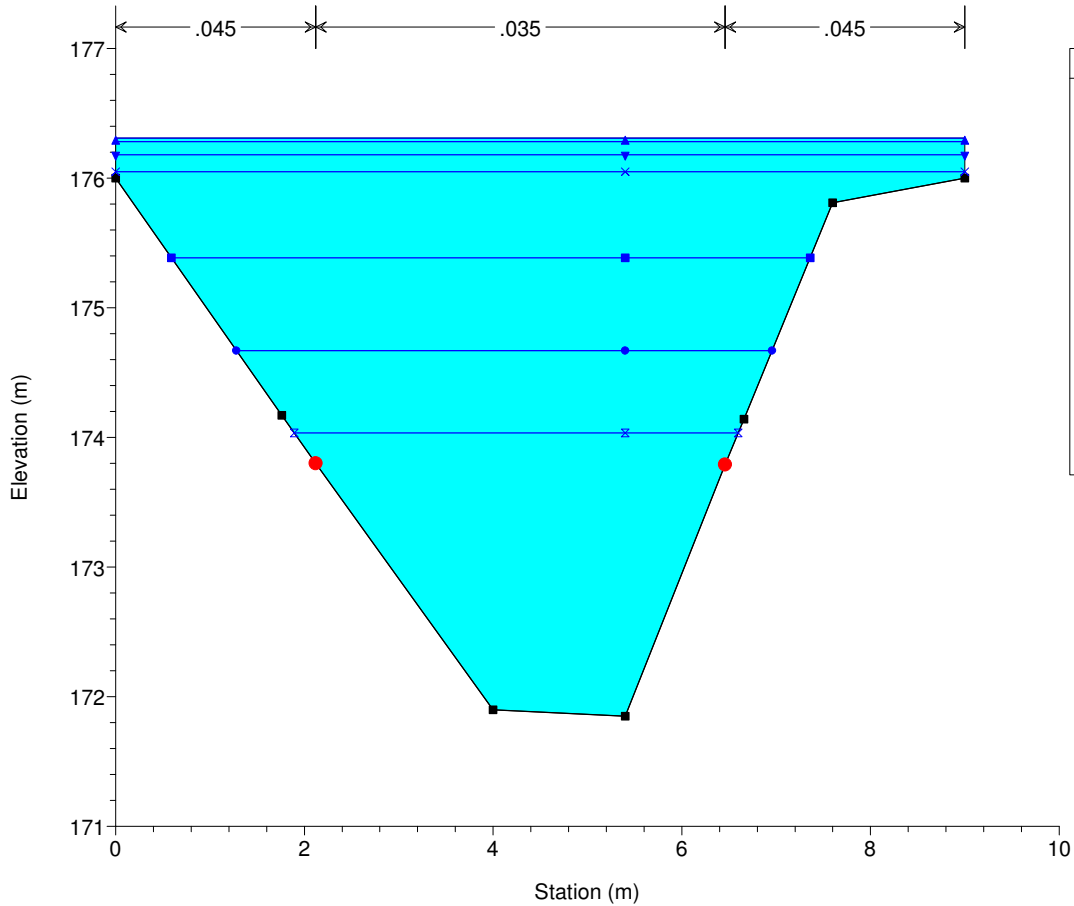
River = Borro Grotte Reach = unico RS = 406 Gr6 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

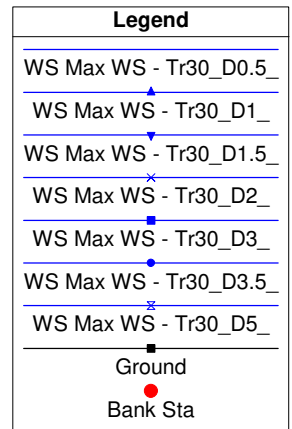
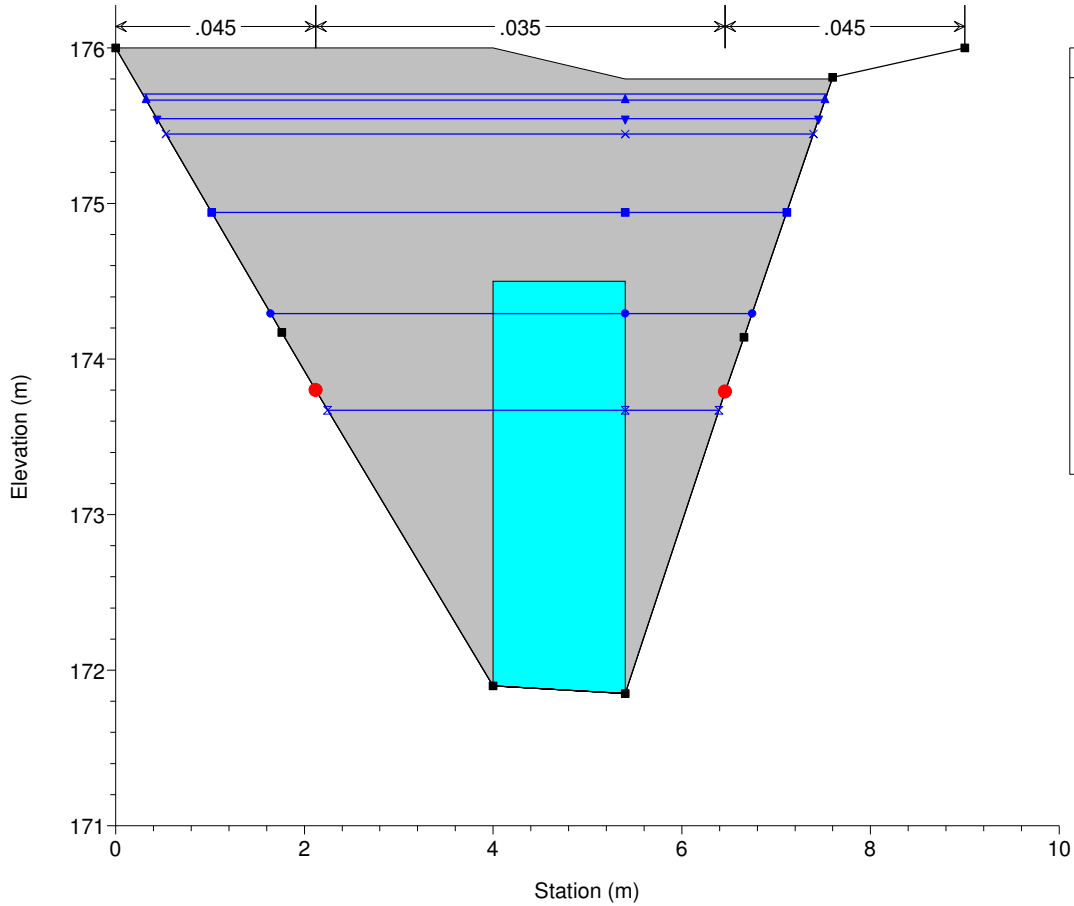
River = Borro Grotte Reach = unico RS = 405 Gr5 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

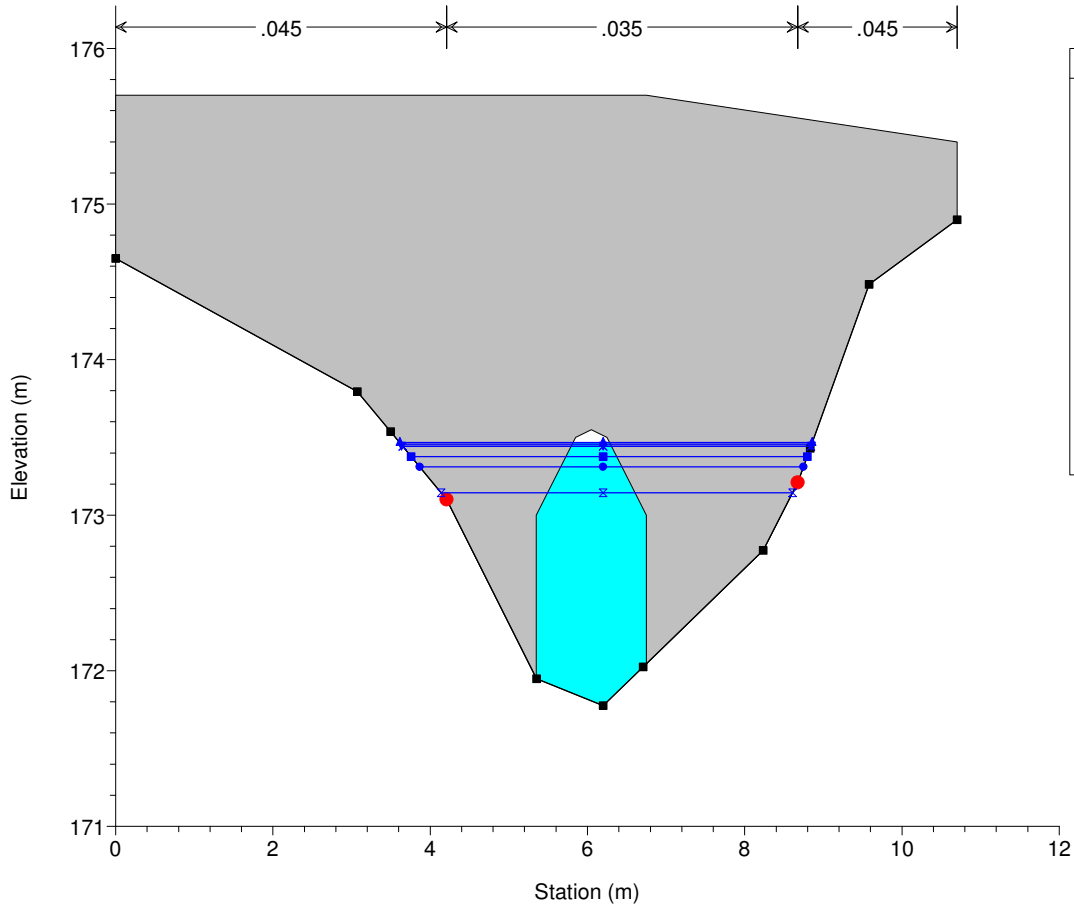
River = Borro Grotte Reach = unico RS = 404.6 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

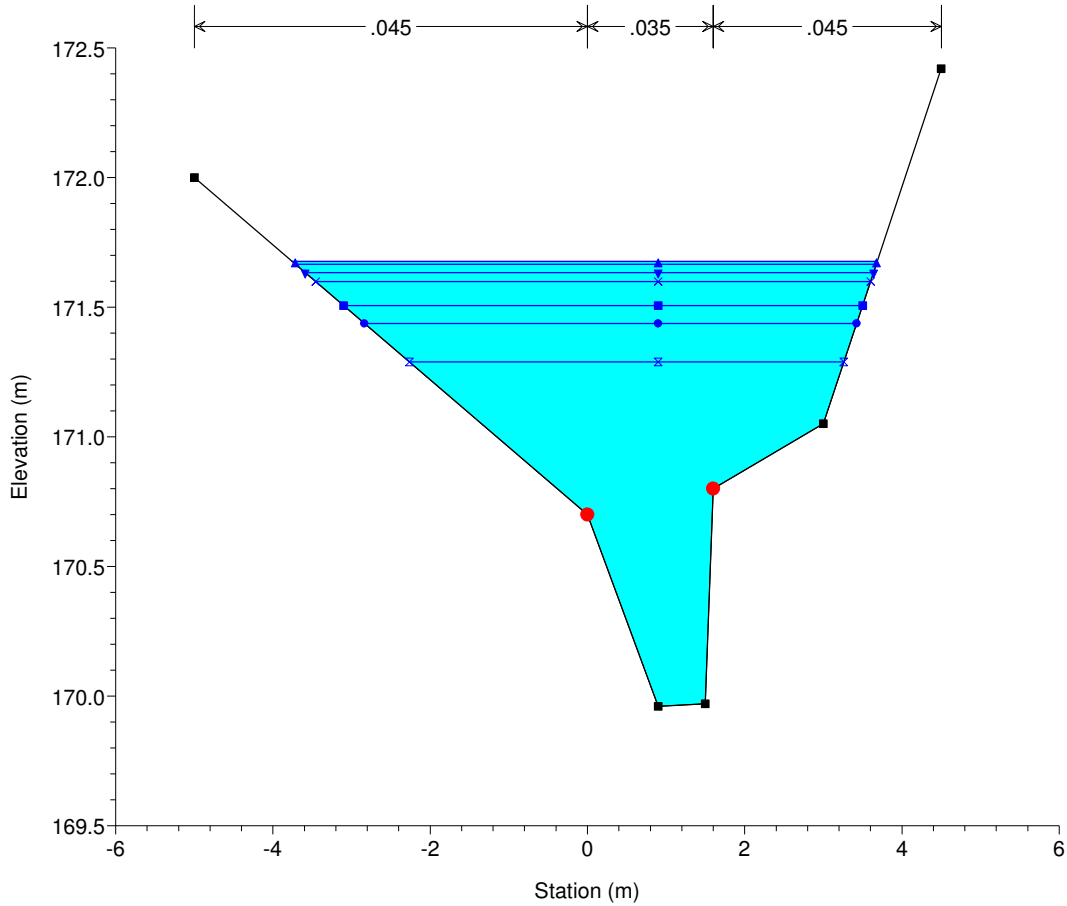
River = Borro Grotte Reach = unico RS = 404.6 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

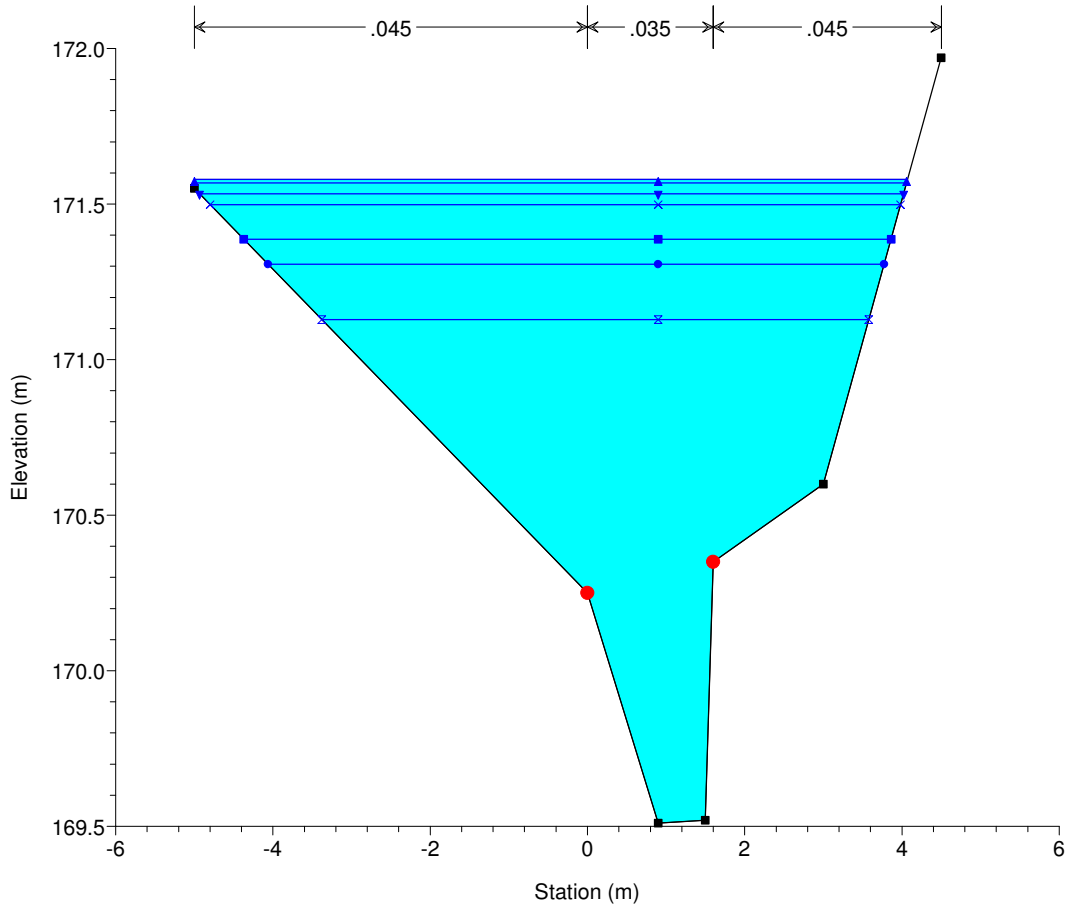
River = Borro Grotte Reach = unico RS = 402 Gr2 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

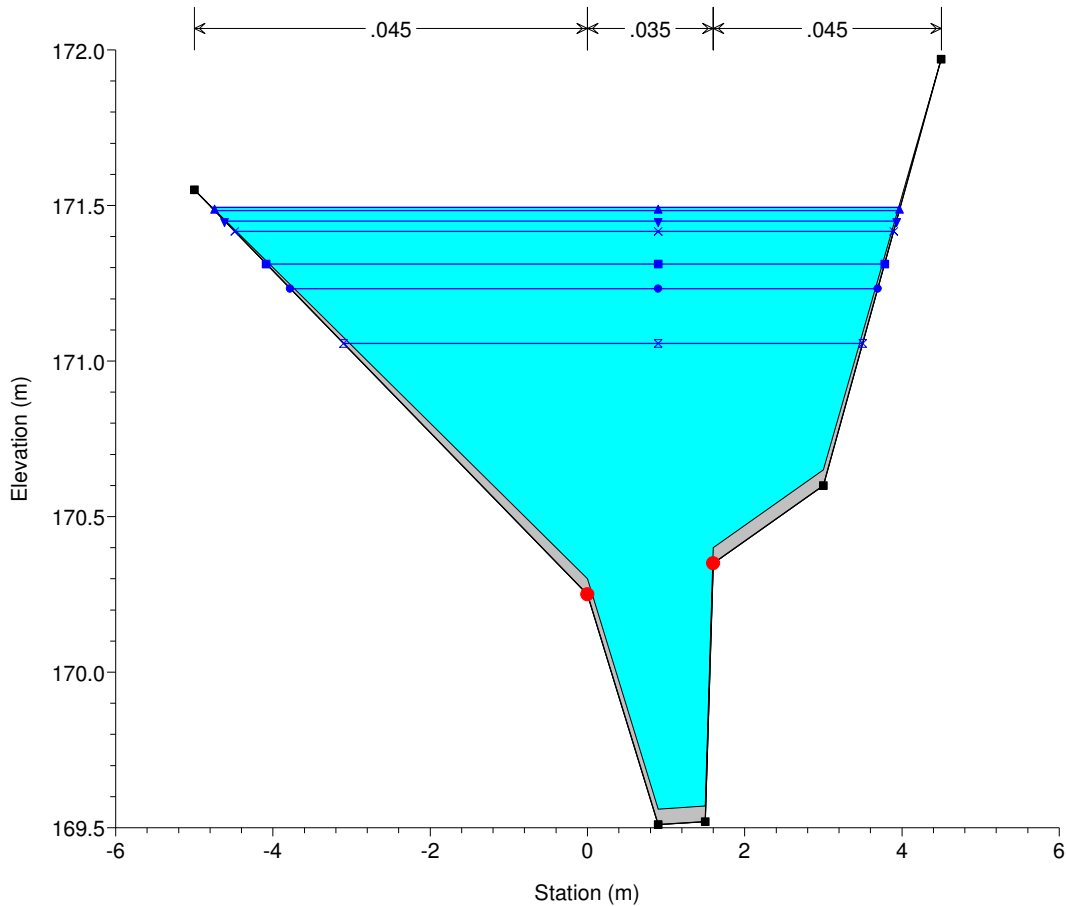
River = Borro Grotte Reach = unico RS = 401.8 Gr2 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

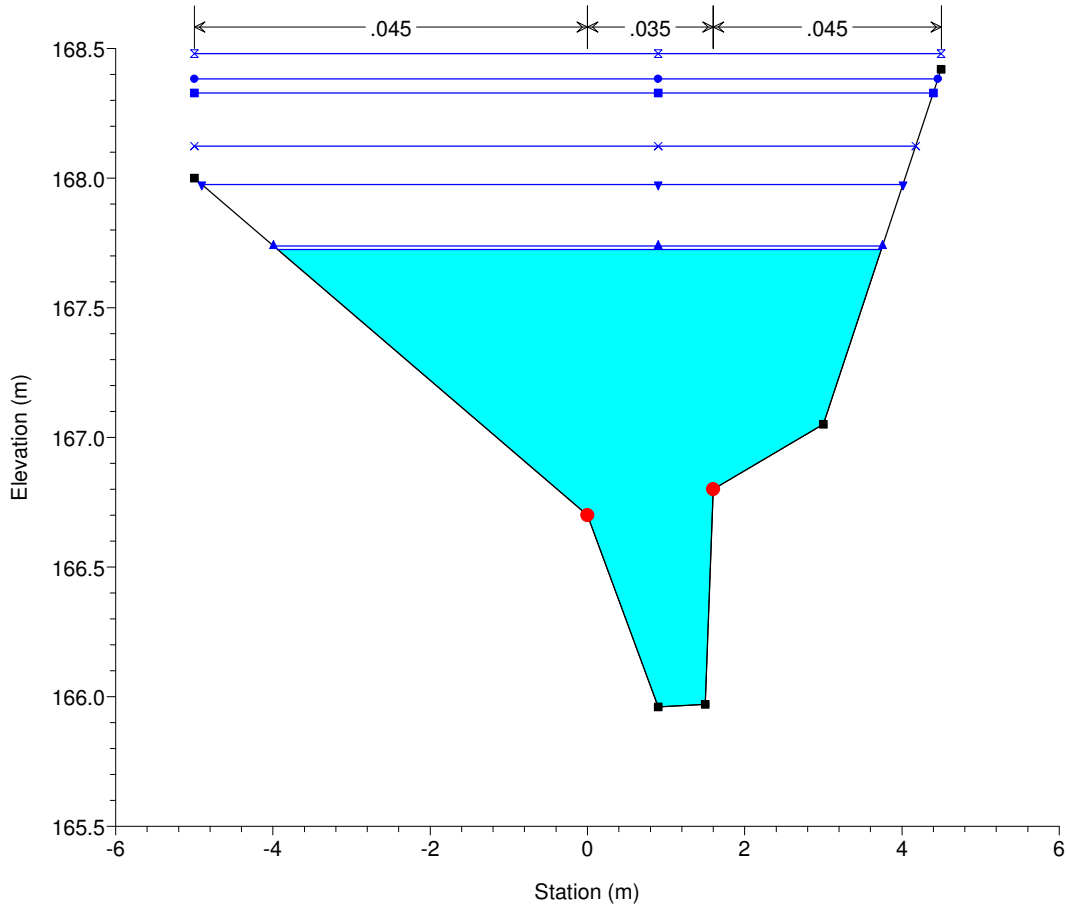
River = Borro Grotte Reach = unico RS = 401.5 IS



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

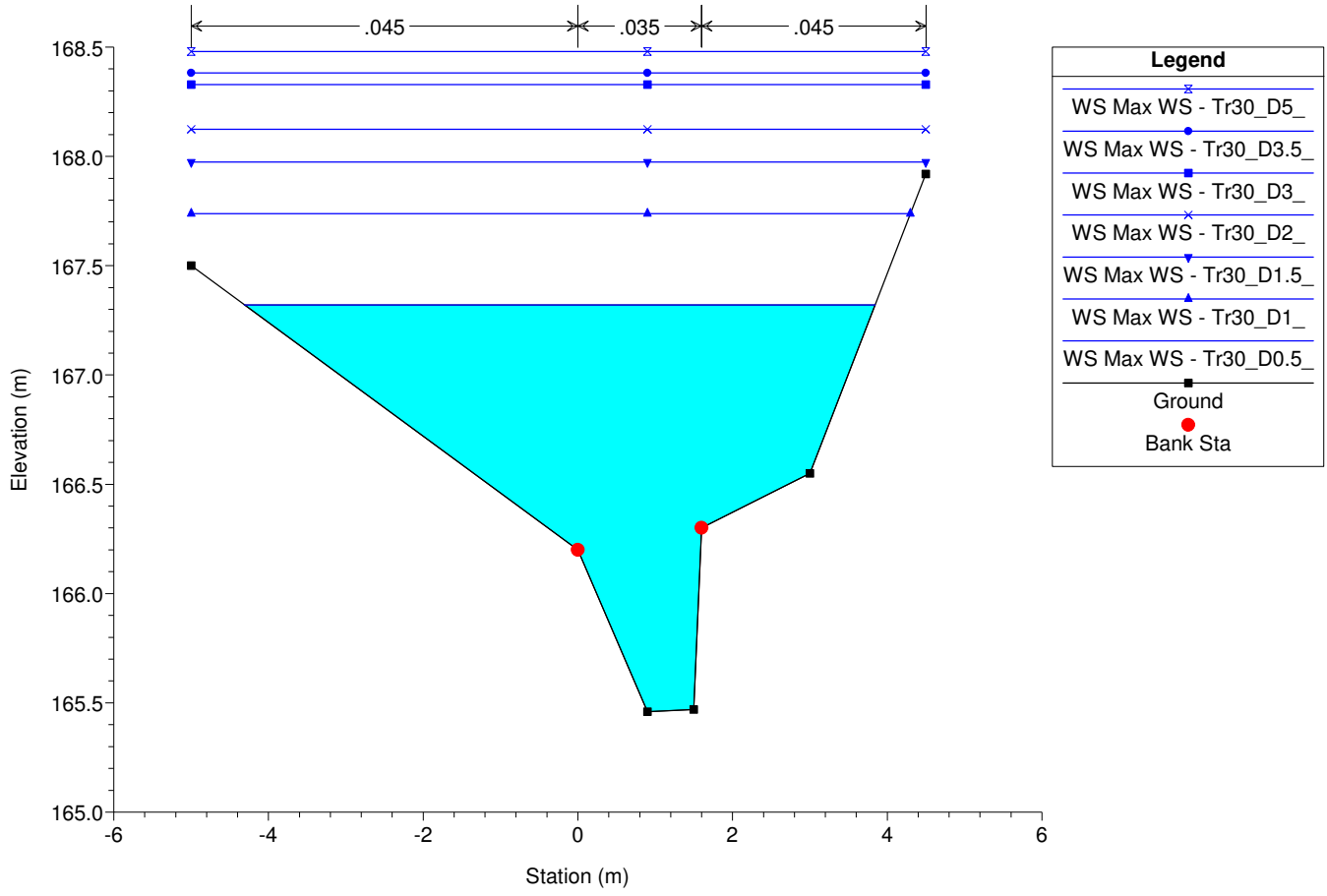
River = Borro Grotte Reach = unico RS = 401.2 Gr1 [COPIA della sez. Gr2 - Quote abbassate di 2m]



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

River = Borro Grotte Reach = unico RS = 401 Gr1 [COPIA della sez. Gr2 - Quote abbassate di 2m]





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTI

MODELLAZIONE PER TR=200 anni

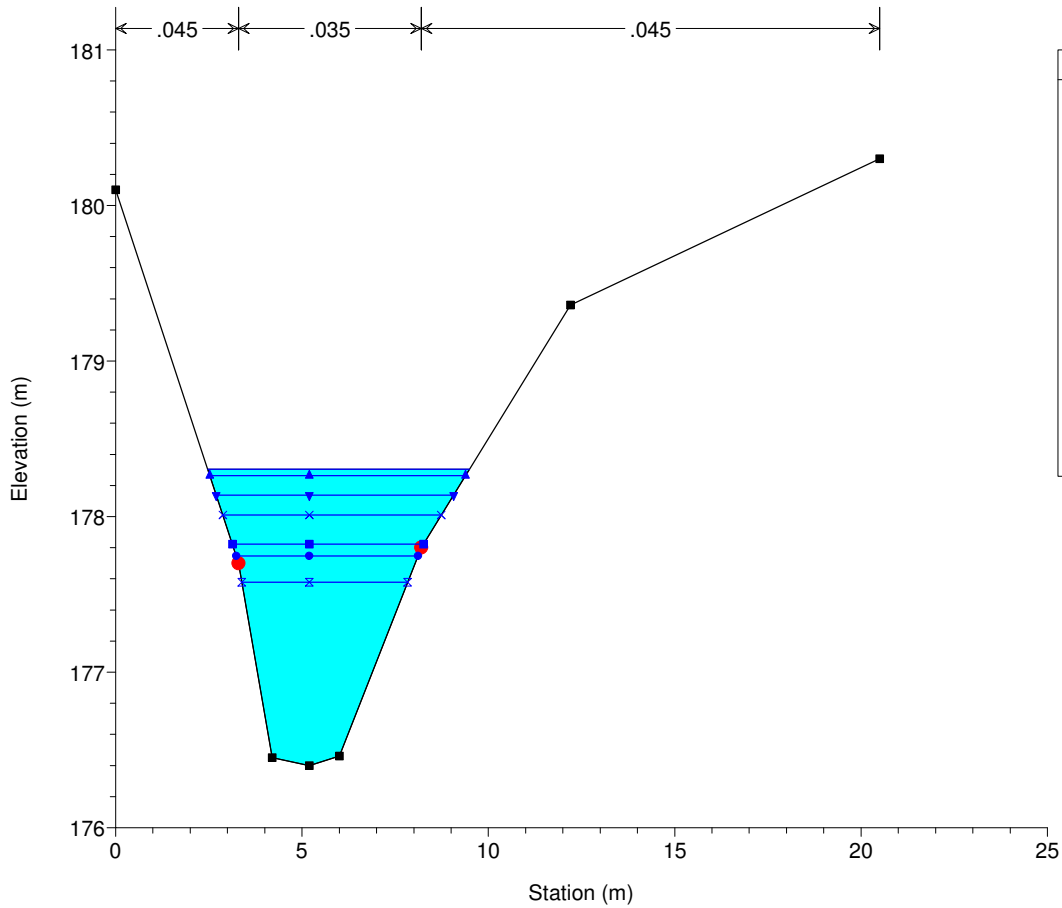
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

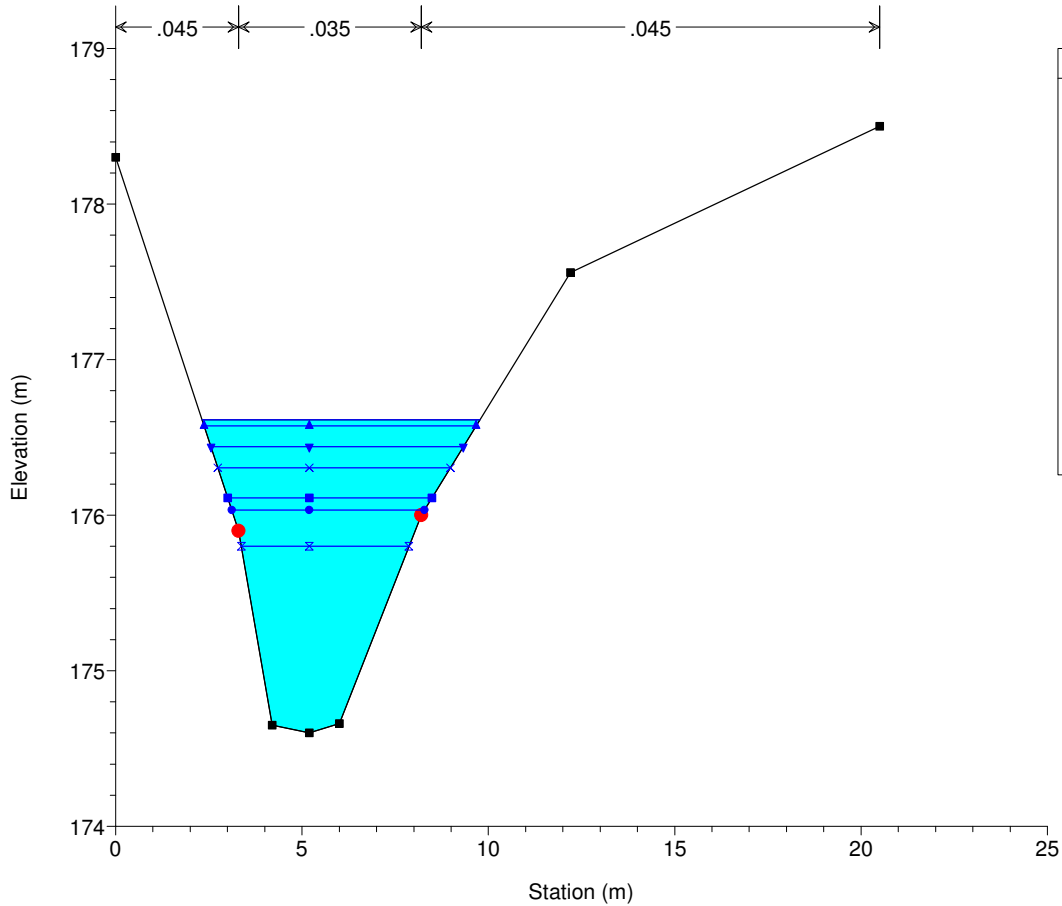
River = Borro Grotte Reach = unico RS = 408



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

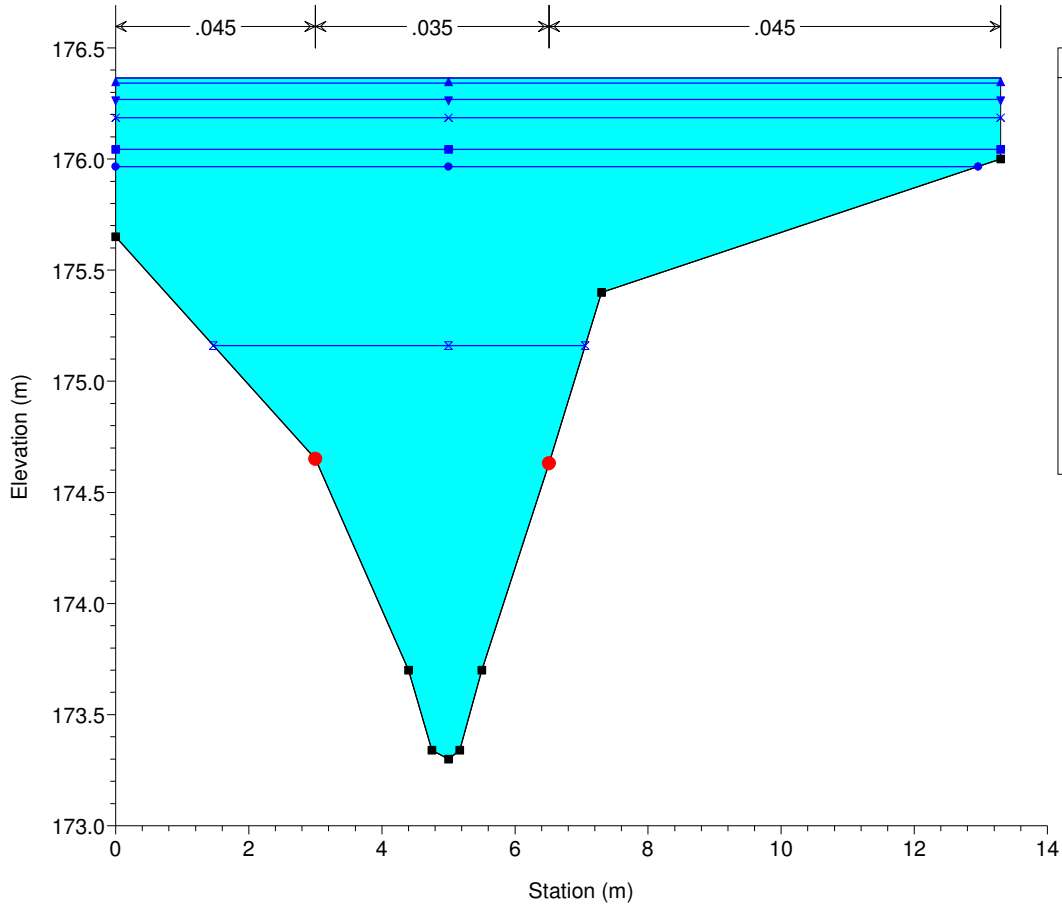
River = Borro Grotte Reach = unico RS = 407 Gr7 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

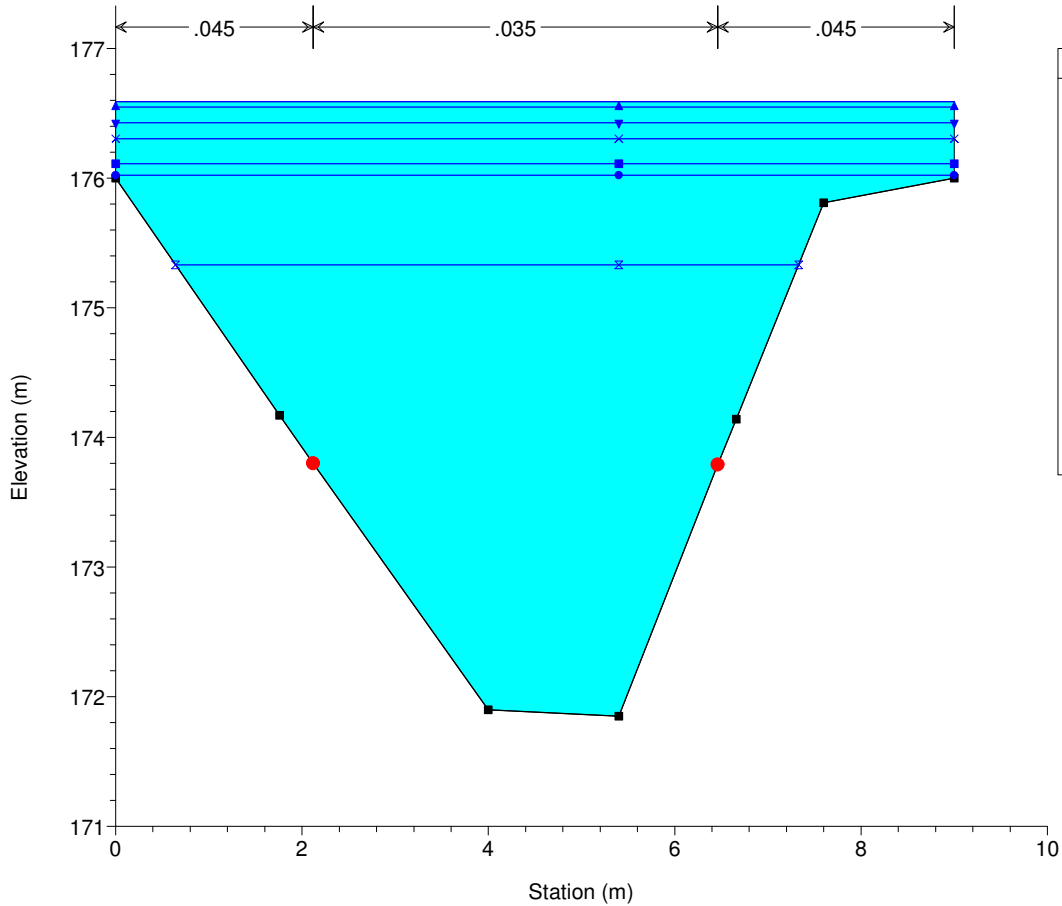
River = Borro Grotte Reach = unico RS = 406 Gr6 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

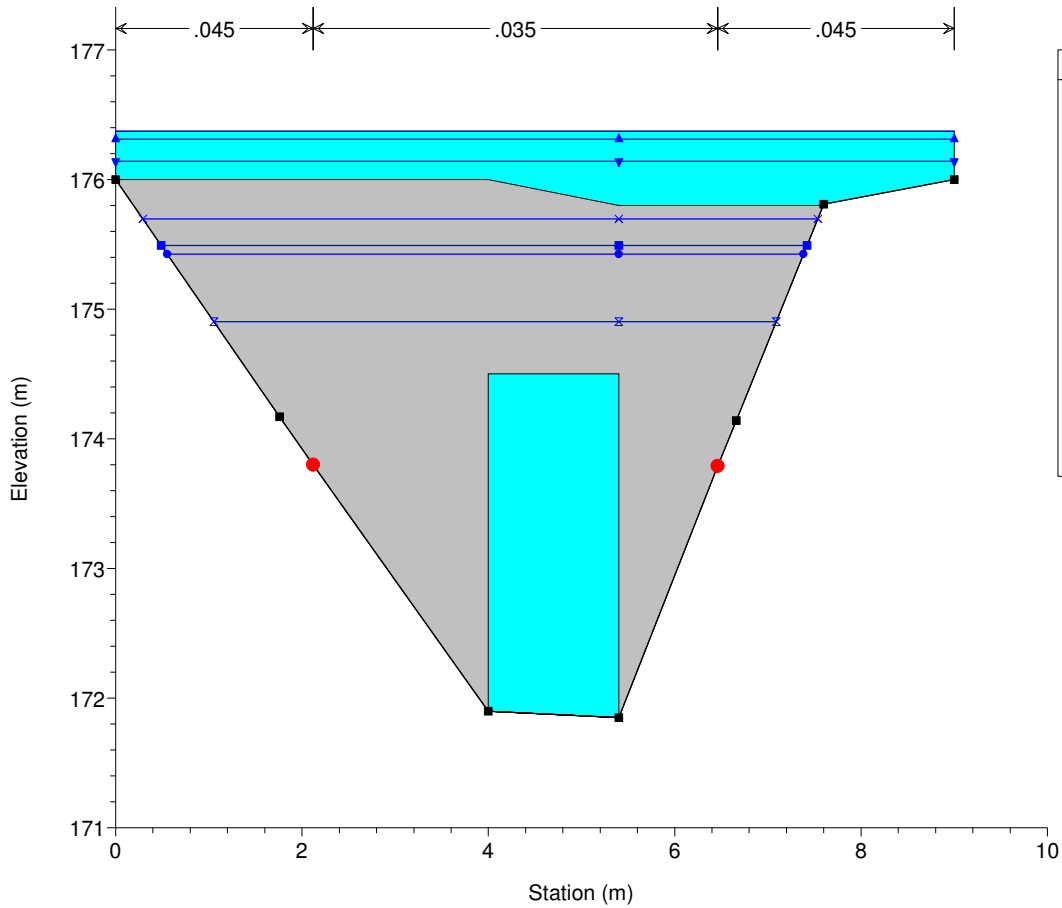
River = Borro Grotte Reach = unico RS = 405 Gr5 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

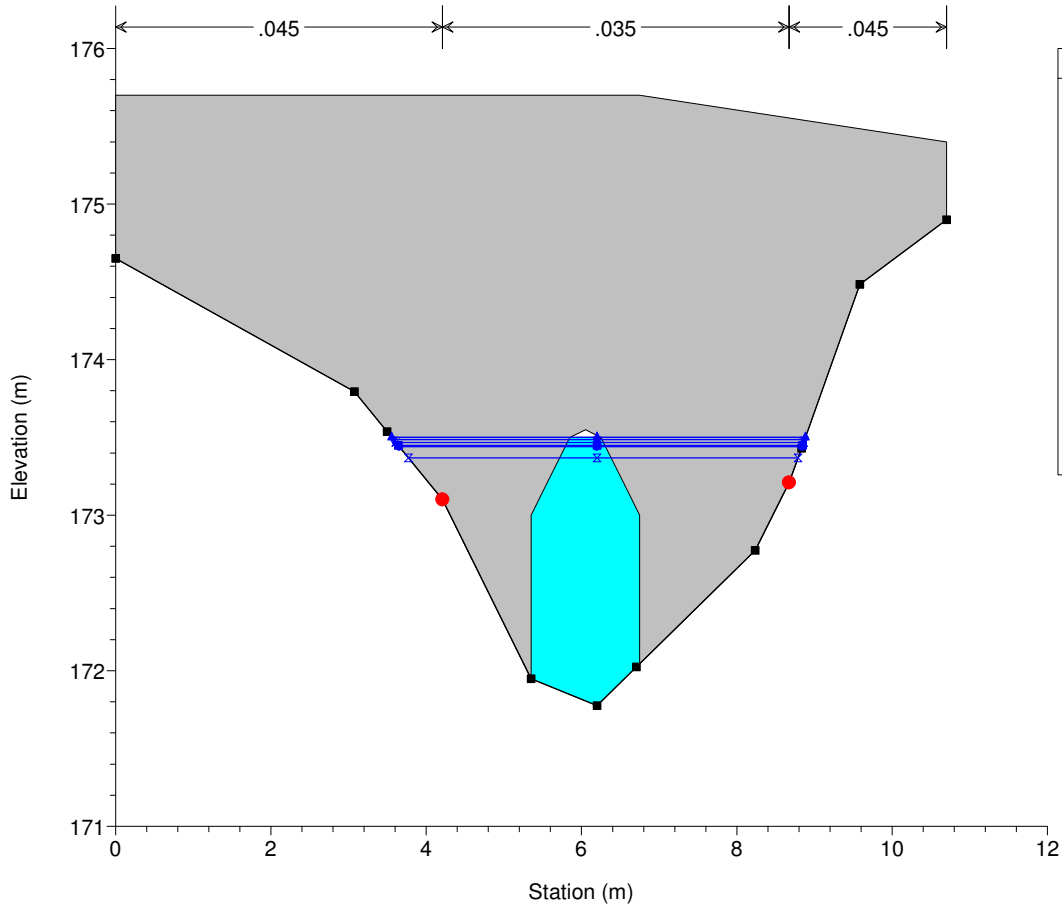
River = Borro Grotte Reach = unico RS = 404.6 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

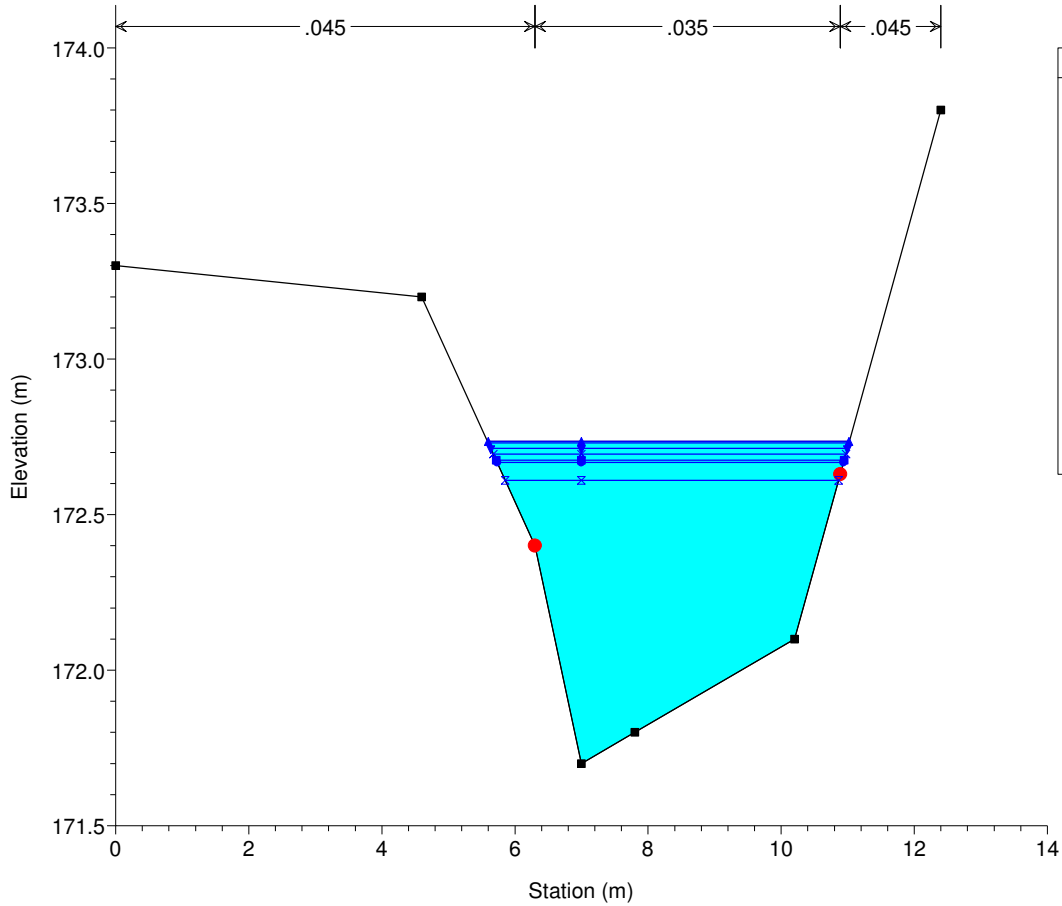
River = Borro Grotte Reach = unico RS = 404.6 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

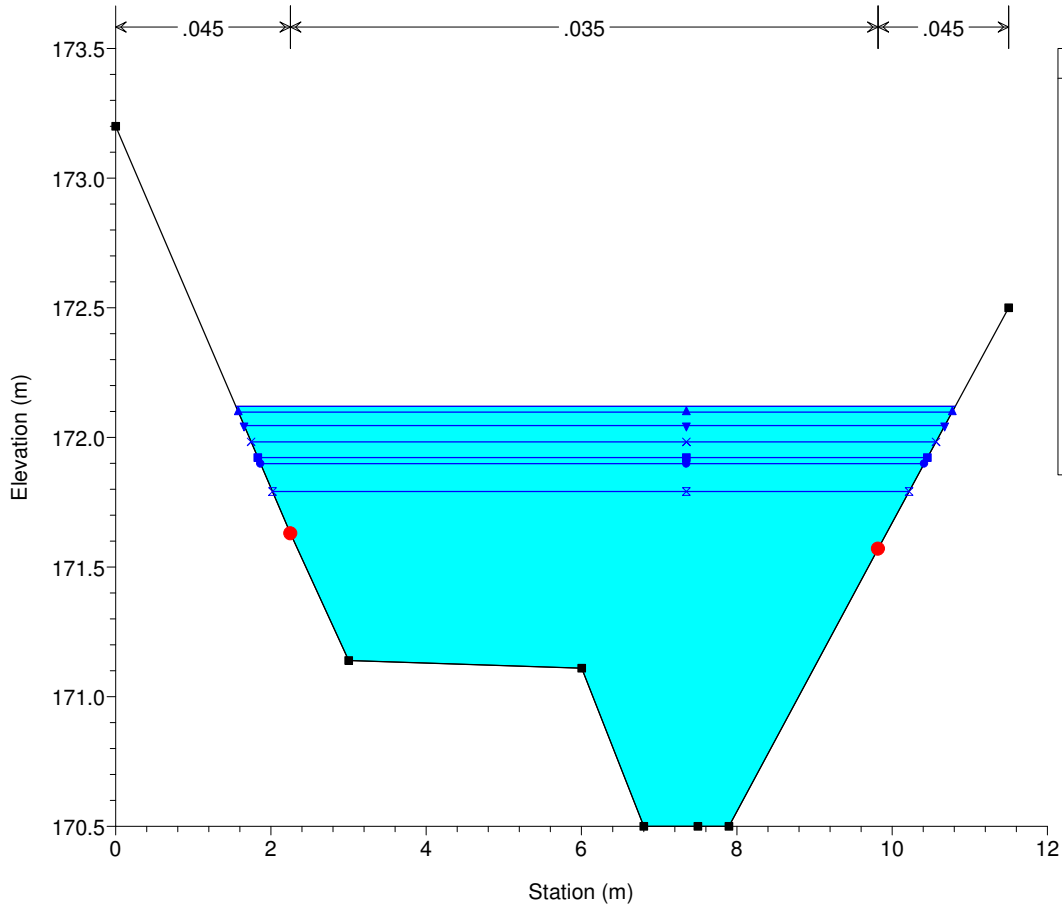
River = Borro Grotte Reach = unico RS = 404 Gr4 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

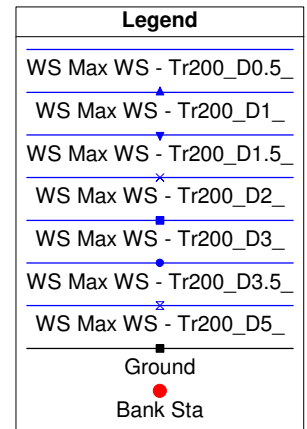
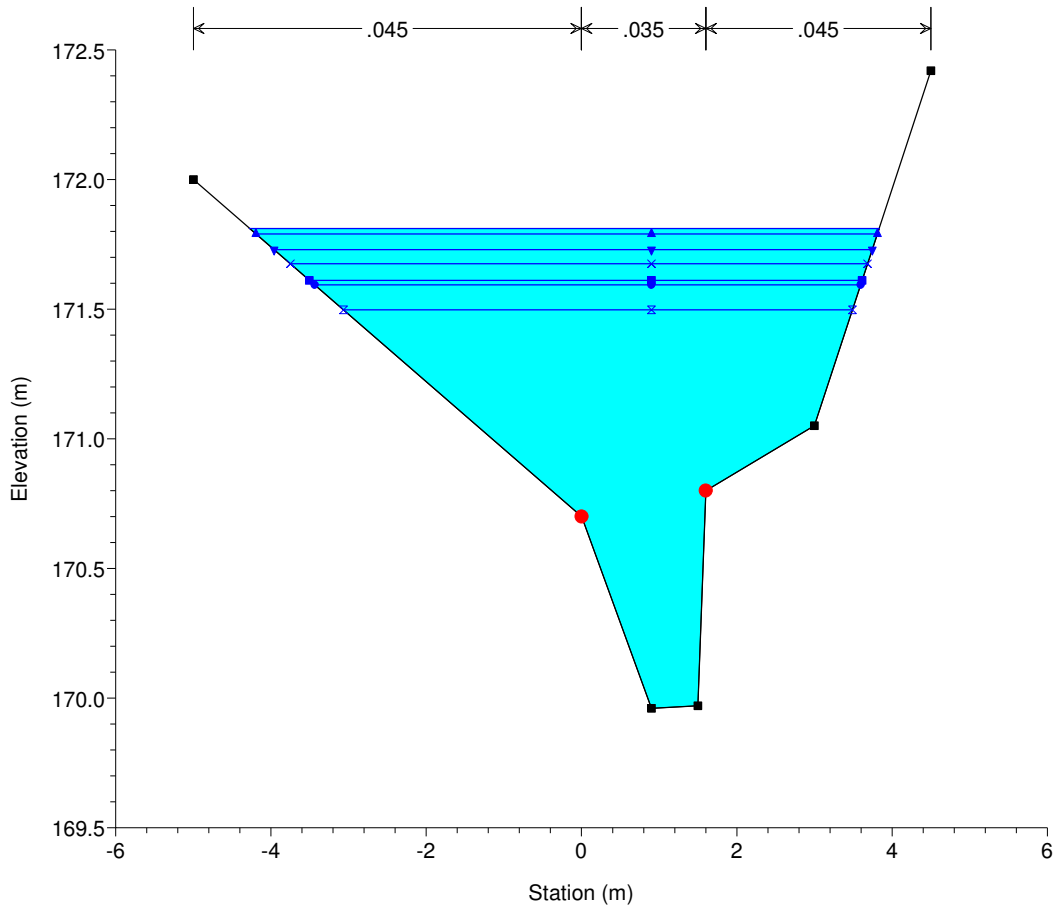
River = Borro Grotte Reach = unico RS = 403 Gr3 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

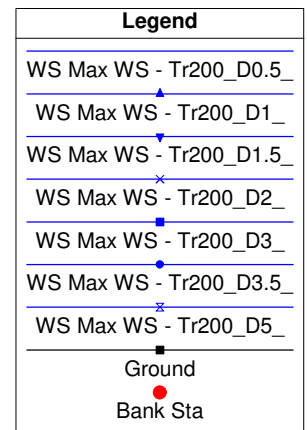
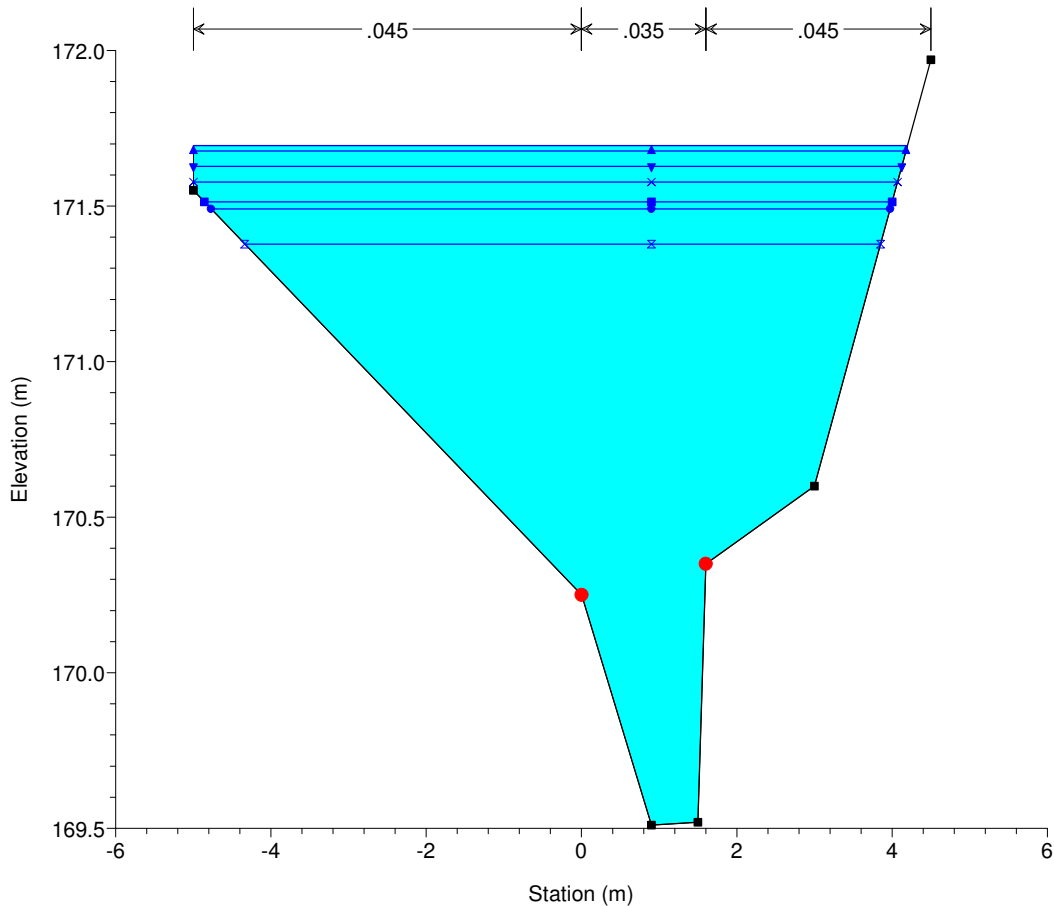
River = Borro Grotte Reach = unico RS = 402 Gr2 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

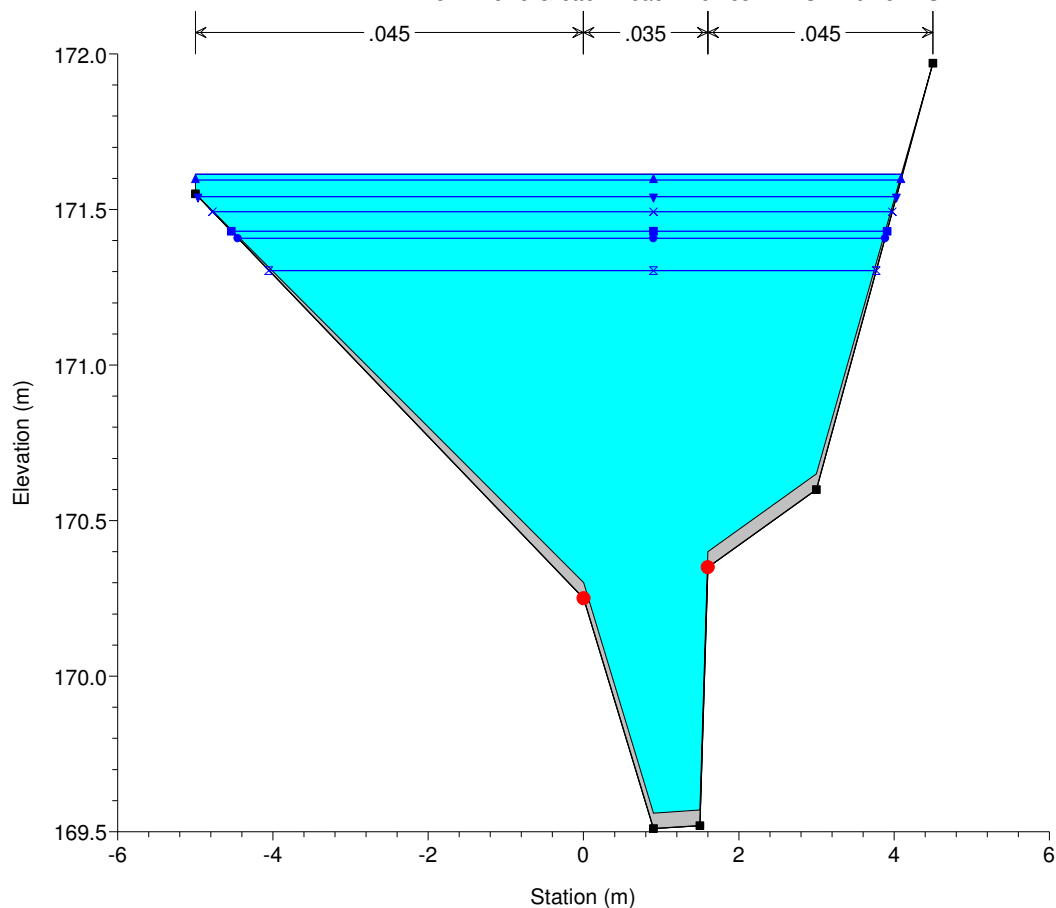
River = Borro Grotte Reach = unico RS = 401.8 Gr2 - Rilievo CBTC 2008



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

River = Borro Grotte Reach = unico RS = 401.5 IS

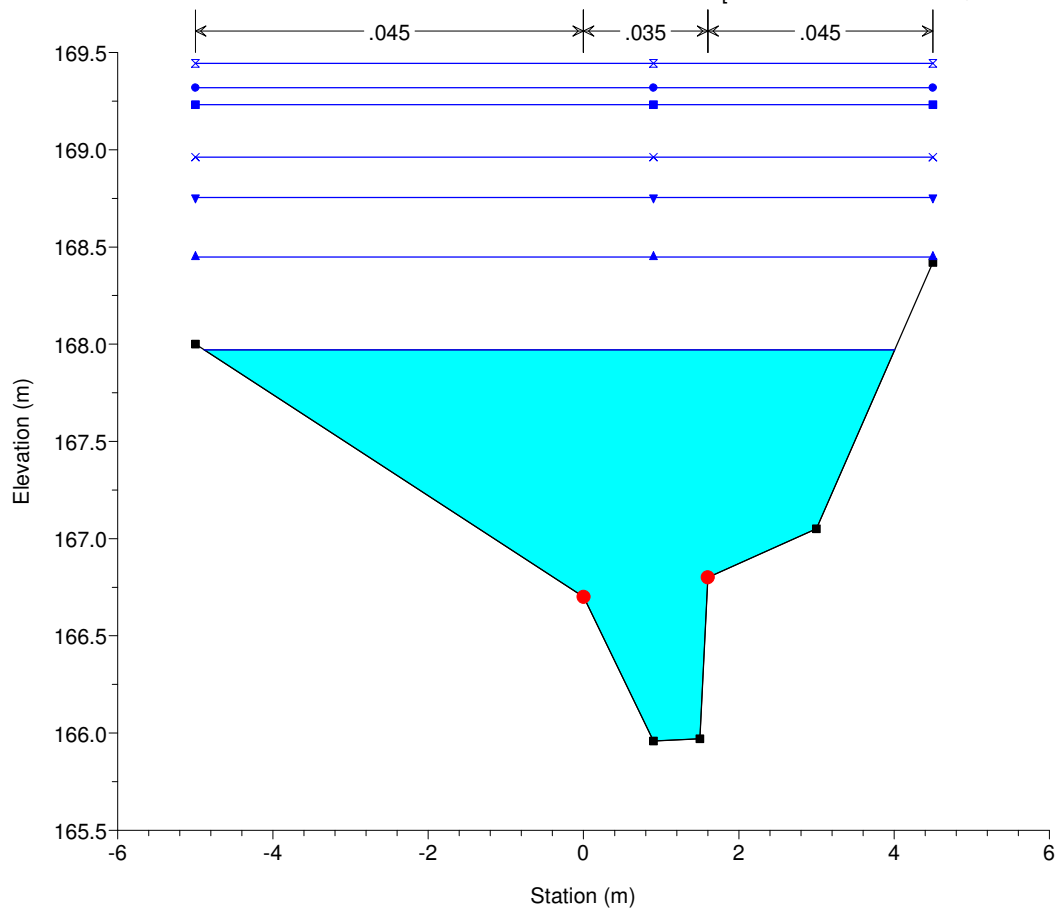


Legend	
WS Max WS - Tr200_D0.5_	▲
WS Max WS - Tr200_D1_	▼
WS Max WS - Tr200_D1.5_	×
WS Max WS - Tr200_D2_	■
WS Max WS - Tr200_D3_	●
WS Max WS - Tr200_D3.5_	×
WS Max WS - Tr200_D5_	■
Ground	■
Bank Sta	●

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

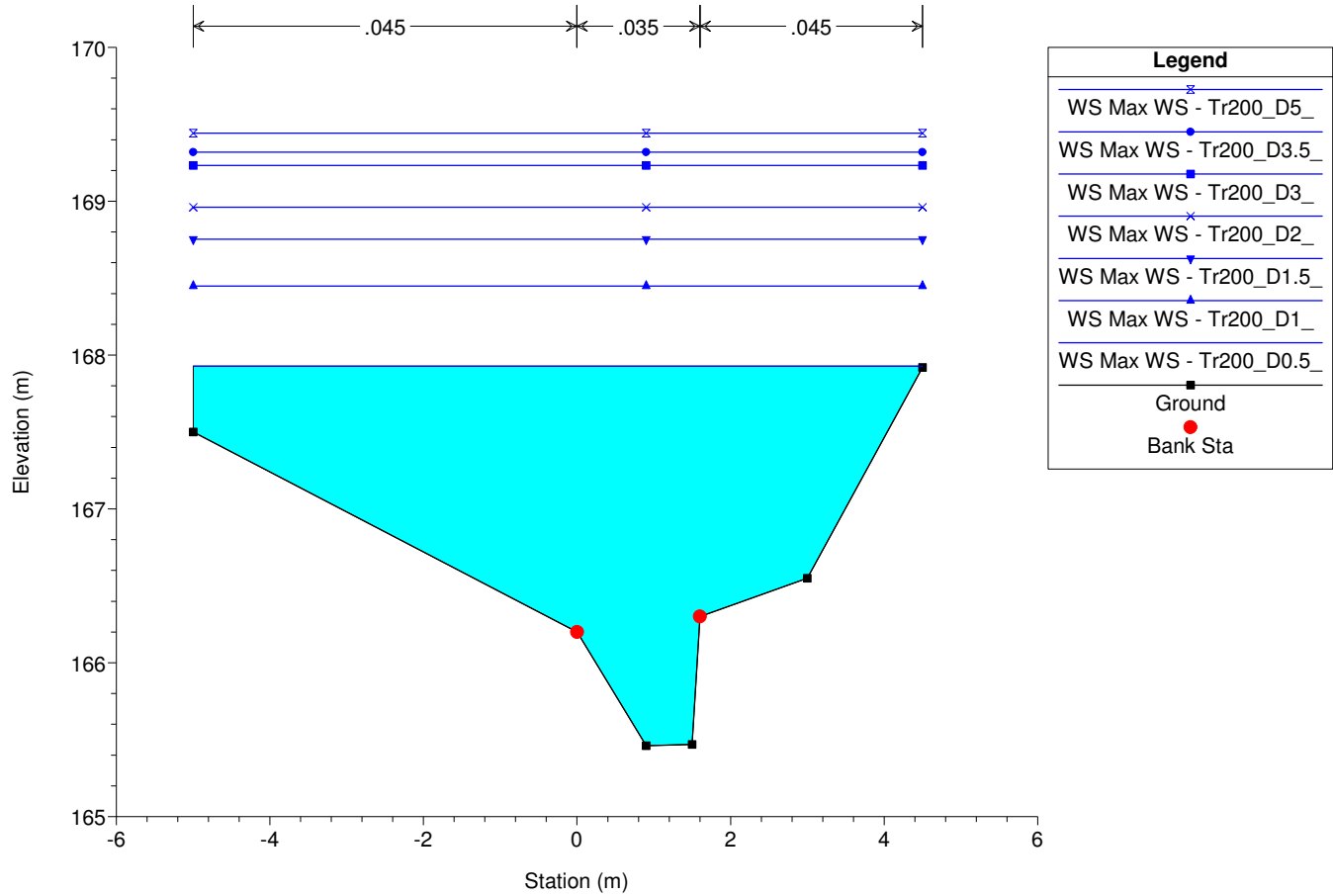
River = Borro Grotte Reach = unico RS = 401.2 Gr1 [COPIA della sez. Gr2 - Quote abbassate di 2m]



Legend	
WS Max WS - Tr200_D5_	×
WS Max WS - Tr200_D3.5_	●
WS Max WS - Tr200_D3_	■
WS Max WS - Tr200_D2_	×
WS Max WS - Tr200_D1.5_	▼
WS Max WS - Tr200_D1_	▲
WS Max WS - Tr200_D0.5_	■
Ground	■
Bank Sta	●

Geom: Pesa Storage Confluenza_

River = Borro Grotte Reach = unico RS = 401 Gr1 [COPIA della sez. Gr2 - Quote abbassate di 2m]





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	408	Max WS	Tr30_D0.5_	21.13	176.40	178.02	178.13	178.72	0.018061	3.72	5.78	5.89	1.11
unico	408	Max WS	Tr30_D1_	20.29	176.40	177.99	178.09	178.67	0.018129	3.67	5.61	5.77	1.10
unico	408	Max WS	Tr30_D1.5_	17.35	176.40	177.89	177.95	178.49	0.018108	3.45	5.06	5.38	1.09
unico	408	Max WS	Tr30_D2_	14.37	176.40	177.77	177.82	178.30	0.018496	3.23	4.45	4.94	1.08
unico	408	Max WS	Tr30_D3_	10.60	176.40	177.59	177.62	178.03	0.018225	2.95	3.59	4.47	1.05
unico	408	Max WS	Tr30_D3.5_	9.34	176.40	177.51	177.53	177.93	0.018143	2.85	3.28	4.30	1.04
unico	408	Max WS	Tr30_D5_	6.89	176.40	177.35	177.36	177.71	0.018303	2.64	2.61	3.91	1.03
unico	407	Max WS	Tr30_D0.5_	21.10	174.60	176.31	176.33	176.90	0.013749	3.42	6.35	6.26	0.98
unico	407	Max WS	Tr30_D1_	20.26	174.60	176.28	176.29	176.85	0.013643	3.36	6.19	6.15	0.97
unico	407	Max WS	Tr30_D1.5_	17.33	174.60	176.18	176.15	176.69	0.013325	3.14	5.60	5.76	0.95
unico	407	Max WS	Tr30_D2_	14.36	174.60	176.06	176.02	176.50	0.013550	2.93	4.92	5.28	0.94
unico	407	Max WS	Tr30_D3_	10.60	174.60	175.81	175.82	176.23	0.016898	2.87	3.69	4.52	1.01
unico	407	Max WS	Tr30_D3.5_	9.34	174.60	175.72	175.73	176.13	0.017767	2.83	3.30	4.31	1.03
unico	407	Max WS	Tr30_D5_	6.89	174.60	175.56	175.56	175.91	0.017957	2.62	2.63	3.93	1.02
unico	406.95			Lat Struct									
unico	406.9			Lat Struct									
unico	406.2			Lat Struct									
unico	406.15			Lat Struct									
unico	406	Max WS	Tr30_D0.5_	19.52	173.30	176.19		176.32	0.001913	1.82	14.87	13.30	0.39
unico	406	Max WS	Tr30_D1_	18.80	173.30	176.17		176.30	0.001848	1.78	14.63	13.30	0.38
unico	406	Max WS	Tr30_D1.5_	16.32	173.30	176.10		176.21	0.001644	1.64	13.65	13.30	0.36
unico	406	Max WS	Tr30_D2_	13.83	173.30	175.99		176.09	0.001518	1.53	12.24	13.22	0.34
unico	406	Max WS	Tr30_D3_	10.60	173.30	175.23		175.47	0.006110	2.24	5.20	5.86	0.63
unico	406	Max WS	Tr30_D3.5_	9.34	173.30	174.62	174.85	175.41	0.043597	3.94	2.37	3.45	1.52
unico	406	Max WS	Tr30_D5_	6.89	173.30	174.31	174.67	175.50	0.091743	4.84	1.42	2.65	2.11
unico	405	Max WS	Tr30_D0.5_	13.02	171.85	176.31	173.43	176.33	0.000175	0.72	21.68	9.00	0.12
unico	405	Max WS	Tr30_D1_	12.90	171.85	176.28	173.42	176.30	0.000176	0.72	21.43	9.00	0.12
unico	405	Max WS	Tr30_D1.5_	12.54	171.85	176.18	173.40	176.21	0.000186	0.72	20.53	9.00	0.12
unico	405	Max WS	Tr30_D2_	12.24	171.85	176.05	173.38	176.08	0.000204	0.74	19.36	9.00	0.13
unico	405	Max WS	Tr30_D3_	10.60	171.85	175.38	173.27	175.42	0.000330	0.82	14.33	6.77	0.15
unico	405	Max WS	Tr30_D3.5_	9.34	171.85	174.67	173.17	174.72	0.000713	0.99	9.88	5.68	0.22
unico	405	Max WS	Tr30_D5_	6.89	171.85	174.03	172.97	174.09	0.001290	1.05	6.58	4.71	0.27
unico	404.6			Bridge									
unico	404	Max WS	Tr30_D0.5_	13.02	171.70	172.69	172.94	173.51	0.036146	4.01	3.32	5.30	1.53
unico	404	Max WS	Tr30_D1_	12.90	171.70	172.69	172.94	173.50	0.036121	3.99	3.30	5.29	1.52
unico	404	Max WS	Tr30_D1.5_	12.54	171.70	172.68	172.92	173.47	0.036159	3.95	3.24	5.25	1.52
unico	404	Max WS	Tr30_D2_	12.24	171.70	172.67	172.90	173.44	0.036151	3.91	3.19	5.21	1.52
unico	404	Max WS	Tr30_D3_	10.60	171.70	172.61	172.82	173.31	0.035936	3.70	2.90	5.03	1.49
unico	404	Max WS	Tr30_D3.5_	9.34	171.70	172.57	172.75	173.20	0.035641	3.53	2.67	4.86	1.47
unico	404	Max WS	Tr30_D5_	6.89	171.70	172.47	172.61	172.97	0.034890	3.15	2.19	4.51	1.42
unico	403.9			Lat Struct									
unico	403.8			Lat Struct									
unico	403	Max WS	Tr30_D0.5_	13.01	170.50	171.98		172.14	0.004222	1.74	7.67	8.83	0.56
unico	403	Max WS	Tr30_D1_	12.89	170.50	171.97		172.13	0.004339	1.75	7.56	8.78	0.57
unico	403	Max WS	Tr30_D1.5_	12.54	170.50	171.93		172.09	0.004734	1.77	7.21	8.66	0.59
unico	403	Max WS	Tr30_D2_	12.24	170.50	171.91		172.07	0.004959	1.78	6.99	8.57	0.60
unico	403	Max WS	Tr30_D3_	10.57	170.50	171.80		171.95	0.005700	1.75	6.08	8.22	0.63
unico	403	Max WS	Tr30_D3.5_	9.34	170.50	171.72		171.87	0.006350	1.73	5.43	7.96	0.65
unico	403	Max WS	Tr30_D5_	6.89	170.50	171.55		171.69	0.008195	1.67	4.14	7.41	0.71
unico	402.9			Lat Struct									
unico	402.85			Lat Struct									
unico	402	Max WS	Tr30_D0.5_	13.34	169.96	171.68	171.71	172.08	0.015549	3.35	5.47	7.44	0.88
unico	402	Max WS	Tr30_D1_	13.18	169.96	171.67	171.70	172.07	0.015764	3.35	5.39	7.39	0.88
unico	402	Max WS	Tr30_D1.5_	12.71	169.96	171.63	171.68	172.05	0.016379	3.37	5.16	7.23	0.90
unico	402	Max WS	Tr30_D2_	12.30	169.96	171.60	171.66	172.03	0.017374	3.41	4.91	7.06	0.92
unico	402	Max WS	Tr30_D3_	10.60	169.96	171.51	171.57	171.93	0.018140	3.33	4.28	6.60	0.93
unico	402	Max WS	Tr30_D3.5_	9.34	169.96	171.44	171.51	171.85	0.018487	3.24	3.83	6.26	0.93
unico	402	Max WS	Tr30_D5_	6.89	169.96	171.29	171.36	171.66	0.018914	3.01	2.95	5.52	0.92
unico	401.8	Max WS	Tr30_D0.5_	14.35	169.51	171.58	171.30	171.77	0.006050	2.41	8.40	9.07	0.57
unico	401.8	Max WS	Tr30_D1_	14.12	169.51	171.57	171.29	171.76	0.006055	2.40	8.30	9.06	0.57
unico	401.8	Max WS	Tr30_D1.5_	13.39	169.51	171.53	171.26	171.72	0.006038	2.36	7.98	8.96	0.56
unico	401.8	Max WS	Tr30_D2_	12.67	169.51	171.50	171.23	171.68	0.005987	2.32	7.67	8.78	0.56
unico	401.8	Max WS	Tr30_D3_	10.60	169.51	171.39	171.12	171.55	0.005842	2.20	6.72	8.23	0.55
unico	401.8	Max WS	Tr30_D3.5_	9.34	169.51	171.31	171.06	171.47	0.005849	2.13	6.08	7.84	0.54
unico	401.8	Max WS	Tr30_D5_	6.89	169.51	171.13	170.91	171.27	0.005862	1.96	4.76	6.96	0.53
unico	401.5			Inl Struct									
unico	401.2	Max WS	Tr30_D0.5_	13.94	165.96	167.72	167.74	168.11	0.014483	3.30	5.83	7.68	0.85
unico	401.2	Max WS	Tr30_D1_	14.11	165.96	167.74	167.74	168.12	0.014172	3.28	5.94	7.75	0.84
unico	401.2	Max WS	Tr30_D1.5_	2.00	165.96	167.98		167.98	0.000138	0.36	7.91	8.92	0.09
unico	401.2	Max WS	Tr30_D2_	2.00	165.96	168.12		168.13	0.000089	0.30	9.26	9.18	0.07

HEC-RAS River: Borro Grotte Reach: unico Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	401.2	Max WS	Tr30_D3_	2.00	165.96	168.33		168.33	0.000053	0.25	11.16	9.40	0.05
unico	401.2	Max WS	Tr30_D3.5_	2.00	165.96	168.38		168.38	0.000047	0.24	11.68	9.46	0.05
unico	401.2	Max WS	Tr30_D5_	2.00	165.96	168.48		168.48	0.000037	0.22	12.60	9.50	0.05
unico	401.16			Lat Struct									
unico	401.15			Lat Struct									
unico	401	Max WS	Tr30_D0.5_	2.00	165.46	167.32		167.33	0.000219	0.42	6.59	8.15	0.11
unico	401	Max WS	Tr30_D1_	2.00	165.46	167.74		167.74	0.000066	0.27	10.31	9.30	0.06
unico	401	Max WS	Tr30_D1.5_	2.00	165.46	167.98		167.98	0.000038	0.22	12.55	9.50	0.05
unico	401	Max WS	Tr30_D2_	2.00	165.46	168.12		168.13	0.000028	0.20	13.97	9.50	0.04
unico	401	Max WS	Tr30_D3_	2.00	165.46	168.33		168.33	0.000019	0.17	15.90	9.50	0.03
unico	401	Max WS	Tr30_D3.5_	2.00	165.46	168.38		168.38	0.000017	0.17	16.42	9.50	0.03
unico	401	Max WS	Tr30_D5_	2.00	165.46	168.48		168.48	0.000015	0.16	17.35	9.50	0.03



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DELLE GROTTI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	408	Max WS	Tr200_D0.5	31.21	176.40	178.30	178.51	179.24	0.018069	4.32	7.64	7.02	1.15
unico	408	Max WS	Tr200_D1	29.66	176.40	178.26	178.46	179.16	0.018044	4.24	7.36	6.86	1.14
unico	408	Max WS	Tr200_D1.5	25.19	176.40	178.14	178.29	178.94	0.018107	3.99	6.53	6.37	1.13
unico	408	Max WS	Tr200_D2	20.95	176.40	178.01	178.12	178.71	0.018062	3.71	5.75	5.86	1.11
unico	408	Max WS	Tr200_D3	15.63	176.40	177.82	177.88	178.38	0.018260	3.32	4.72	5.13	1.08
unico	408	Max WS	Tr200_D3.5	13.86	176.40	177.75	177.80	178.27	0.018471	3.19	4.34	4.88	1.07
unico	408	Max WS	Tr200_D5	10.46	176.40	177.58	177.61	178.02	0.018247	2.94	3.56	4.45	1.05
unico	407	Max WS	Tr200_D0.5	31.19	174.60	176.61	176.71	177.40	0.013894	3.98	8.43	7.45	1.02
unico	407	Max WS	Tr200_D1	29.62	174.60	176.57	176.66	177.33	0.013765	3.89	8.14	7.29	1.01
unico	407	Max WS	Tr200_D1.5	25.17	174.60	176.44	176.49	177.11	0.013793	3.66	7.21	6.77	1.00
unico	407	Max WS	Tr200_D2	20.94	174.60	176.30	176.32	176.89	0.013727	3.41	6.32	6.24	0.98
unico	407	Max WS	Tr200_D3	15.63	174.60	176.11	176.08	176.58	0.013625	3.04	5.19	5.47	0.95
unico	407	Max WS	Tr200_D3.5	13.86	174.60	176.03	176.00	176.46	0.013848	2.91	4.78	5.17	0.94
unico	407	Max WS	Tr200_D5	10.46	174.60	175.80	175.81	176.22	0.016979	2.86	3.65	4.50	1.01
unico	406.95			Lat Struct									
unico	406.9			Lat Struct									
unico	406.2			Lat Struct									
unico	406.15			Lat Struct									
unico	406	Max WS	Tr200_D0.5	28.23	173.30	176.37		176.57	0.002770	2.30	17.21	13.30	0.47
unico	406	Max WS	Tr200_D1	26.87	173.30	176.34		176.53	0.002630	2.23	16.89	13.30	0.46
unico	406	Max WS	Tr200_D1.5	23.03	173.30	176.27		176.43	0.002247	2.02	15.92	13.30	0.42
unico	406	Max WS	Tr200_D2	19.39	173.30	176.19		176.32	0.001901	1.81	14.83	13.30	0.39
unico	406	Max WS	Tr200_D3	14.89	173.30	176.04		176.15	0.001556	1.57	12.93	13.30	0.35
unico	406	Max WS	Tr200_D3.5	13.42	173.30	175.97		176.06	0.001518	1.51	11.90	12.96	0.34
unico	406	Max WS	Tr200_D5	10.46	173.30	175.16		175.44	0.007258	2.36	4.81	5.59	0.68
unico	405	Max WS	Tr200_D0.5	14.29	171.85	176.59	173.51	176.61	0.000159	0.72	24.22	9.00	0.11
unico	405	Max WS	Tr200_D1	14.10	171.85	176.55	173.50	176.57	0.000161	0.72	23.85	9.00	0.11
unico	405												

HEC-RAS River: Borro Grotte Reach: unico Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	401.15			Lat Struct									
unico	401	Max WS	Tr200_D0.5	2.00	165.46	167.93		167.93	0.000042	0.23	12.11	9.50	0.05
unico	401	Max WS	Tr200_D1	2.00	165.46	168.45		168.45	0.000016	0.16	17.04	9.50	0.03
unico	401	Max WS	Tr200_D1.5	2.00	165.46	168.75		168.75	0.000010	0.14	19.94	9.50	0.03
unico	401	Max WS	Tr200_D2	2.00	165.46	168.96		168.96	0.000008	0.13	21.92	9.50	0.02
unico	401	Max WS	Tr200_D3	2.00	165.46	169.23		169.23	0.000006	0.11	24.49	9.50	0.02
unico	401	Max WS	Tr200_D3.5	2.00	165.46	169.32		169.32	0.000005	0.11	25.32	9.50	0.02
unico	401	Max WS	Tr200_D5	2.00	165.46	169.44		169.44	0.000004	0.10	26.50	9.50	0.02



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

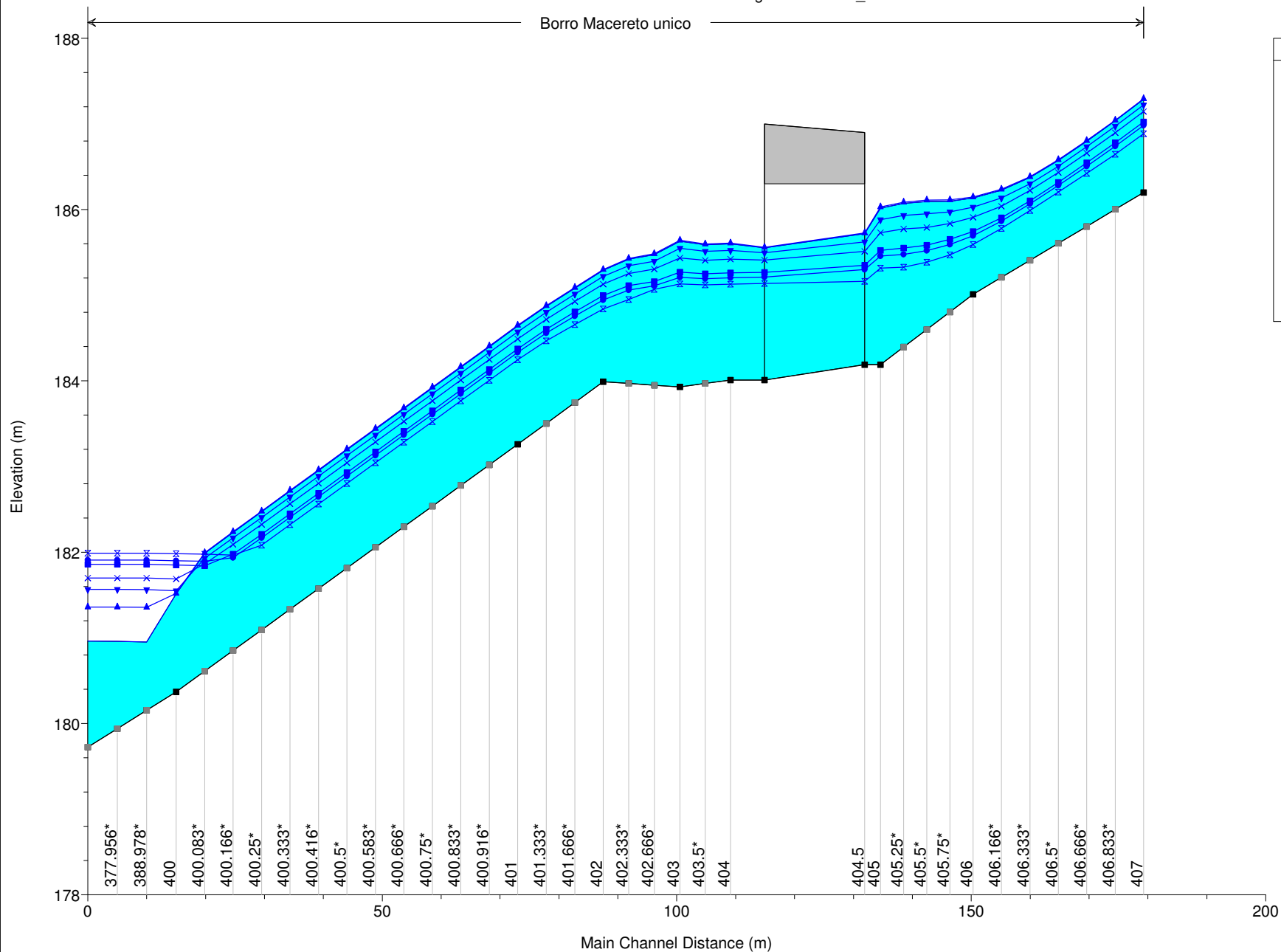
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_
Geom: Pesa Storage Confluenza_

Borro Macereto unico



Legend	
WS Max WS - Tr30_D5_	✕
WS Max WS - Tr30_D3.5_	●
WS Max WS - Tr30_D3_	■
WS Max WS - Tr30_D2_	✕
WS Max WS - Tr30_D1.5_	▼
WS Max WS - Tr30_D1_	▲
WS Max WS - Tr30_D0.5_	■
Ground	■



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

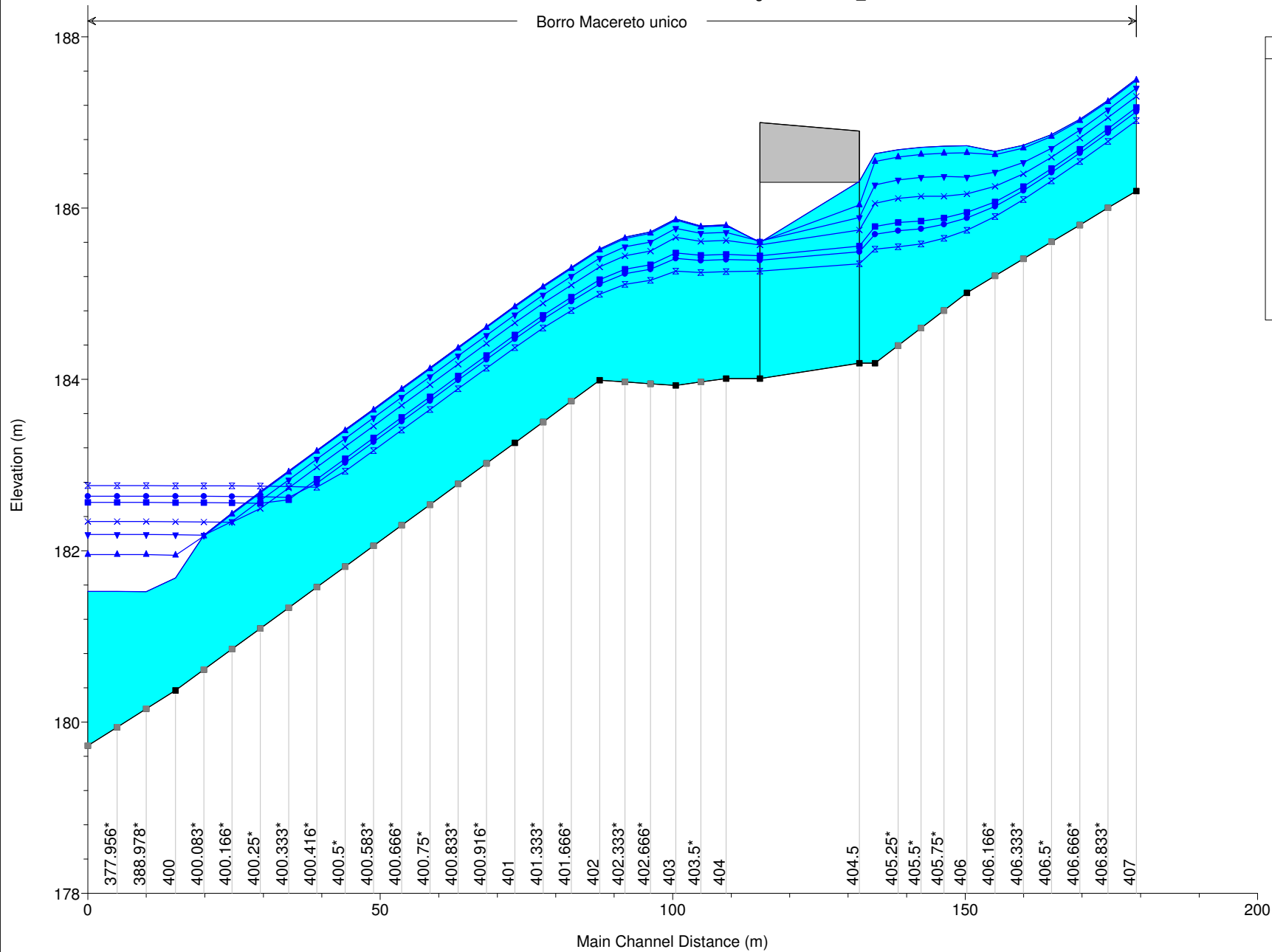
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_
Geom: Pesa Storage Confluenza_

Borro Macereto unico





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

MODELLAZIONE PER TR=30 anni

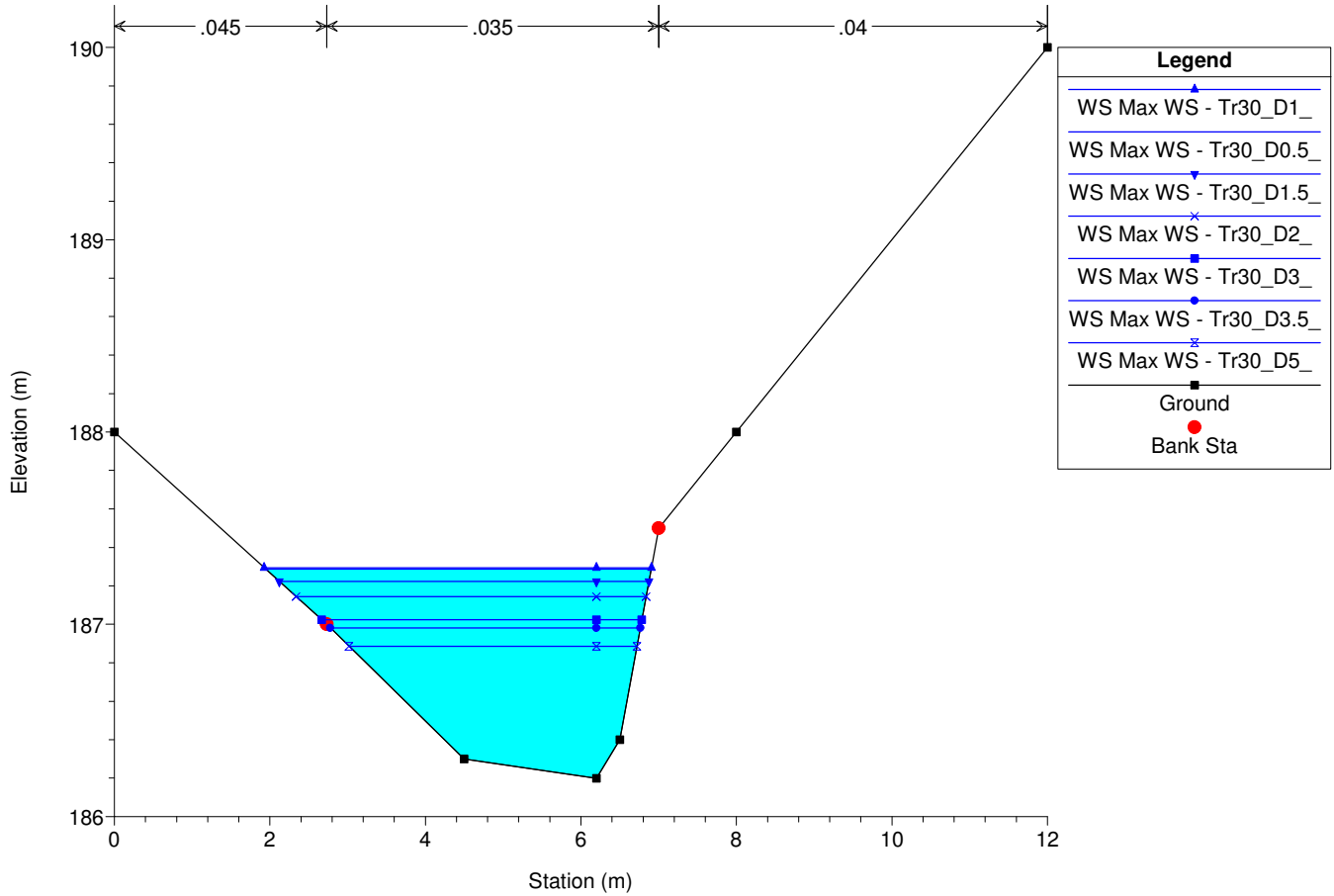
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

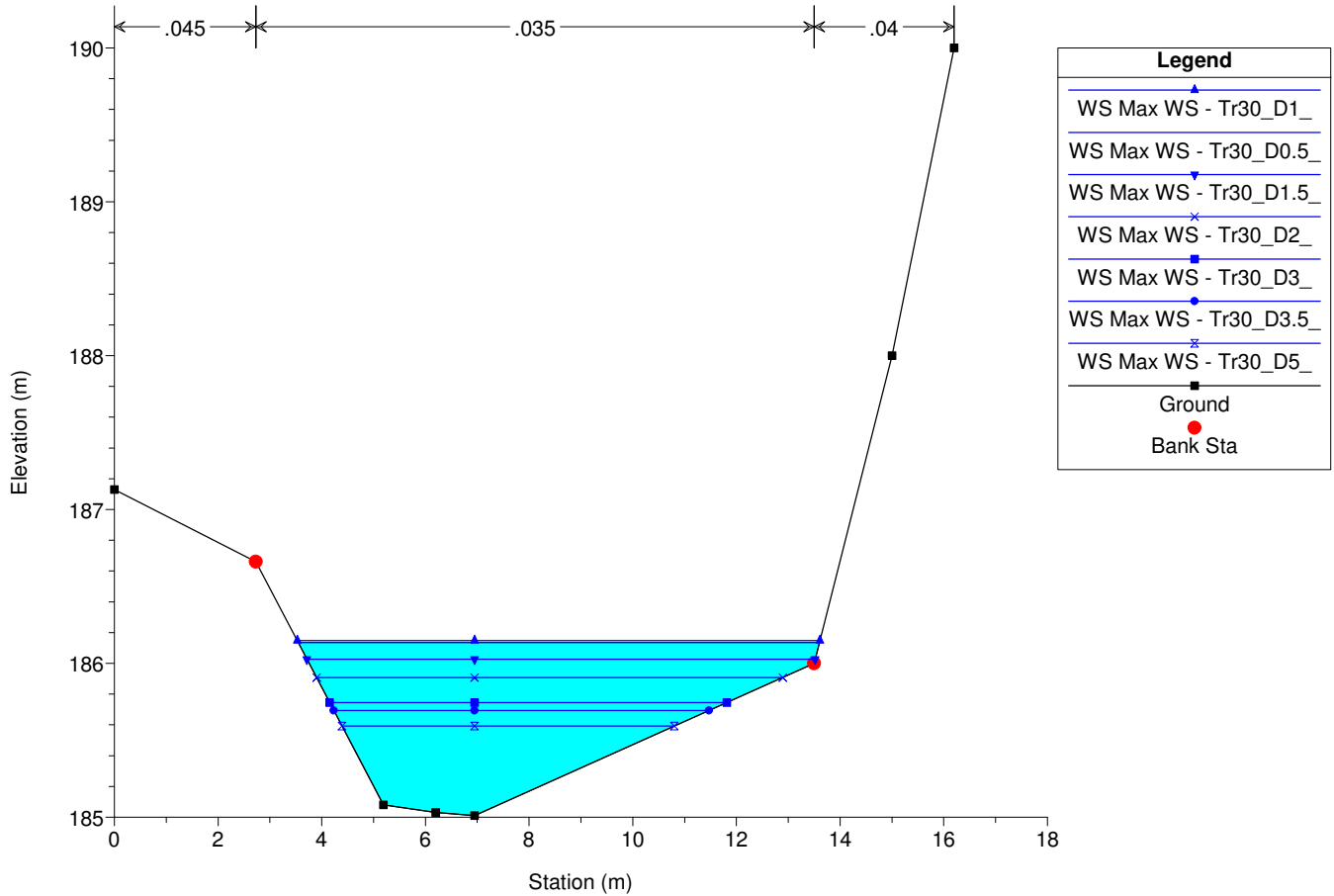
River = Borro Macereto Reach = unico RS = 407 MA7 - IPOTIZZATA



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

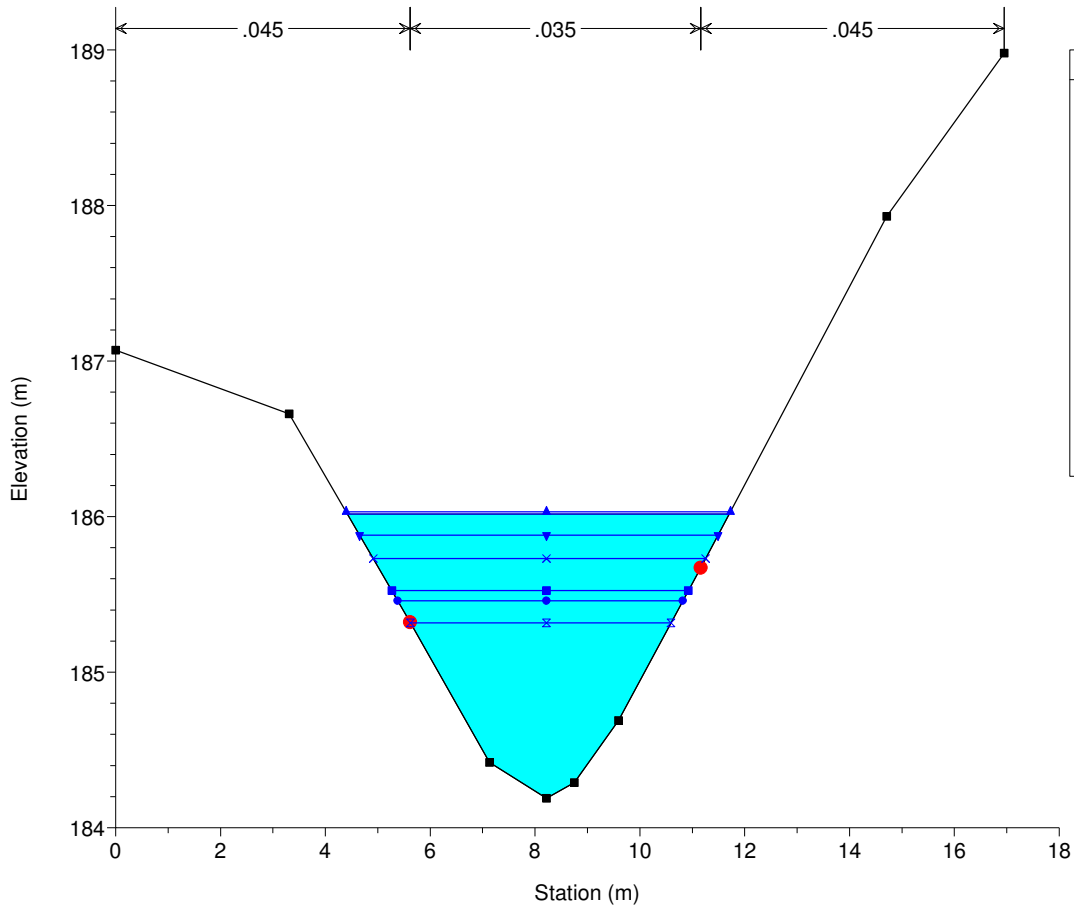
River = Borro Macereto Reach = unico RS = 406 MA6 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

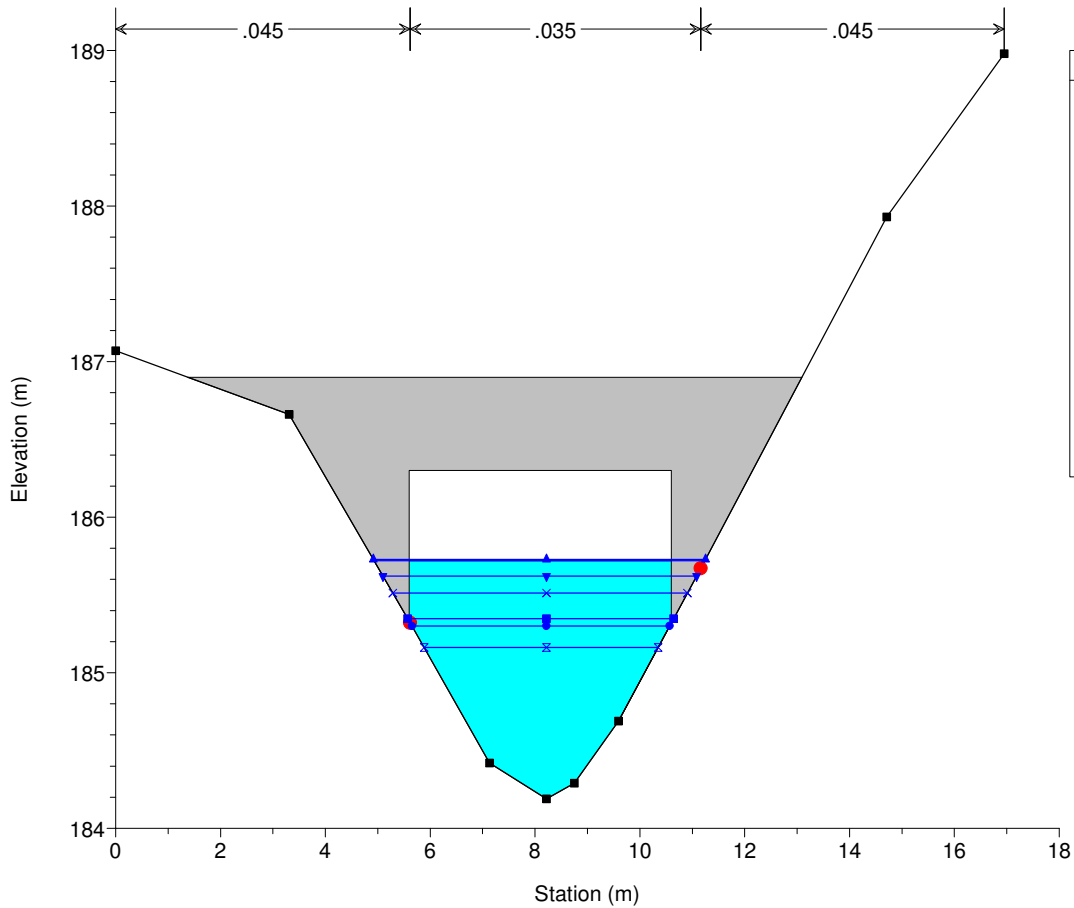
River = Borro Macereto Reach = unico RS = 405 MA5 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

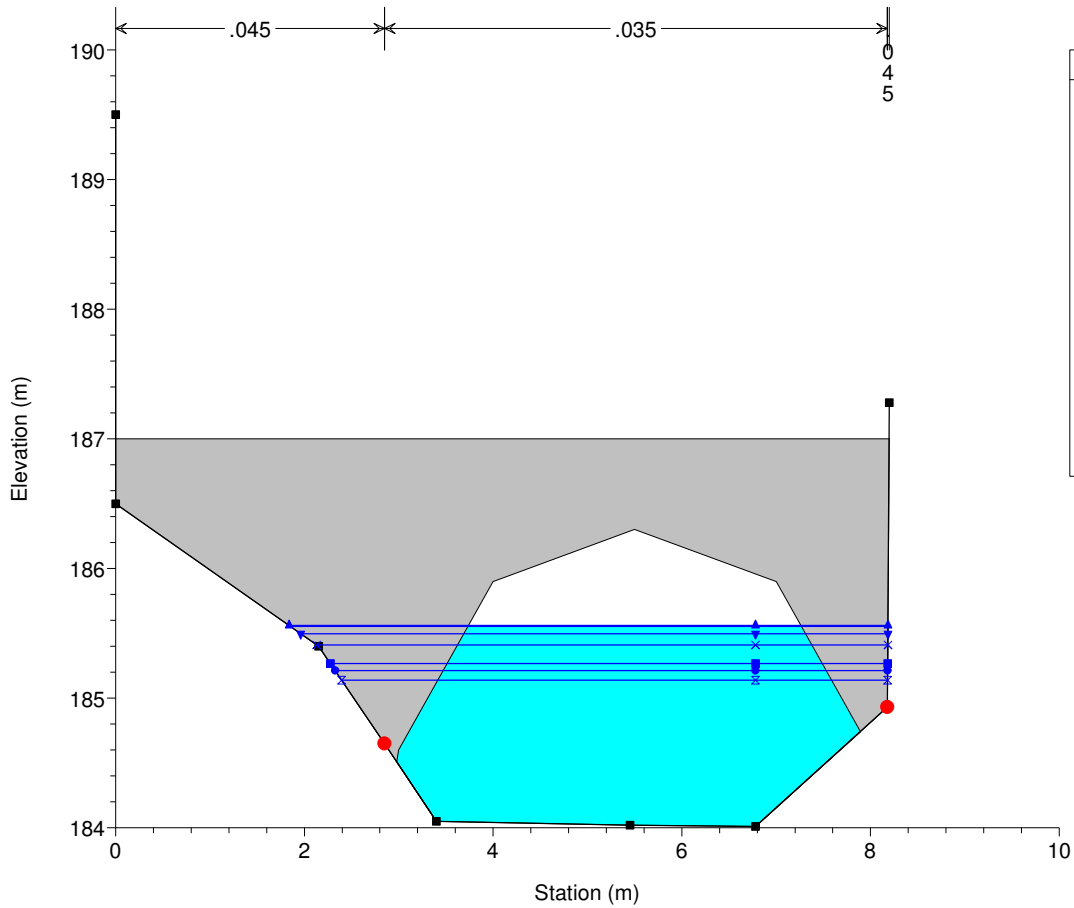
River = Borro Macereto Reach = unico RS = 404.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

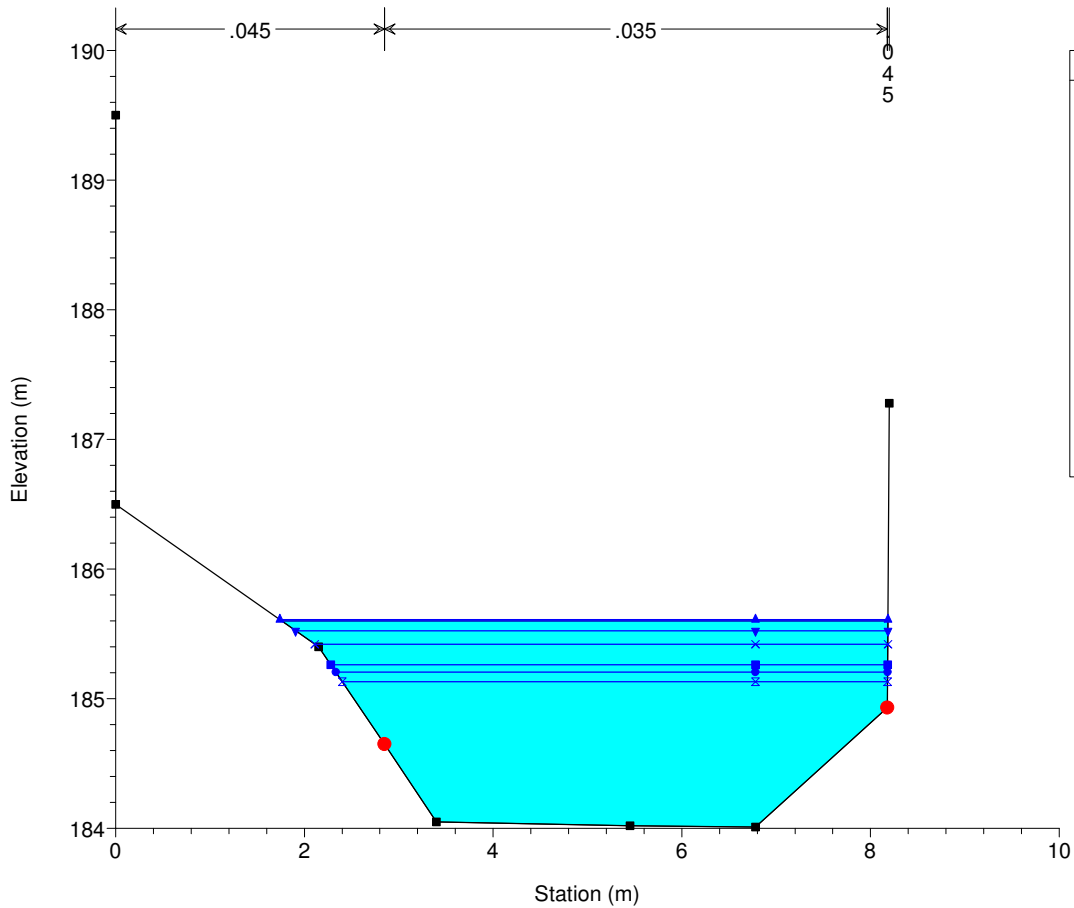
River = Borro Macereto Reach = unico RS = 404.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

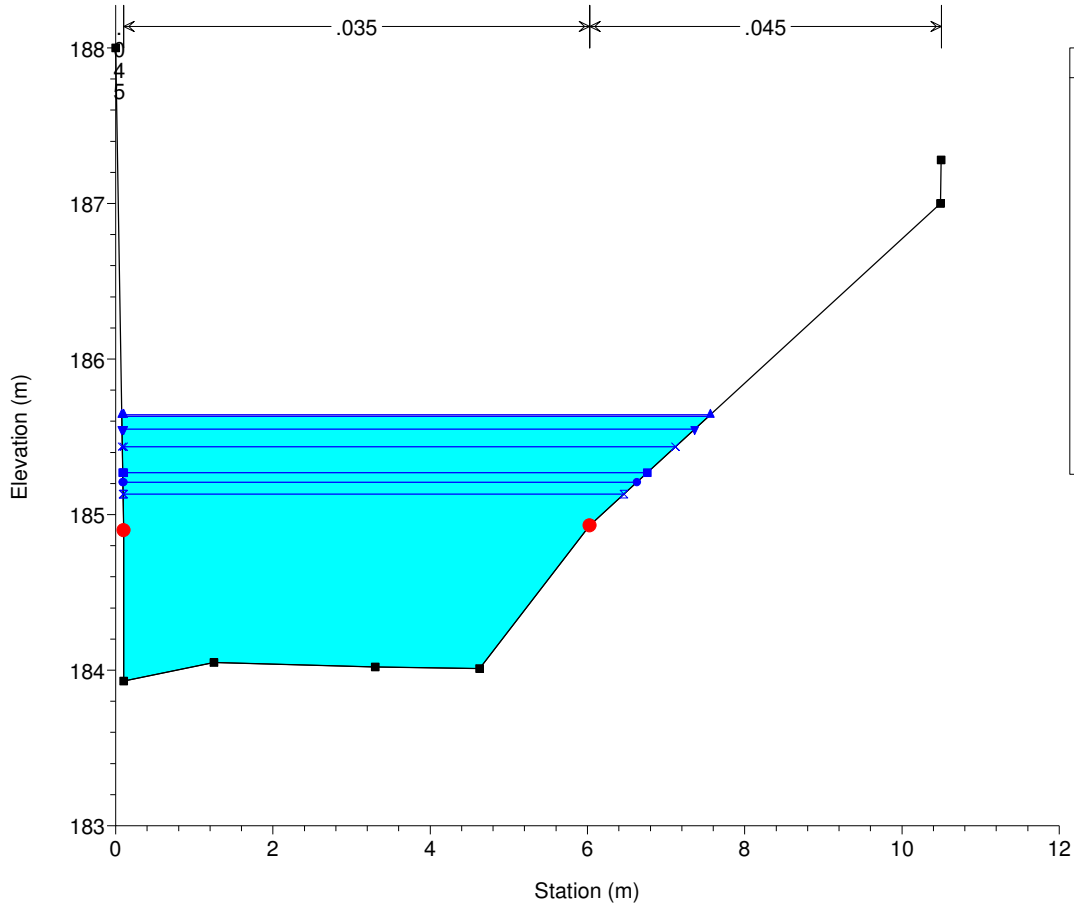
River = Borro Macereto Reach = unico RS = 404 MA4 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

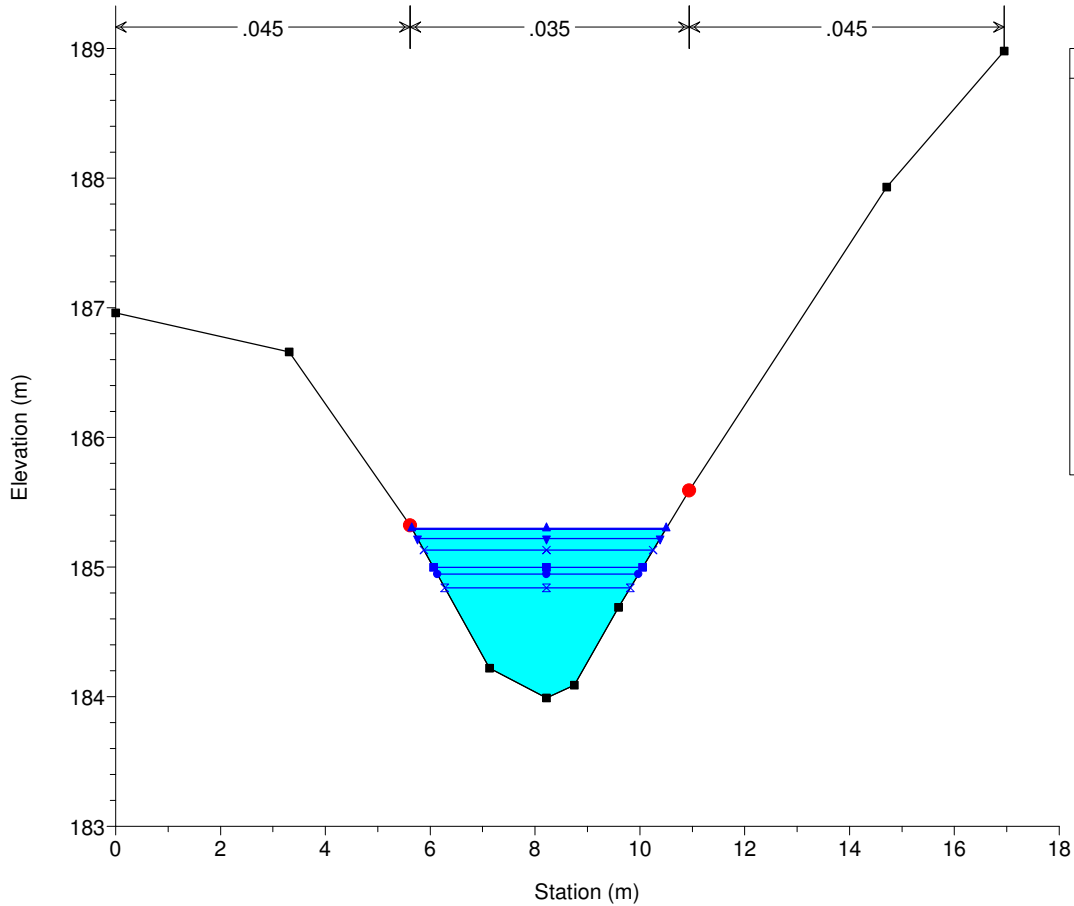
River = Borro Macereto Reach = unico RS = 403 MA3 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

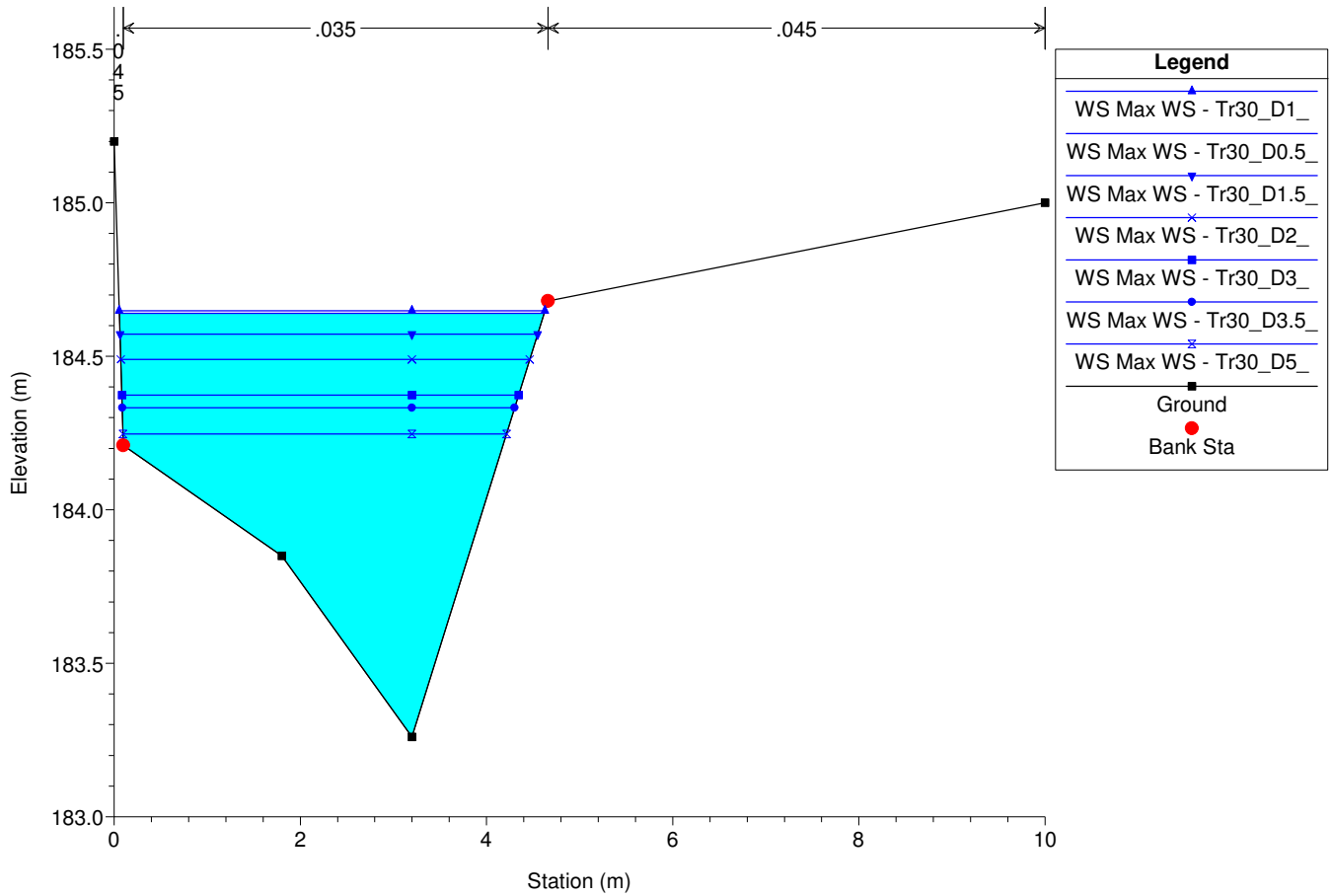
River = Borro Macereto Reach = unico RS = 402 MA2 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

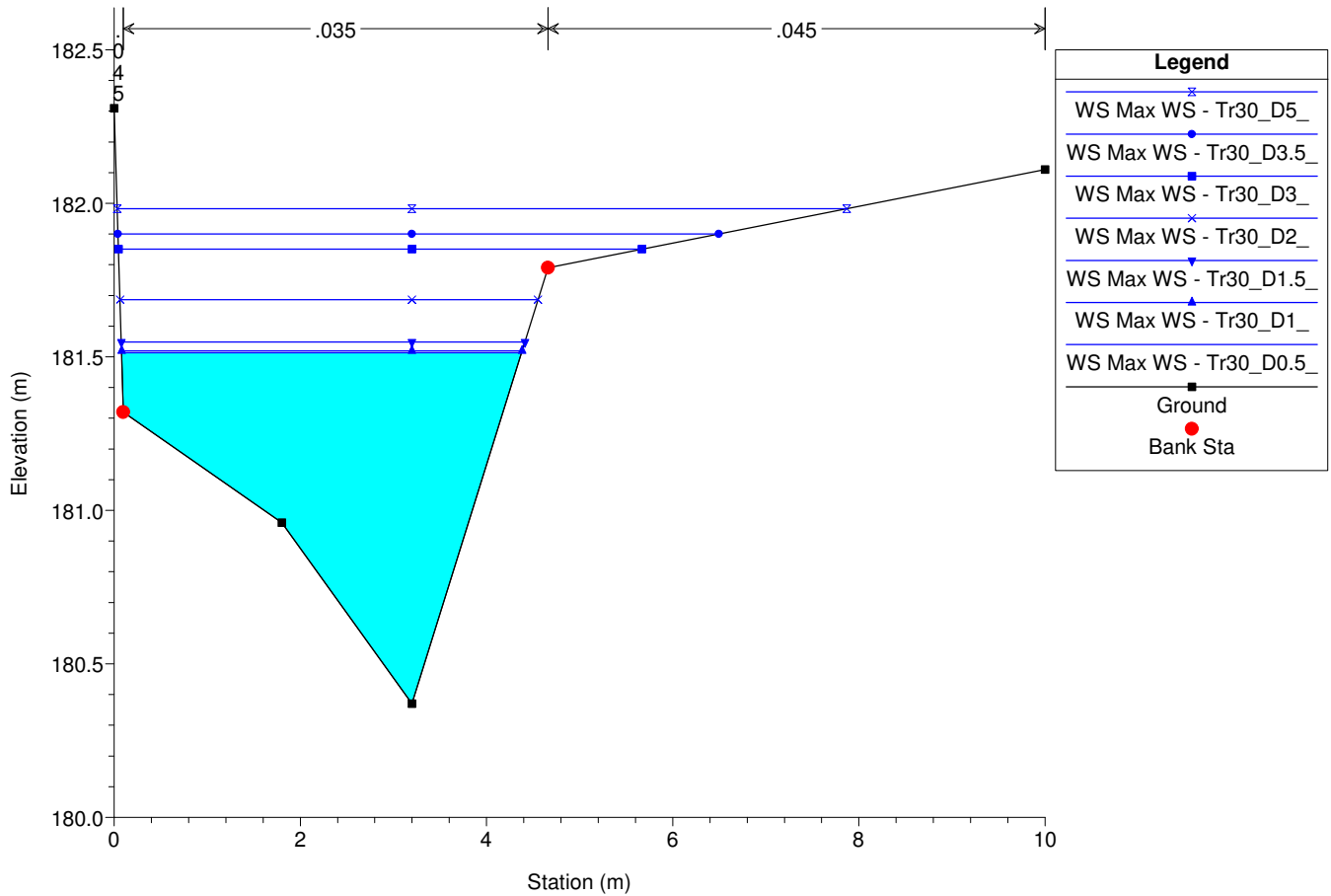
River = Borro Macereto Reach = unico RS = 401 MA1 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

River = Borro Macereto Reach = unico RS = 400 MA0 - IPOTIZZATA





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

MODELLAZIONE PER TR=200 anni

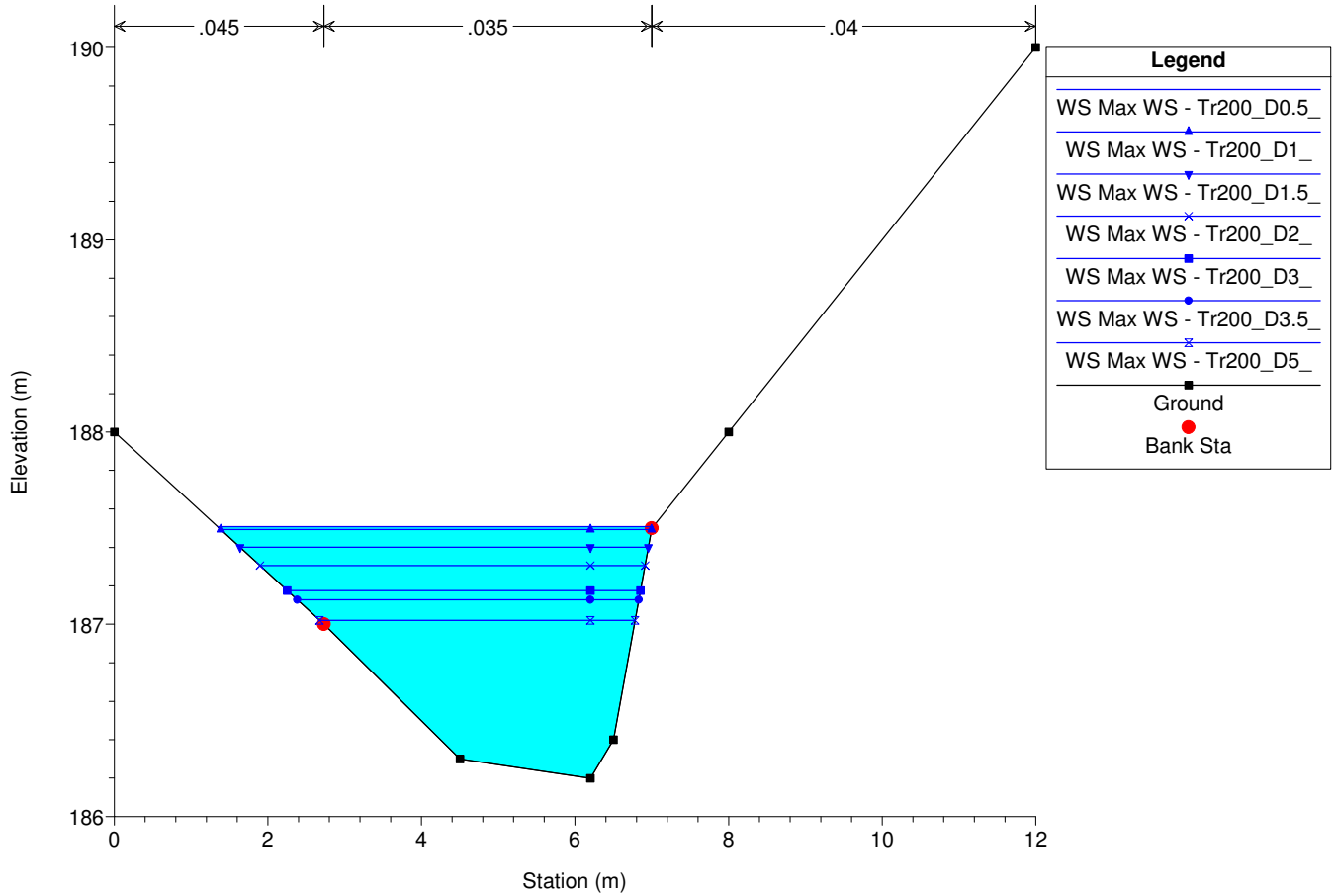
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

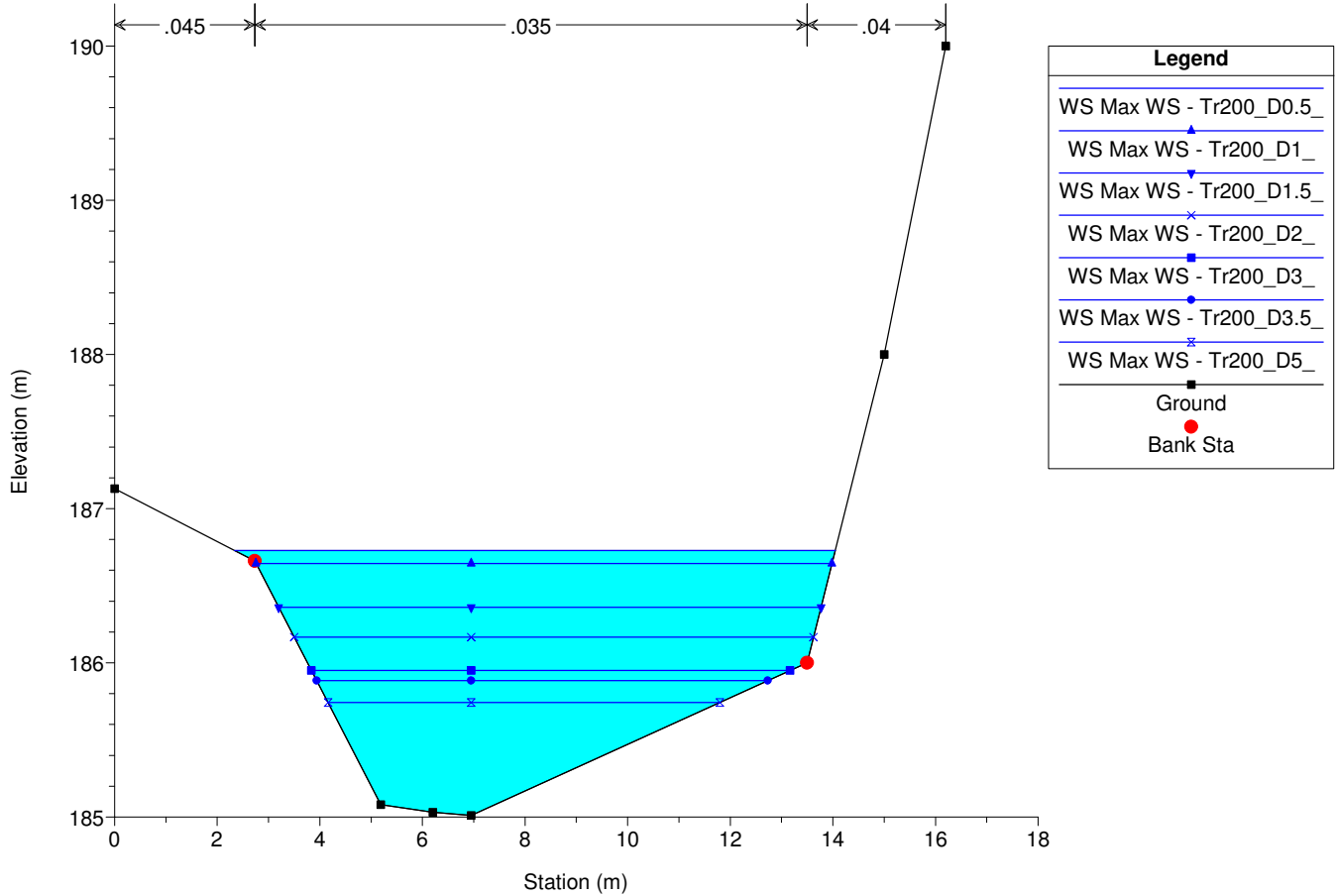
River = Borro Macereto Reach = unico RS = 407 MA7 - IPOTIZZATA



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

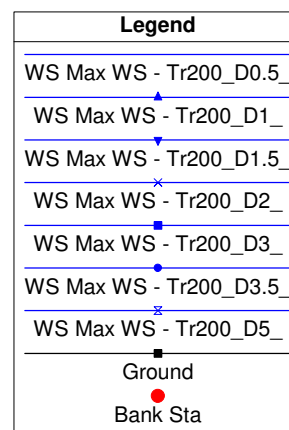
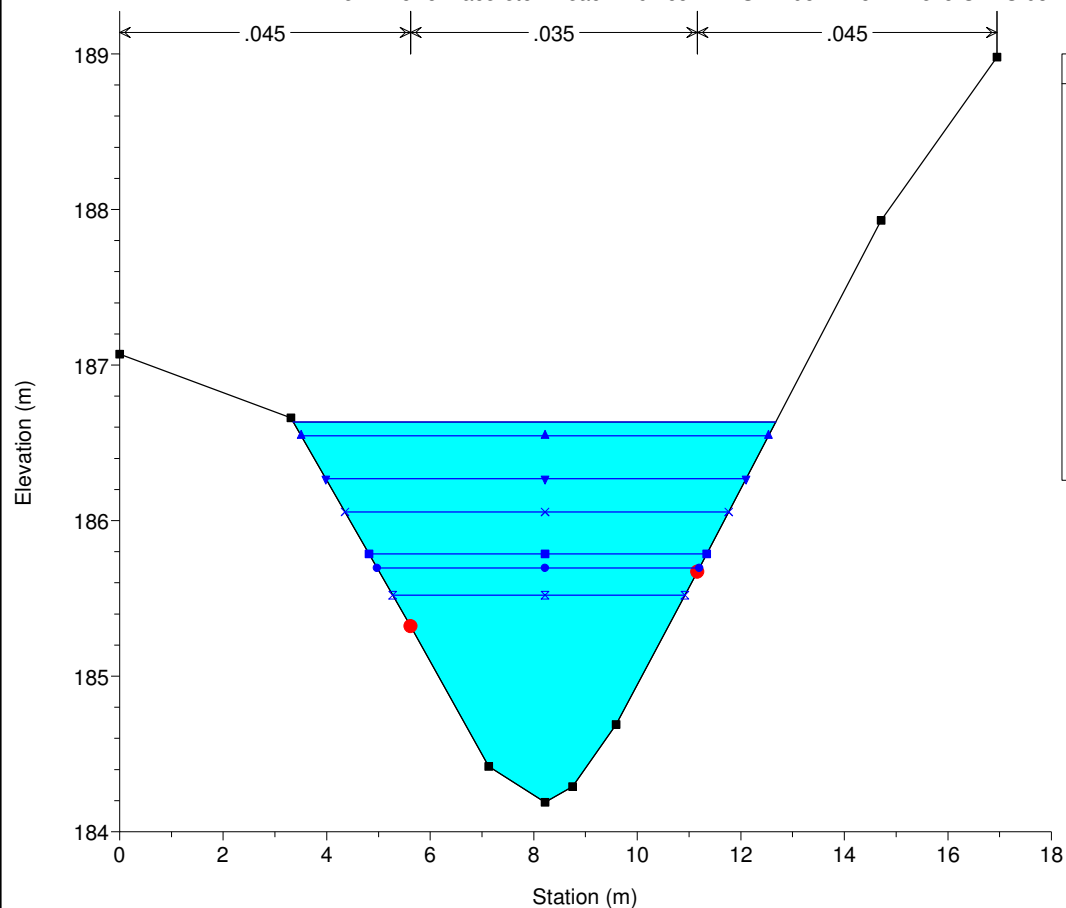
River = Borro Macereto Reach = unico RS = 406 MA6 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

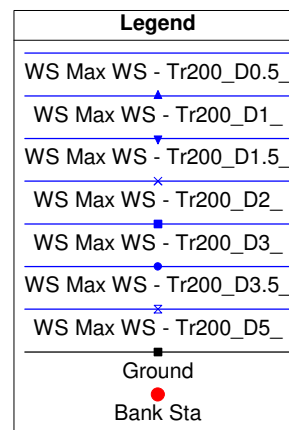
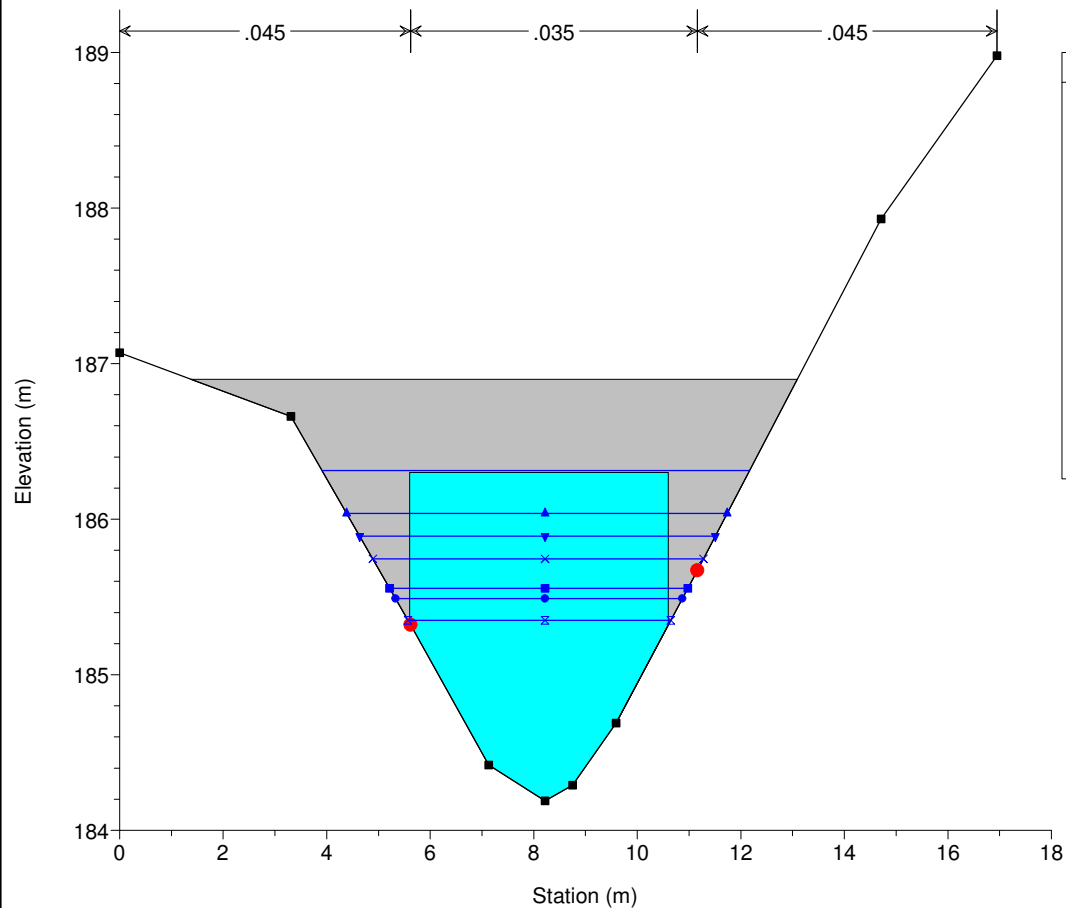
River = Borro Macereto Reach = unico RS = 405 MA5 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

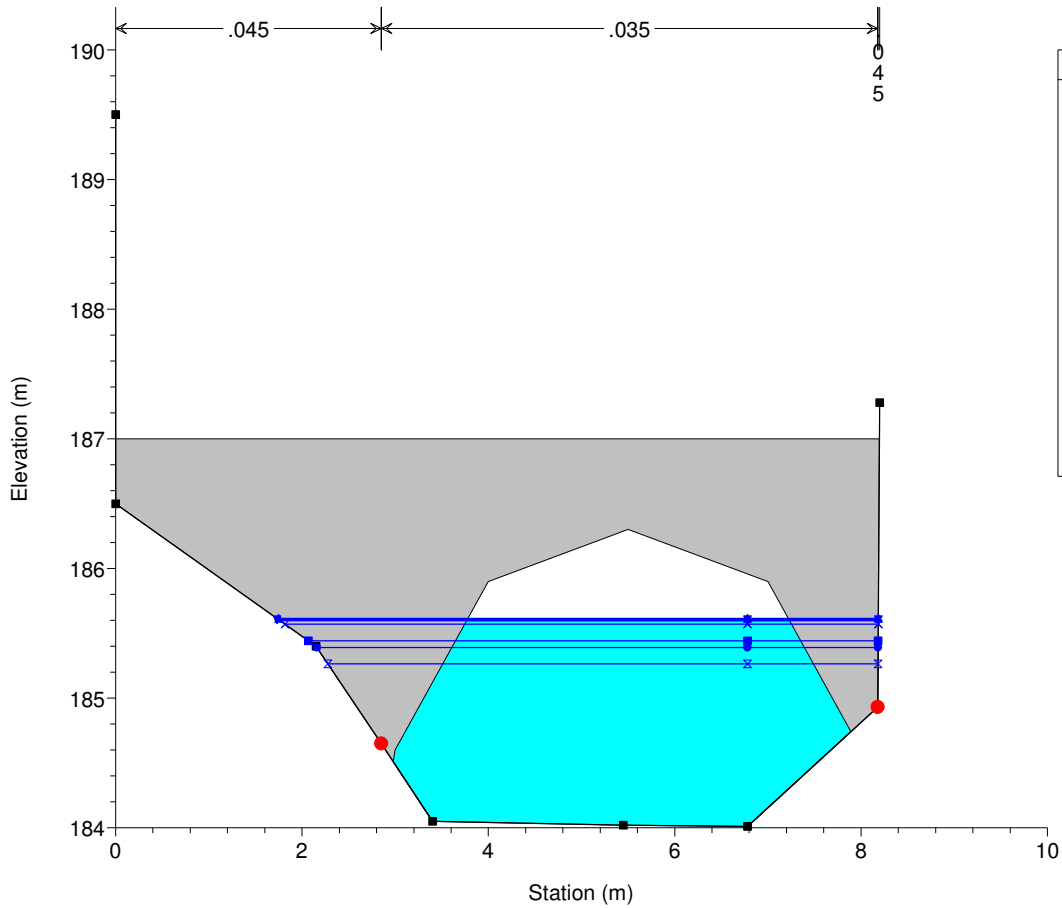
River = Borro Macereto Reach = unico RS = 404.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

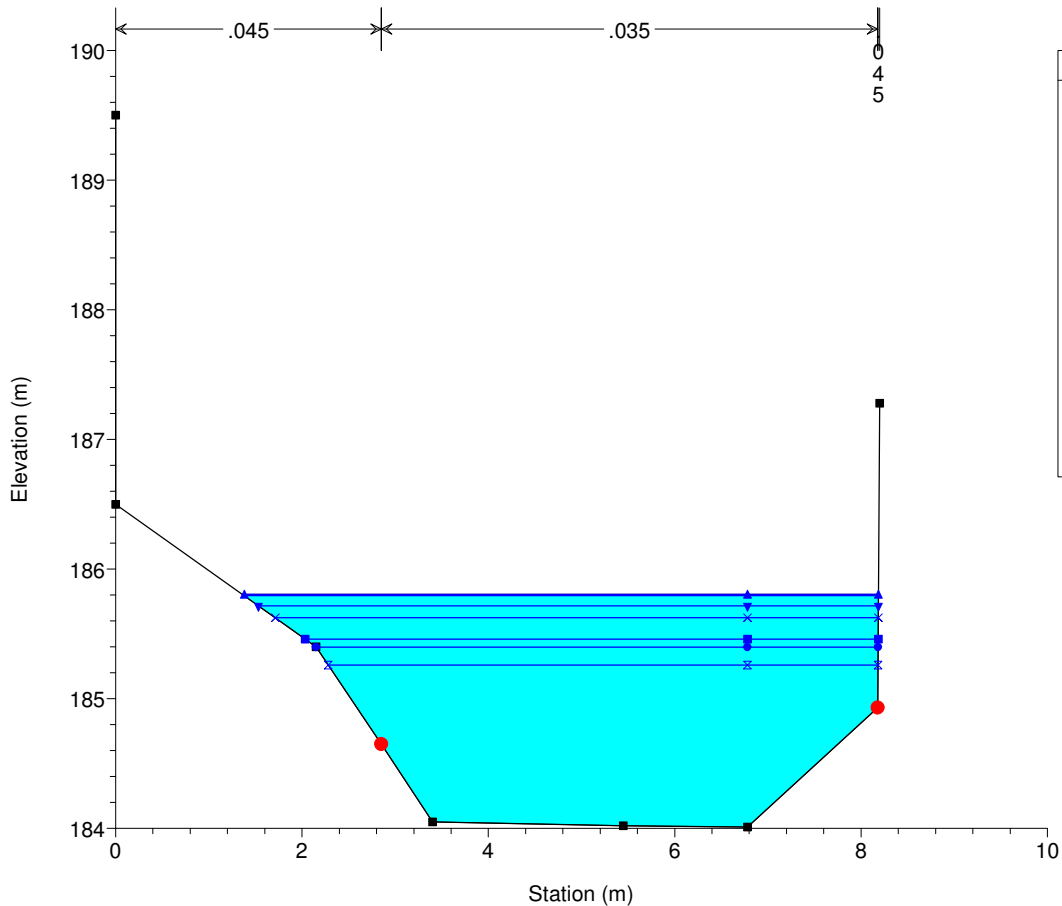
River = Borro Macereto Reach = unico RS = 404.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

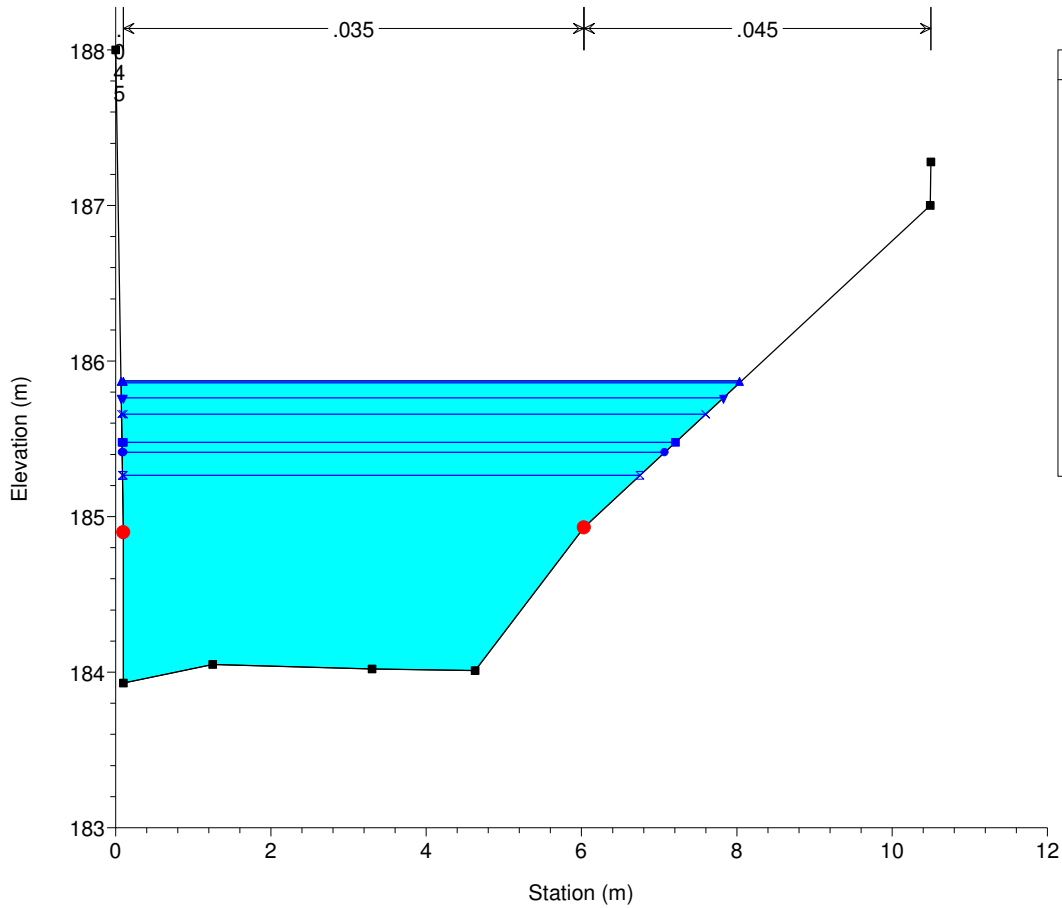
River = Borro Macereto Reach = unico RS = 404 MA4 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

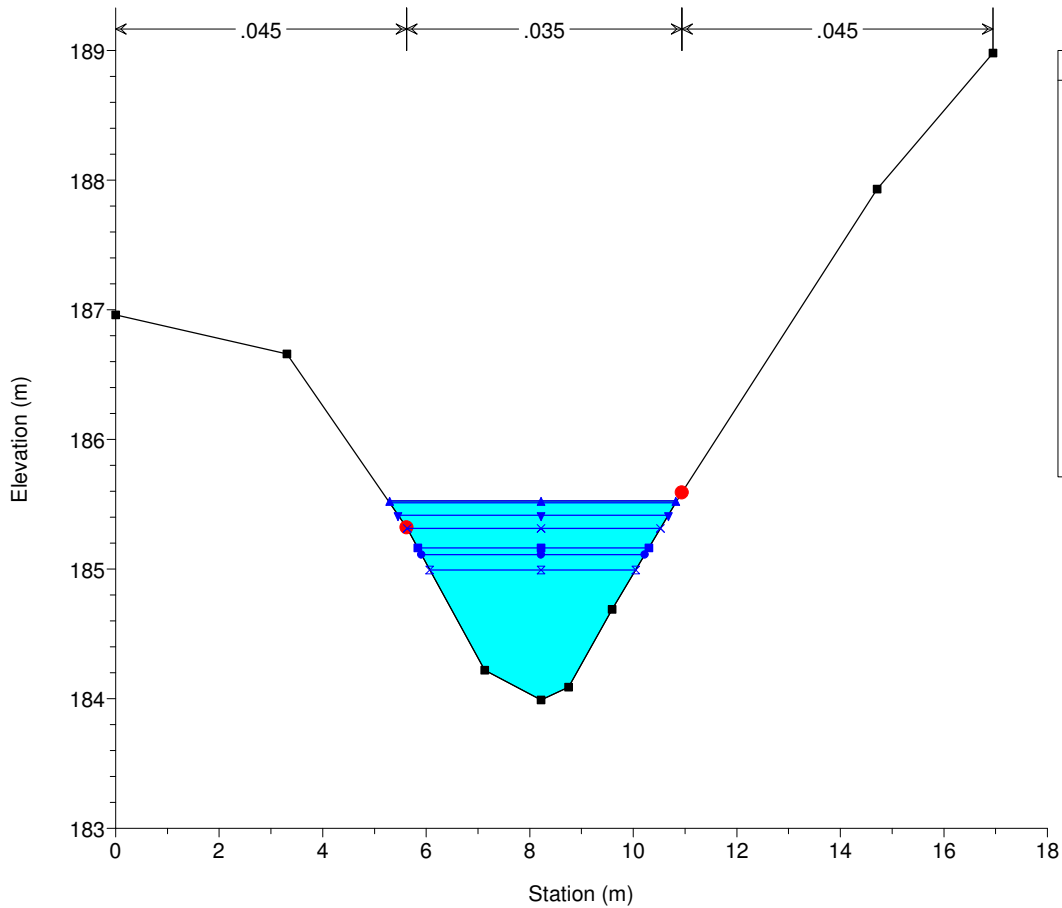
River = Borro Macereto Reach = unico RS = 403 MA3 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

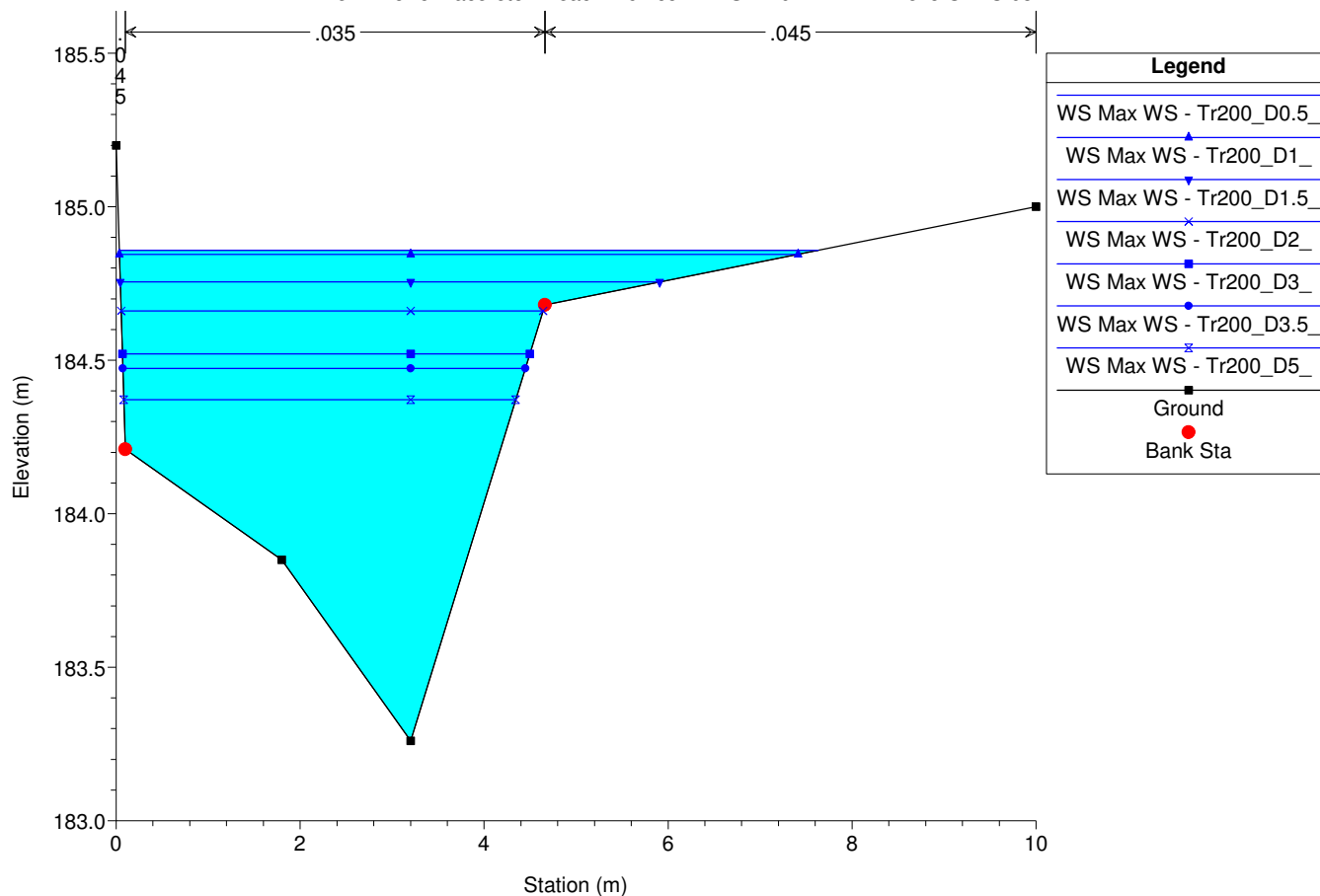
River = Borro Macereto Reach = unico RS = 402 MA2 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

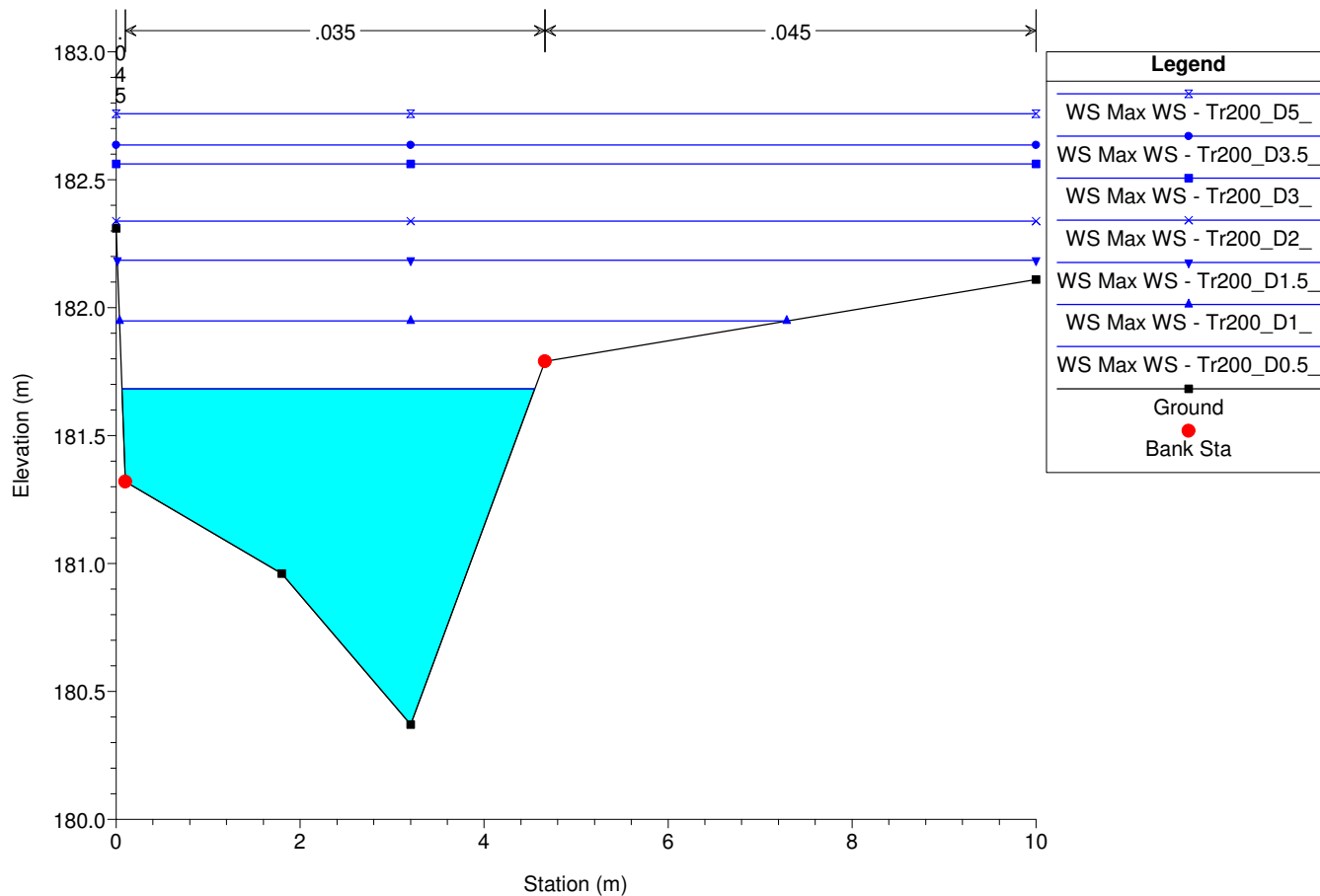
River = Borro Macereto Reach = unico RS = 401 MA1 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

River = Borro Macereto Reach = unico RS = 400 MA0 - IPOTIZZATA





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	407	Max WS	Tr30_D0.5_	17.39	186.20	187.29	187.71	188.61	0.053538	5.12	3.48	4.96	1.82
unico	407	Max WS	Tr30_D1_	17.65	186.20	187.29	187.73	188.63	0.053649	5.15	3.51	4.98	1.82
unico	407	Max WS	Tr30_D1.5_	15.14	186.20	187.22	187.61	188.42	0.052778	4.86	3.17	4.75	1.79
unico	407	Max WS	Tr30_D2_	12.62	186.20	187.14	187.48	188.19	0.052089	4.54	2.81	4.50	1.76
unico	407	Max WS	Tr30_D3_	9.38	186.20	187.02	187.29	187.88	0.053444	4.11	2.28	4.12	1.75
unico	407	Max WS	Tr30_D3.5_	8.34	186.20	186.98	187.23	187.78	0.053324	3.95	2.11	3.99	1.73
unico	407	Max WS	Tr30_D5_	6.34	186.20	186.89	187.09	187.56	0.051913	3.63	1.75	3.70	1.69
unico	406	Max WS	Tr30_D0.5_	17.38	185.01	186.14	186.12	186.46	0.013134	2.51	6.94	10.06	0.96
unico	406	Max WS	Tr30_D1_	17.64	185.01	186.15	186.12	186.47	0.012863	2.50	7.05	10.08	0.95
unico	406	Max WS	Tr30_D1.5_	15.13	185.01	186.03	186.05	186.37	0.016991	2.58	5.86	9.81	1.07
unico	406	Max WS	Tr30_D2_	12.62	185.01	185.91	185.97	186.27	0.021481	2.67	4.73	8.99	1.17
unico	406	Max WS	Tr30_D3_	9.38	185.01	185.75	185.85	186.14	0.029520	2.78	3.37	7.66	1.34
unico	406	Max WS	Tr30_D3.5_	8.34	185.01	185.69	185.80	186.09	0.032275	2.79	2.99	7.24	1.38
unico	406	Max WS	Tr30_D5_	6.34	185.01	185.59	185.71	185.98	0.038168	2.76	2.30	6.41	1.47
unico	405	Max WS	Tr30_D0.5_	17.37	184.19	186.02	185.74	186.30	0.005769	2.38	7.64	7.28	0.67
unico	405	Max WS	Tr30_D1_	17.64	184.19	186.03	185.75	186.32	0.005710	2.39	7.75	7.33	0.67
unico	405	Max WS	Tr30_D1.5_	15.13	184.19	185.88	185.64	186.16	0.006434	2.34	6.69	6.84	0.70
unico	405	Max WS	Tr30_D2_	12.62	184.19	185.73	185.52	185.99	0.007237	2.26	5.70	6.34	0.72
unico	405	Max WS	Tr30_D3_	9.38	184.19	185.52	185.35	185.75	0.008093	2.12	4.46	5.66	0.74
unico	405	Max WS	Tr30_D3.5_	8.34	184.19	185.46	185.29	185.67	0.008163	2.04	4.10	5.44	0.74
unico	405	Max WS	Tr30_D5_	6.34	184.19	185.32	185.16	185.50	0.008469	1.89	3.36	4.97	0.73
unico	404.5			Bridge									
unico	404	Max WS	Tr30_D0.5_	17.37	184.01	185.60		185.85	0.004407	2.25	8.03	6.43	0.60
unico	404	Max WS	Tr30_D1_	17.64	184.01	185.61		185.87	0.004443	2.27	8.09	6.44	0.61
unico	404	Max WS	Tr30_D1.5_	15.13	184.01	185.52		185.74	0.004032	2.08	7.55	6.28	0.57
unico	404	Max WS	Tr30_D2_	12.62	184.01	185.42		185.60	0.003684	1.88	6.91	6.07	0.54
unico	404	Max WS	Tr30_D3_	9.38	184.01	185.26		185.39	0.003227	1.61	5.96	5.90	0.49
unico	404	Max WS	Tr30_D3.5_	8.34	184.01	185.20		185.32	0.003071	1.51	5.62	5.85	0.48
unico	404	Max WS	Tr30_D5_	6.34	184.01	185.13		185.21	0.002285	1.24	5.19	5.78	0.41
unico	403	Max WS	Tr30_D0.5_	17.36	183.93	185.63		185.81	0.003329	1.91	9.48	7.47	0.50
unico	403	Max WS	Tr30_D1_	17.63	183.93	185.64		185.83	0.003354	1.92	9.55	7.49	0.50
unico	403	Max WS	Tr30_D1.5_	15.13	183.93	185.55		185.71	0.003078	1.77	8.86	7.28	0.47
unico	403	Max WS	Tr30_D2_	12.62	183.93	185.44		185.57	0.002844	1.61	8.06	7.04	0.45
unico	403	Max WS	Tr30_D3_	9.38	183.93	185.27		185.37	0.002502	1.38	6.91	6.67	0.41
unico	403	Max WS	Tr30_D3.5_	8.34	183.93	185.21		185.29	0.002376	1.29	6.51	6.54	0.40
unico	403	Max WS	Tr30_D5_	6.34	183.93	185.13		185.19	0.001759	1.06	6.02	6.37	0.34
unico	402	Max WS	Tr30_D0.5_	17.36	183.99	185.29	185.63	186.37	0.043829	4.60	3.77	4.83	1.66
unico	402	Max WS	Tr30_D1_	17.63	183.99	185.30	185.64	186.39	0.043949	4.63	3.81	4.86	1.67
unico	402	Max WS	Tr30_D1.5_	15.13	183.99	185.22	185.53	186.21	0.042837	4.41	3.43	4.63	1.63
unico	402	Max WS	Tr30_D2_	12.62	183.99	185.13	185.41	186.01	0.041638	4.16	3.03	4.37	1.60
unico	402	Max WS	Tr30_D3_	9.38	183.99	185.00	185.23	185.73	0.039834	3.79	2.47	3.99	1.54
unico	402	Max WS	Tr30_D3.5_	8.34	183.99	184.95	185.15	185.63	0.039614	3.67	2.27	3.84	1.52
unico	402	Max WS	Tr30_D5_	6.34	183.99	184.84	185.01	185.42	0.037940	3.36	1.88	3.54	1.47
unico	401	Max WS	Tr30_D0.5_	17.36	183.26	184.64	185.10	185.87	0.049888	4.91	3.54	4.56	1.77
unico	401	Max WS	Tr30_D1_	17.63	183.26	184.65	185.11	185.89	0.049837	4.94	3.58	4.57	1.77
unico	401	Max WS	Tr30_D1.5_	15.13	183.26	184.57	185.01	185.69	0.049903	4.68	3.24	4.49	1.75
unico	401	Max WS	Tr30_D2_	12.62	183.26	184.49	184.82	185.48	0.050008	4.40	2.87	4.39	1.73
unico	401	Max WS	Tr30_D3_	9.38	183.26	184.37	184.61	185.17	0.050013	3.96	2.37	4.26	1.69
unico	401	Max WS	Tr30_D3.5_	8.34	183.26	184.33	184.55	185.07	0.050155	3.80	2.20	4.22	1.68
unico	401	Max WS	Tr30_D5_	6.34	183.26	184.25	184.42	184.85	0.050412	3.45	1.84	4.12	1.65
unico	400.96			Lat Struct									
unico	400.95			Lat Struct									
unico	400.3			Lat Struct									
unico	400.28			Lat Struct									
unico	400	Max WS	Tr30_D0.5_	17.36	180.37	181.51	182.21	183.98	0.145850	6.96	2.50	4.30	2.91
unico	400	Max WS	Tr30_D1_	17.63	180.37	181.52	182.22	184.01	0.145919	7.00	2.52	4.30	2.91
unico	400	Max WS	Tr30_D1.5_	2.00	180.37	181.55		181.58	0.001612	0.76	2.65	4.34	0.31
unico	400	Max WS	Tr30_D2_	2.00	180.37	181.69		181.71	0.000855	0.62	3.26	4.49	0.23
unico	400	Max WS	Tr30_D3_	2.00	180.37	181.85		181.86	0.000447	0.50	4.04	5.62	0.17
unico	400	Max WS	Tr30_D3.5_	2.00	180.37	181.90		181.91	0.000370	0.47	4.34	6.45	0.16
unico	400	Max WS	Tr30_D5_	2.00	180.37	181.98		181.99	0.000274	0.43	4.92	7.84	0.14



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO MACERETO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

HEC-RAS River: Borro Macereto Reach: unico Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	407	Max WS	Tr200_D0.5	26.41	186.20	187.51	188.09	189.29	0.056099	5.98	4.65	5.67	1.90
unico	407	Max WS	Tr200_D1_	25.75	186.20	187.49	188.07	189.24	0.056050	5.92	4.57	5.61	1.90
unico	407	Max WS	Tr200_D1.5	21.75	186.20	187.40	187.89	188.95	0.054827	5.56	4.06	5.32	1.86
unico	407	Max WS	Tr200_D2_	18.07	186.20	187.31	187.74	188.67	0.053802	5.20	3.57	5.02	1.83
unico	407	Max WS	Tr200_D3_	13.54	186.20	187.18	187.52	188.27	0.051980	4.65	2.95	4.60	1.77
unico	407	Max WS	Tr200_D3.5	12.11	186.20	187.13	187.45	188.15	0.052238	4.47	2.72	4.45	1.76
unico	407	Max WS	Tr200_D5_	9.32	186.20	187.02	187.29	187.88	0.053490	4.10	2.27	4.11	1.75
unico	406	Max WS	Tr200_D0.5	26.36	185.01	186.73		186.93	0.004050	2.00	13.31	11.71	0.58
unico	406	Max WS	Tr200_D1_	25.73	185.01	186.64		186.87	0.004881	2.10	12.35	11.23	0.63
unico	406	Max WS	Tr200_D1.5	21.74	185.01	186.36		186.64	0.008390	2.36	9.25	10.57	0.80
unico	406	Max WS	Tr200_D2_	18.07	185.01	186.17	186.13	186.48	0.012396	2.50	7.24	10.13	0.94
unico	406	Max WS	Tr200_D3_	13.54	185.01	185.95	186.00	186.31	0.020093	2.65	5.11	9.33	1.14
unico	406	Max WS	Tr200_D3.5	12.11	185.01	185.88	185.96	186.25	0.022405	2.68	4.52	8.80	1.19
unico	406	Max WS	Tr200_D5_	9.32	185.01	185.74	185.85	186.14	0.029640	2.78	3.35	7.64	1.34
unico	405	Max WS	Tr200_D0.5	26.37	184.19	186.63	186.07	186.89	0.003258	2.33	12.78	9.32	0.54
unico	405	Max WS	Tr200_D1_	25.73	184.19	186.54	186.05	186.82	0.003702	2.40	11.95	9.02	0.57
unico	405	Max WS	Tr200_D1.5	21.74	184.19	186.27	185.90	186.56	0.004784	2.45	9.60	8.12	0.63
unico	405	Max WS	Tr200_D2_	18.07	184.19	186.06	185.77	186.34	0.005608	2.40	7.94	7.42	0.66
unico	405	Max WS	Tr200_D3_	13.54	184.19	185.79	185.57	186.05	0.006919	2.29	6.06	6.53	0.71
unico	405	Max WS	Tr200_D3.5	12.11	184.19	185.70	185.50	185.95	0.007507	2.25	5.48	6.23	0.73
unico	405	Max WS	Tr200_D5_	9.32	184.19	185.52	185.35	185.75	0.008096	2.11	4.44	5.65	0.74
unico	404.5			Bridge									
unico	404	Max WS	Tr200_D0.5	26.37	184.01	185.81		186.24	0.006379	2.96	9.39	6.83	0.74
unico	404	Max WS	Tr200_D1_	25.73	184.01	185.79		186.22	0.006229	2.91	9.31	6.81	0.73
unico	404	Max WS	Tr200_D1.5	21.22	184.01	185.72		186.04	0.005031	2.53	8.78	6.65	0.65
unico	404	Max WS	Tr200_D2_	18.07	184.01	185.62		185.89	0.004508	2.30	8.18	6.47	0.61
unico	404	Max WS	Tr200_D3_	13.54	184.01	185.46		185.65	0.003822	1.96	7.14	6.15	0.55
unico	404	Max WS	Tr200_D3.5	12.11	184.01	185.40		185.57	0.003603	1.84	6.77	6.03	0.53
unico	404	Max WS	Tr200_D5_	9.32	184.01	185.26		185.39	0.003220	1.60	5.94	5.90	0.49
unico	403	Max WS	Tr200_D0.5	26.37	183.93	185.87		186.17	0.004555	2.46	11.35	7.99	0.59
unico	403	Max WS	Tr200_D1_	25.73	183.93	185.86		186.15	0.004461	2.43	11.23	7.96	0.59
unico	403	Max WS	Tr200_D1.5	21.22	183.93	185.76		185.99	0.003706	2.13	10.48	7.75	0.53
unico	403	Max WS	Tr200_D2_	18.07	183.93	185.66		185.85	0.003394	1.95	9.67	7.52	0.50
unico	403	Max WS	Tr200_D3_	13.54	183.93	185.48		185.62	0.002939	1.67	8.35	7.13	0.46
unico	403	Max WS	Tr200_D3.5	12.11	183.93	185.41		185.54	0.002786	1.57	7.89	6.99	0.44
unico	403	Max WS	Tr200_D5_	9.32	183.93	185.27		185.36	0.002497	1.37	6.89	6.66	0.41
unico	402	Max WS	Tr200_D0.5	26.37	183.99	185.52	185.97	186.96	0.045383	5.32	4.99	5.58	1.74
unico	402	Max WS	Tr200_D1_	25.73	183.99	185.51	185.95	186.93	0.045258	5.27	4.91	5.53	1.74
unico	402	Max WS	Tr200_D1.5	21.74	183.99	185.42	185.81	186.67	0.044262	4.95	4.39	5.22	1.70
unico	402	Max WS	Tr200_D2_	18.07	183.99	185.31	185.65	186.42	0.044139	4.66	3.88	4.89	1.67
unico	402	Max WS	Tr200_D3_	13.54	183.99	185.16	185.45	186.09	0.042213	4.26	3.18	4.47	1.61
unico	402	Max WS	Tr200_D3.5	12.11	183.99	185.11	185.38	185.97	0.041230	4.10	2.95	4.32	1.58
unico	402	Max WS	Tr200_D5_	9.32	183.99	184.99	185.22	185.72	0.039797	3.79	2.46	3.98	1.54
unico	401	Max WS	Tr200_D0.5	26.36	183.26	184.86	185.37	186.53	0.050066	5.76	4.81	7.60	1.85
unico	401	Max WS	Tr200_D1_	25.73	183.26	184.85	185.35	186.49	0.049994	5.71	4.72	7.38	1.84
unico	401	Max WS	Tr200_D1.5	21.74	183.26	184.75	185.25	186.21	0.049961	5.35	4.12	5.86	1.81
unico	401	Max WS	Tr200_D2_	18.07	183.26	184.66	185.13	185.92	0.050006	4.98	3.64	4.58	1.78
unico	401	Max WS	Tr200_D3_	13.54	183.26	184.52	184.88	185.56	0.050041	4.51	3.01	4.43	1.74
unico	401	Max WS	Tr200_D3.5	12.11	183.26	184.47	184.78	185.43	0.049866	4.33	2.80	4.37	1.72
unico	401	Max WS	Tr200_D5_	9.32	183.26	184.37	184.61	185.17	0.049971	3.95	2.36	4.26	1.69
unico	400.96			Lat Struct									
unico	400.95			Lat Struct									
unico	400.3			Lat Struct									
unico	400.28			Lat Struct									
unico	400	Max WS	Tr200_D0.5	26.36	180.37	181.68	182.48	185.07	0.151221	8.16	3.24	4.49	3.05
unico	400	Max WS	Tr200_D1_	2.00	180.37	181.95		181.96	0.000310	0.45	4.66	7.25	0.14
unico	400	Max WS	Tr200_D1.5	2.00	180.37	182.19		182.19	0.000134	0.34	6.81	9.99	0.10
unico	400	Max WS	Tr200_D2_	1.99	180.37	182.34		182.34	0.000081	0.29	8.34	10.00	0.08
unico	400	Max WS	Tr200_D3_	2.00	180.37	182.56		182.56	0.000043	0.23	10.58	10.00	0.06
unico	400	Max WS	Tr200_D3.5	2.02	180.37	182.64		182.64	0.000036	0.22	11.31	10.00	0.05
unico	400	Max WS	Tr200_D5_	2.05	180.37	182.76		182.76	0.000028	0.20	12.54	10.00	0.05



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=30 anni

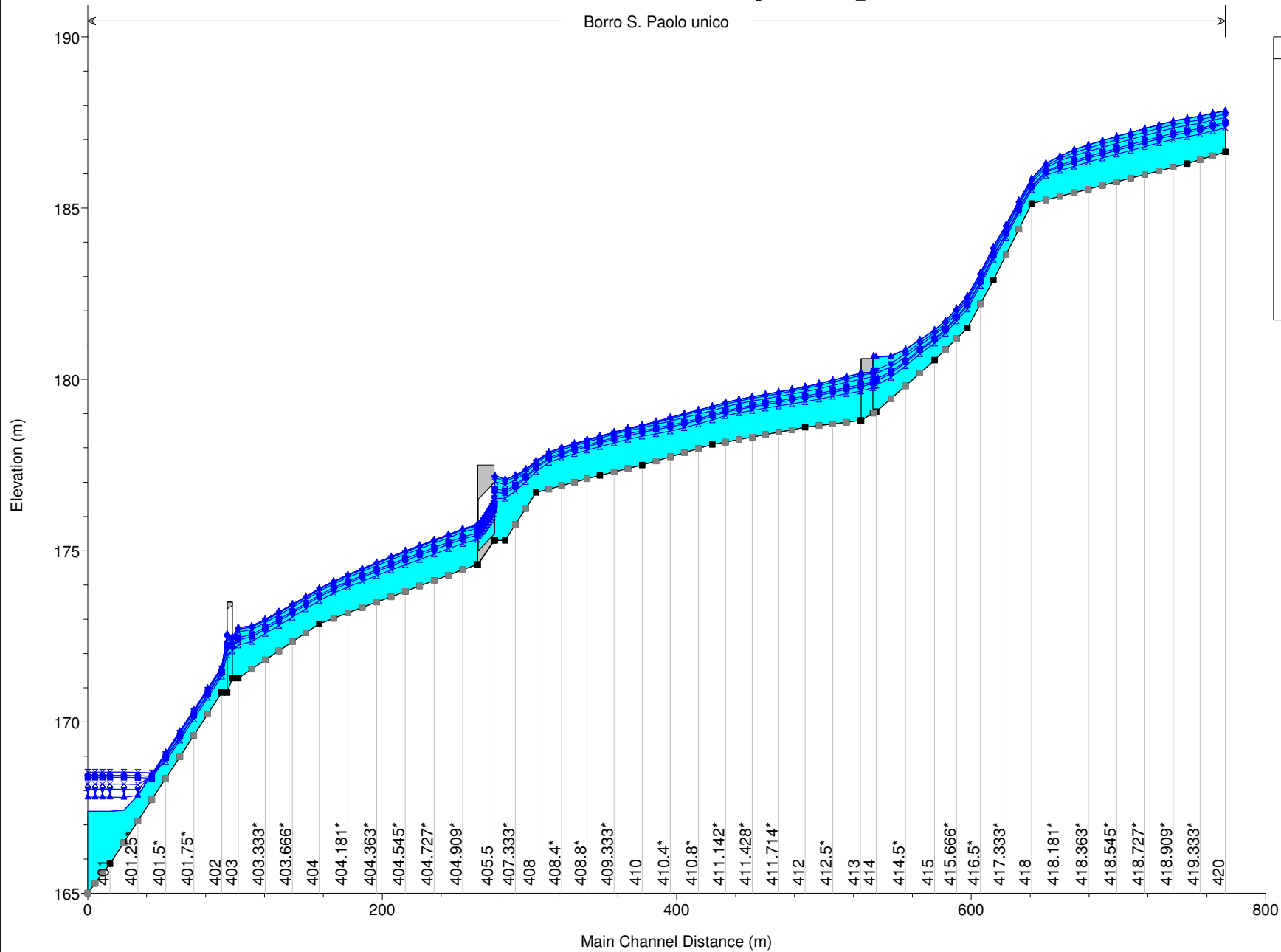
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

Borro S. Paolo unico





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=200 anni

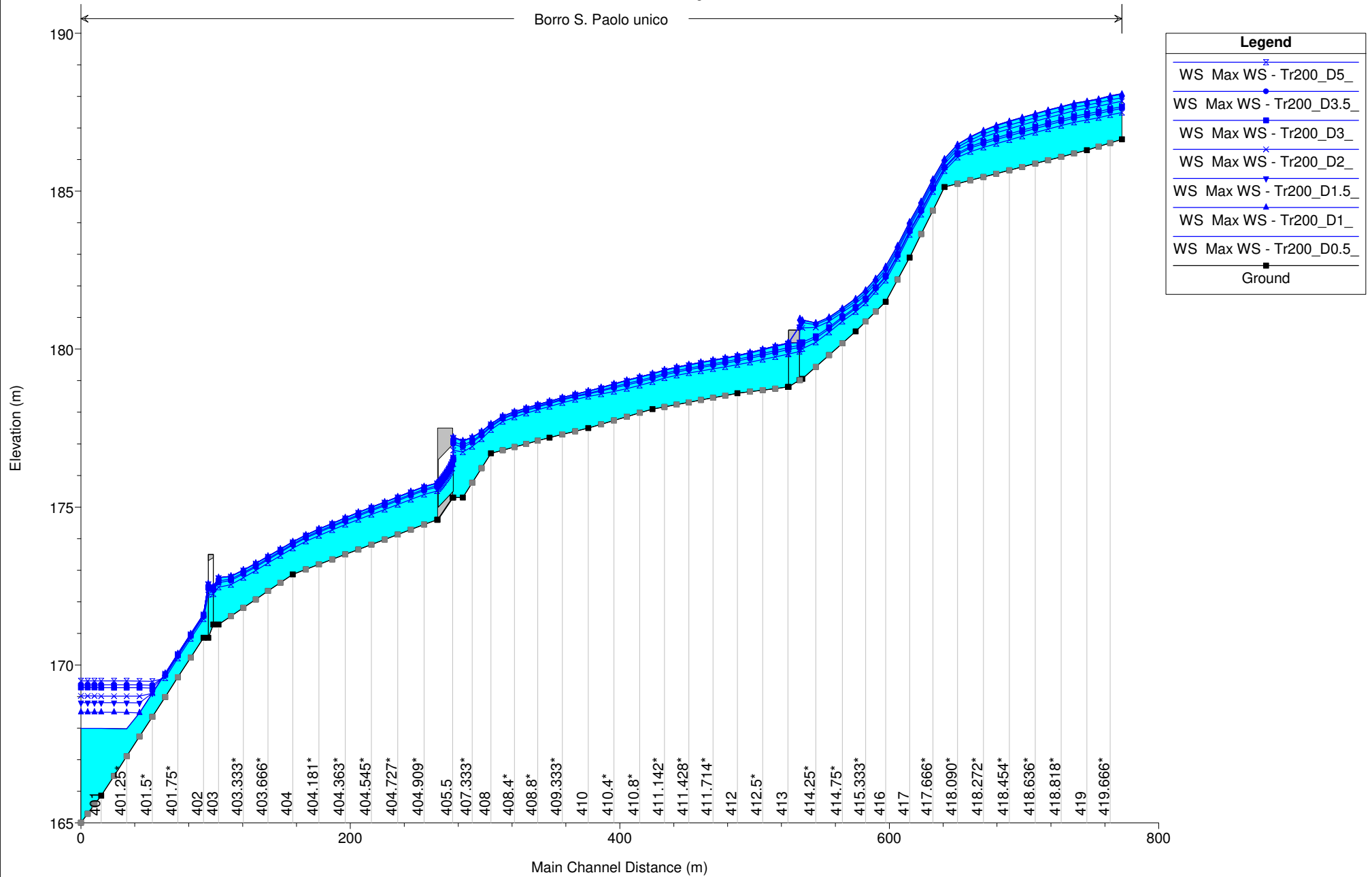
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Profilo longitudinale

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

Borro S. Paolo unico





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=30 anni

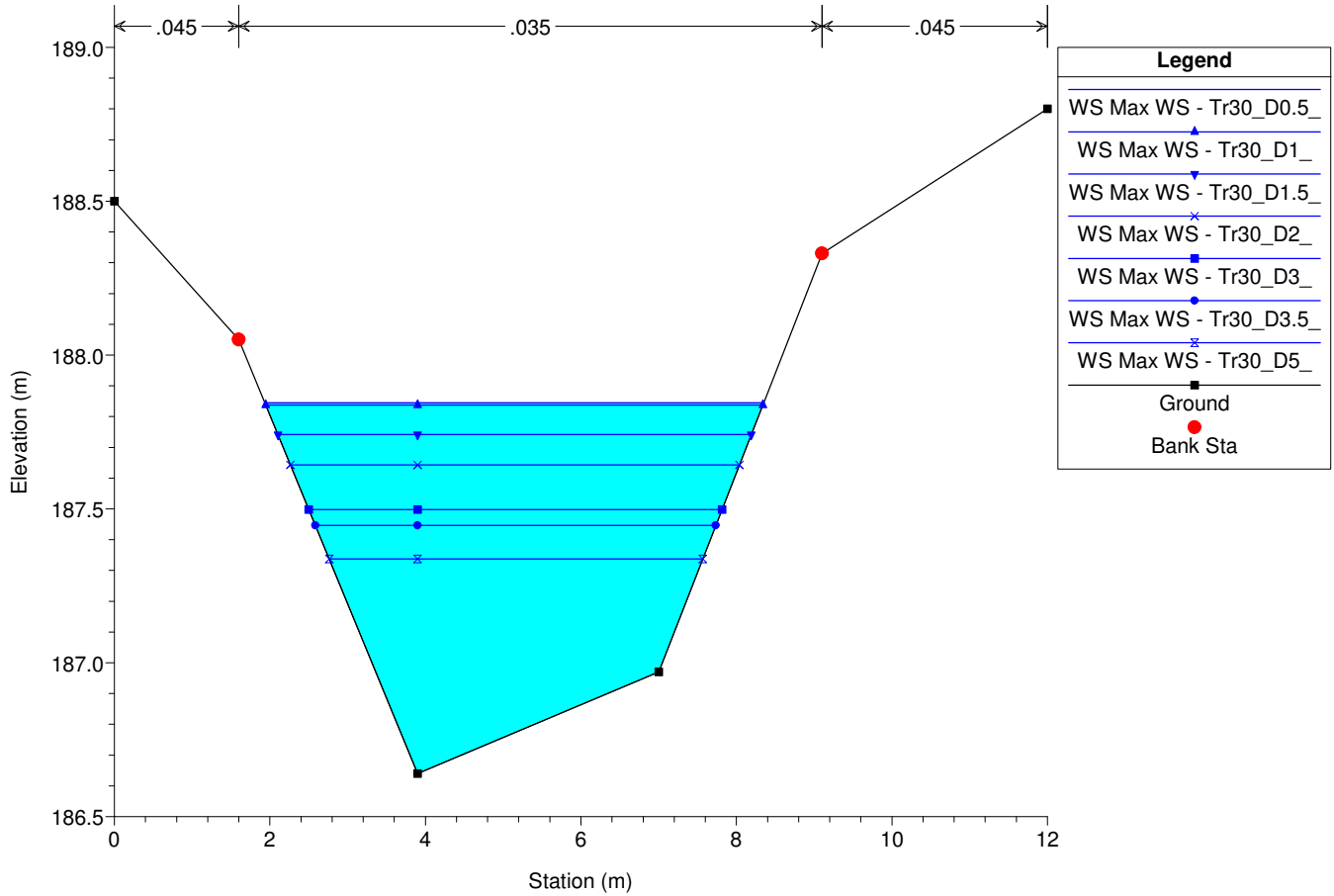
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

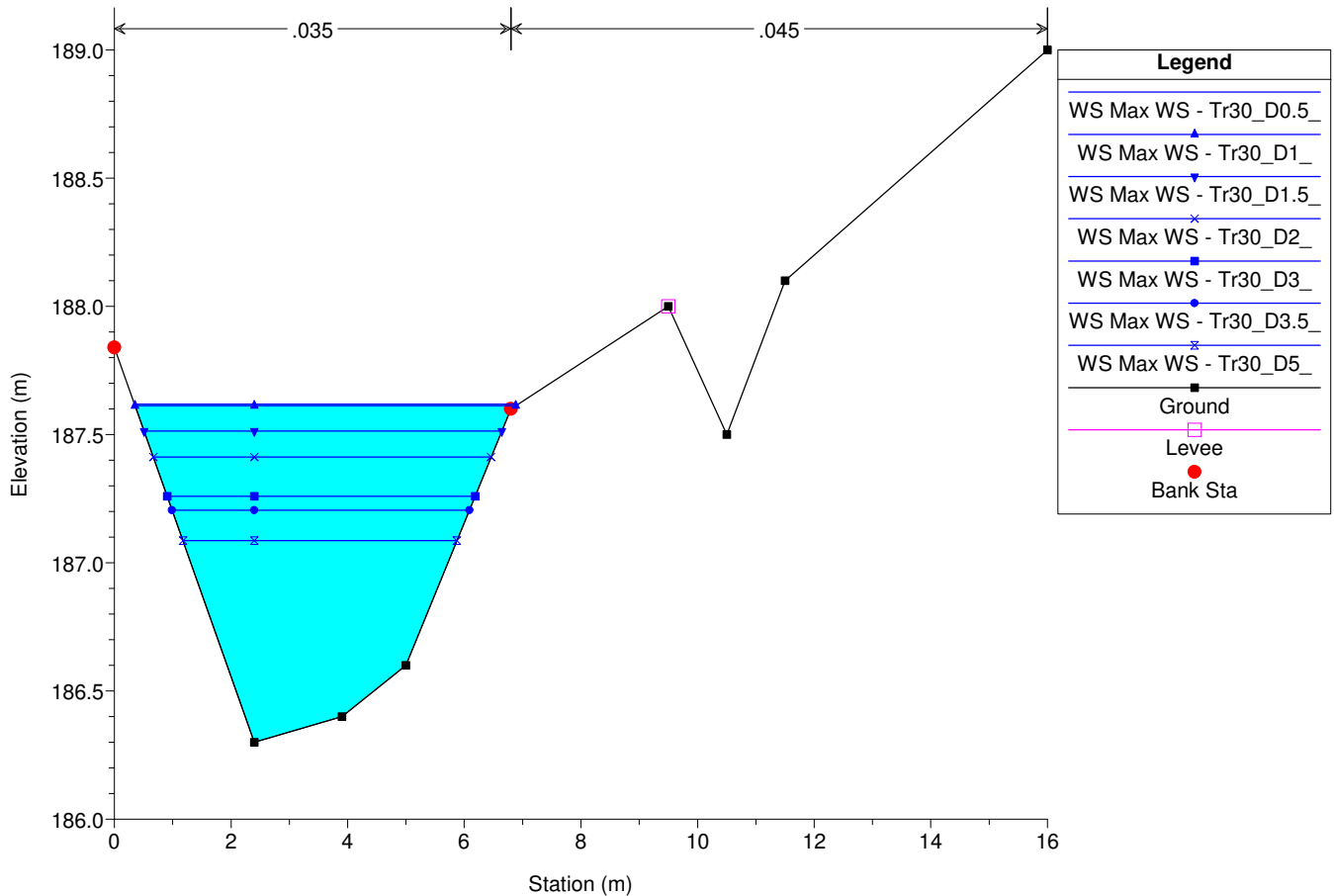
River = Borro S. Paolo Reach = unico RS = 420 SP20 - Rilievo CBTC 08 - MODIFICHE: pti 6-8 aggiunti x fosso



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

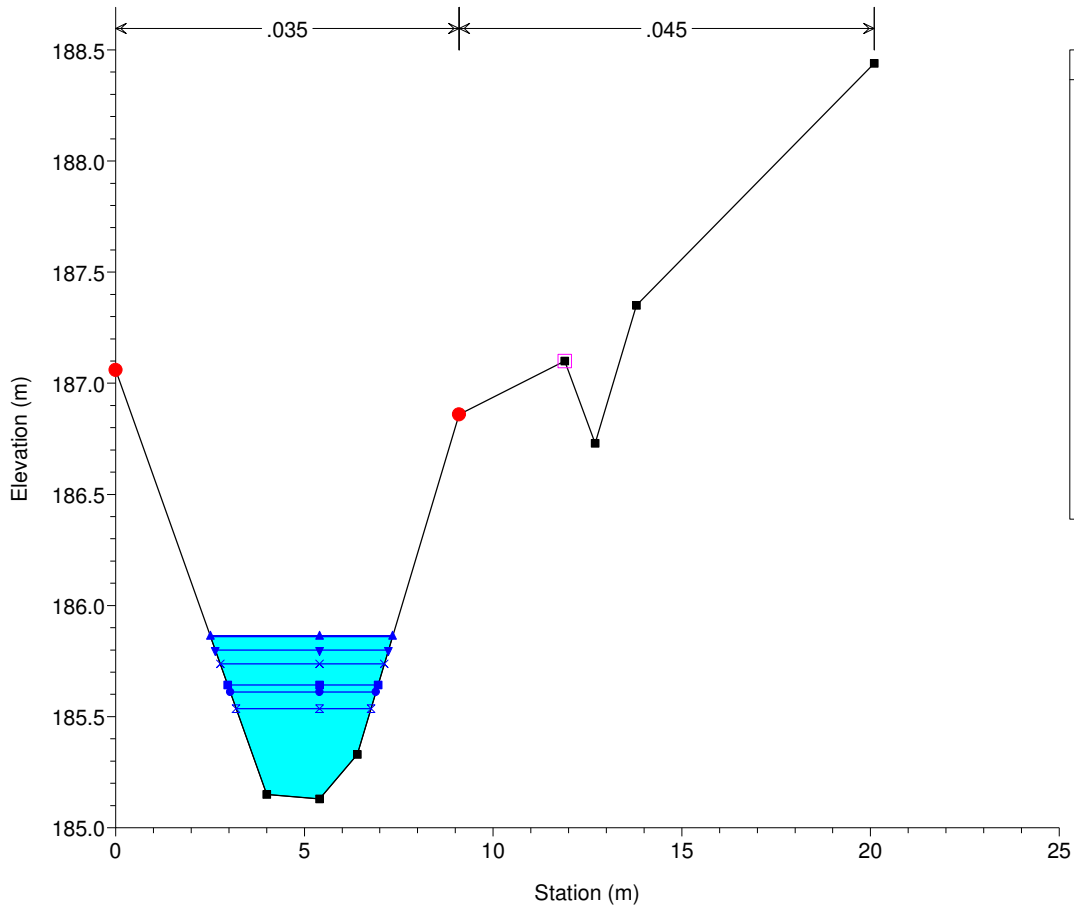
River = Borro S. Paolo Reach = unico RS = 419 SP19 - Rilievo CBTC 08 - MODIFICHE: pti 6-9 aggiunti x SP19 - R



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

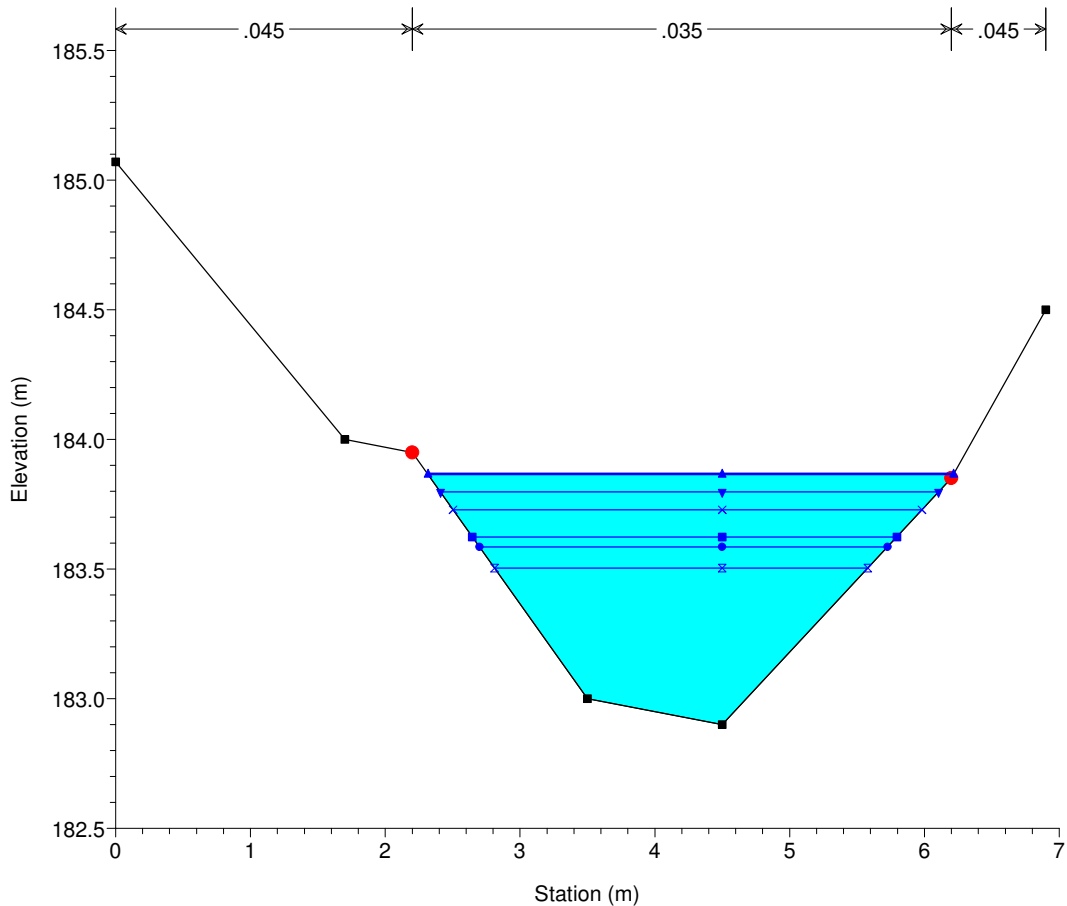
River = Borro S. Paolo Reach = unico RS = 418 SP18 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

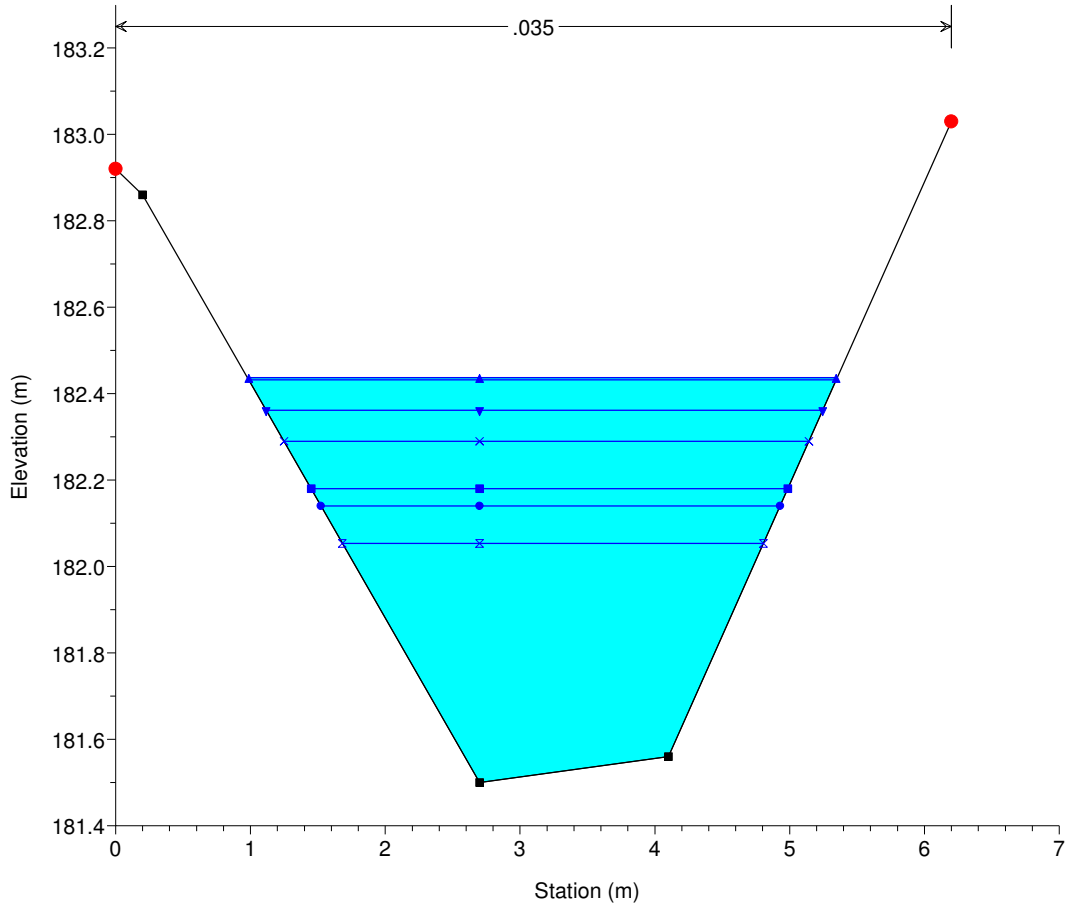
River = Borro S. Paolo Reach = unico RS = 417 SP17 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

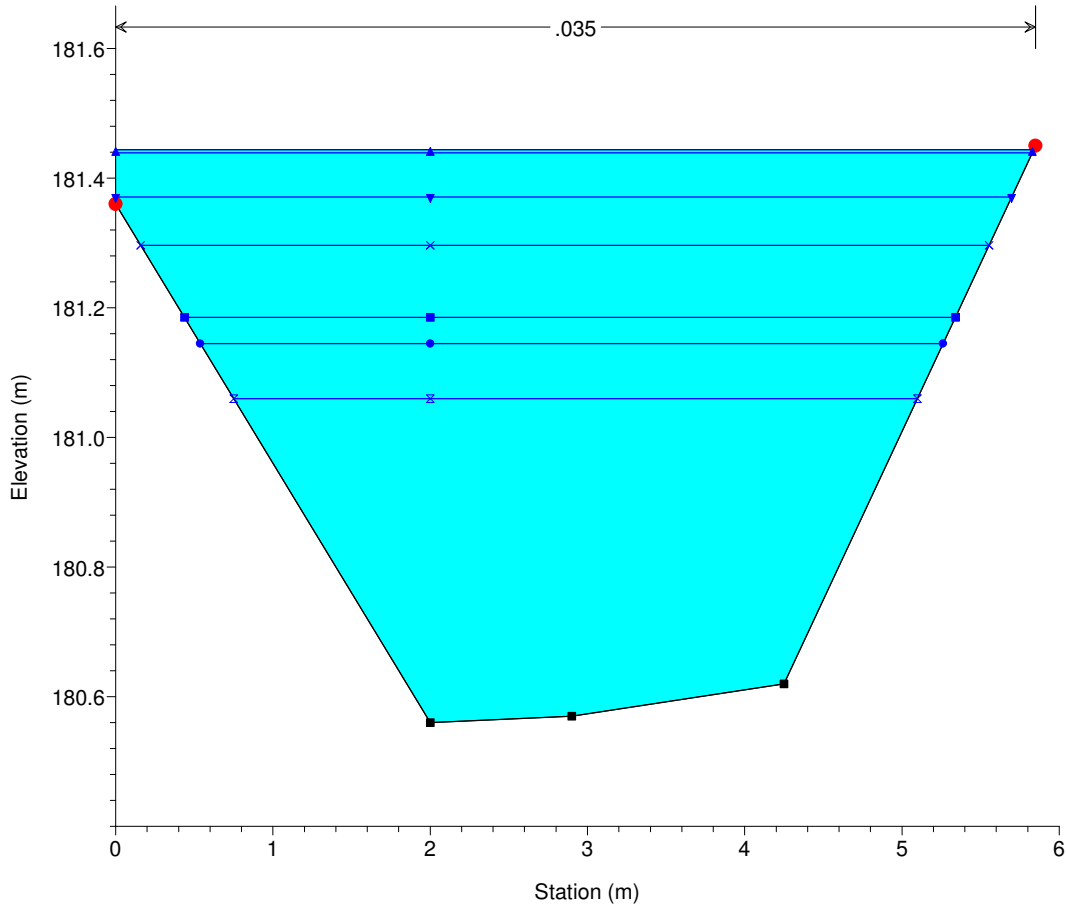
River = Borro S. Paolo Reach = unico RS = 416 SP16 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

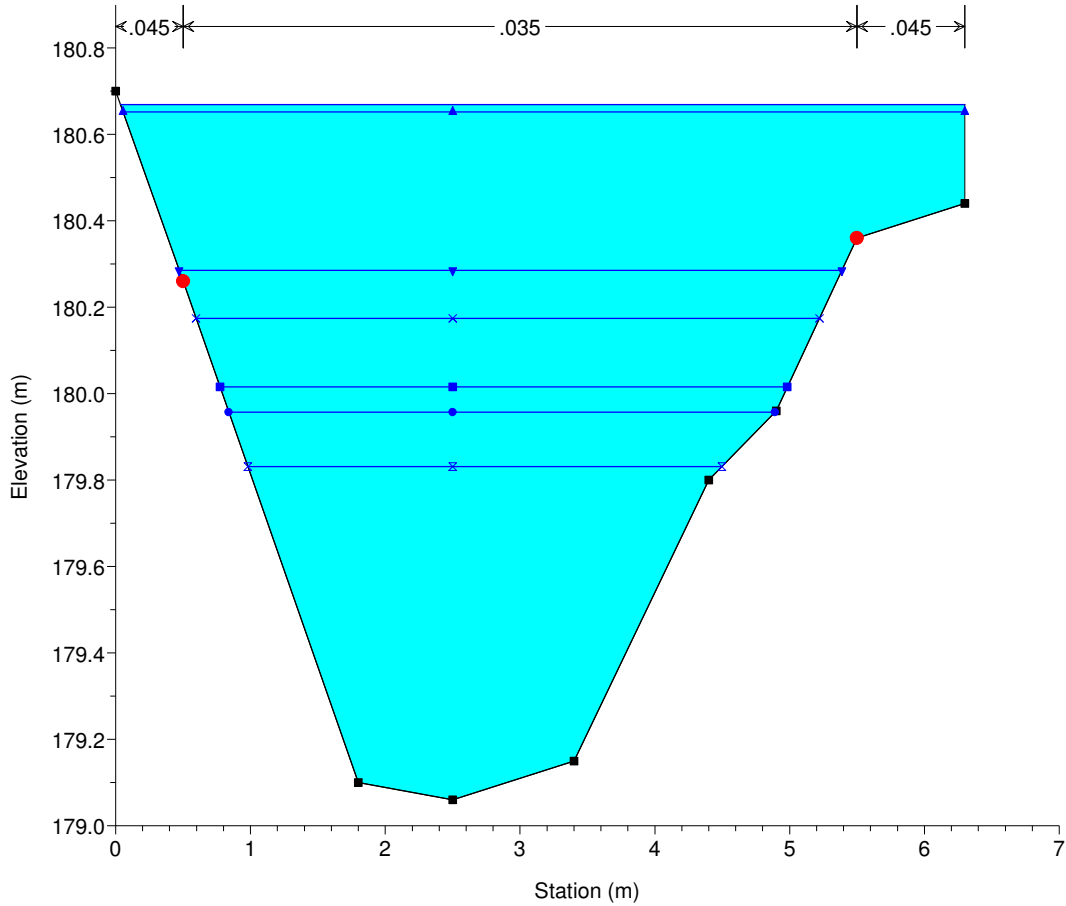
River = Borro S. Paolo Reach = unico RS = 415 SP15 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

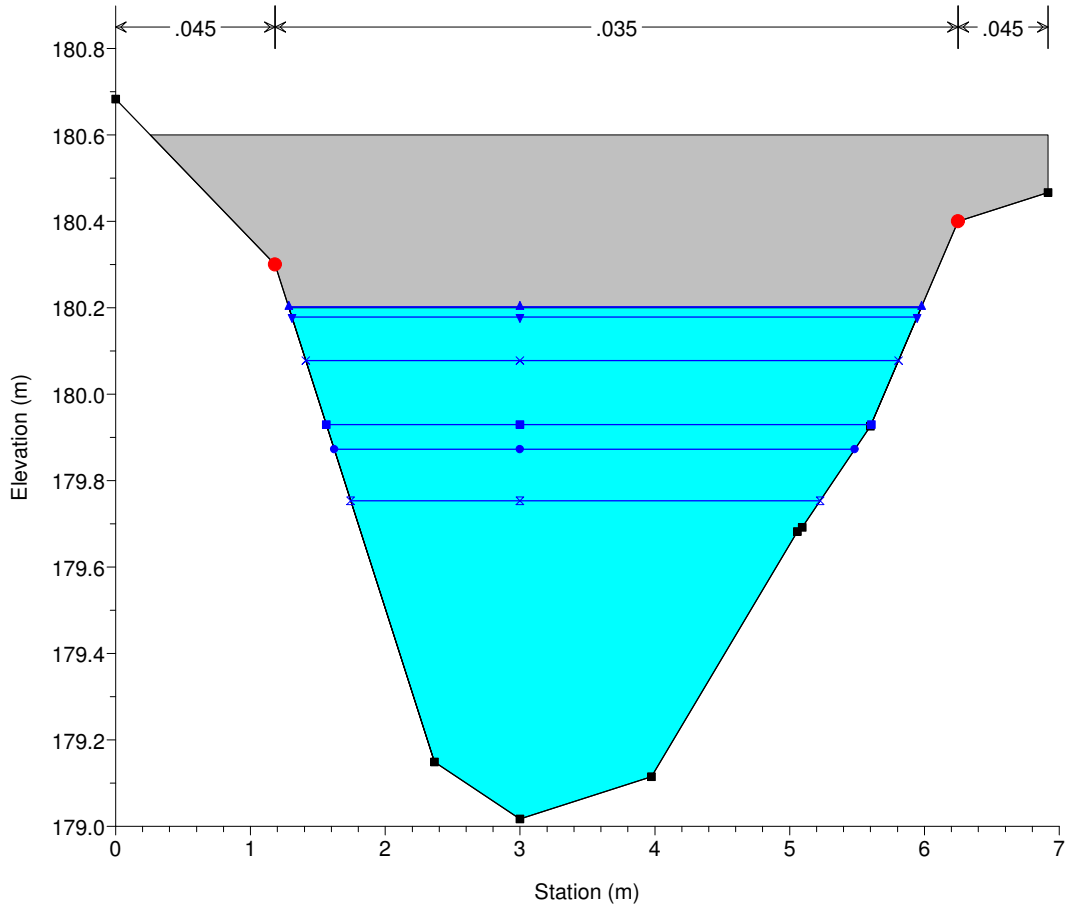
River = Borro S. Paolo Reach = unico RS = 414 SP14 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

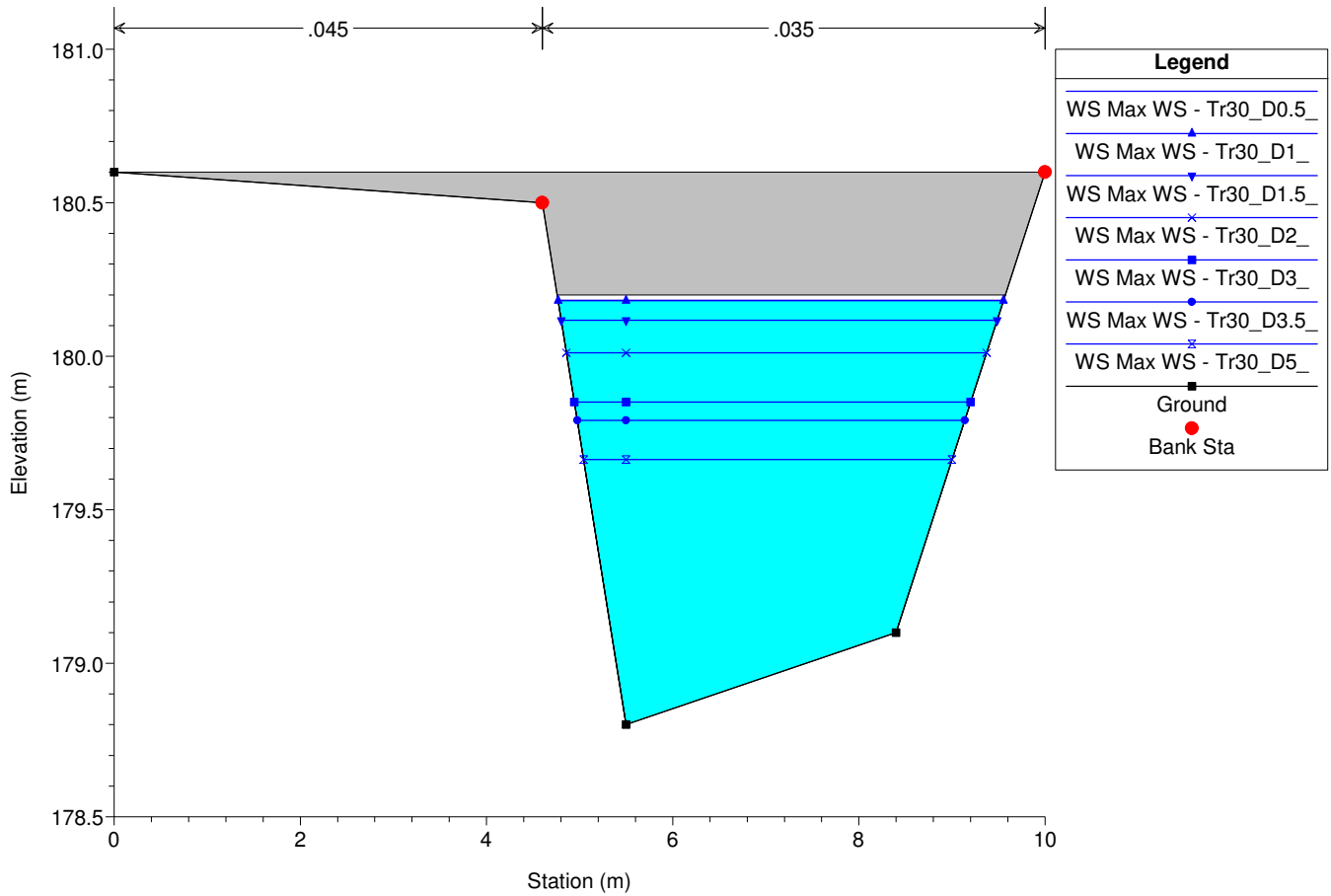
River = Borro S. Paolo Reach = unico RS = 413.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

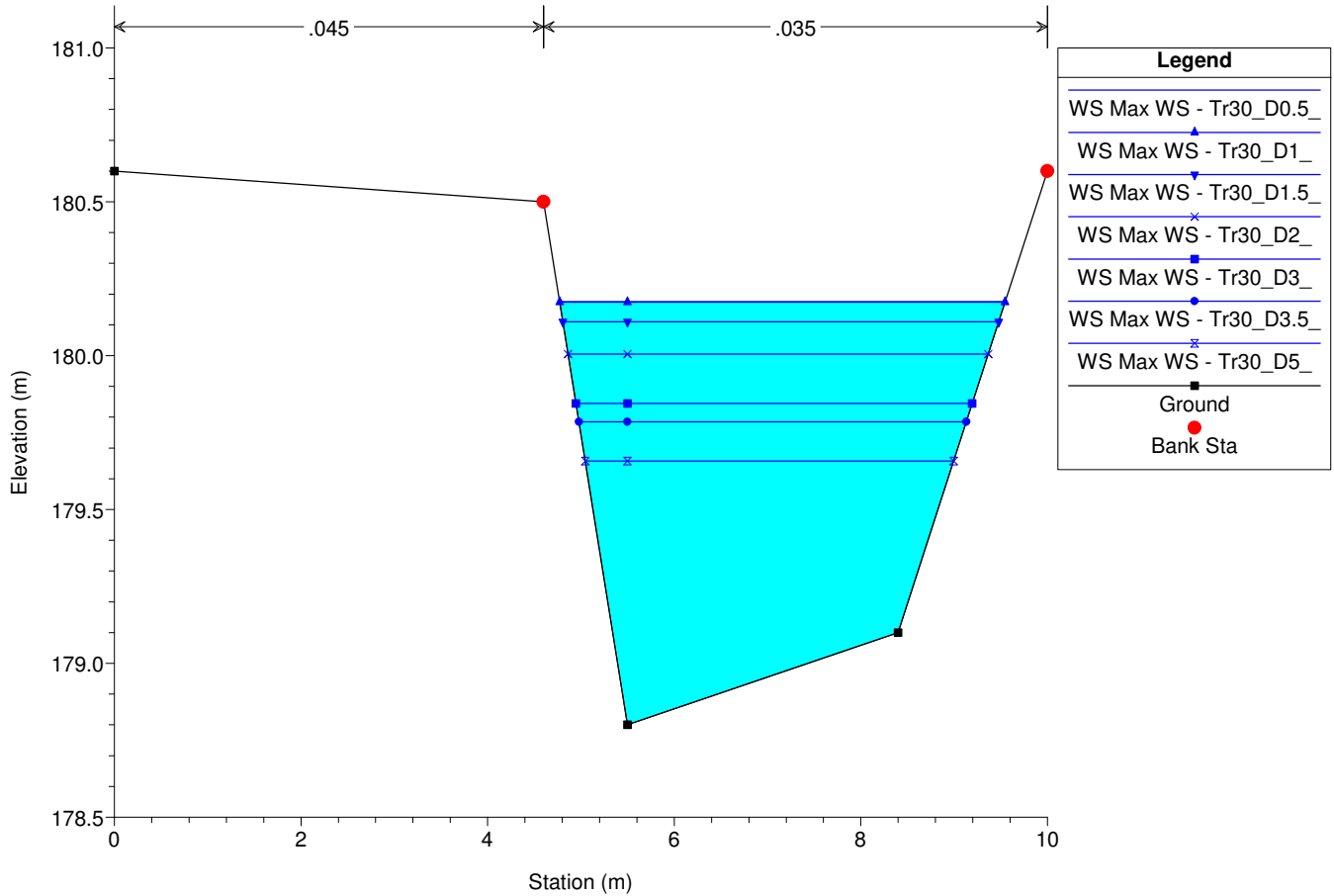
River = Borro S. Paolo Reach = unico RS = 413.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

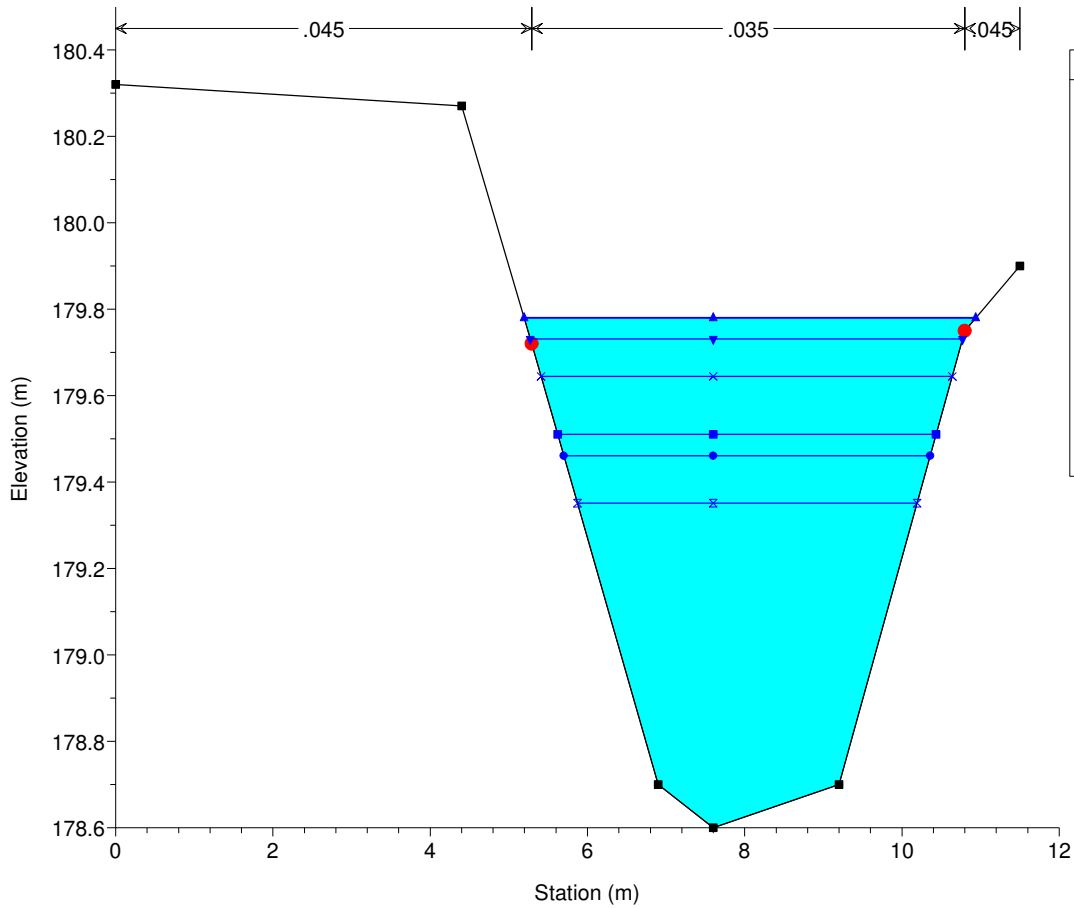
River = Borro S. Paolo Reach = unico RS = 413 SP13 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

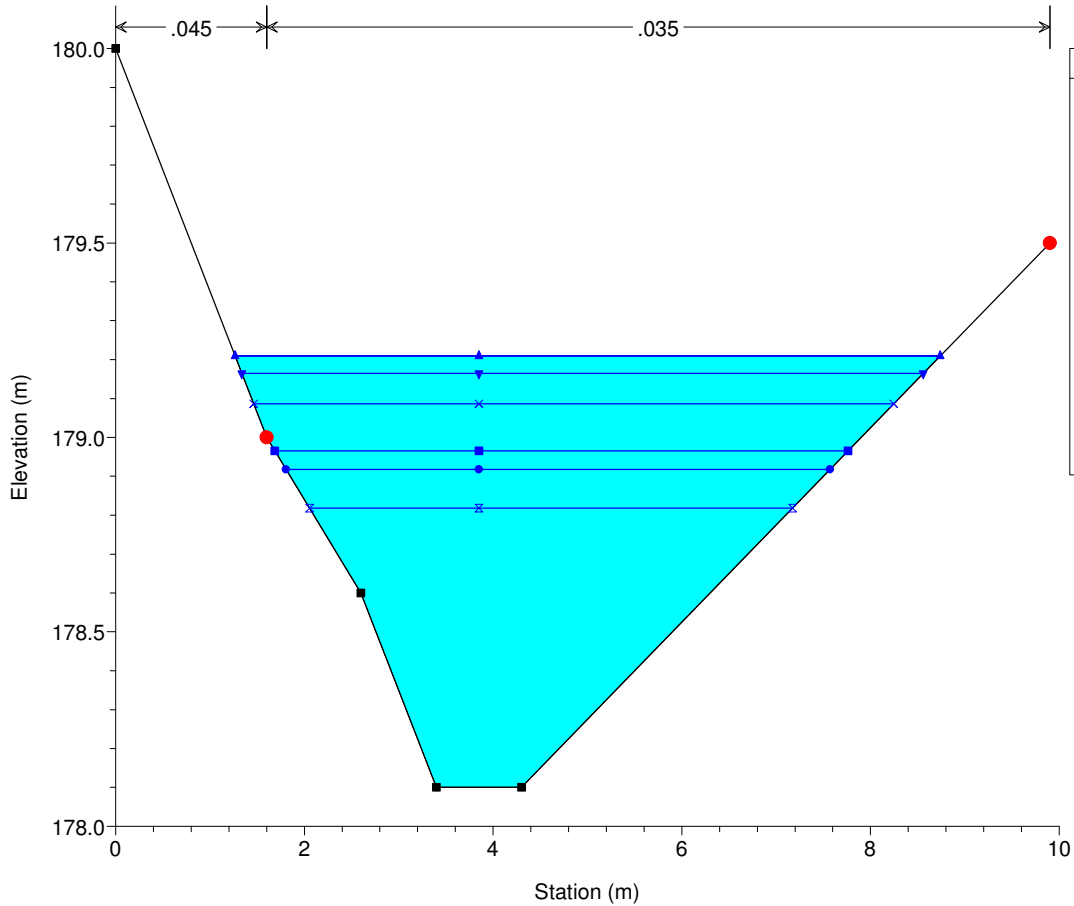
River = Borro S. Paolo Reach = unico RS = 412 SP12 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

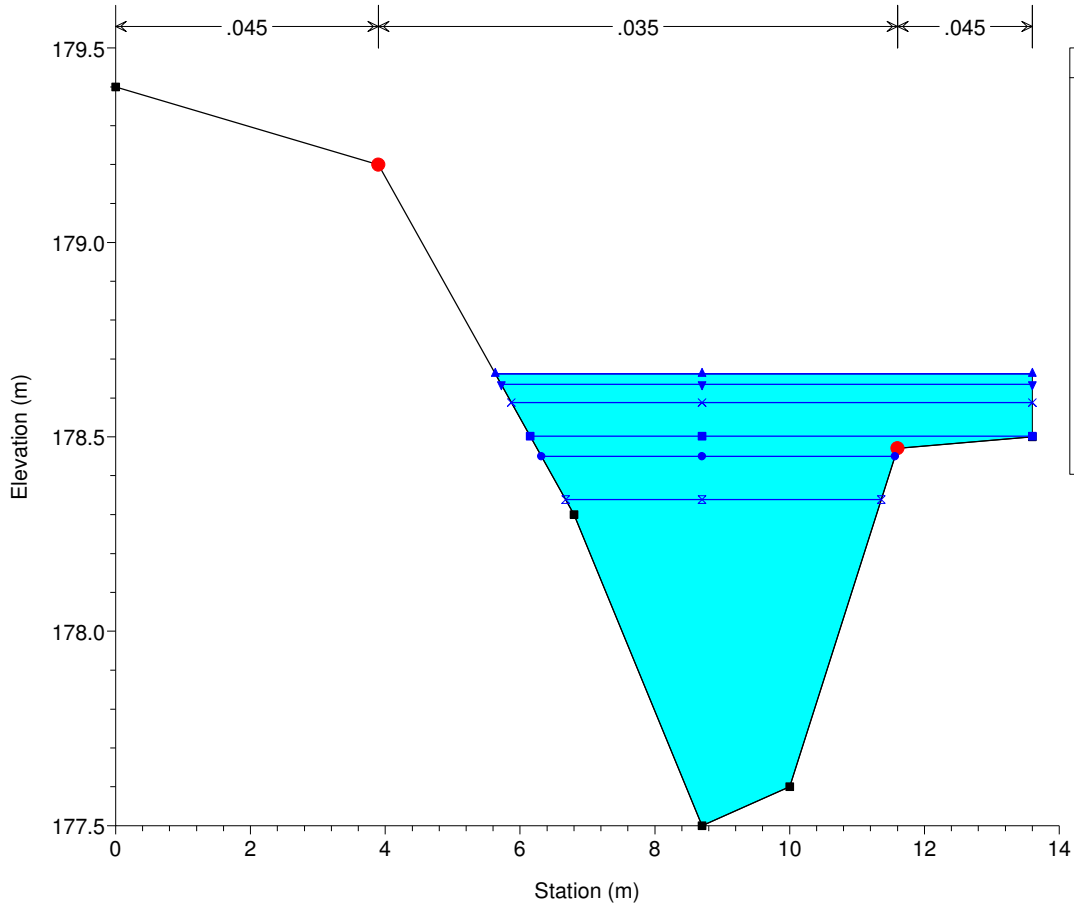
River = Borro S. Paolo Reach = unico RS = 411 SP11 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

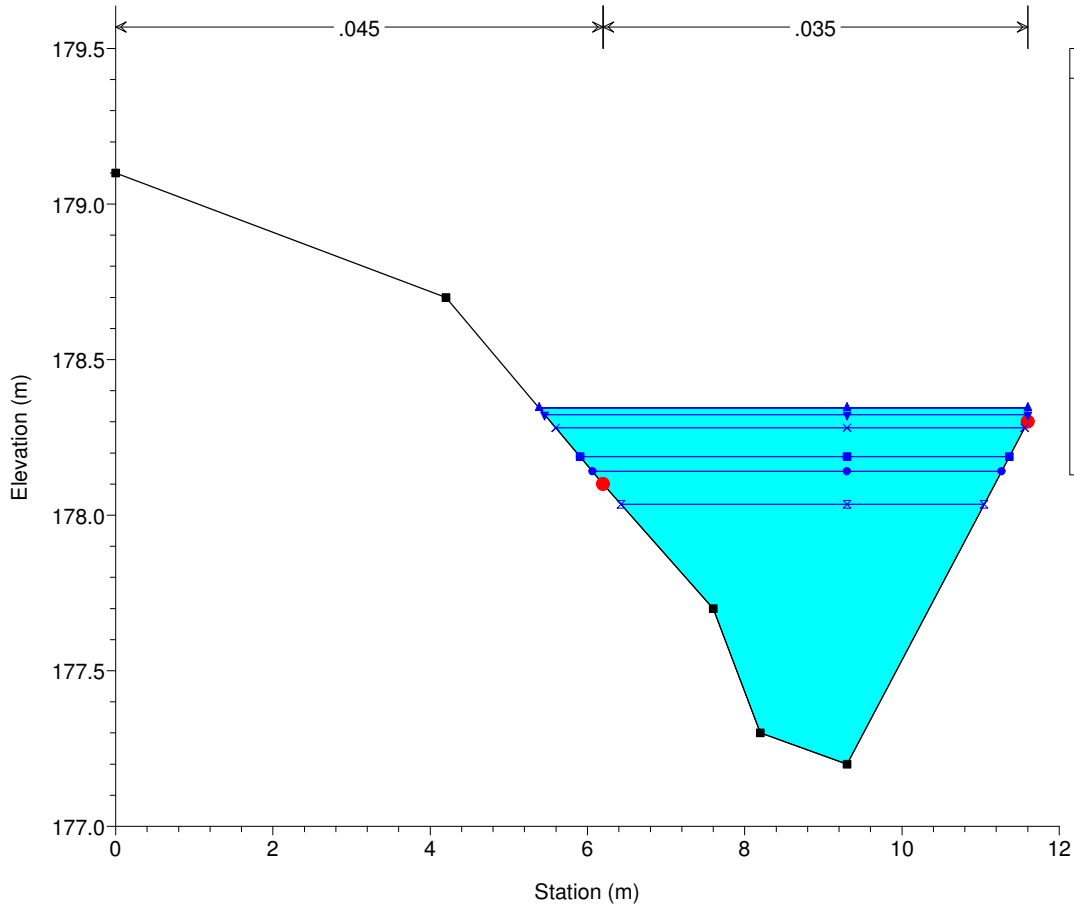
River = Borro S. Paolo Reach = unico RS = 410 SP10 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

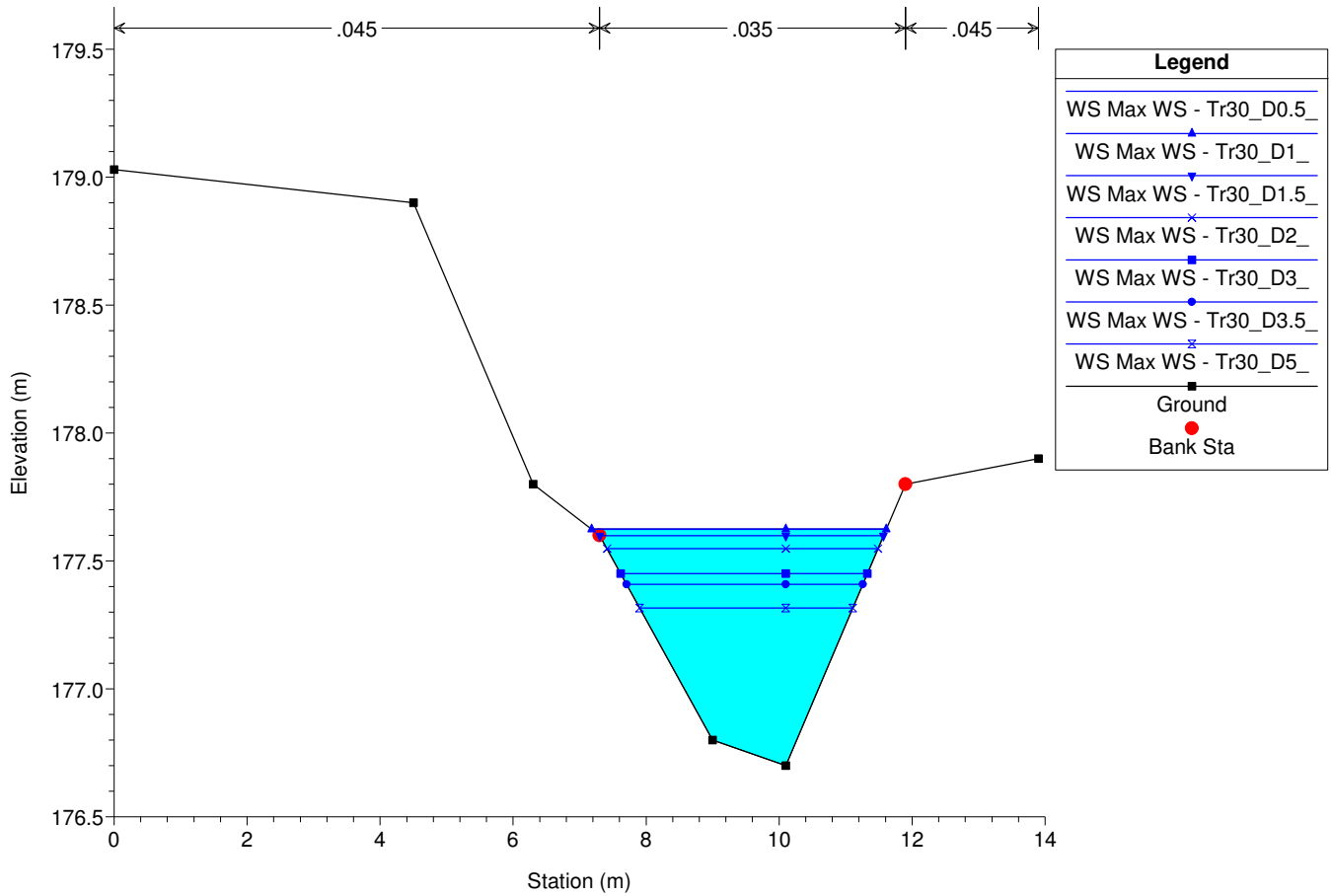
River = Borro S. Paolo Reach = unico RS = 409 SP9 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

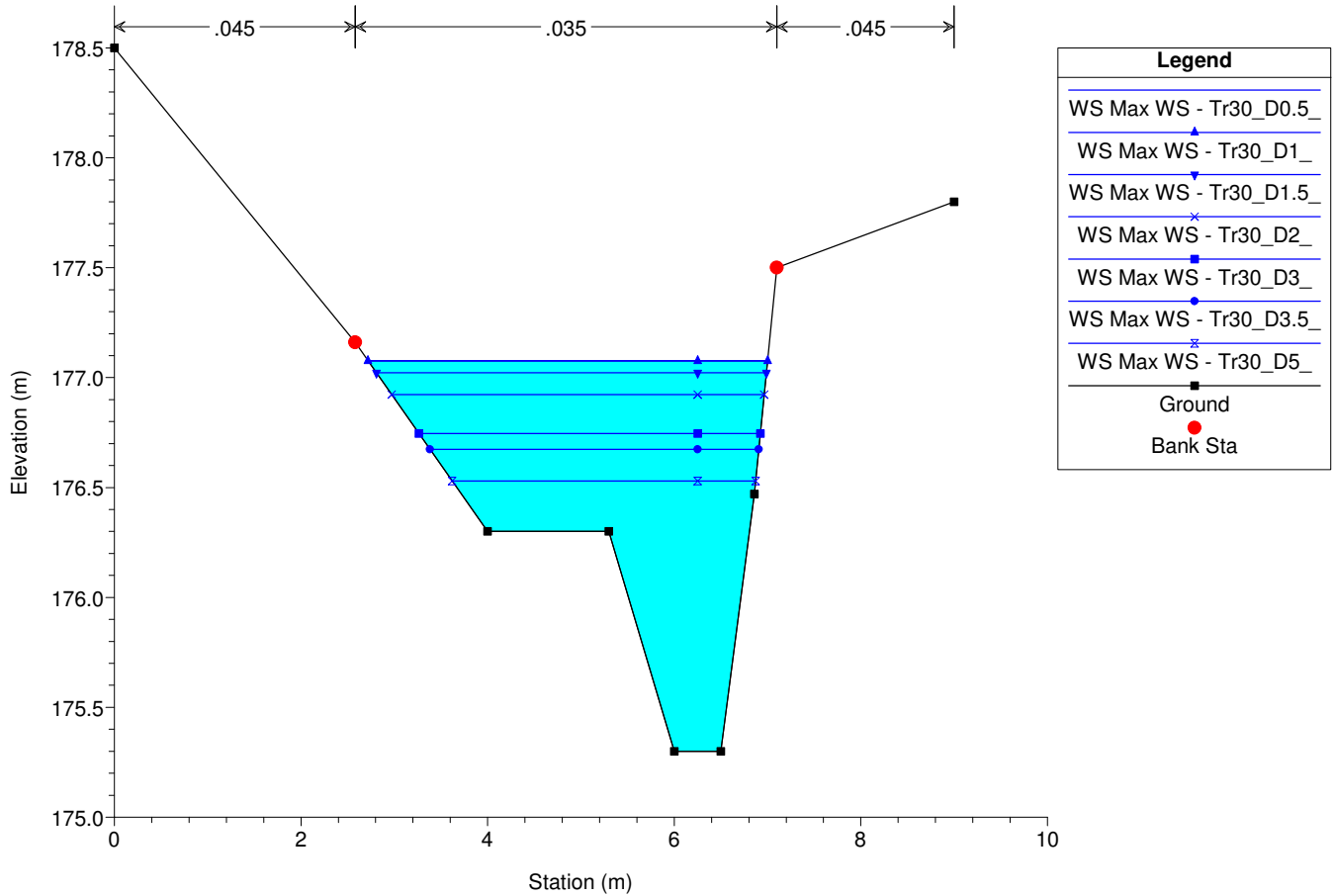
River = Borro S. Paolo Reach = unico RS = 408 SP8 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

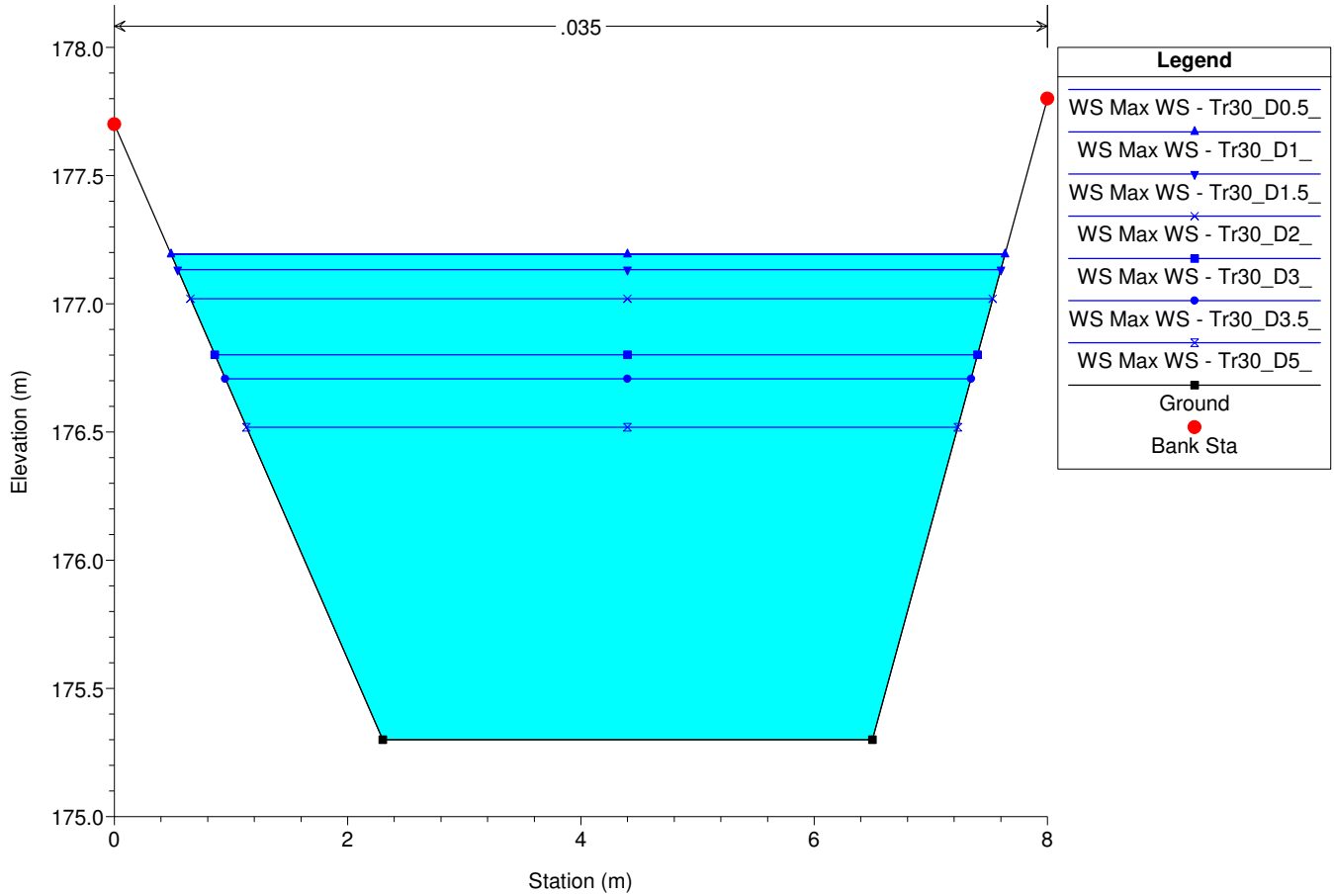
River = Borro S. Paolo Reach = unico RS = 407 SP7 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

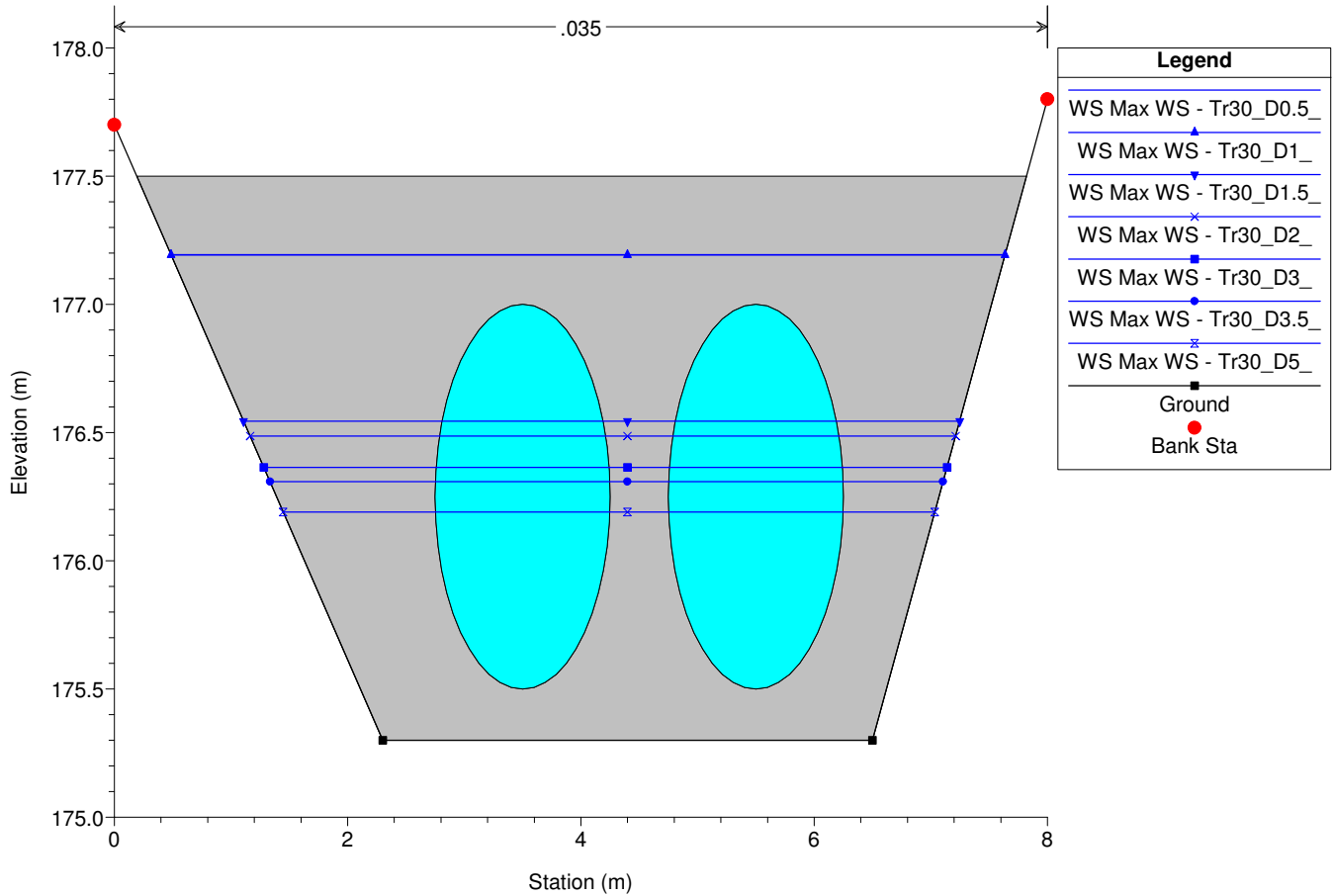
River = Borro S. Paolo Reach = unico RS = 406 SP6 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

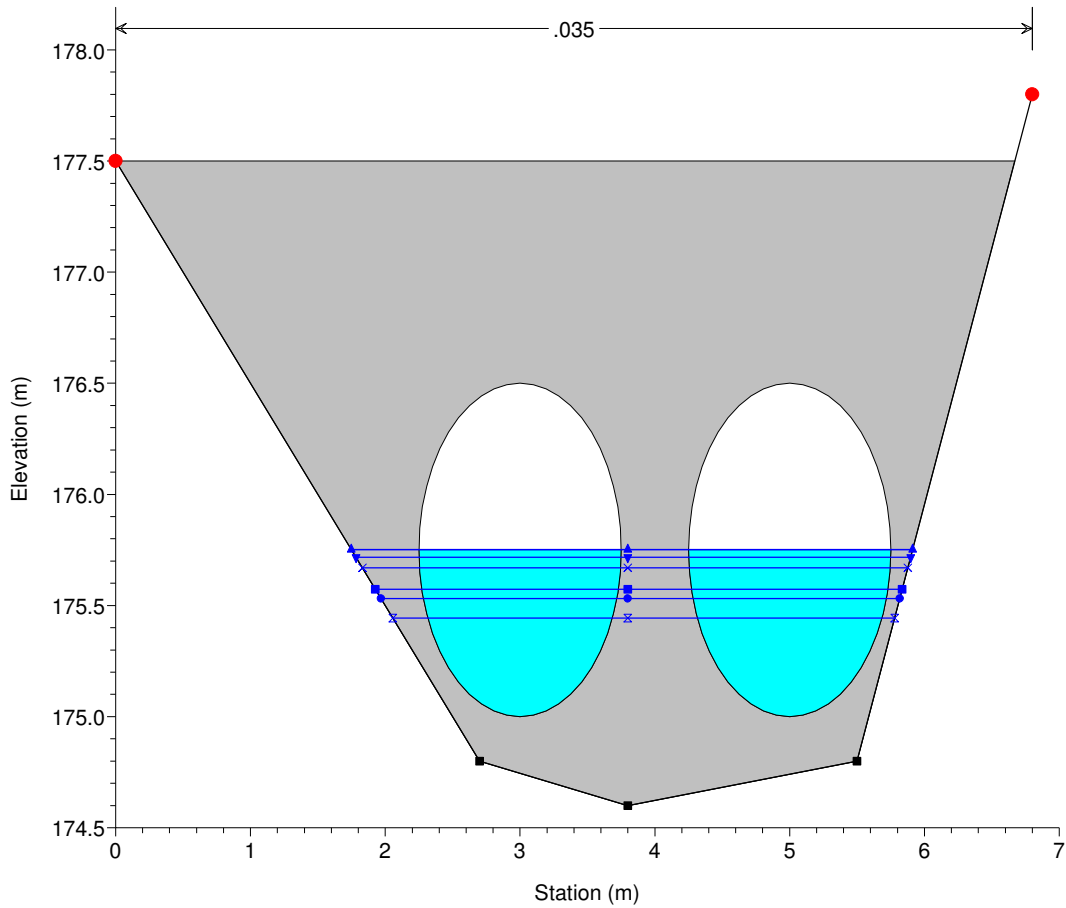
River = Borro S. Paolo Reach = unico RS = 405.5 Culv



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

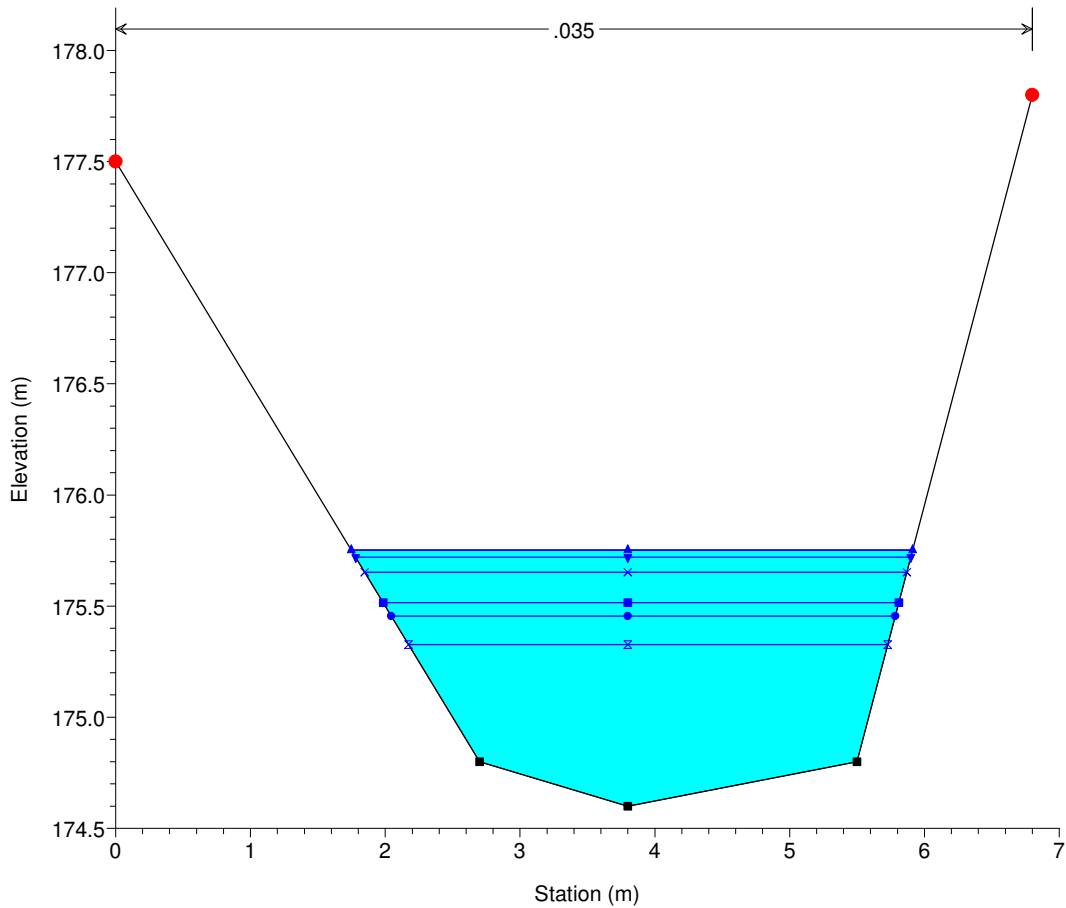
River = Borro S. Paolo Reach = unico RS = 405.5 Culv



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

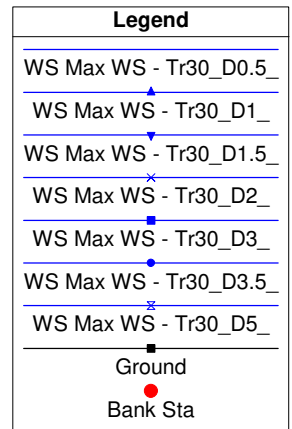
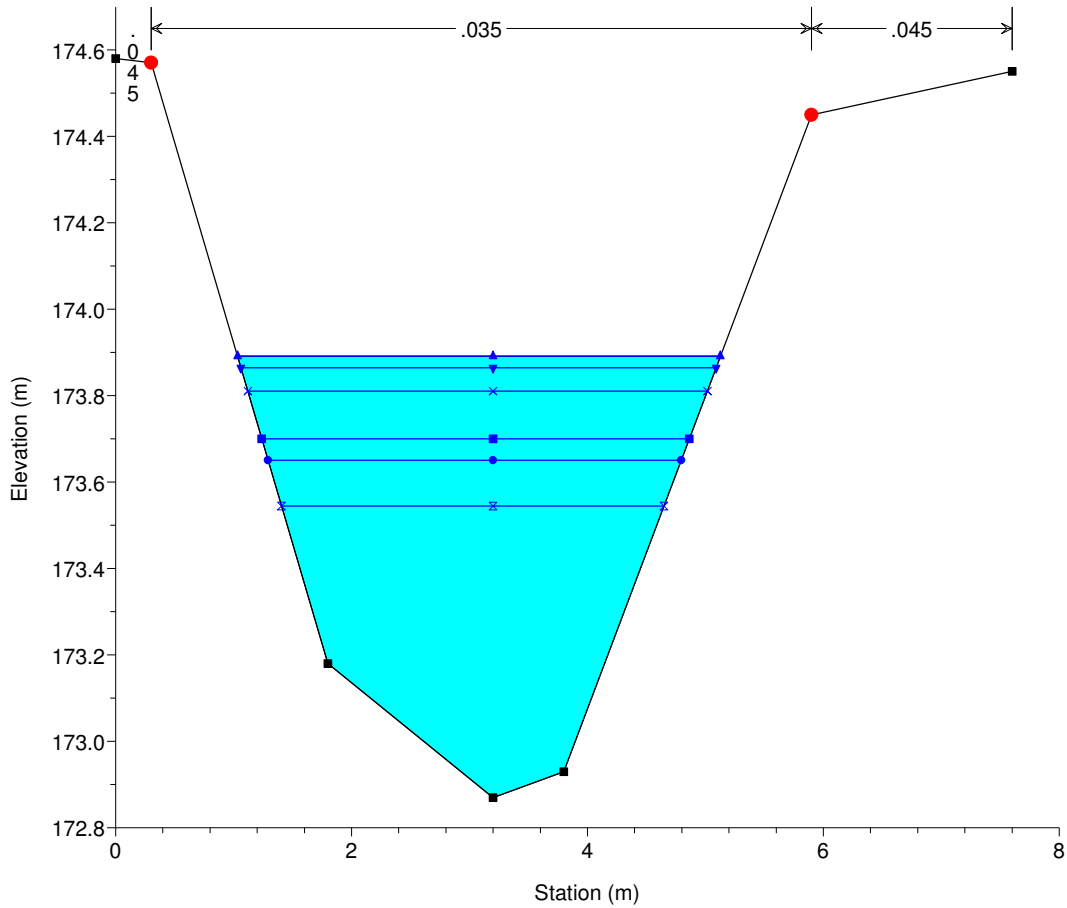
River = Borro S. Paolo Reach = unico RS = 405 SP5 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

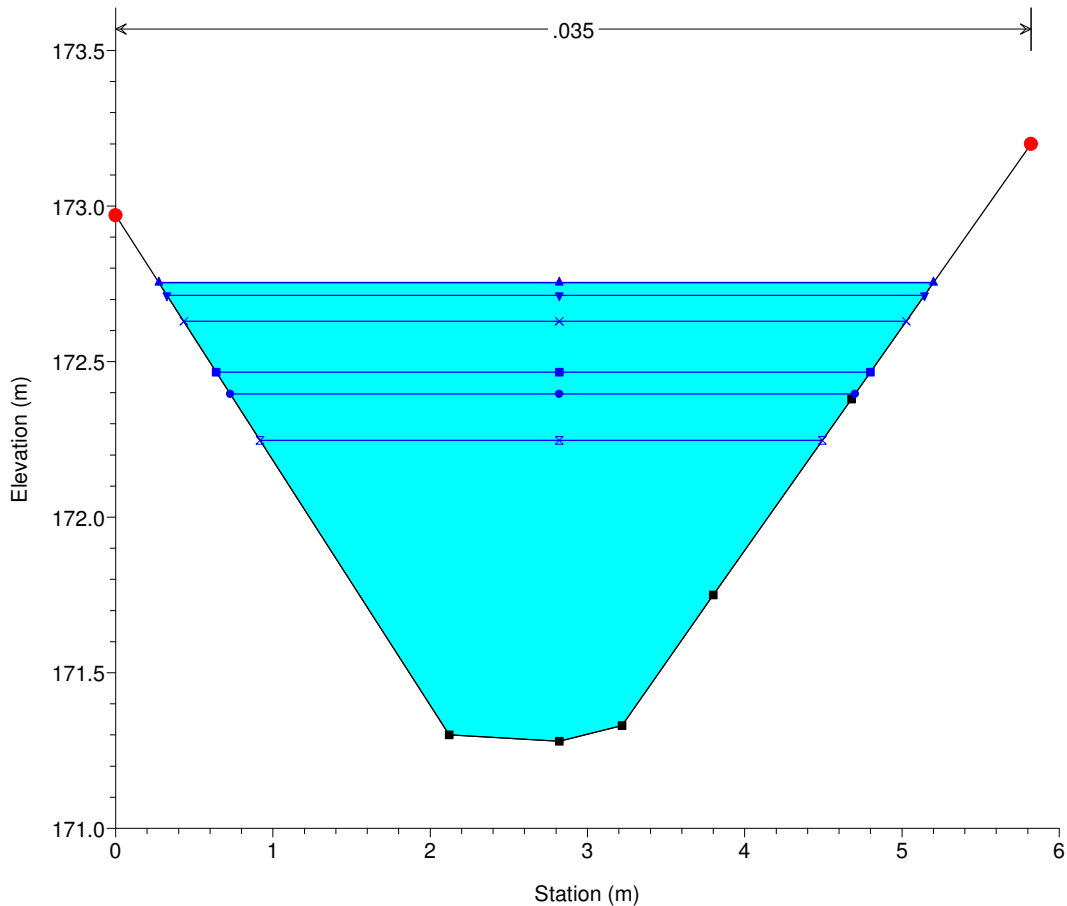
River = Borro S. Paolo Reach = unico RS = 404 SP4 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

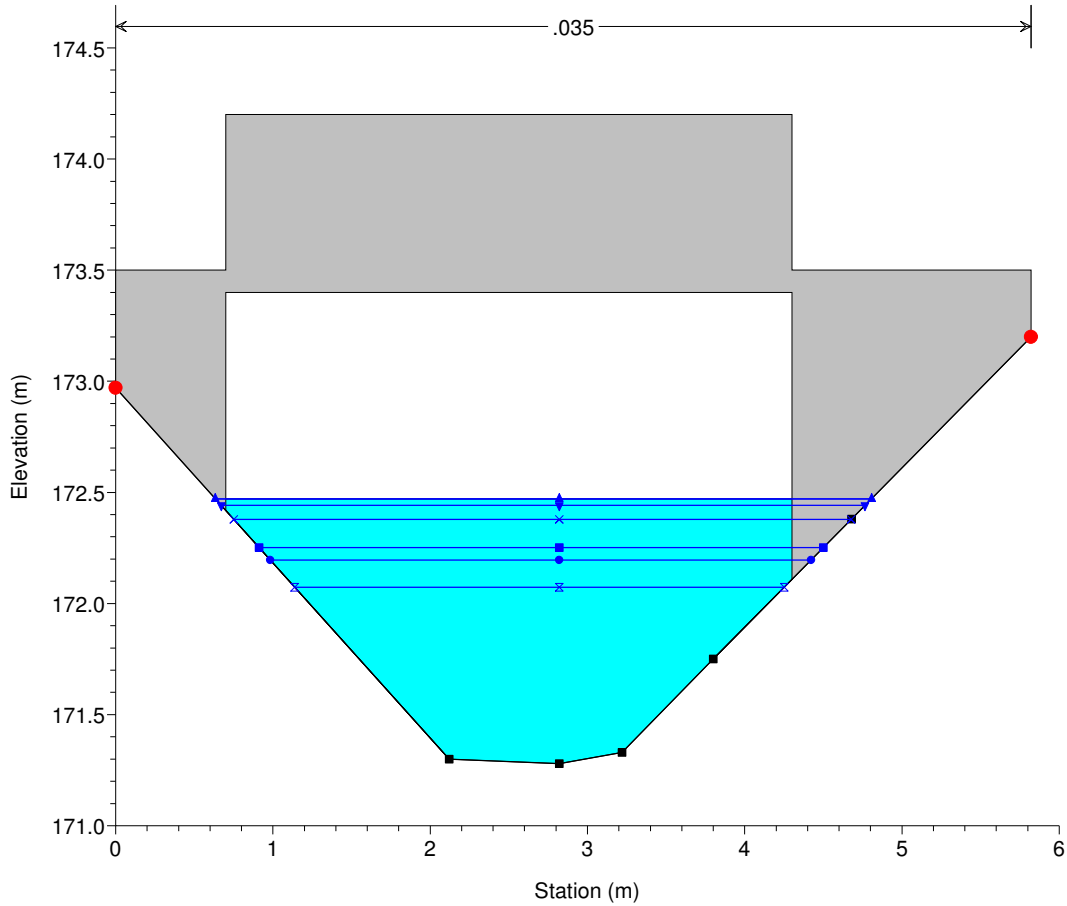
River = Borro S. Paolo Reach = unico RS = 403 SP3 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

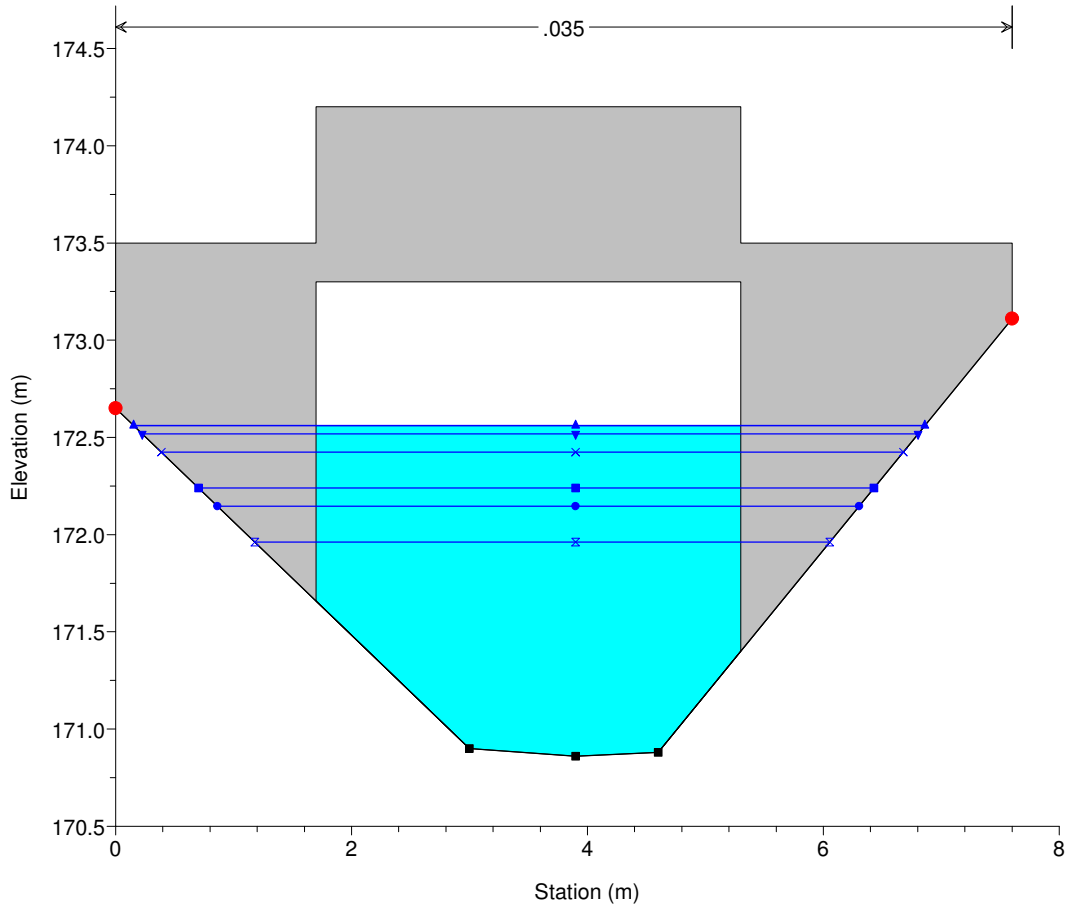
River = Borro S. Paolo Reach = unico RS = 402.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

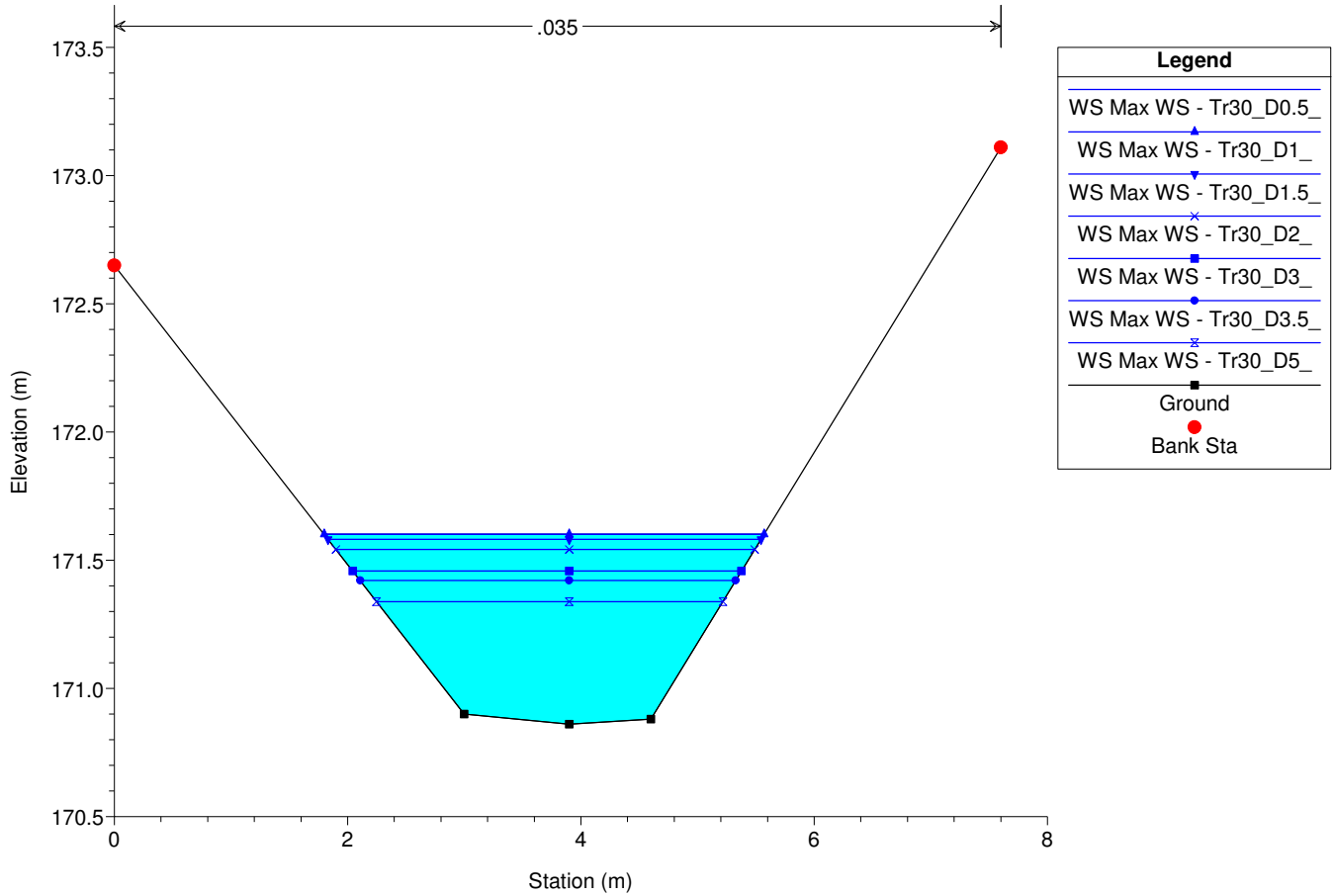
River = Borro S. Paolo Reach = unico RS = 402.5 BR



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

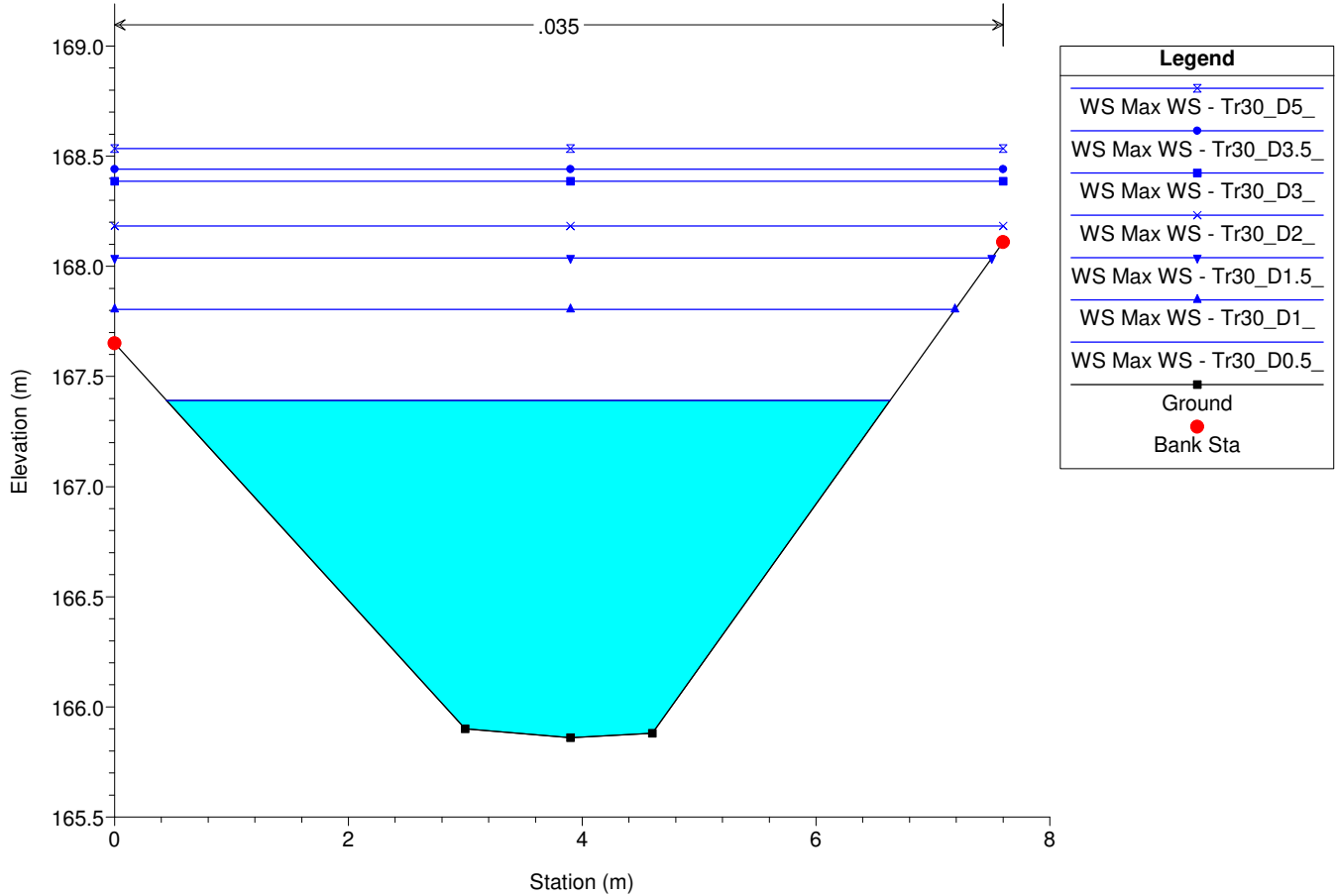
River = Borro S. Paolo Reach = unico RS = 402 SP2 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr30_D0.5_ 2) Tr30_D1_ 3) Tr30_D1.5_ 4) Tr30_D2_ 5) Tr30_D3_ 6) Tr30_D3.5_ 7) Tr30_D5_

Geom: Pesa Storage Confluenza_

River = Borro S. Paolo Reach = unico RS = 401 SP1 [COPIA della Sez. 2 - Quote abbassate di 5m]





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=200 anni

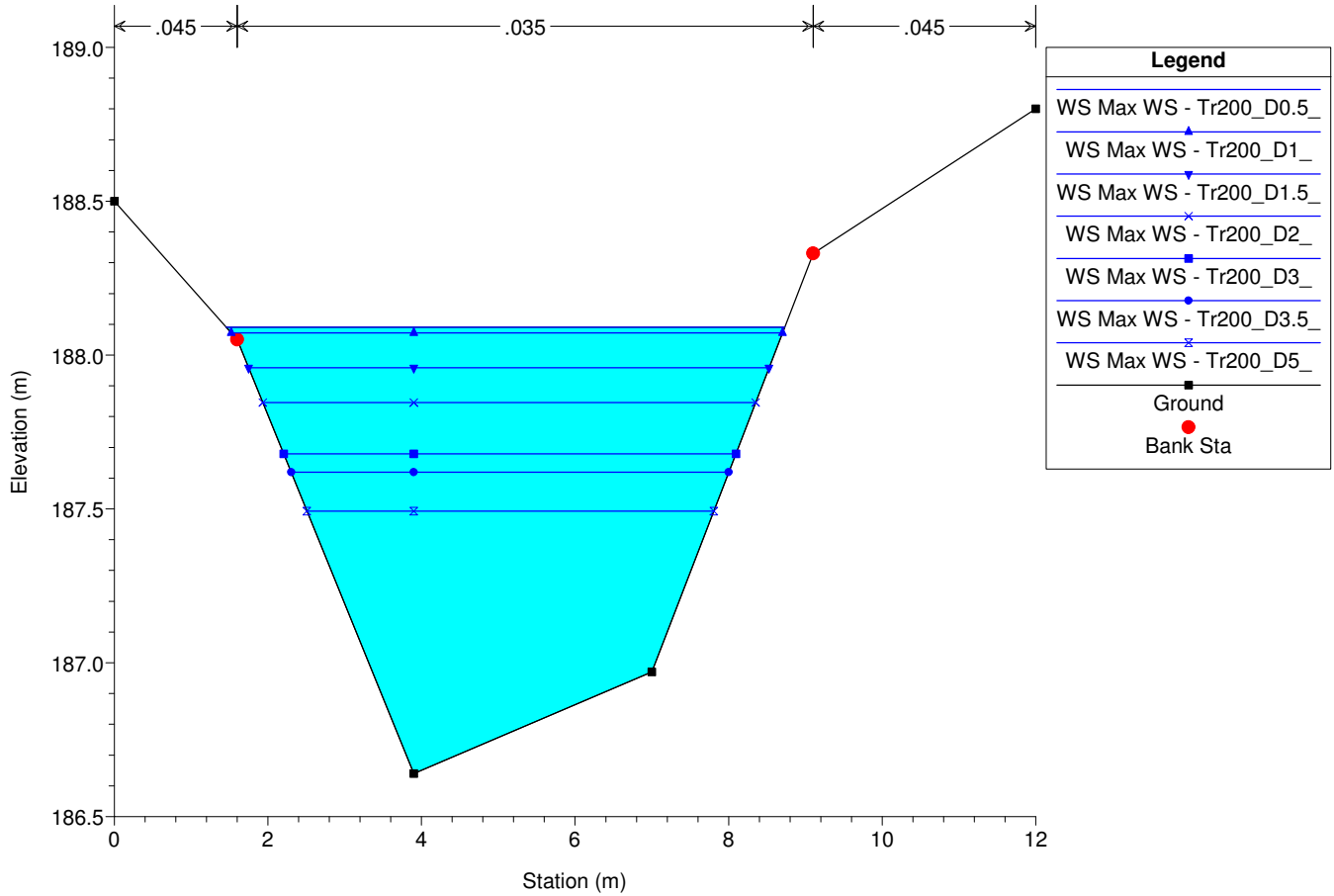
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Sezioni Trasversali (da monte verso valle)

Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

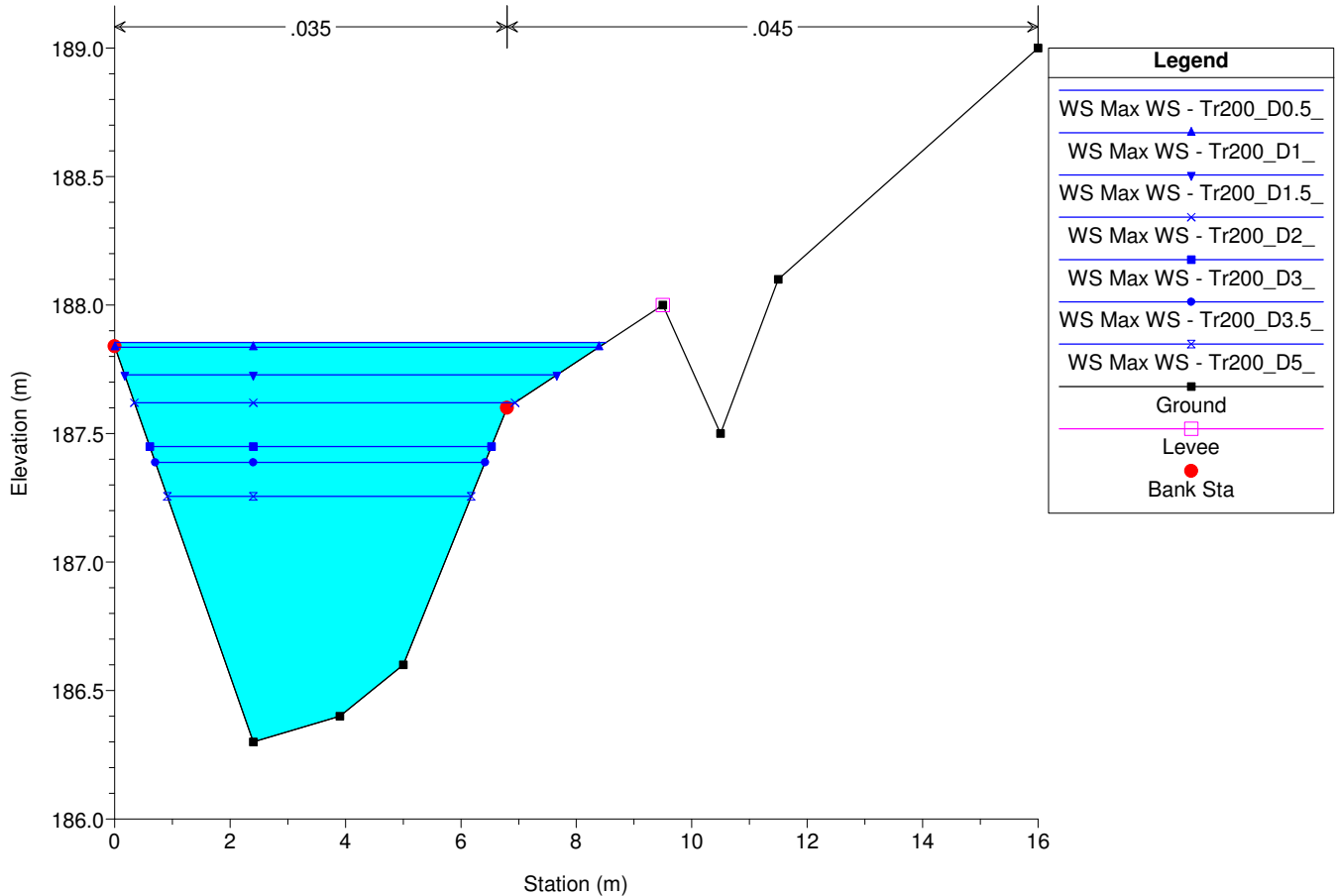
River = Borro S. Paolo Reach = unico RS = 420 SP20 - Rilievo CBTC 08 - MODIFICHE: pti 6-8 aggiunti x fosso



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

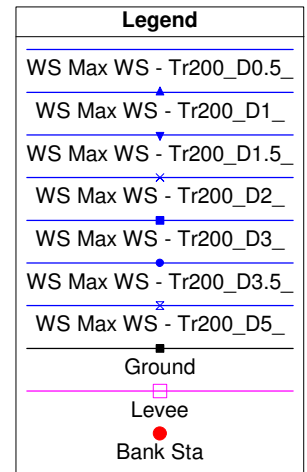
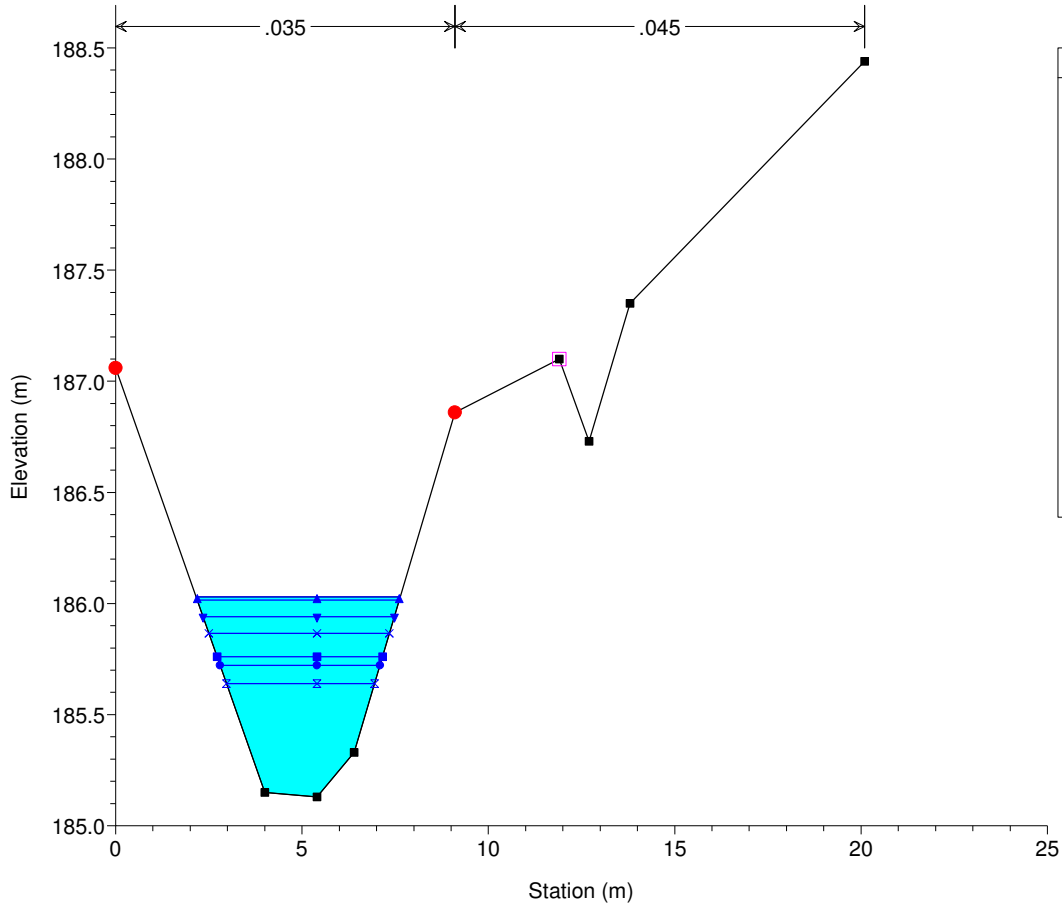
River = Borro S. Paolo Reach = unico RS = 419 SP19 - Rilievo CBTC 08 - MODIFICHE: pti 6-9 aggiunti x SP19 - R



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

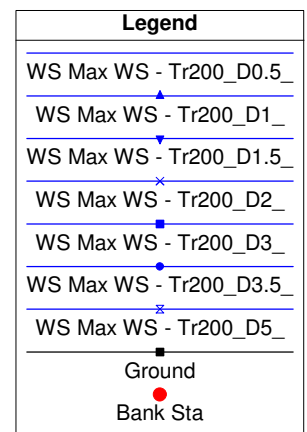
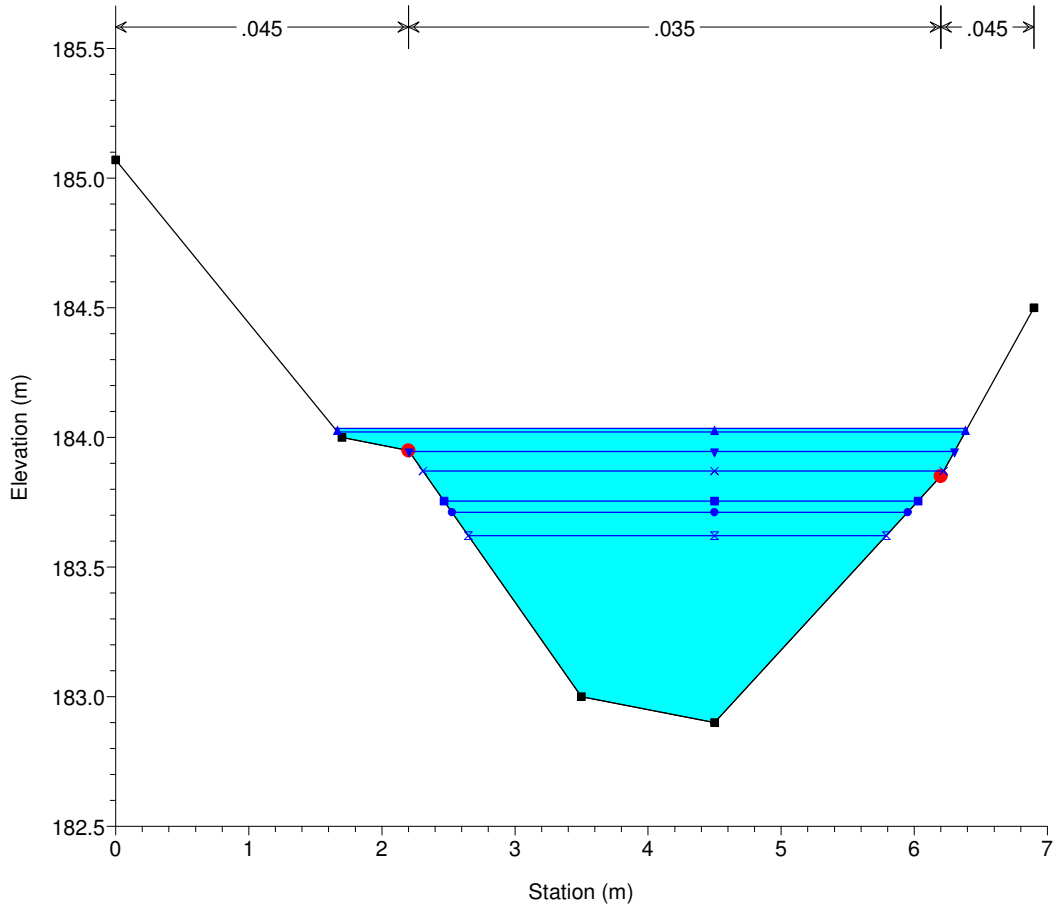
River = Borro S. Paolo Reach = unico RS = 418 SP18 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

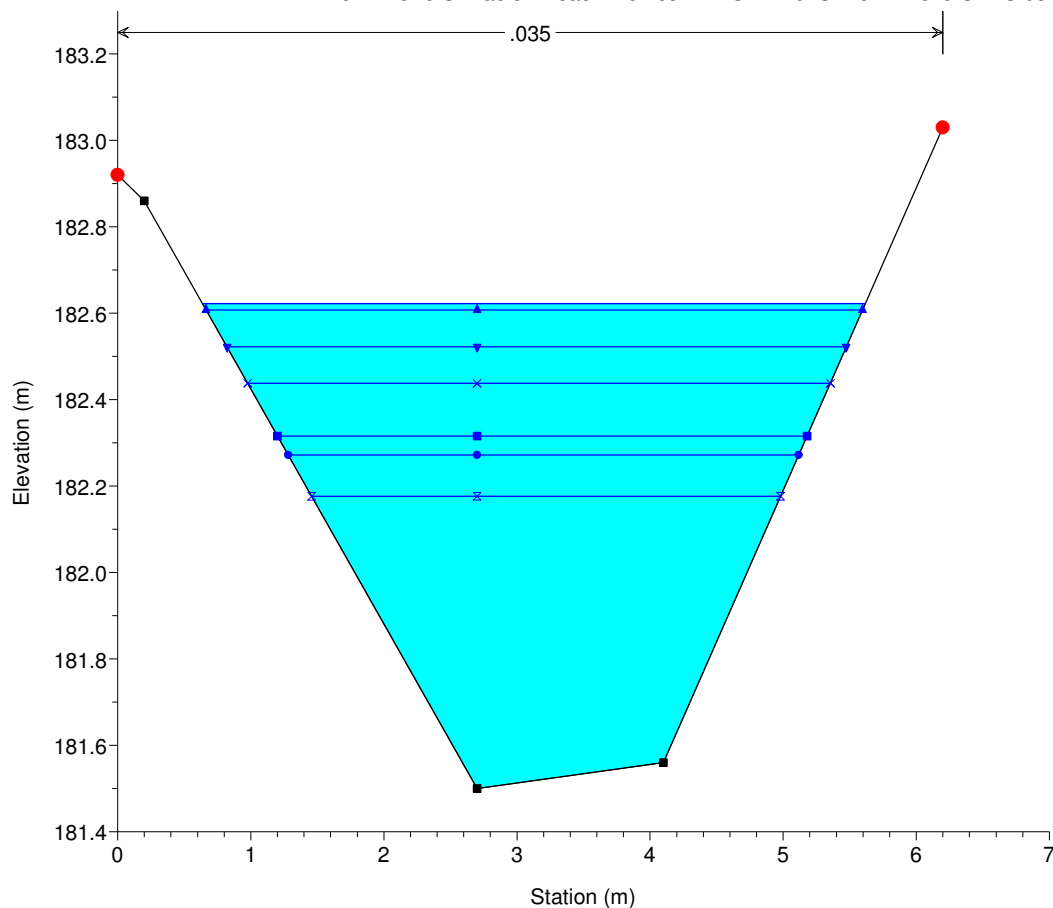
River = Borro S. Paolo Reach = unico RS = 417 SP17 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

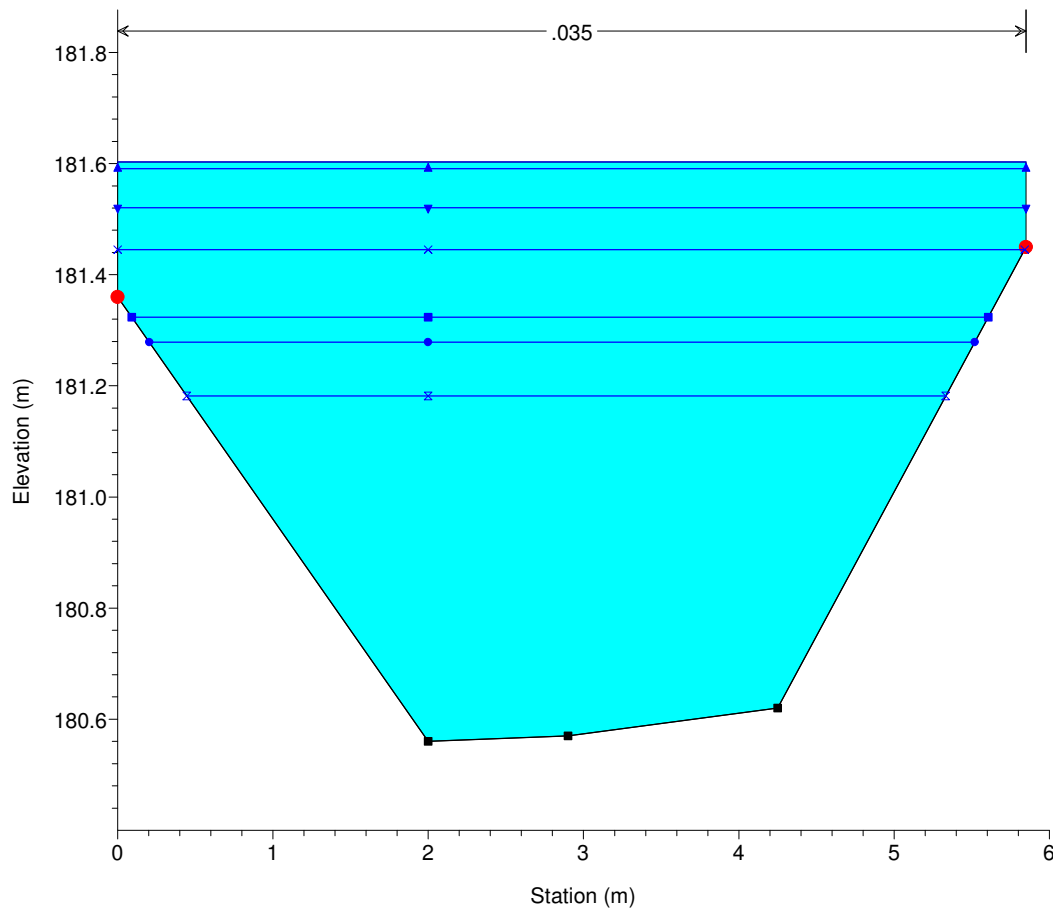
River = Borro S. Paolo Reach = unico RS = 416 SP16 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

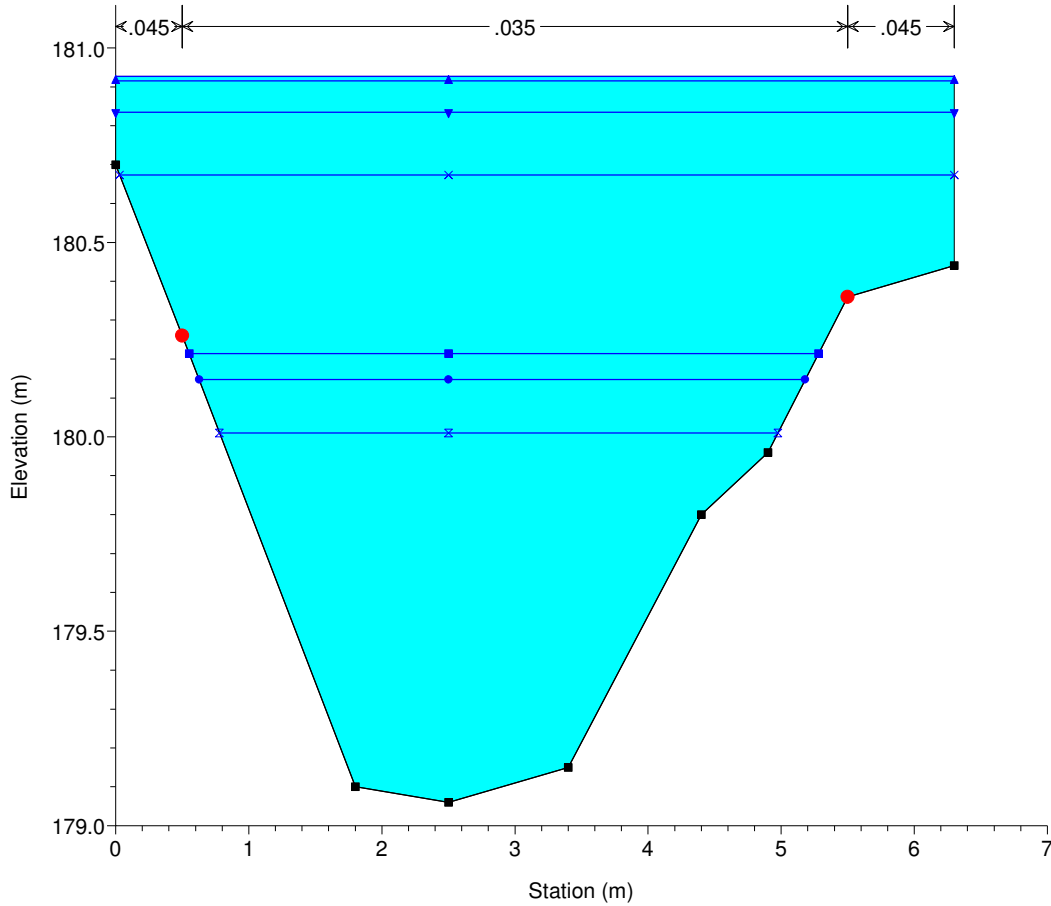
River = Borro S. Paolo Reach = unico RS = 415 SP15 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

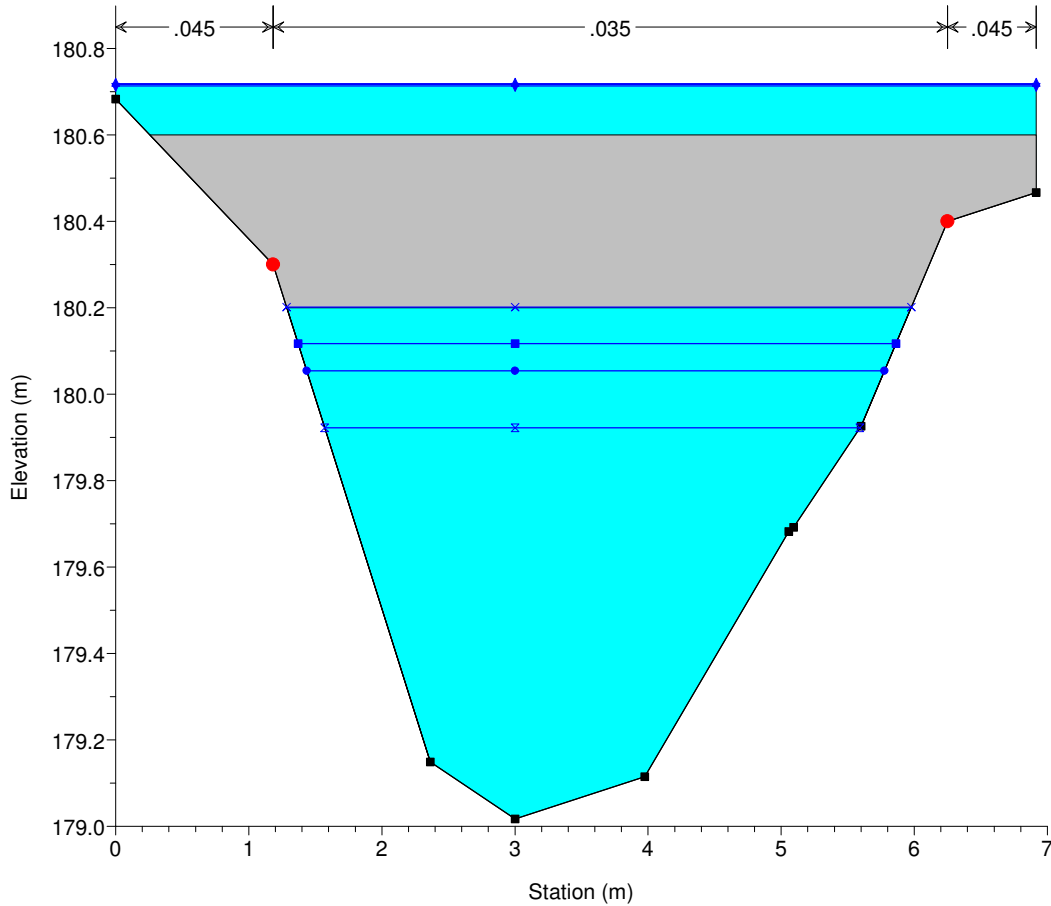
River = Borro S. Paolo Reach = unico RS = 414 SP14 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

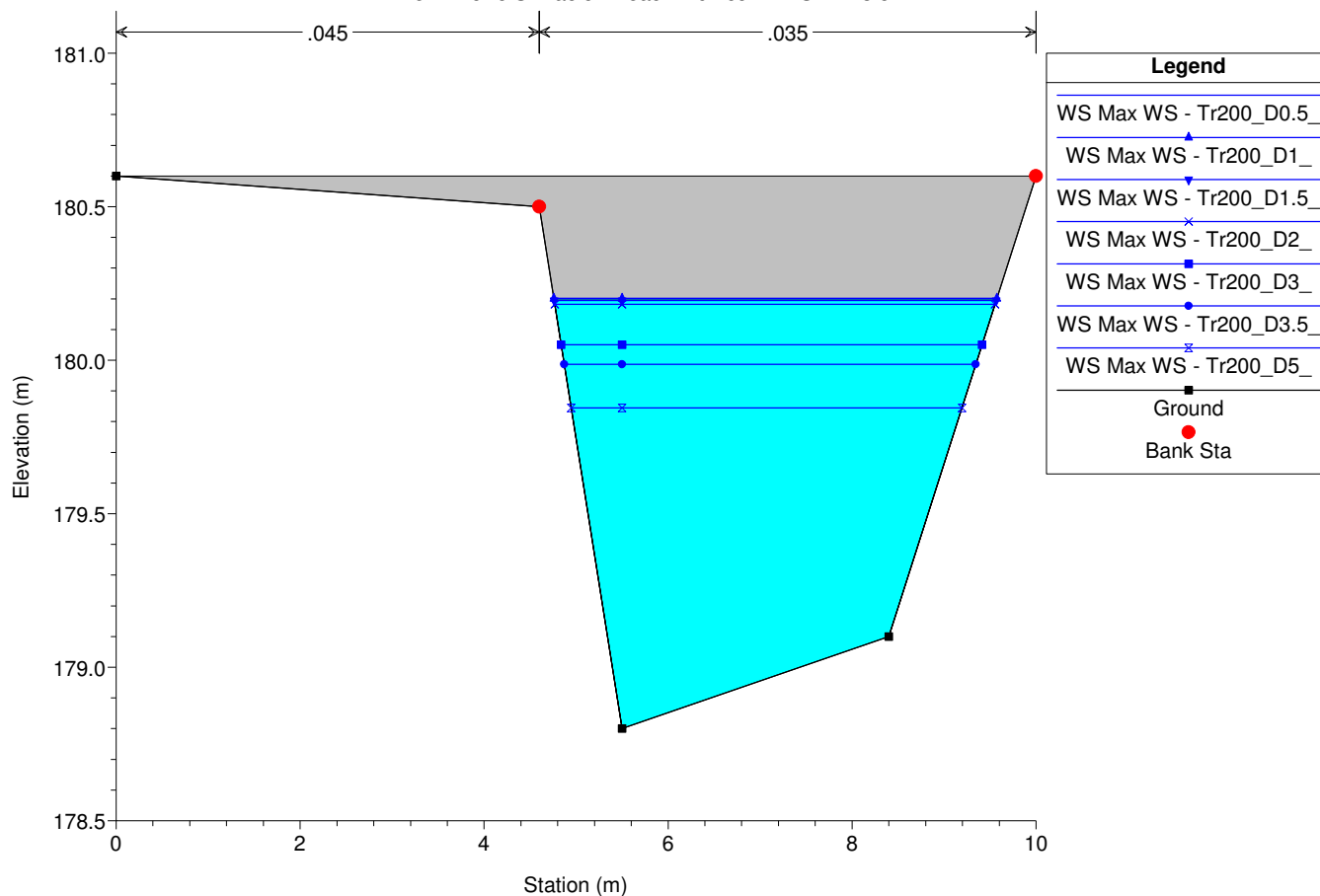
River = Borro S. Paolo Reach = unico RS = 413.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

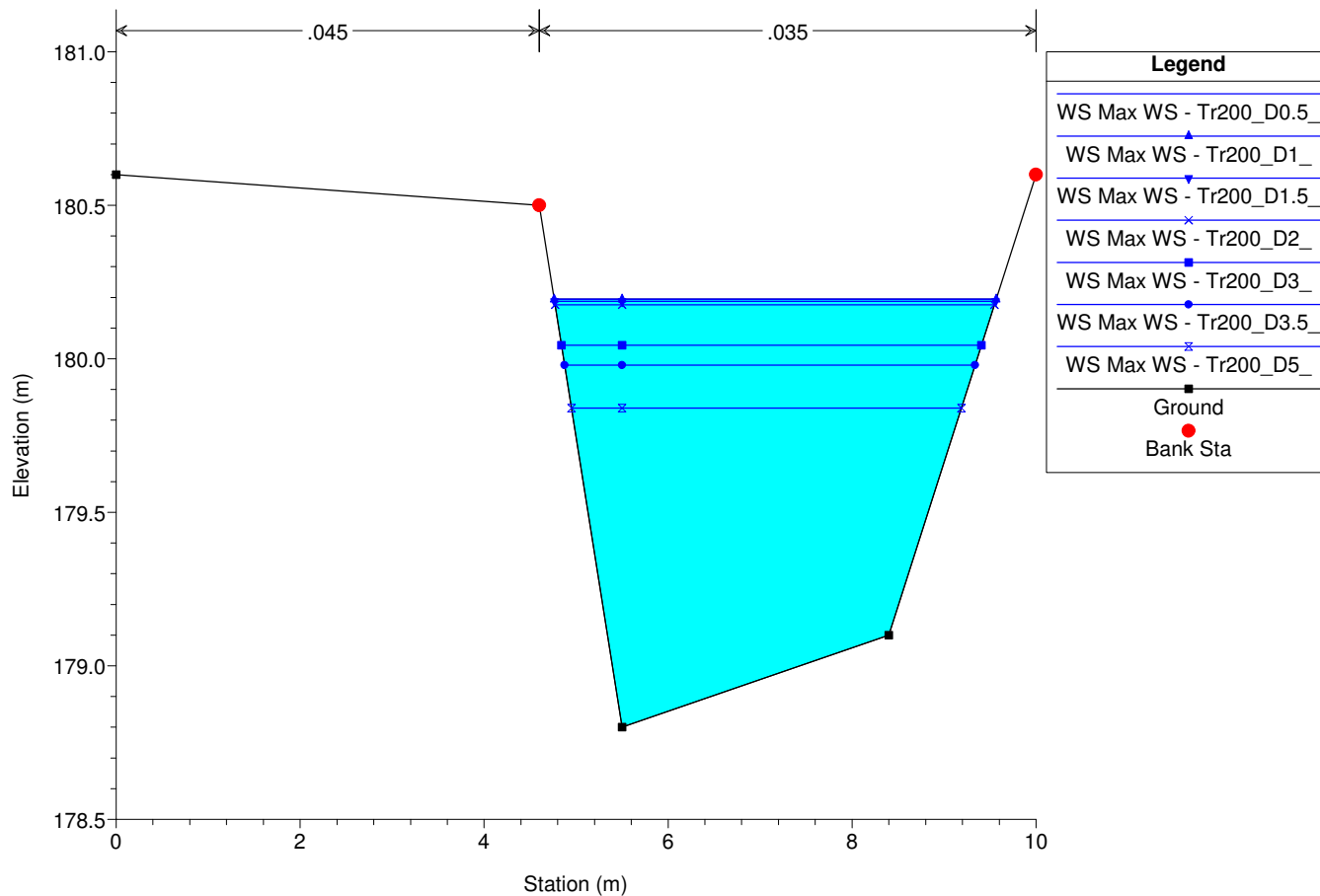
River = Borro S. Paolo Reach = unico RS = 413.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

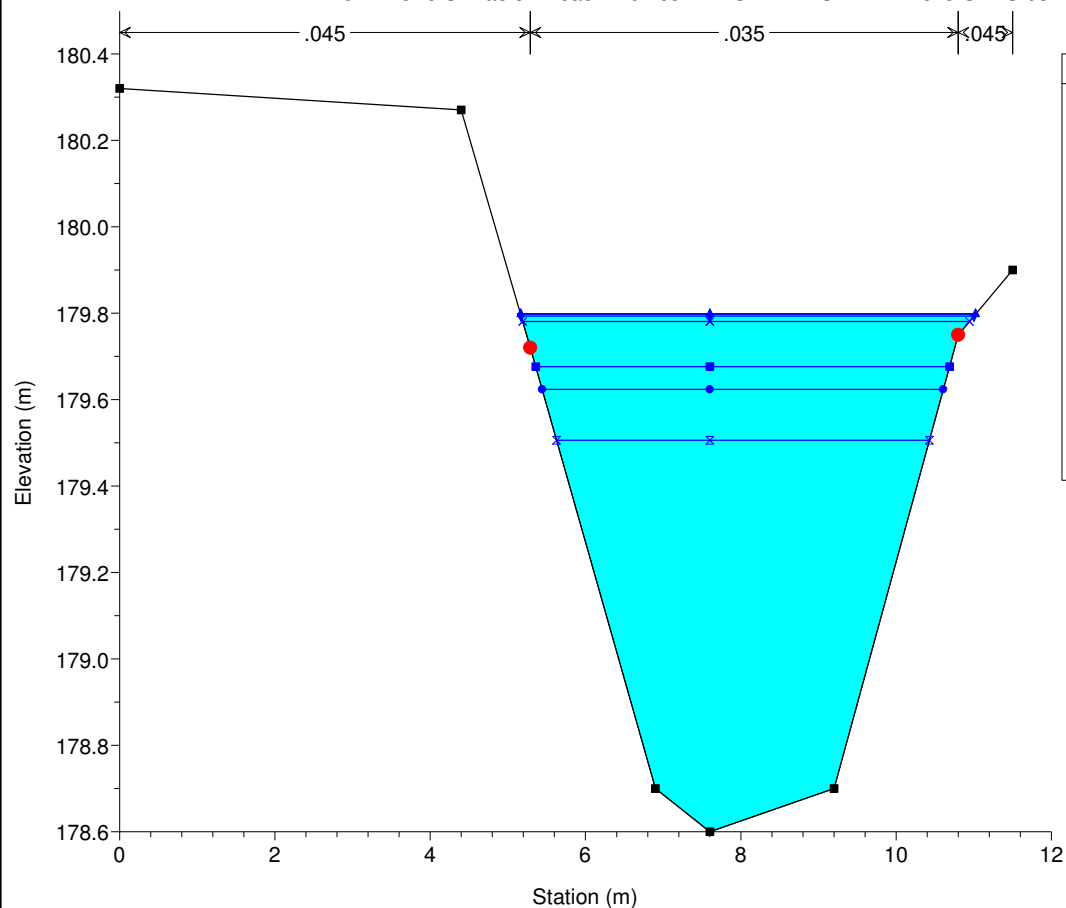
River = Borro S. Paolo Reach = unico RS = 413 SP13 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

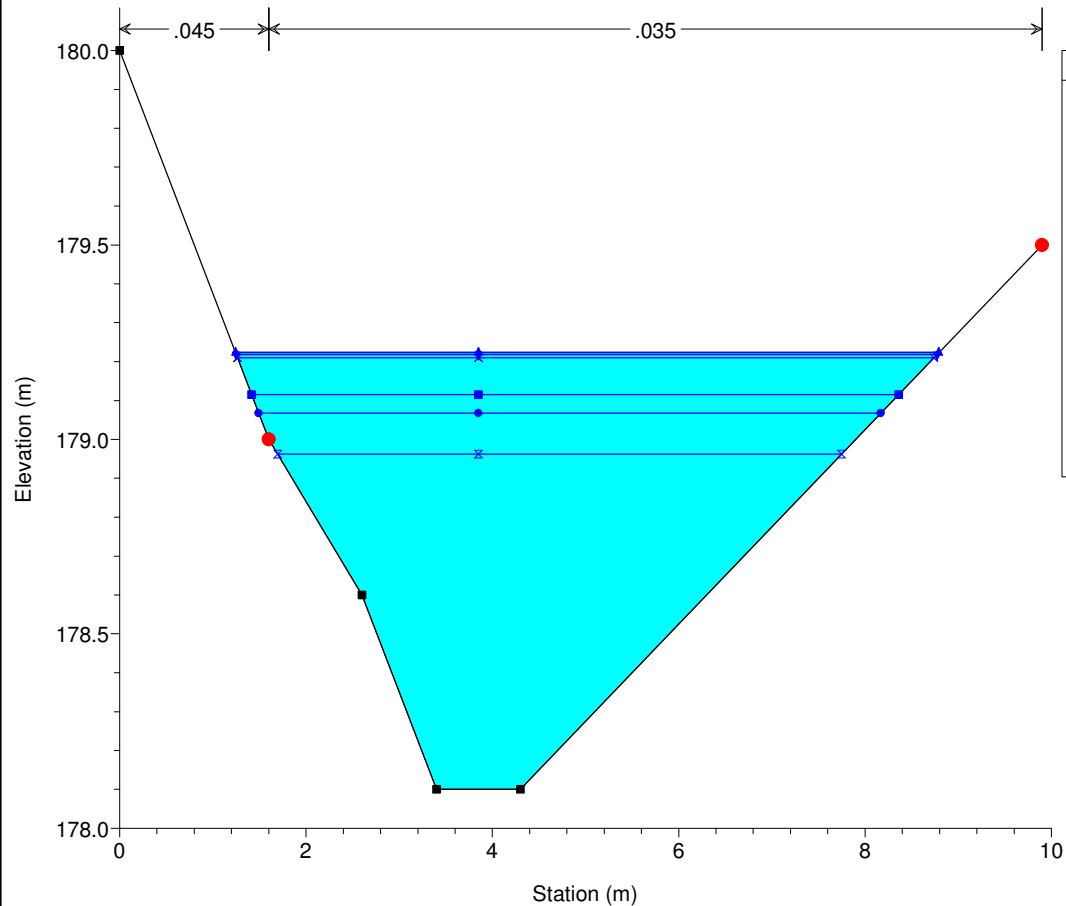
River = Borro S. Paolo Reach = unico RS = 412 SP12 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

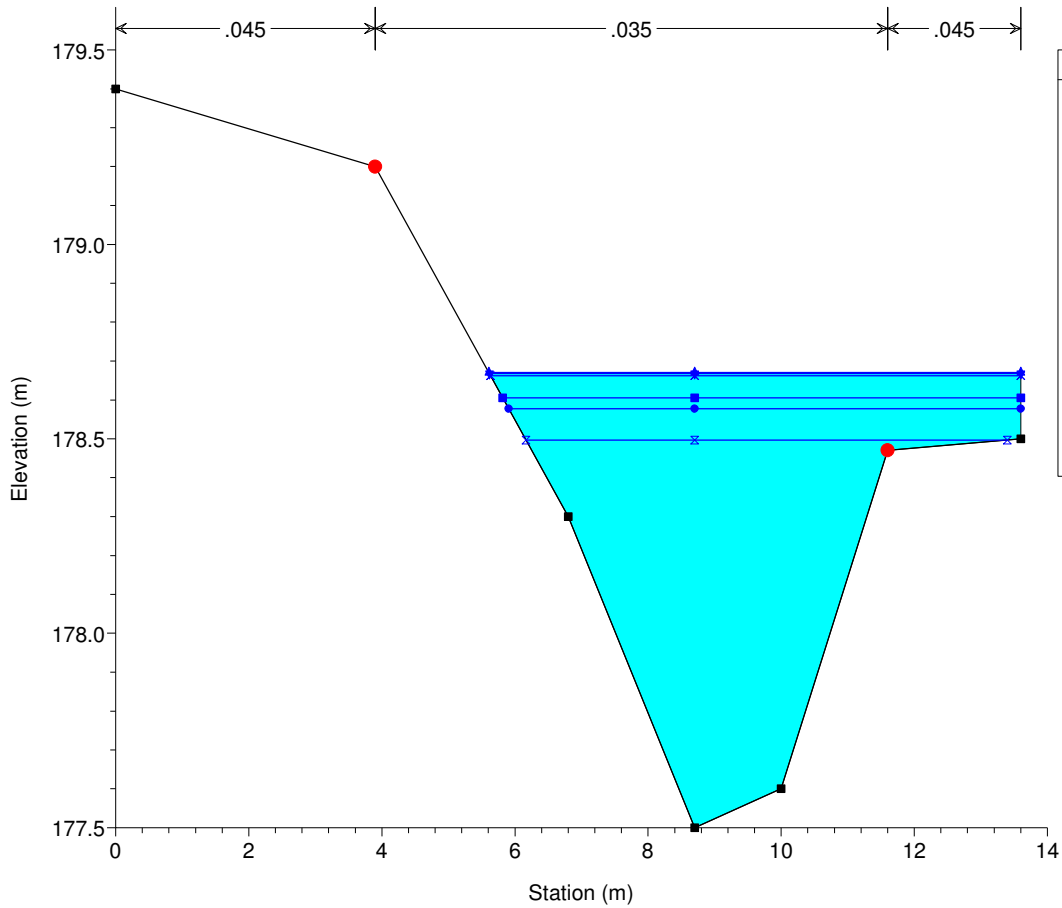
River = Borro S. Paolo Reach = unico RS = 411 SP11 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

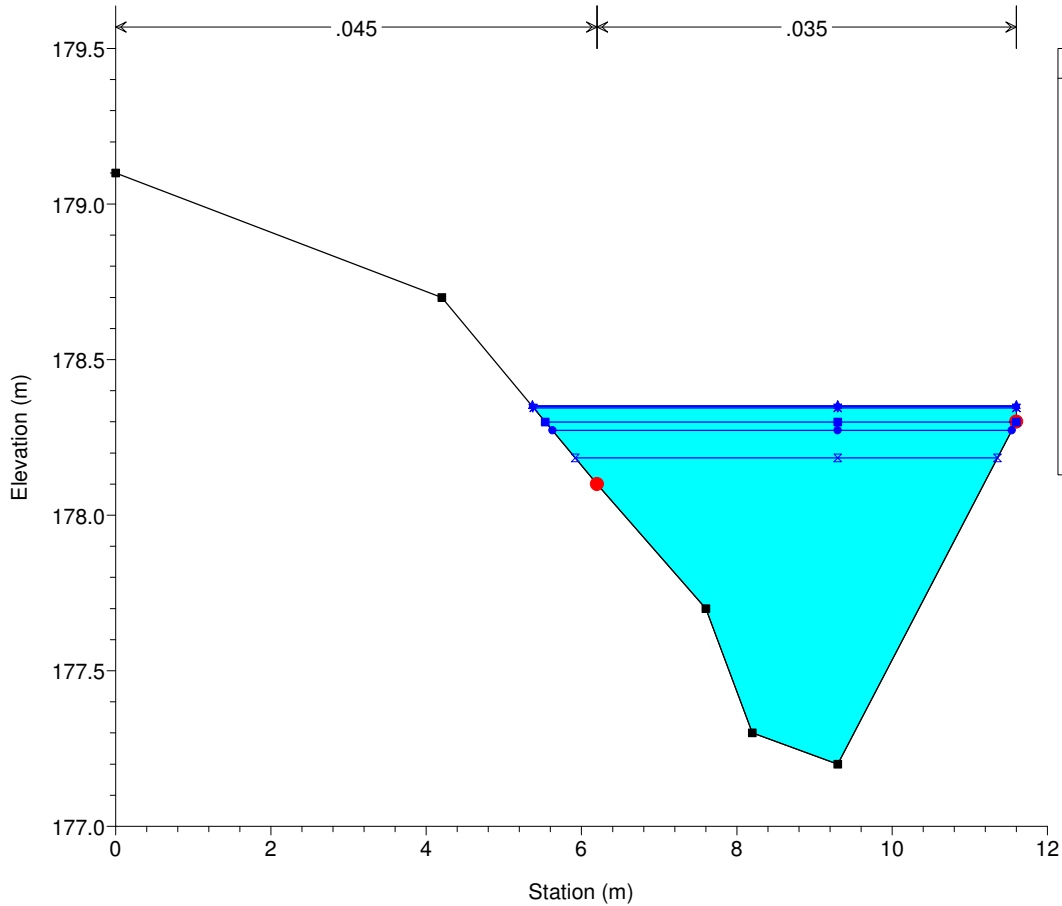
River = Borro S. Paolo Reach = unico RS = 410 SP10 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

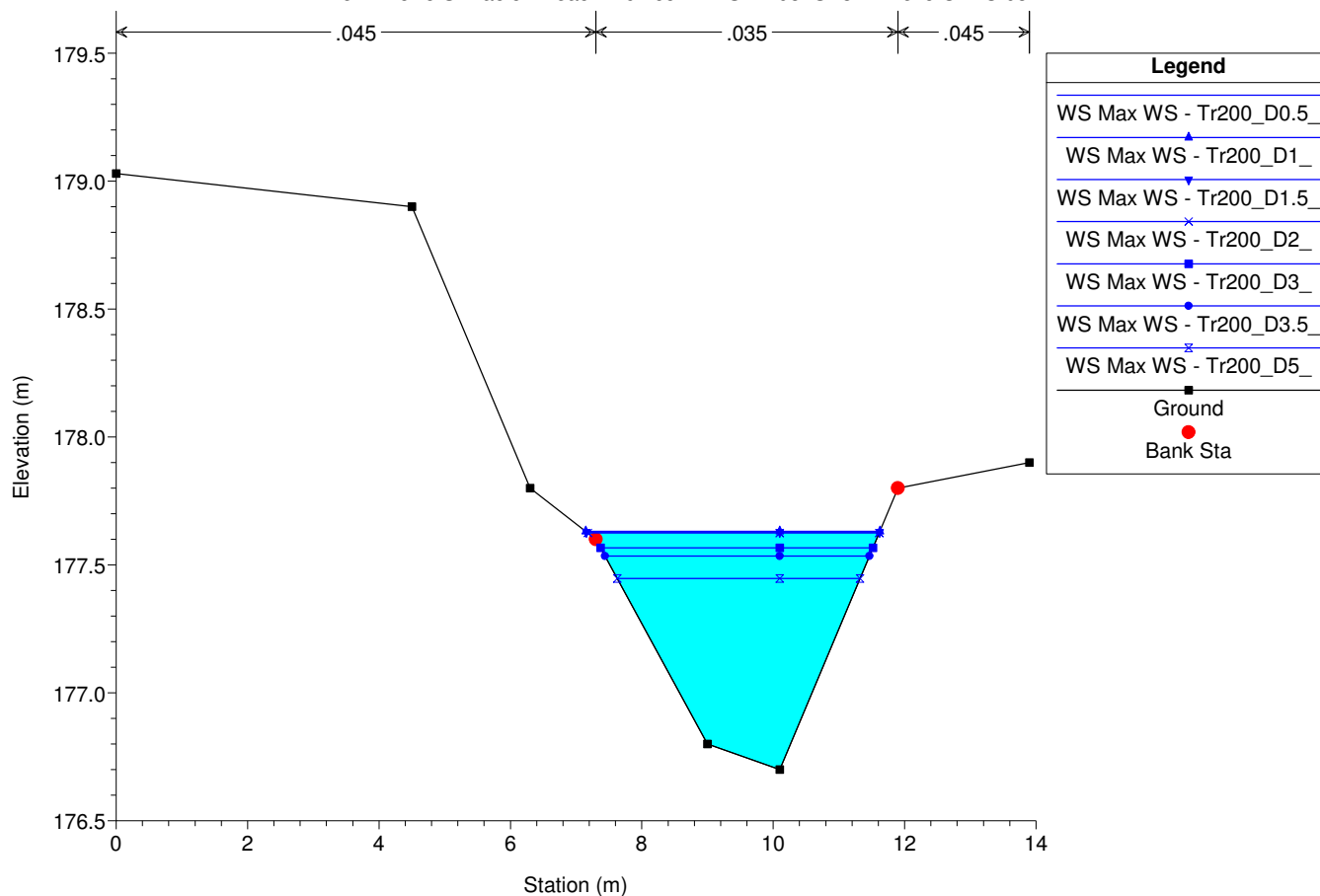
River = Borro S. Paolo Reach = unico RS = 409 SP9 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

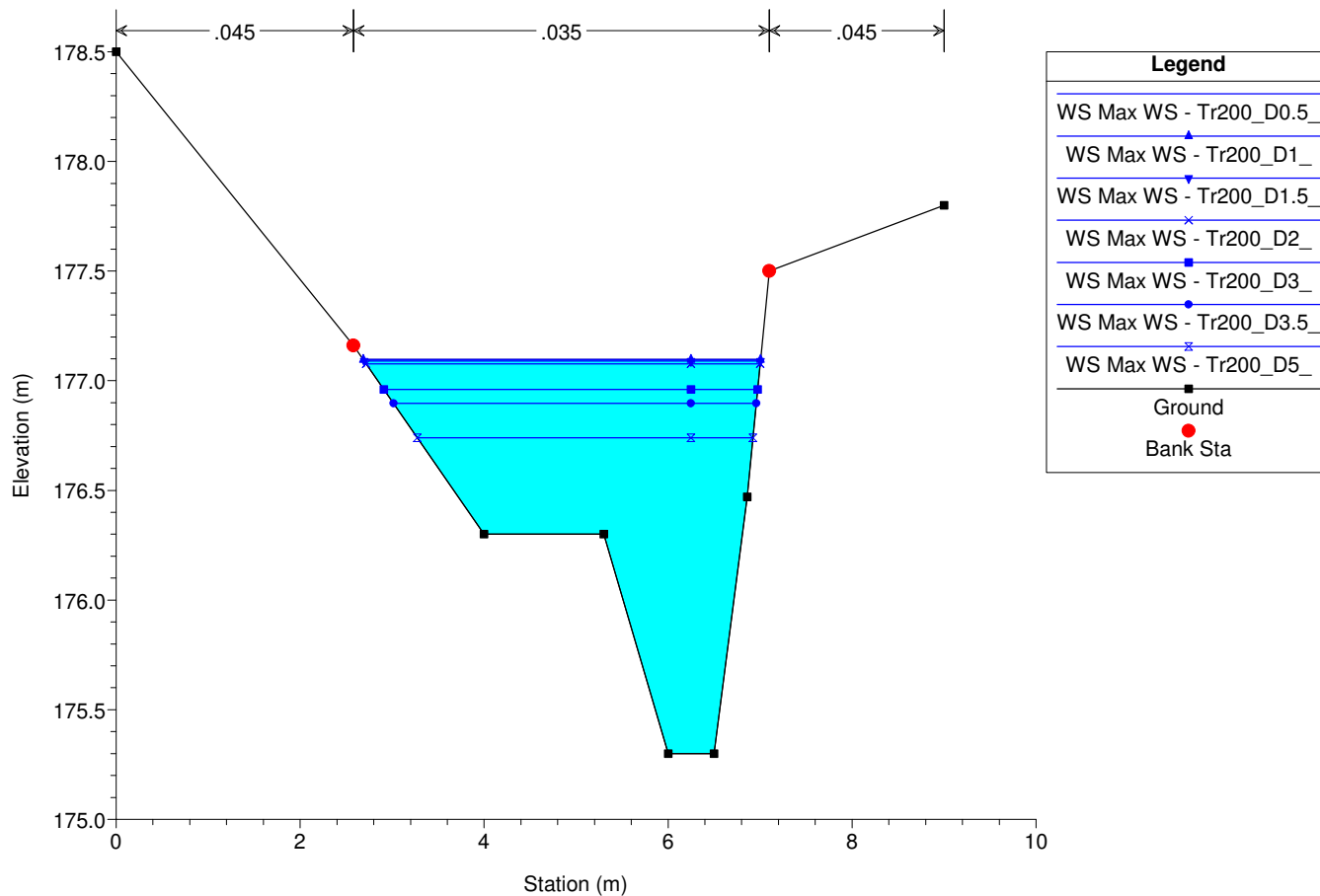
River = Borro S. Paolo Reach = unico RS = 408 SP8 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

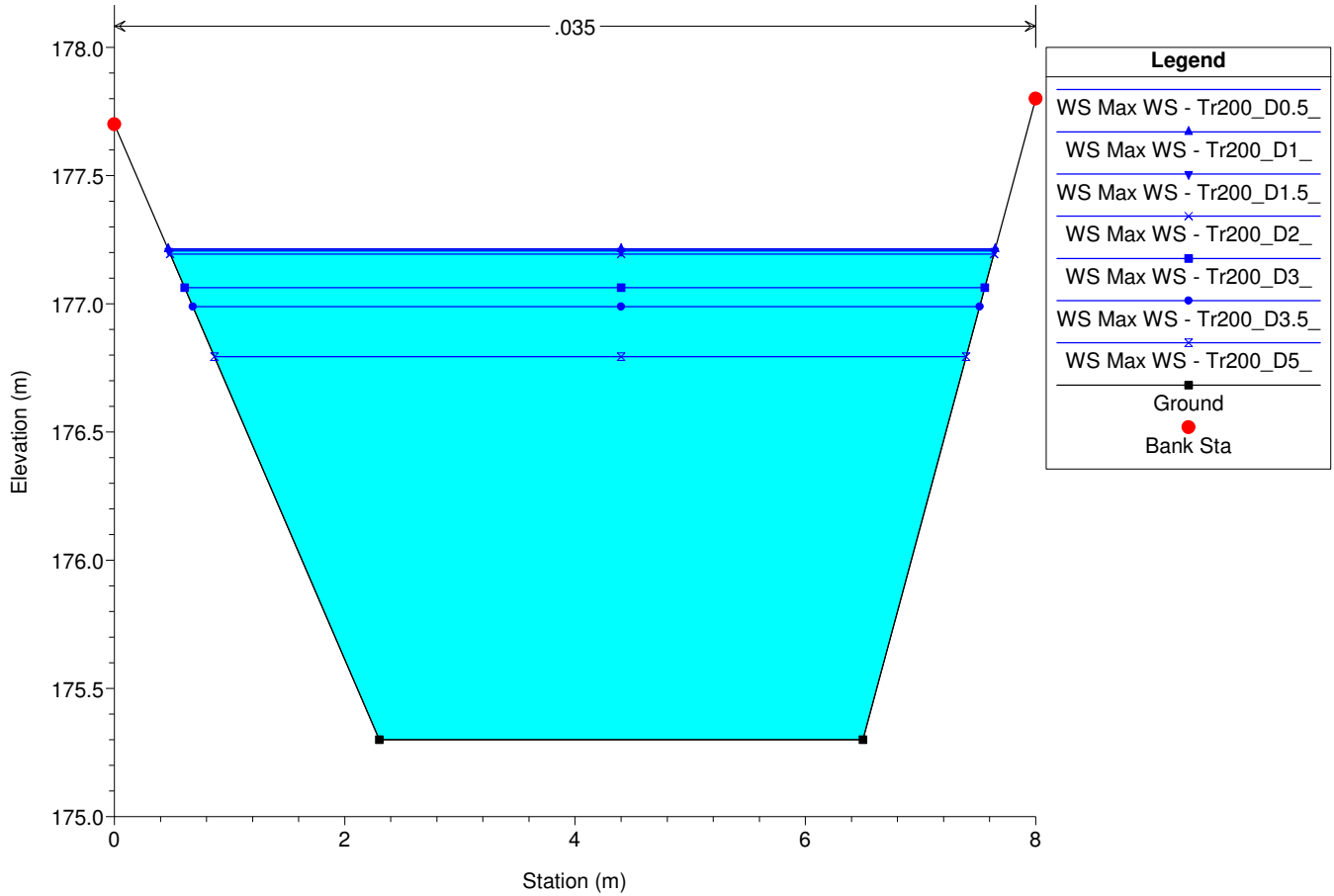
River = Borro S. Paolo Reach = unico RS = 407 SP7 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

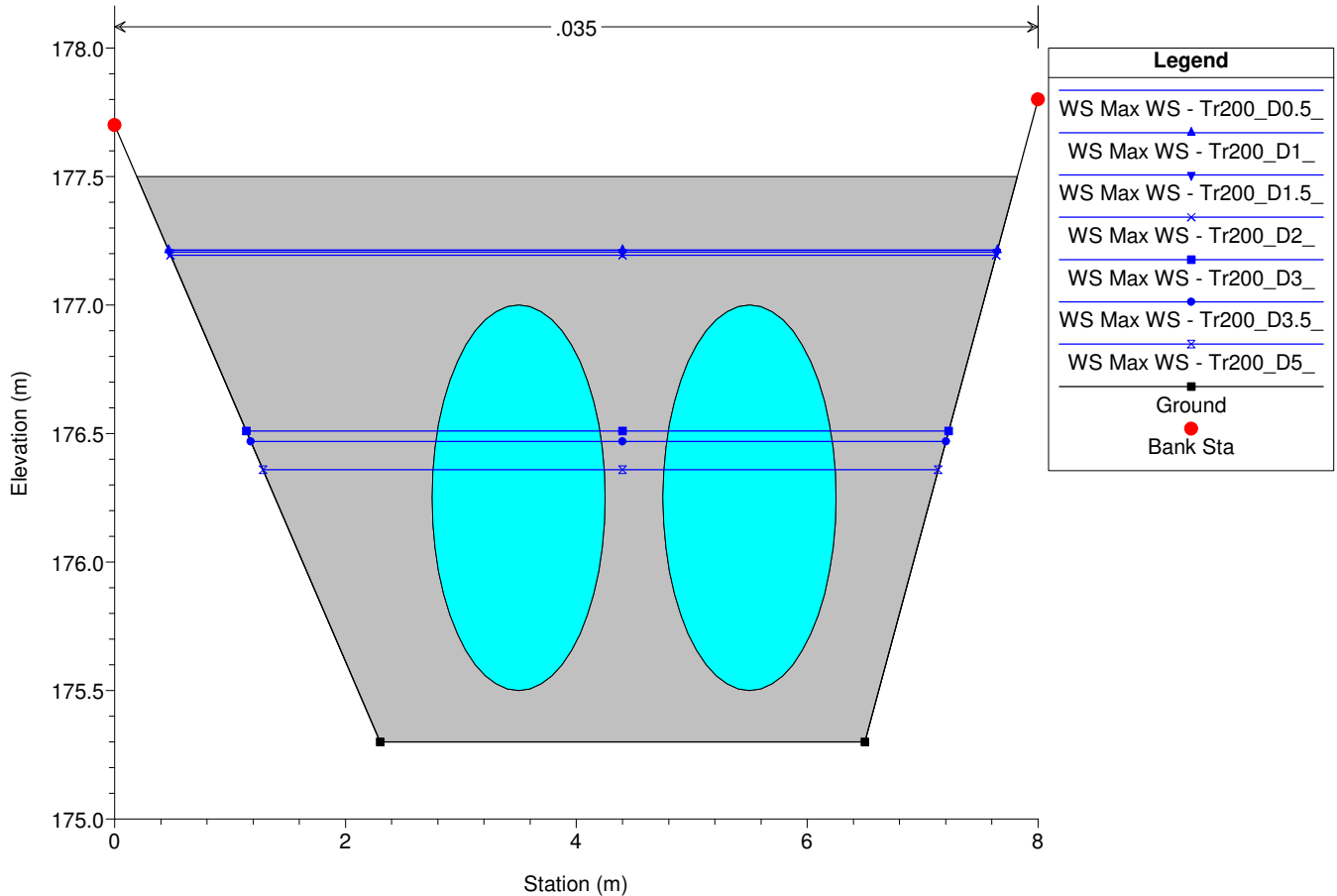
River = Borro S. Paolo Reach = unico RS = 406 SP6 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

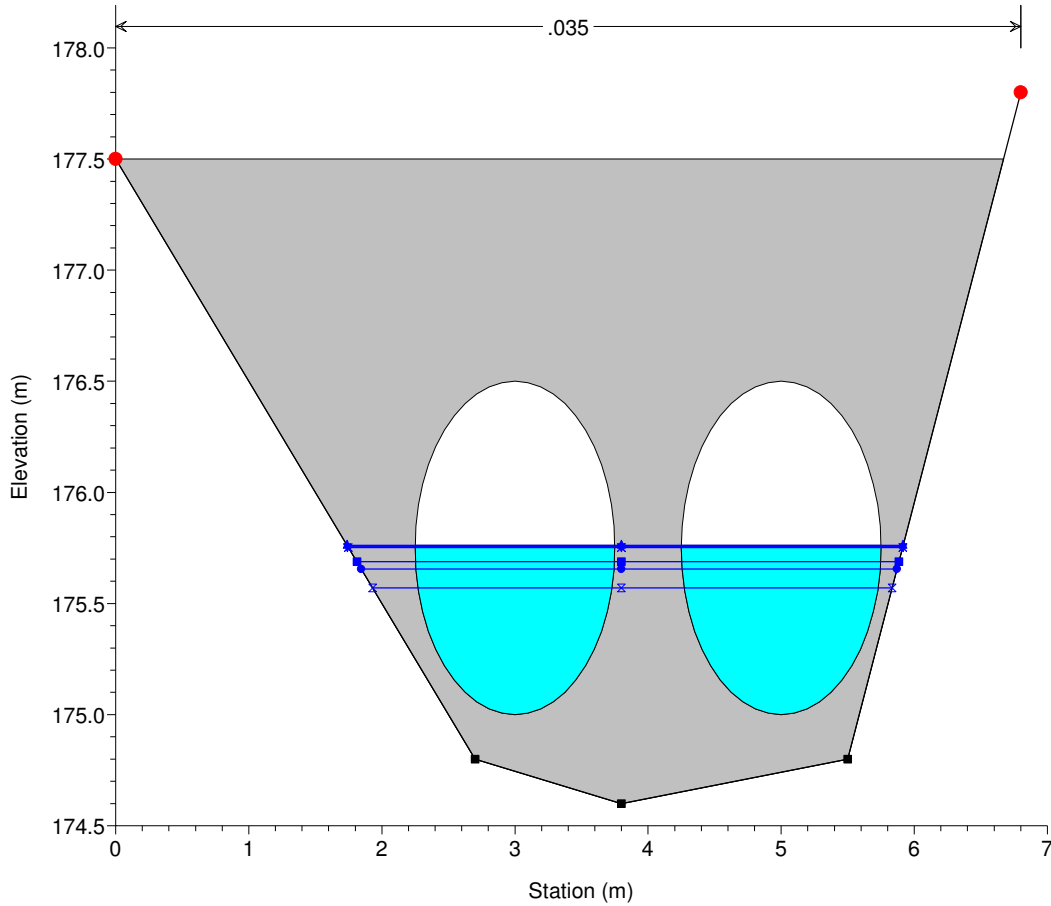
Geom: Pesa Storage Confluenza_

River = Borro S. Paolo Reach = unico RS = 405.5 Culv



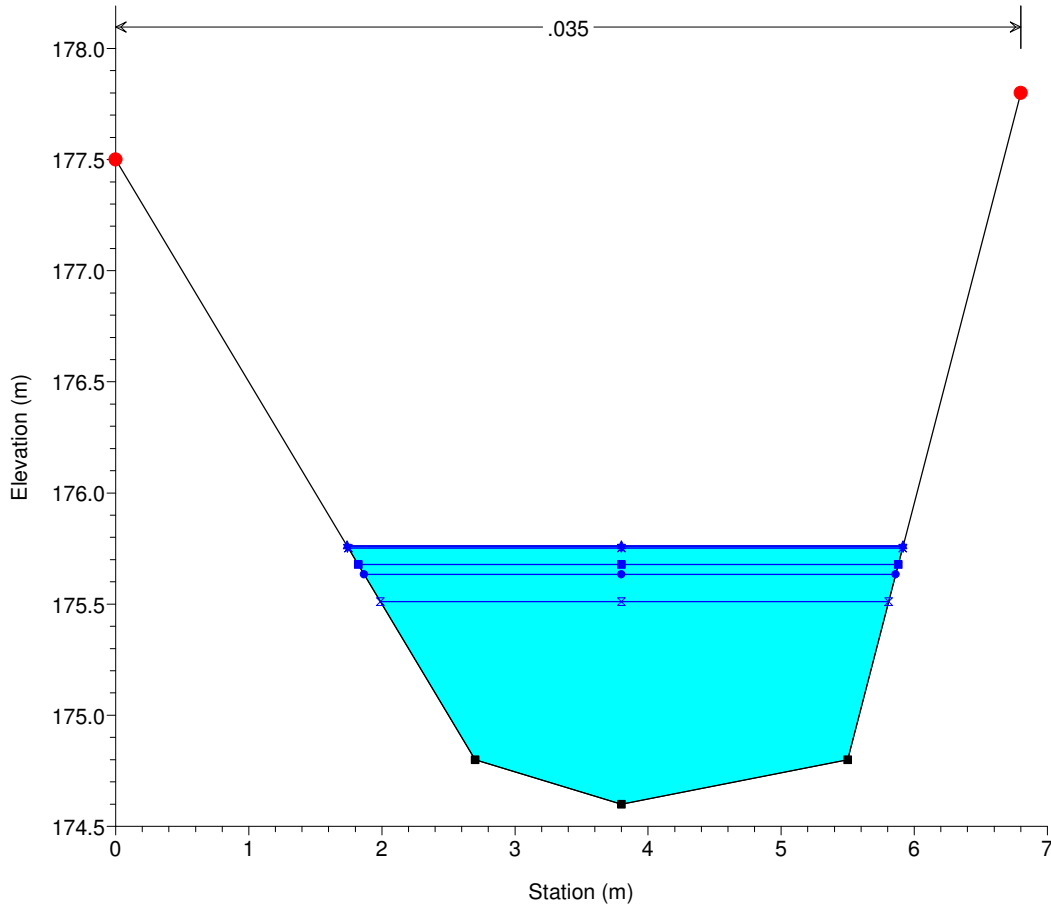
Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_
River = Borro S. Paolo Reach = unico RS = 405.5 Culv



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

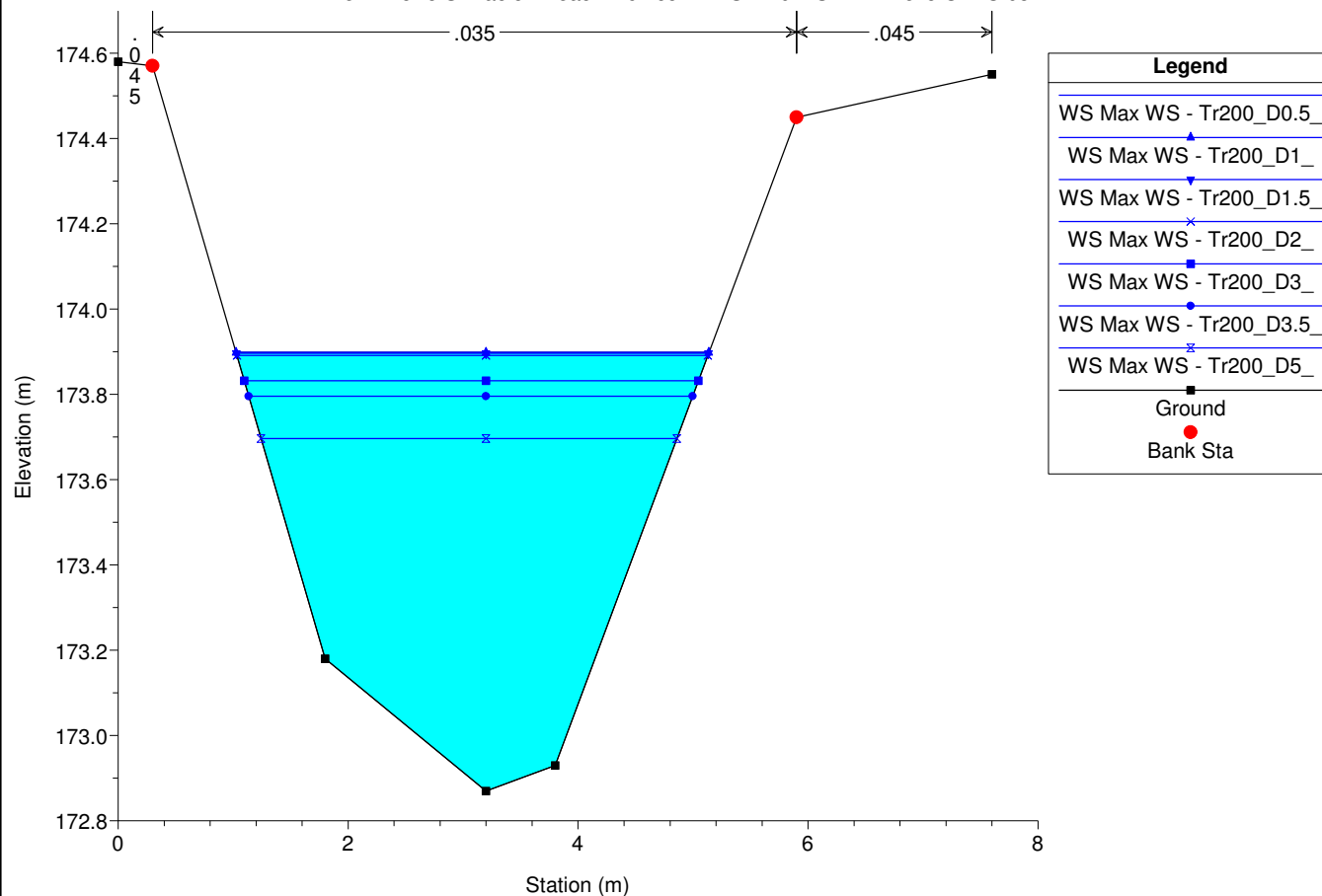
Geom: Pesa Storage Confluenza_
River = Borro S. Paolo Reach = unico RS = 405 SP5 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

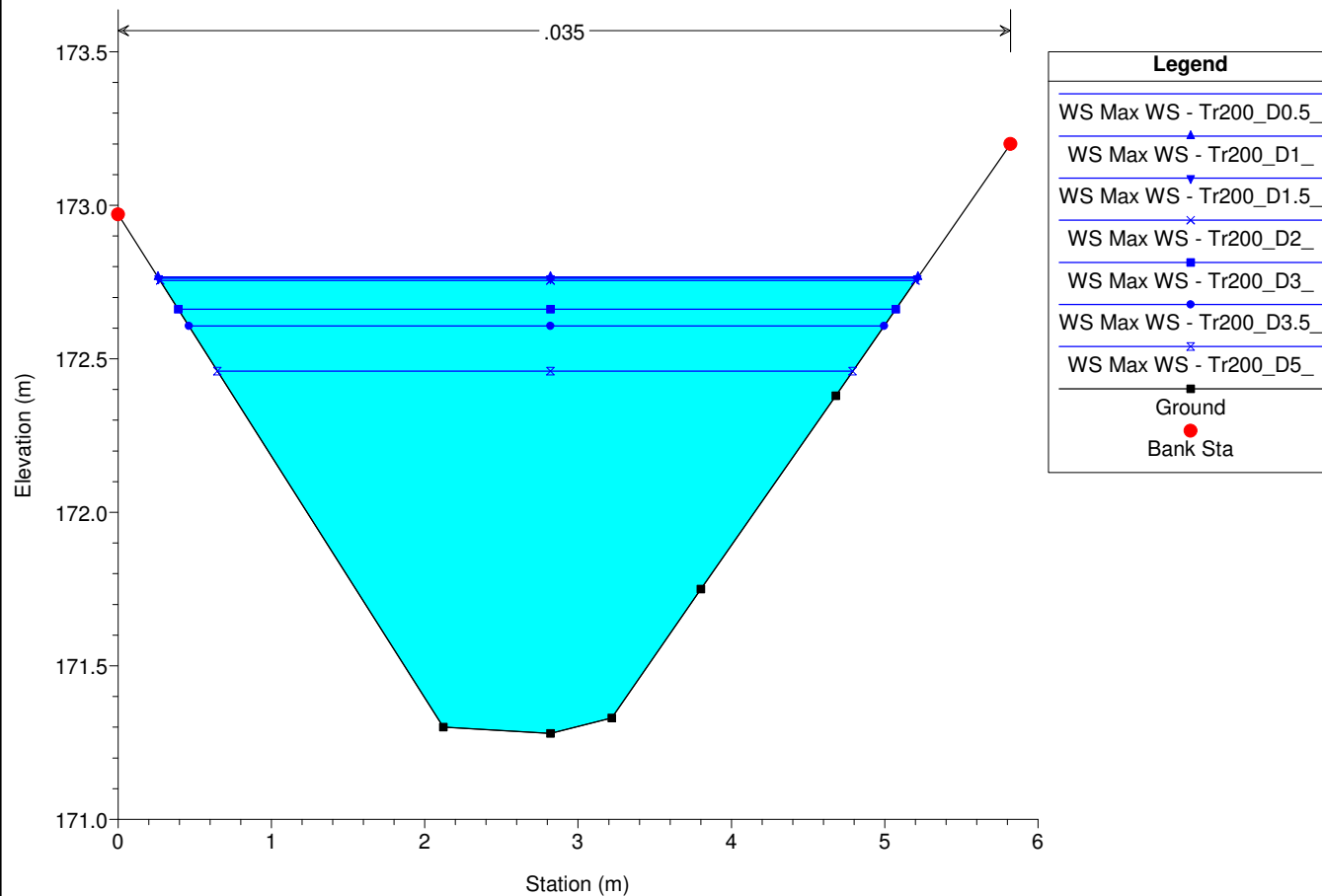
River = Borro S. Paolo Reach = unico RS = 404 SP4 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

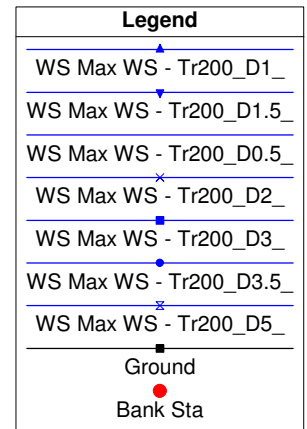
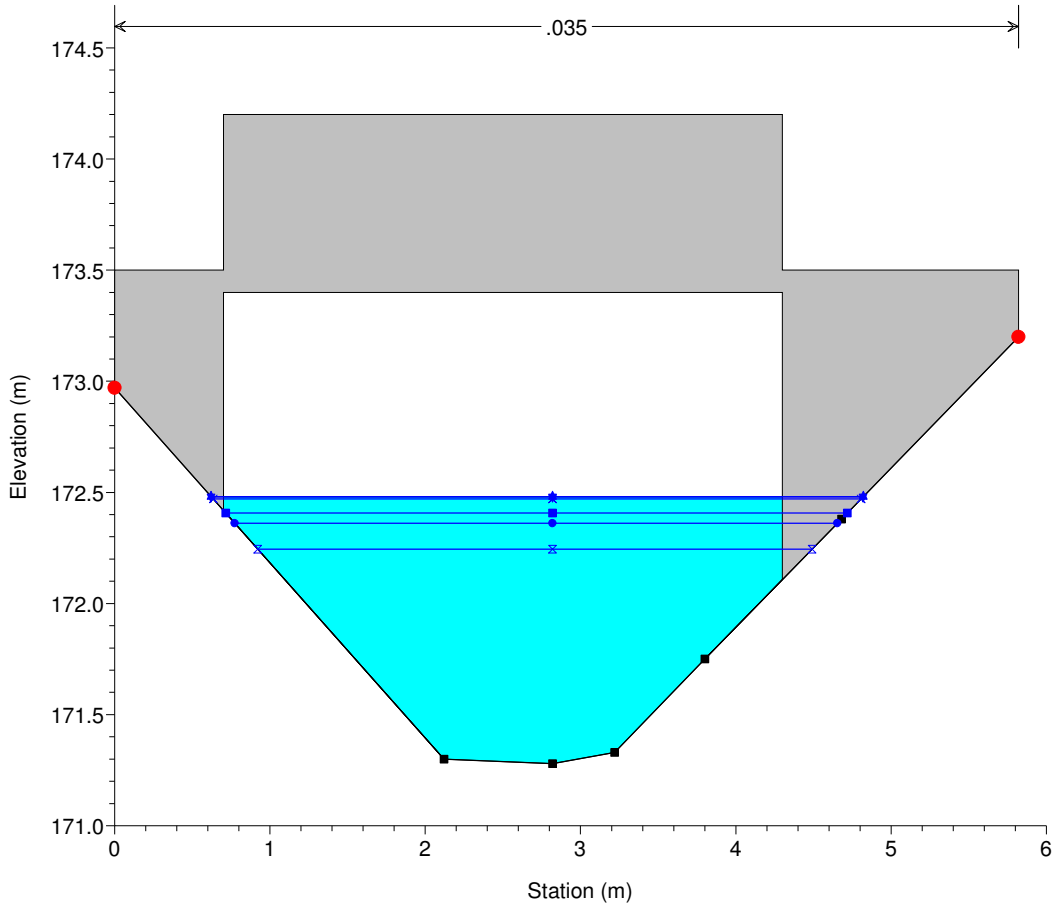
Geom: Pesa Storage Confluenza_

River = Borro S. Paolo Reach = unico RS = 403 SP3 - Rilievo CBTC 08



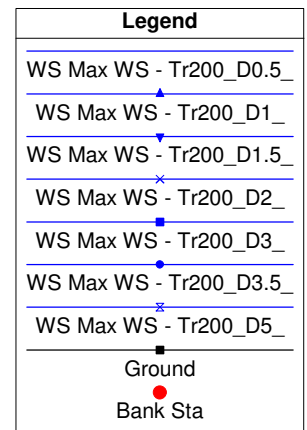
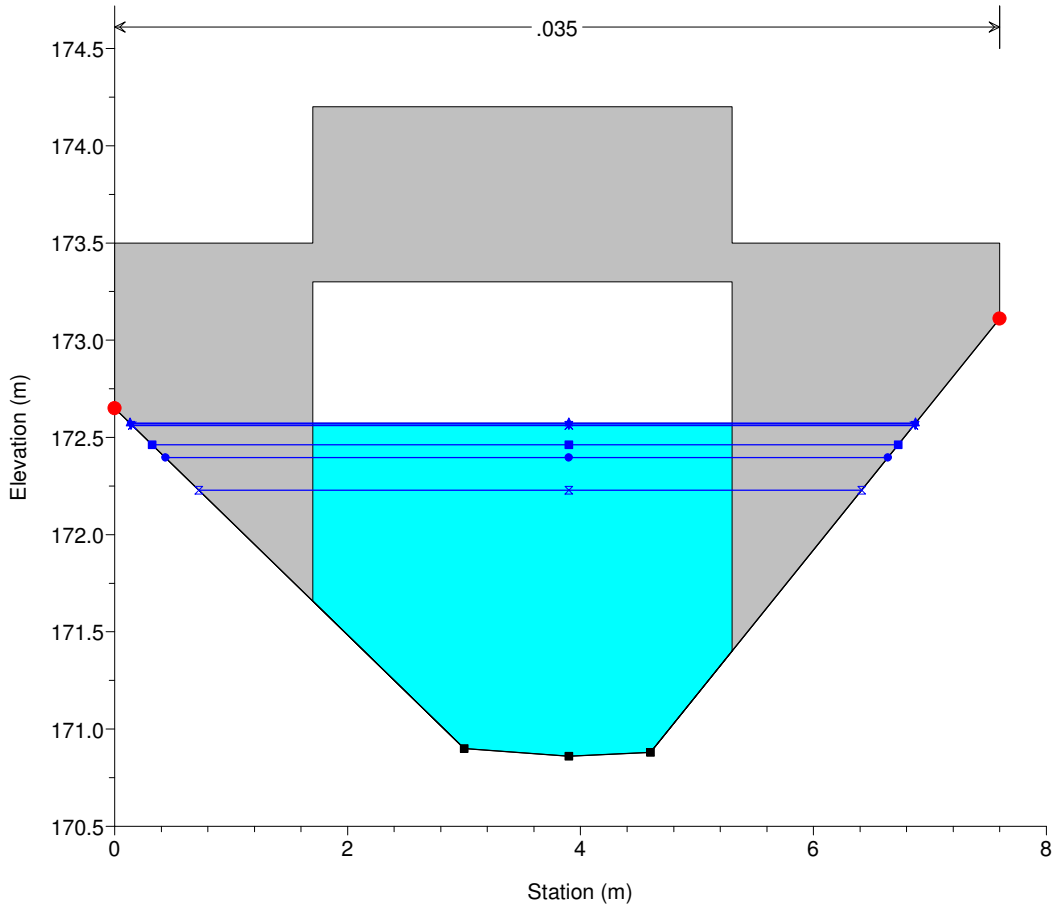
Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_
River = Borro S. Paolo Reach = unico RS = 402.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

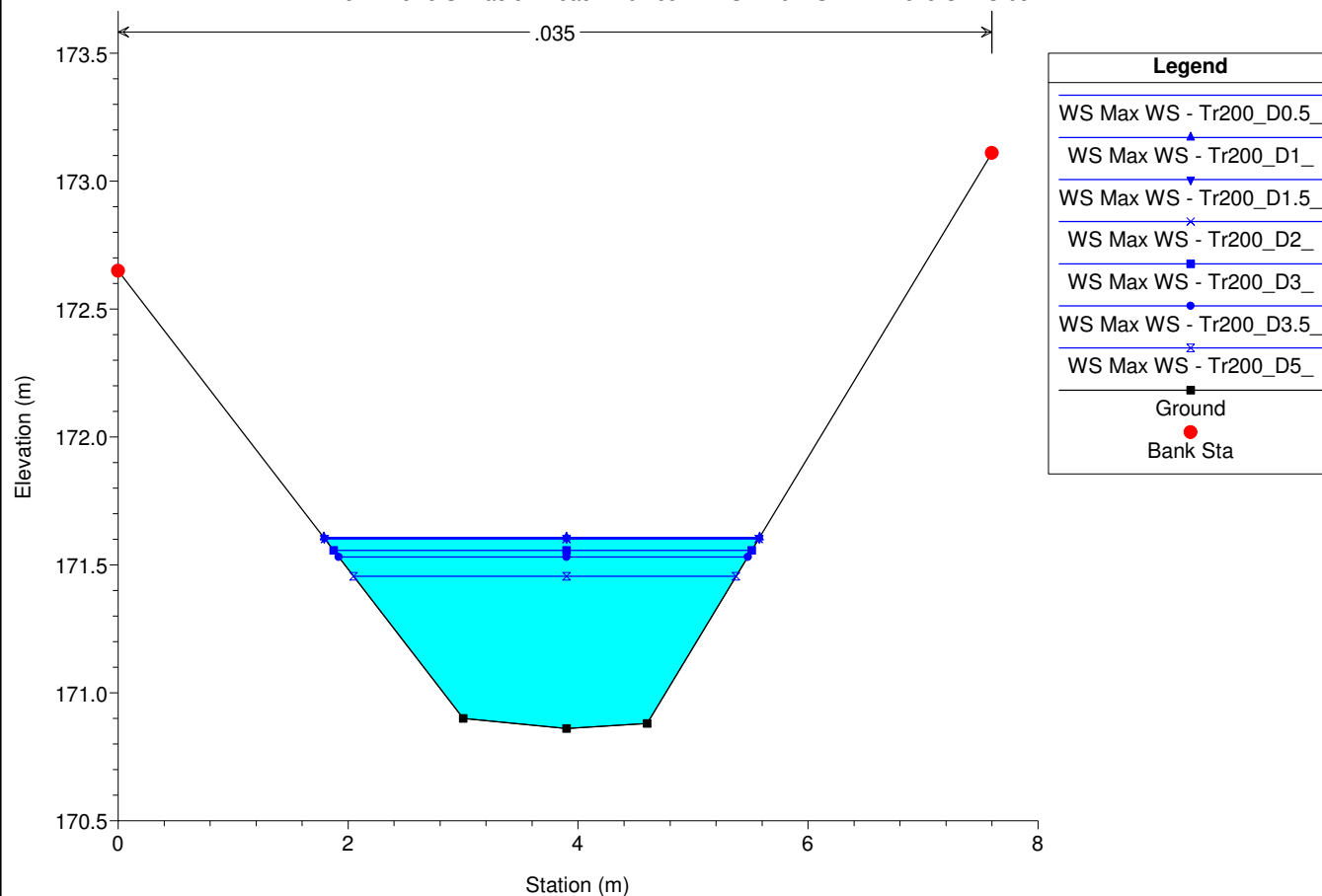
Geom: Pesa Storage Confluenza_
River = Borro S. Paolo Reach = unico RS = 402.5 BR



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

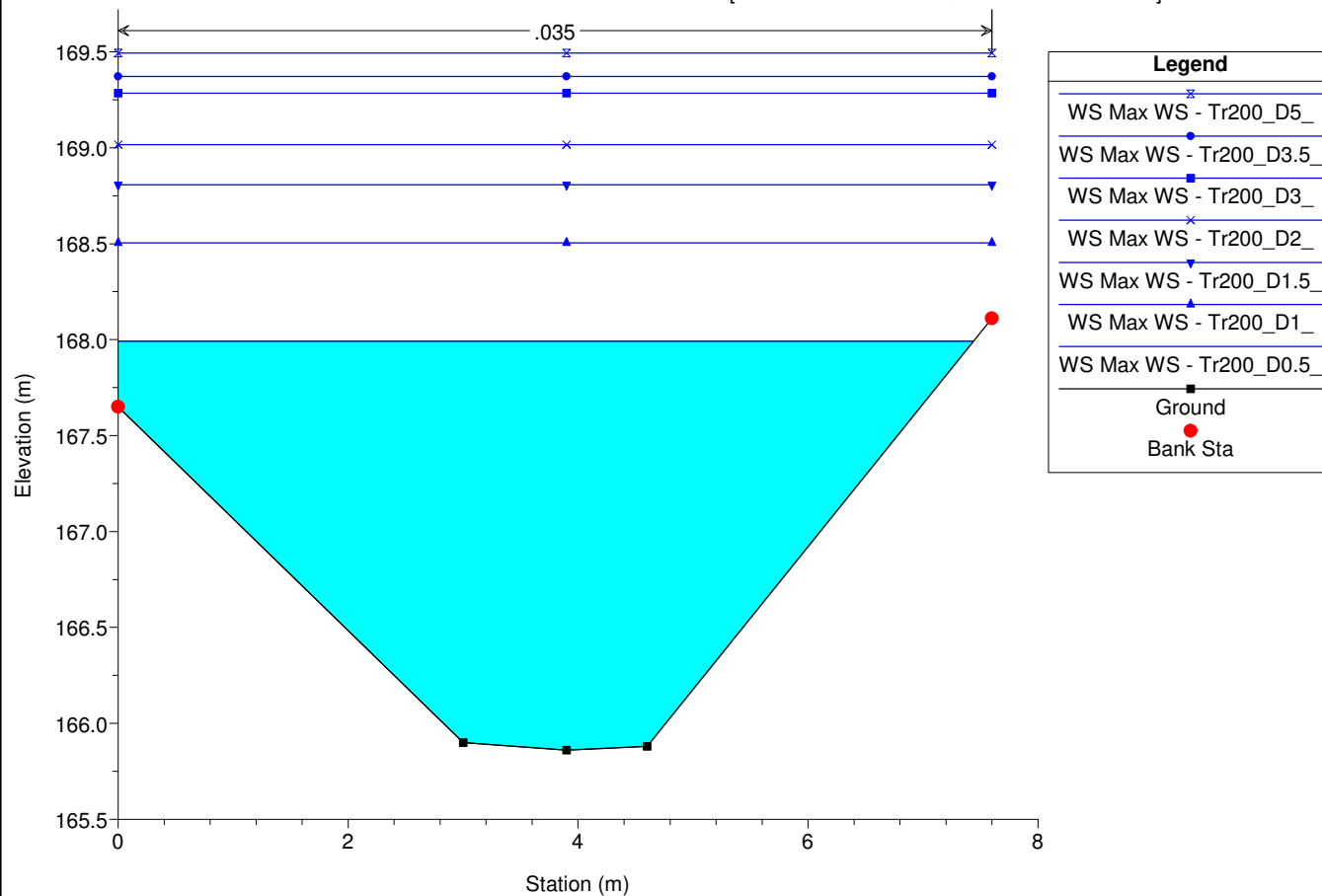
River = Borro S. Paolo Reach = unico RS = 402 SP2 - Rilievo CBTC 08



Pesa Affluenti Plan: 1) Tr200_D0.5_ 2) Tr200_D1_ 3) Tr200_D1.5_ 4) Tr200_D2_ 5) Tr200_D3_ 6) Tr200_D3.5_ 7) Tr200_D5_

Geom: Pesa Storage Confluenza_

River = Borro S. Paolo Reach = unico RS = 401 SP1 [COPIA della Sez. 2 - Quote abbassate di 5m]





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	420	Max WS	Tr30_D0.5	11.08	186.64	187.84		188.09	0.009492	2.22	5.00	6.42	0.80
unico	420	Max WS	Tr30_D1	10.95	186.64	187.84		188.09	0.009513	2.21	4.95	6.39	0.80
unico	420	Max WS	Tr30_D1.5	9.23	186.64	187.74		187.97	0.009693	2.12	4.35	6.09	0.80
unico	420	Max WS	Tr30_D2	7.64	186.64	187.64		187.85	0.009937	2.03	3.77	5.78	0.80
unico	420	Max WS	Tr30_D3	5.57	186.64	187.50		187.68	0.010437	1.88	2.96	5.31	0.80
unico	420	Max WS	Tr30_D3.5	4.90	186.64	187.45		187.61	0.010604	1.82	2.69	5.15	0.80
unico	420	Max WS	Tr30_D5	3.63	186.64	187.34		187.48	0.011130	1.69	2.15	4.80	0.81
unico	419	Max WS	Tr30_D0.5	11.07	186.30	187.62		187.83	0.007343	2.04	5.42	6.58	0.71
unico	419	Max WS	Tr30_D1	10.94	186.30	187.61		187.82	0.007342	2.03	5.38	6.53	0.71
unico	419	Max WS	Tr30_D1.5	9.23	186.30	187.51		187.71	0.007328	1.94	4.76	6.14	0.70
unico	419	Max WS	Tr30_D2	7.64	186.30	187.41		187.58	0.007312	1.84	4.15	5.79	0.69
unico	419	Max WS	Tr30_D3	5.57	186.30	187.26		187.40	0.007260	1.68	3.31	5.28	0.68
unico	419	Max WS	Tr30_D3.5	4.90	186.30	187.20		187.34	0.007209	1.62	3.02	5.10	0.67
unico	419	Max WS	Tr30_D5	3.63	186.30	187.09		187.20	0.007181	1.49	2.44	4.70	0.66
unico	418.95			Lat Struct									
unico	418	Max WS	Tr30_D0.5	11.06	185.13	185.86	186.20	186.92	0.068859	4.54	2.43	4.84	2.04
unico	418	Max WS	Tr30_D1	10.93	185.13	185.86	186.19	186.91	0.068947	4.53	2.41	4.82	2.04
unico	418	Max WS	Tr30_D1.5	9.22	185.13	185.80	186.10	186.76	0.069680	4.34	2.13	4.59	2.03
unico	418	Max WS	Tr30_D2	7.64	185.13	185.74	186.01	186.60	0.070314	4.12	1.85	4.35	2.02
unico	418	Max WS	Tr30_D3	5.57	185.13	185.64	185.87	186.39	0.073606	3.83	1.46	3.98	2.02
unico	418	Max WS	Tr30_D3.5	4.90	185.13	185.61	185.83	186.30	0.072994	3.67	1.33	3.86	2.00
unico	418	Max WS	Tr30_D5	3.63	185.13	185.54	185.73	186.14	0.078753	3.45	1.05	3.57	2.03
unico	417	Max WS	Tr30_D0.5	11.06	182.90	183.87	184.24	185.07	0.070201	4.86	2.28	3.91	2.03
unico	417	Max WS	Tr30_D1	10.93	182.90	183.86	184.23	185.06	0.070182	4.84	2.26	3.90	2.03
unico	417	Max WS	Tr30_D1.5	9.22	182.90	183.80	184.13	184.88	0.069732	4.61	2.00	3.70	2.00
unico	417	Max WS	Tr30_D2	7.64	182.90	183.73	184.03	184.69	0.068268	4.35	1.75	3.48	1.96
unico	417	Max WS	Tr30_D3	5.57	182.90	183.62	183.87	184.42	0.065505	3.95	1.41	3.15	1.89
unico	417	Max WS	Tr30_D3.5	4.90	182.90	183.59	183.82	184.32	0.064307	3.80	1.29	3.03	1.86
unico	417	Max WS	Tr30_D5	3.63	182.90	183.50	183.70	184.11	0.061308	3.45	1.05	2.77	1.78
unico	416	Max WS	Tr30_D0.5	11.06	181.50	182.44	182.73	183.34	0.049785	4.21	2.63	4.37	1.74
unico	416	Max WS	Tr30_D1	10.93	181.50	182.43	182.72	183.33	0.049684	4.19	2.60	4.36	1.73
unico	416	Max WS	Tr30_D1.5	9.22	181.50	182.36	182.63	183.18	0.049197	4.00	2.31	4.13	1.71
unico	416	Max WS	Tr30_D2	7.64	181.50	182.29	182.53	183.02	0.048570	3.79	2.02	3.89	1.68
unico	416	Max WS	Tr30_D3	5.57	181.50	182.18	182.37	182.79	0.047750	3.46	1.61	3.54	1.64
unico	416	Max WS	Tr30_D3.5	4.90	181.50	182.14	182.32	182.70	0.047288	3.33	1.47	3.41	1.62
unico	416	Max WS	Tr30_D5	3.63	181.50	182.05	182.20	182.53	0.046683	3.05	1.19	3.12	1.58
unico	415.95			Lat Struct									
unico	415.9			Lat Struct									
unico	415	Max WS	Tr30_D0.5	11.03	180.56	181.44	181.55	181.93	0.025049	3.10	3.56	5.84	1.27
unico	415	Max WS	Tr30_D1	10.90	180.56	181.44	181.55	181.92	0.025084	3.09	3.53	5.83	1.27
unico	415	Max WS	Tr30_D1.5	9.22	180.56	181.37	181.47	181.81	0.025399	2.94	3.14	5.70	1.26
unico	415	Max WS	Tr30_D2	7.64	180.56	181.30	181.39	181.70	0.025793	2.80	2.72	5.39	1.26
unico	415	Max WS	Tr30_D3	5.57	180.56	181.19	181.26	181.53	0.026336	2.59	2.15	4.90	1.25
unico	415	Max WS	Tr30_D3.5	4.90	180.56	181.14	181.21	181.46	0.026562	2.50	1.96	4.72	1.24
unico	415	Max WS	Tr30_D5	3.63	180.56	181.06	181.12	181.33	0.026980	2.31	1.57	4.35	1.23
unico	414	Max WS	Tr30_D0.5	10.48	179.06	180.67		180.83	0.004111	1.81	6.01	6.26	0.54
unico	414	Max WS	Tr30_D1	10.44	179.06	180.65		180.82	0.004290	1.83	5.91	6.25	0.55
unico	414	Max WS	Tr30_D1.5	9.22	179.06	180.29		180.59	0.012397	2.44	3.79	4.92	0.88
unico	414	Max WS	Tr30_D2	7.64	179.06	180.17		180.45	0.012976	2.35	3.26	4.63	0.89
unico	414	Max WS	Tr30_D3	5.57	179.06	180.02		180.26	0.013513	2.18	2.55	4.21	0.89
unico	414	Max WS	Tr30_D3.5	4.90	179.06	179.96		180.19	0.013734	2.12	2.31	4.05	0.89
unico	414	Max WS	Tr30_D5	3.63	179.06	179.83		180.03	0.013483	1.98	1.84	3.52	0.87
unico	413.5			Bridge									
unico	413	Max WS	Tr30_D0.5	10.28	178.80	180.17		180.42	0.008380	2.20	4.67	4.77	0.71
unico	413	Max WS	Tr30_D1	10.26	178.80	180.17		180.42	0.008370	2.20	4.66	4.77	0.71
unico	413	Max WS	Tr30_D1.5	9.22	178.80	180.11		180.34	0.008127	2.11	4.37	4.67	0.70
unico	413	Max WS	Tr30_D2	7.64	178.80	180.00		180.20	0.007743	1.97	3.88	4.50	0.68
unico	413	Max WS	Tr30_D3	5.57	178.80	179.84		180.00	0.007233	1.75	3.18	4.25	0.65
unico	413	Max WS	Tr30_D3.5	4.90	178.80	179.79		179.93	0.007053	1.67	2.93	4.15	0.64
unico	413	Max WS	Tr30_D5	3.63	178.80	179.66		179.77	0.006746	1.50	2.41	3.95	0.61
unico	412	Max WS	Tr30_D0.5	10.28	178.60	179.78		180.06	0.010350	2.33	4.41	5.75	0.83
unico	412	Max WS	Tr30_D1	10.26	178.60	179.78		180.06	0.010350	2.33	4.41	5.74	0.83
unico	412	Max WS	Tr30_D1.5	9.22	178.60	179.73		179.98	0.010230	2.23	4.13	5.50	0.82
unico	412	Max WS	Tr30_D2	7.64	178.60	179.64		179.87	0.009745	2.08	3.67	5.23	0.79
unico	412	Max WS	Tr30_D3	5.57	178.60	179.51		179.69	0.009057	1.86	3.00	4.81	0.75
unico	412	Max WS	Tr30_D3.5	4.90	178.60	179.46		179.62	0.008783	1.77	2.76	4.66	0.74
unico	412	Max WS	Tr30_D5	3.63	178.60	179.35		179.48	0.008300	1.60	2.27	4.32	0.70
unico	411	Max WS	Tr30_D0.5	10.28	178.10	179.21		179.47	0.012042	2.25	4.60	7.48	0.90
unico	411	Max WS	Tr30_D1	10.26	178.10	179.21		179.47	0.012030	2.25	4.59	7.47	0.90
unico	411	Max WS	Tr30_D1.5	9.22	178.10	179.16		179.40	0.011953	2.17	4.26	7.22	0.89
unico	411	Max WS	Tr30_D2	7.64	178.10	179.09		179.30	0.012093	2.06	3.71	6.78	0.88
unico	411	Max WS	Tr30_D3	5.57	178.10	178.97		179.15	0.012453	1.90	2.94	6.08	0.87
unico	411	Max WS	Tr30_D3.5	4.90	178.10	178.92		179.09	0.012583	1.85	2.65	5.77	0.87
unico	411	Max WS	Tr30_D5	3.63	178.10	178.82		178.97	0.012630	1.72	2.11	5.12	0.85

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	410.9			Lat Struct									
unico	410	Max WS	Tr30_D0.5_	9.79	177.50	178.66	178.64	178.93	0.011903	2.32	4.47	7.97	0.89
unico	410	Max WS	Tr30_D1_	9.77	177.50	178.66	178.64	178.93	0.011899	2.32	4.46	7.97	0.89
unico	410	Max WS	Tr30_D1.5_	8.93	177.50	178.64	178.60	178.88	0.011239	2.21	4.25	7.88	0.86
unico	410	Max WS	Tr30_D2_	7.54	177.50	178.59		178.79	0.009989	2.02	3.88	7.73	0.81
unico	410	Max WS	Tr30_D3_	5.57	177.50	178.50		178.66	0.008384	1.74	3.23	7.45	0.73
unico	410	Max WS	Tr30_D3.5_	4.90	177.50	178.45		178.59	0.008370	1.68	2.91	5.25	0.72
unico	410	Max WS	Tr30_D5_	3.63	177.50	178.34		178.46	0.007950	1.54	2.36	4.68	0.69
unico	409.1			Lat Struct									
unico	409	Max WS	Tr30_D0.5_	8.60	177.20	178.34		178.61	0.012080	2.31	3.80	6.22	0.89
unico	409	Max WS	Tr30_D1_	8.59	177.20	178.34		178.61	0.012072	2.31	3.80	6.21	0.89
unico	409	Max WS	Tr30_D1.5_	8.08	177.20	178.32		178.58	0.011820	2.24	3.67	6.14	0.88
unico	409	Max WS	Tr30_D2_	7.18	177.20	178.28		178.51	0.011490	2.13	3.41	5.96	0.86
unico	409	Max WS	Tr30_D3_	5.57	177.20	178.19		178.38	0.011168	1.94	2.88	5.46	0.83
unico	409	Max WS	Tr30_D3.5_	4.90	177.20	178.14		178.32	0.011300	1.86	2.63	5.20	0.83
unico	409	Max WS	Tr30_D5_	3.63	177.20	178.03		178.19	0.011423	1.72	2.11	4.62	0.81
unico	408	Max WS	Tr30_D0.5_	8.49	176.70	177.62	177.83	178.27	0.039048	3.56	2.38	4.43	1.53
unico	408	Max WS	Tr30_D1_	8.48	176.70	177.62	177.83	178.27	0.039113	3.56	2.38	4.43	1.53
unico	408	Max WS	Tr30_D1.5_	8.04	176.70	177.60	177.80	178.24	0.040515	3.54	2.27	4.27	1.55
unico	408	Max WS	Tr30_D2_	7.18	176.70	177.55	177.74	178.17	0.042022	3.49	2.06	4.08	1.57
unico	408	Max WS	Tr30_D3_	5.57	176.70	177.45	177.62	178.01	0.043699	3.31	1.68	3.71	1.57
unico	408	Max WS	Tr30_D3.5_	4.90	176.70	177.41	177.57	177.93	0.043576	3.20	1.53	3.56	1.56
unico	408	Max WS	Tr30_D5_	3.63	176.70	177.32	177.46	177.77	0.044472	2.98	1.22	3.21	1.54
unico	407	Max WS	Tr30_D0.5_	8.49	175.30	177.08		177.34	0.012549	2.25	3.76	4.28	0.77
unico	407	Max WS	Tr30_D1_	8.48	175.30	177.08		177.34	0.012575	2.26	3.76	4.28	0.77
unico	407	Max WS	Tr30_D1.5_	8.04	175.30	177.02		177.29	0.013477	2.28	3.53	4.18	0.79
unico	407	Max WS	Tr30_D2_	7.18	175.30	176.92		177.19	0.015145	2.30	3.12	3.99	0.83
unico	407	Max WS	Tr30_D3_	5.57	175.30	176.75		177.01	0.018139	2.27	2.45	3.66	0.89
unico	407	Max WS	Tr30_D3.5_	4.90	175.30	176							

HEC-RAS River: Borro S. Paolo Reach: unico Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	401.9			Lat Struct									
unico	401	Max WS	Tr30_D0.5_	2.00	165.86	167.39		167.40	0.000183	0.34	5.87	6.19	0.11
unico	401	Max WS	Tr30_D1_	2.00	165.86	167.80		167.81	0.000063	0.23	8.66	7.19	0.07
unico	401	Max WS	Tr30_D1.5_	2.00	165.86	168.04		168.04	0.000038	0.19	10.38	7.50	0.05
unico	401	Max WS	Tr30_D2_	2.00	165.86	168.18		168.19	0.000029	0.17	11.49	7.60	0.05
unico	401	Max WS	Tr30_D3_	2.00	165.86	168.39		168.39	0.000020	0.15	13.03	7.60	0.04
unico	401	Max WS	Tr30_D3.5_	2.00	165.86	168.44		168.44	0.000018	0.15	13.45	7.60	0.04
unico	401	Max WS	Tr30_D5_	2.00	165.86	168.53		168.54	0.000016	0.14	14.15	7.60	0.03



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa affluenti"

BORRO DI SAN PAOLO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	420	Max WS	Tr200_D0.5	16.53	186.64	188.09		188.40	0.009395	2.48	6.67	7.27	0.82
unico	420	Max WS	Tr200_D1_	16.00	186.64	188.07		188.38	0.009356	2.45	6.54	7.18	0.81
unico	420	Max WS	Tr200_D1.5	13.38	186.64	187.96		188.23	0.009383	2.33	5.75	6.78	0.81
unico	420	Max WS	Tr200_D2_	11.09	186.64	187.85		188.10	0.009475	2.22	5.00	6.42	0.80
unico	420	Max WS	Tr200_D3_	8.20	186.64	187.68		187.90	0.009844	2.06	3.98	5.89	0.80
unico	420	Max WS	Tr200_D3.5	7.28	186.64	187.62		187.82	0.010010	2.00	3.63	5.70	0.80
unico	420	Max WS	Tr200_D5_	5.51	186.64	187.49		187.67	0.010455	1.88	2.94	5.30	0.80
unico	419	Max WS	Tr200_D0.5	16.51	186.30	187.85		188.13	0.007496	2.35	7.20	8.51	0.74
unico	419	Max WS	Tr200_D1_	15.99	186.30	187.84		188.11	0.007435	2.32	7.05	8.39	0.74
unico	419	Max WS	Tr200_D1.5	13.38	186.30	187.73		187.97	0.007354	2.18	6.19	7.49	0.72
unico	419	Max WS	Tr200_D2_	11.09	186.30	187.62		187.83	0.007330	2.04	5.43	6.59	0.71
unico	419	Max WS	Tr200_D3_	8.20	186.30	187.45		187.63	0.007313	1.88	4.37	5.92	0.70
unico	419	Max WS	Tr200_D3.5	7.28	186.30	187.39		187.56	0.007288	1.81	4.01	5.71	0.69
unico	419	Max WS	Tr200_D5_	5.51	186.30	187.26		187.40	0.007250	1.68	3.29	5.27	0.68
unico	418.95			Lat Struct									
unico	418	Max WS	Tr200_D0.5	16.46	185.13	186.03	186.43	187.31	0.066878	5.01	3.28	5.47	2.07
unico	418	Max WS	Tr200_D1_	15.97	185.13	186.02	186.41	187.28	0.067145	4.98	3.21	5.42	2.07
unico	418	Max WS	Tr200_D1.5	13.37	185.13	185.94	186.30	187.09	0.067360	4.75	2.82	5.13	2.05
unico	418	Max WS	Tr200_D2_	11.09	185.13	185.87	186.20	186.92	0.068897	4.55	2.44	4.84	2.05
unico	418	Max WS	Tr200_D3_	8.20	185.13	185.76	186.04	186.66	0.069657	4.19	1.95	4.44	2.02
unico	418	Max WS	Tr200_D3.5	7.28	185.13	185.72	185.99	186.57	0.070852	4.08	1.78	4.29	2.02
unico	418	Max WS	Tr200_D5_	5.51	185.13	185.64	185.87	186.38	0.073572	3.81	1.44	3.97	2.02
unico	417	Max WS	Tr200_D0.5	16.46	182.90	184.03	184.52	185.63	0.069362	5.60	2.98	4.75	2.09
unico	417	Max WS	Tr200_D1_	15.97	182.90	184.02	184.49	185.58	0.069532	5.54	2.92	4.72	2.09
unico	417	Max WS	Tr200_D1.5	13.37	182.90	183.95	184.36	185.31	0.070323	5.18	2.58	4.10	2.06
unico	417	Max WS	Tr200_D2_	11.09	182.90	183.87	184.24	185.08	0.070263	4.87	2.28	3.91	2.03
unico	417	Max WS	Tr200_D3_	8.20	182.90	183.75	184.07	184.76	0.068333	4.44	1.85	3.56	1.97
unico	417	Max WS	Tr200_D3.5	7.28	182.90	183.71	184.00	184.65	0.067895	4.29	1.70	3.43	1.95
unico	417	Max WS	Tr200_D5_	5.51	182.90	183.62	183.87	184.41	0.065415	3.94	1.40	3.14	1.88
unico	416	Max WS	Tr200_D0.5	16.46	181.50	182.62	182.98	183.75	0.051032	4.71	3.49	4.98	1.80
unico	416	Max WS	Tr200_D1_	15.97	181.50	182.61	182.96	183.72	0.050953	4.67	3.42	4.93	1.79
unico	416	Max WS	Tr200_D1.5	13.37	181.50	182.52	182.85	183.53	0.050348	4.44	3.01	4.65	1.76
unico	416	Max WS	Tr200_D2_	11.09	181.50	182.44	182.73	183.34	0.049793	4.21	2.63	4.38	1.74
unico	416	Max WS	Tr200_D3_	8.20	181.50	182.32	182.56	183.08	0.048891	3.87	2.12	3.98	1.69
unico	416	Max WS	Tr200_D3.5	7.28	181.50	182.27	182.50	182.98	0.048474	3.74	1.95	3.84	1.67
unico	416	Max WS	Tr200_D5_	5.51	181.50	182.18	182.37	182.78	0.047766	3.45	1.60	3.52	1.64
unico	415.95			Lat Struct									
unico	415.9			Lat Struct									
unico	415	Max WS	Tr200_D0.5	15.95	180.56	181.60	181.74	182.25	0.025841	3.55	4.49	5.85	1.29
unico	415	Max WS	Tr200_D1_	15.53	180.56	181.59	181.73	182.22	0.025717	3.51	4.42	5.85	1.29
unico	415	Max WS	Tr200_D1.5	13.22	180.56	181.52	181.64	182.07	0.025077	3.30	4.01	5.85	1.27
unico	415	Max WS	Tr200_D2_	11.06	180.56	181.45	181.55	181.94	0.025039	3.10	3.57	5.84	1.27
unico	415	Max WS	Tr200_D3_	8.20	180.56	181.32	181.42	181.74	0.025660	2.85	2.87	5.52	1.26
unico	415	Max WS	Tr200_D3.5	7.28	180.56	181.28	181.37	181.67	0.025845	2.77	2.63	5.32	1.26
unico	415	Max WS	Tr200_D5_	5.51	180.56	181.18	181.26	181.52	0.026379	2.58	2.13	4.89	1.25
unico	414	Max WS	Tr200_D0.5	11.51	179.06	180.93		181.05	0.002443	1.60	7.63	6.30	0.43
unico	414	Max WS	Tr200_D1_	11.45	179.06	180.92		181.04	0.002490	1.61	7.56	6.30	0.44
unico	414	Max WS	Tr200_D1.5	11.08	179.06	180.83		180.97	0.002867	1.66	7.05	6.30	0.46
unico	414	Max WS	Tr200_D2_	10.49	179.06	180.67		180.84	0.004060	1.81	6.04	6.27	0.54
unico	414	Max WS	Tr200_D3_	8.20	179.06	180.21		180.50	0.012864	2.38	3.44	4.73	0.89
unico	414	Max WS	Tr200_D3.5	7.28	179.06	180.15		180.42	0.013128	2.32	3.13	4.55	0.89
unico	414	Max WS	Tr200_D5_	5.51	179.06	180.01		180.25	0.013542	2.18	2.53	4.19	0.89
unico	413.5			Bridge									
unico	413	Max WS	Tr200_D0.5	10.62	178.80	180.19		180.45	0.008456	2.23	4.76	4.81	0.71
unico	413	Max WS	Tr200_D1_	10.61	178.80	180.19		180.45	0.008452	2.23	4.76	4.80	0.71
unico	413	Max WS	Tr200_D1.5	10.50	178.80	180.19		180.44	0.008422	2.22	4.73	4.79	0.71
unico	413	Max WS	Tr200_D2_	10.29	178.80	180.18		180.42	0.008374	2.20	4.67	4.78	0.71
unico	413	Max WS	Tr200_D3_	8.20	178.80	180.04		180.25	0.007873	2.02	4.06	4.57	0.68
unico	413	Max WS	Tr200_D3.5	7.28	178.80	179.98		180.17	0.007639	1.93	3.77	4.46	0.67
unico	413	Max WS	Tr200_D5_	5.51	178.80	179.84		179.99	0.007219	1.75	3.16	4.24	0.65
unico	412	Max WS	Tr200_D0.5	10.62	178.60	179.80		180.08	0.010252	2.36	4.52	5.86	0.83
unico	412	Max WS	Tr200_D1_	10.61	178.60	179.80		180.08	0.010247	2.35	4.51	5.86	0.83
unico	412	Max WS	Tr200_D1.5	10.50	178.60	179.79		180.07	0.010227	2.34	4.49	5.83	0.83
unico	412	Max WS	Tr200_D2_	10.29	178.60	179.78		180.06	0.010348	2.33	4.41	5.75	0.83
unico	412	Max WS	Tr200_D3_	8.20	178.60	179.68		179.91	0.009935	2.14	3.84	5.33	0.80
unico	412	Max WS	Tr200_D3.5	7.28	178.60	179.62		179.84	0.009621	2.04	3.56	5.16	0.79
unico	412	Max WS	Tr200_D5_	5.51	178.60	179.51		179.68	0.009032	1.85	2.98	4.80	0.75
unico	411	Max WS	Tr200_D0.5	10.62	178.10	179.22		179.49	0.012082	2.28	4.70	7.55	0.90
unico	411	Max WS	Tr200_D1_	10.60	178.10	179.22		179.49	0.012079	2.27	4.69	7.55	0.90
unico	411	Max WS	Tr200_D1.5	10.50	178.10	179.22		179.48	0.012076	2.27	4.66	7.52	0.90
unico	411	Max WS	Tr200_D2_	10.29	178.10	179.21		179.47	0.012039	2.25	4.60	7.48	0.90
unico	411	Max WS	Tr200_D3_	8.20	178.10	179.12		179.34	0.012009	2.10	3.91	6.95	0.88
unico	411	Max WS	Tr200_D3.5	7.28	178.10	179.07		179.28	0.012139	2.03	3.59	6.68	0.88
unico	411	Max WS	Tr200_D5_	5.51	178.10	178.96		179.14	0.012432	1.89	2.91	6.05	0.87
unico	410.9			Lat Struct									
unico	410	Max WS	Tr200_D0.5	10.05	177.50	178.67	178.65	178.94	0.012094	2.35	4.53	7.99	0.90
unico	410	Max WS	Tr200_D1_	10.04	177.50	178.67	178.65	178.94	0.012081	2.35	4.53	7.99	0.90
unico	410	Max WS	Tr200_D1.5	9.95	177.50	178.67	178.65	178.94	0.012028	2.34	4.51	7.98	0.90

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
unico	410	Max WS	Tr200_D2_	9.79	177.50	178.66	178.64	178.93	0.011915	2.32	4.47	7.97	0.89
unico	410	Max WS	Tr200_D3_	8.05	177.50	178.61		178.83	0.010490	2.10	4.02	7.78	0.83
unico	410	Max WS	Tr200_D3.5_	7.22	177.50	178.58		178.77	0.009652	1.98	3.80	7.69	0.79
unico	410	Max WS	Tr200_D5_	5.51	177.50	178.50		178.65	0.008397	1.74	3.19	7.23	0.73
unico	409.1			Lat Struct									
unico	409	Max WS	Tr200_D0.5_	8.75	177.20	178.35	178.31	178.62	0.012161	2.33	3.84	6.24	0.89
unico	409	Max WS	Tr200_D1_	8.74	177.20	178.35	178.31	178.62	0.012159	2.33	3.84	6.23	0.89
unico	409	Max WS	Tr200_D1.5_	8.70	177.20	178.35	178.30	178.62	0.012128	2.32	3.82	6.23	0.89
unico	409	Max WS	Tr200_D2_	8.60	177.20	178.34		178.61	0.012089	2.31	3.80	6.22	0.89
unico	409	Max WS	Tr200_D3_	7.52	177.20	178.30		178.54	0.011507	2.16	3.53	6.07	0.86
unico	409	Max WS	Tr200_D3.5_	6.95	177.20	178.27		178.49	0.011228	2.09	3.36	5.92	0.85
unico	409	Max WS	Tr200_D5_	5.51	177.20	178.18		178.37	0.011170	1.93	2.86	5.44	0.83
unico	408	Max WS	Tr200_D0.5_	8.61	176.70	177.63	177.84	178.28	0.038685	3.57	2.42	4.48	1.52
unico	408	Max WS	Tr200_D1_	8.60	176.70	177.63	177.84	178.28	0.038701	3.57	2.41	4.48	1.52
unico	408	Max WS	Tr200_D1.5_	8.56	176.70	177.63	177.83	178.28	0.038865	3.57	2.40	4.46	1.53
unico	408	Max WS	Tr200_D2_	8.49	176.70	177.62	177.83	178.27	0.039072	3.56	2.38	4.43	1.53
unico	408	Max WS	Tr200_D3_	7.51	176.70	177.57	177.76	178.20	0.041631	3.51	2.14	4.15	1.56
unico	408	Max WS	Tr200_D3.5_	6.95	176.70	177.53	177.73	178.15	0.042188	3.46	2.01	4.03	1.57
unico	408	Max WS	Tr200_D5_	5.51	176.70	177.45	177.62	178.00	0.043709	3.30	1.67	3.70	1.57
unico	407	Max WS	Tr200_D0.5_	8.61	175.30	177.10		177.35	0.012138	2.24	3.85	4.32	0.76
unico	407	Max WS	Tr200_D1_	8.60	175.30	177.10		177.35	0.012157	2.24	3.85	4.32	0.76
unico	407	Max WS	Tr200_D1.5_	8.56	175.30	177.09		177.35	0.012279	2.24	3.82	4.31	0.76
unico	407	Max WS	Tr200_D2_	8.49	175.30	177.08		177.34	0.012545	2.25	3.77	4.29	0.77
unico	407	Max WS	Tr200_D3_	7.51	175.30	176.96		177.23	0.014487	2.29	3.28	4.07	0.81
unico	407	Max WS	Tr200_D3.5_	6.95	175.30	176.90		177.17	0.015590	2.30	3.02	3.94	0.84
unico	407	Max WS	Tr200_D5_	5.51	175.30	176.74		177.00	0.018242	2.27	2.43	3.65	0.89
unico	406	Max WS	Tr200_D0.5_	8.61	175.30	177.21		177.25	0.000600	0.79	10.89	7.18	0.20
unico	406	Max WS	Tr200_D1_	8.60	175.30	177.21		177.25	0.000601	0.79	10.89	7.18	0.20
unico	406	Max WS	Tr200_D1.5_	8.56	175.30	177.21		177.24	0.000602	0.79	10.84	7.17	0.21
unico	406	Max WS	Tr200_D2_	8.49	175.30	177.19		177.23	0.000605	0.79	10.75	7.15	0.21
unico	406	Max WS	Tr200_D3_	7.51	175.30	177.06		177.09	0.000608	0.76	9.83	6.95	0.21
unico	406	Max WS	Tr200_D3.5_	6.95	175.30	176.99		177.02	0.000604	0.75	9.31	6.83	0.20
unico	406	Max WS	Tr200_D5_	5.51	175.30	176.79		176.82	0.000580	0.69	8.01	6.53	0.20
unico	405.5			Culvert									
unico	405	Max WS	Tr200_D0.5_	8.61	174.60	175.76		176.05	0.011201	2.37	3.63	4.18	0.81
unico	405	Max WS	Tr200_D1_	8.60	174.60	175.76		176.05	0.011198	2.37	3.63	4.18	0.81
unico	405	Max WS	Tr200_D1.5_	8.56	174.60	175.76		176.04	0.011195	2.37	3.62	4.17	0.81
unico	405	Max WS	Tr200_D2_	8.49	174.60	175.75		176.04	0.011201	2.36	3.60	4.17	0.81
unico	405	Max WS	Tr200_D3_	7.51	174.60	175.68		175.94	0.011233	2.28	3.29	4.06	0.81
unico	405	Max WS	Tr200_D3.5_	6.95	174.60	175.63		175.89	0.011258	2.23	3.11	3.99	0.81
unico	405	Max WS	Tr200_D5_	5.51	174.60	175.51		175.73	0.011329	2.09	2.63	3.82	0.80
unico	404.96			Lat Struct									
unico	404.95			Lat Struct									
unico	404	Max WS	Tr200_D0.5_	8.61	172.87	173.90	174.00	174.40	0.024882	3.13	2.75	4.11	1.22
unico	404	Max WS	Tr200_D1_	8.60	172.87	173.90	174.00	174.40	0.024912	3.13	2.75	4.11	1.22
unico	404	Max WS	Tr200_D1.5_	8.56	172.87	173.90	174.00	174.39	0.024903	3.13	2.74	4.11	1.22
unico	404	Max WS	Tr200_D2_	8.49	172.87	173.89	174.00	174.39	0.024923	3.12	2.72	4.10	1.22
unico	404	Max WS	Tr200_D3_	7.51	172.87	173.83	173.93	174.30	0.025170	3.03	2.48	3.95	1.22
unico	404	Max WS	Tr200_D3.5_	6.95	172.87	173.80	173.89	174.25	0.025300	2.97	2.34	3.86	1.22
unico	404	Max WS	Tr200_D5_	5.51	172.87	173.70	173.78	174.10	0.025663	2.80	1.97	3.62	1.21
unico	403.9			Lat Struct									
unico	403	Max WS	Tr200_D0.5_	8.61	171.28	172.77	172.49	172.96	0.006899	1.95	4.42	4.96	0.66
unico	403	Max WS	Tr200_D1_	8.60	171.28	172.77	172.49	172.96	0.006903	1.95	4.41	4.96	0.66
unico	403	Max WS	Tr200_D1.5_	8.56	171.28	172.76	172.49	172.96	0.006916	1.95	4.40	4.95	0.66
unico	403	Max WS	Tr200_D2_	8.49	171.28	172.75	172.48	172.95	0.006950	1.95	4.36	4.93	0.66
unico	403	Max WS	Tr200_D3_	7.51	171.28	172.66	172.41	172.85	0.007275	1.92	3.91	4.68	0.67
unico	403	Max WS	Tr200_D3.5_	6.95	171.28	172.61	172.37	172.79	0.007435	1.90	3.66	4.53	0.68
unico	403	Max WS	Tr200_D5_	5.51	171.28	172.46	172.25	172.63	0.007810	1.83	3.02	4.14	0.68
unico	402.5			Bridge									
unico	402	Max WS	Tr200_D0.5_	8.61	170.86	171.61	171.92	172.59	0.066311	4.40	1.96	3.79	1.96
unico	402	Max WS	Tr200_D1_	8.60	170.86	171.61	171.92	172.59	0.066333	4.40	1.95	3.79	1.96
unico	402	Max WS	Tr200_D1.5_	8.56	170.86	171.61	171.91	172.59	0.066375	4.40	1.95	3.78	1.96
unico	402	Max WS	Tr200_D2_	8.49	170.86	171.60	171.91	172.58	0.066359	4.39	1.93	3.77	1.96
unico	402	Max WS	Tr200_D3_	7.51	170.86	171.56	171.85	172.48	0.066396	4.25	1.77	3.64	1.94
unico	402	Max WS	Tr200_D3.5_	6.95	170.86	171.53	171.81	172.41	0.065863	4.14	1.68	3.56	1.93
unico	402	Max WS	Tr200_D5_	5.51	170.86	171.46	171.70	172.23	0.066246	3.90	1.41	3.33	1.91
unico	401.95			Lat Struct									
unico	401.9			Lat Struct									
unico	401	Max WS	Tr200_D0.5_	2.00	165.86	167.99		167.99	0.000042	0.20	10.03	7.44	0.05
unico	401	Max WS	Tr200_D1_	2.00	165.86	168.50		168.50	0.000016	0.14	13.92	7.60	0.03
unico	401	Max WS	Tr200_D1.5_	2.01	165.86	168.81		168.81	0.000011	0.12	16.22	7.60	0.03
unico	401	Max WS	Tr200_D2_	2.00	165.86	169.02		169.02	0.000008	0.11	17.81	7.60	0.02
unico	401	Max WS	Tr200_D3_	2.00	165.86	169.29		169.29	0.000006	0.10	19.85	7.60	0.02
unico	401	Max WS	Tr200_D3.5_	2.00	165.86	169.37		169.37	0.000006	0.10	20.51	7.60	0.02
unico	401	Max WS	Tr200_D5_	2.00	165.86	169.49		169.49	0.000005	0.09	21.44	7.60	0.02



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

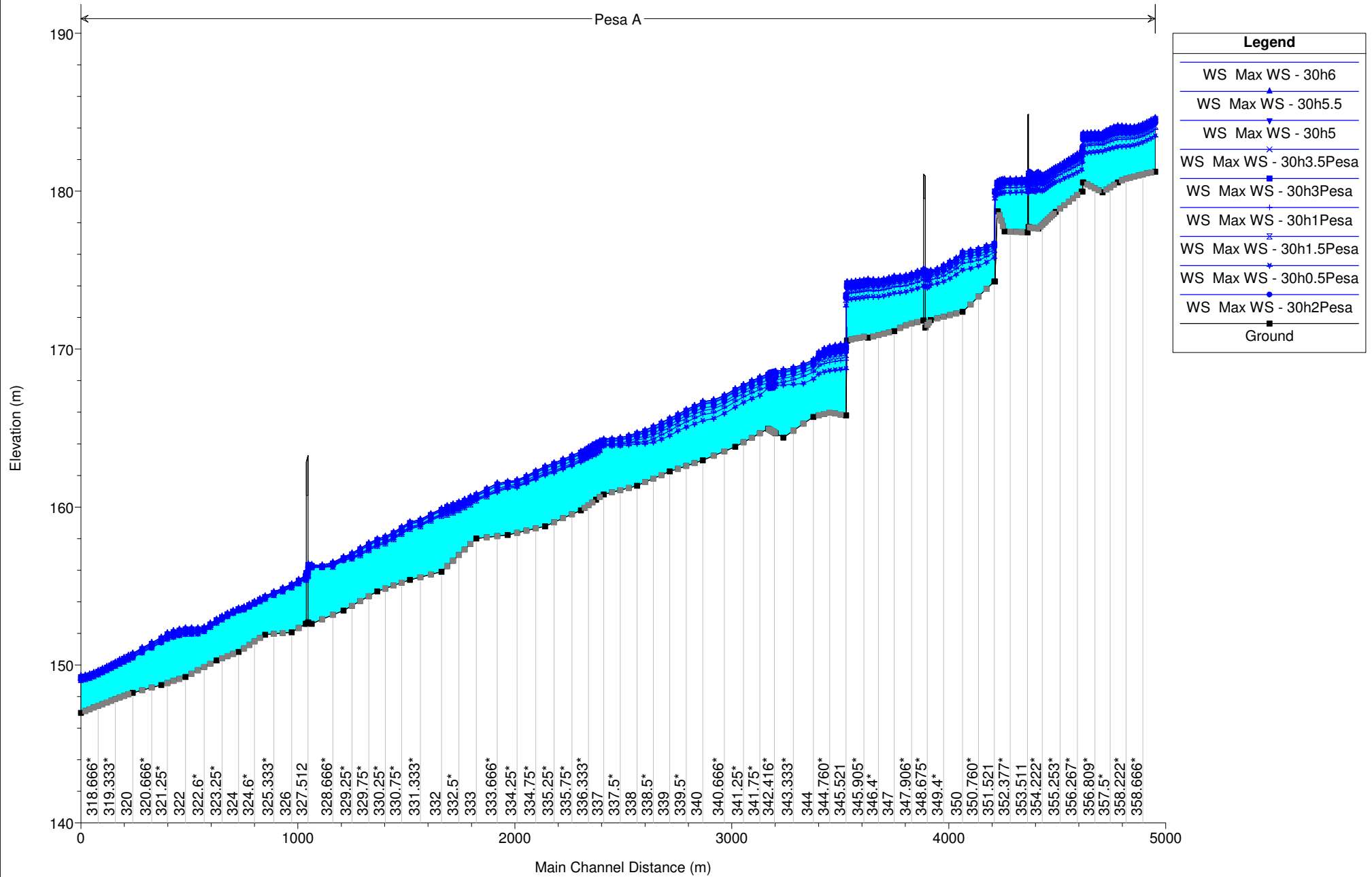
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Profilo longitudinale

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa
Geom: Pesa

Pesa A





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

MODELLAZIONE PER TR=200 anni

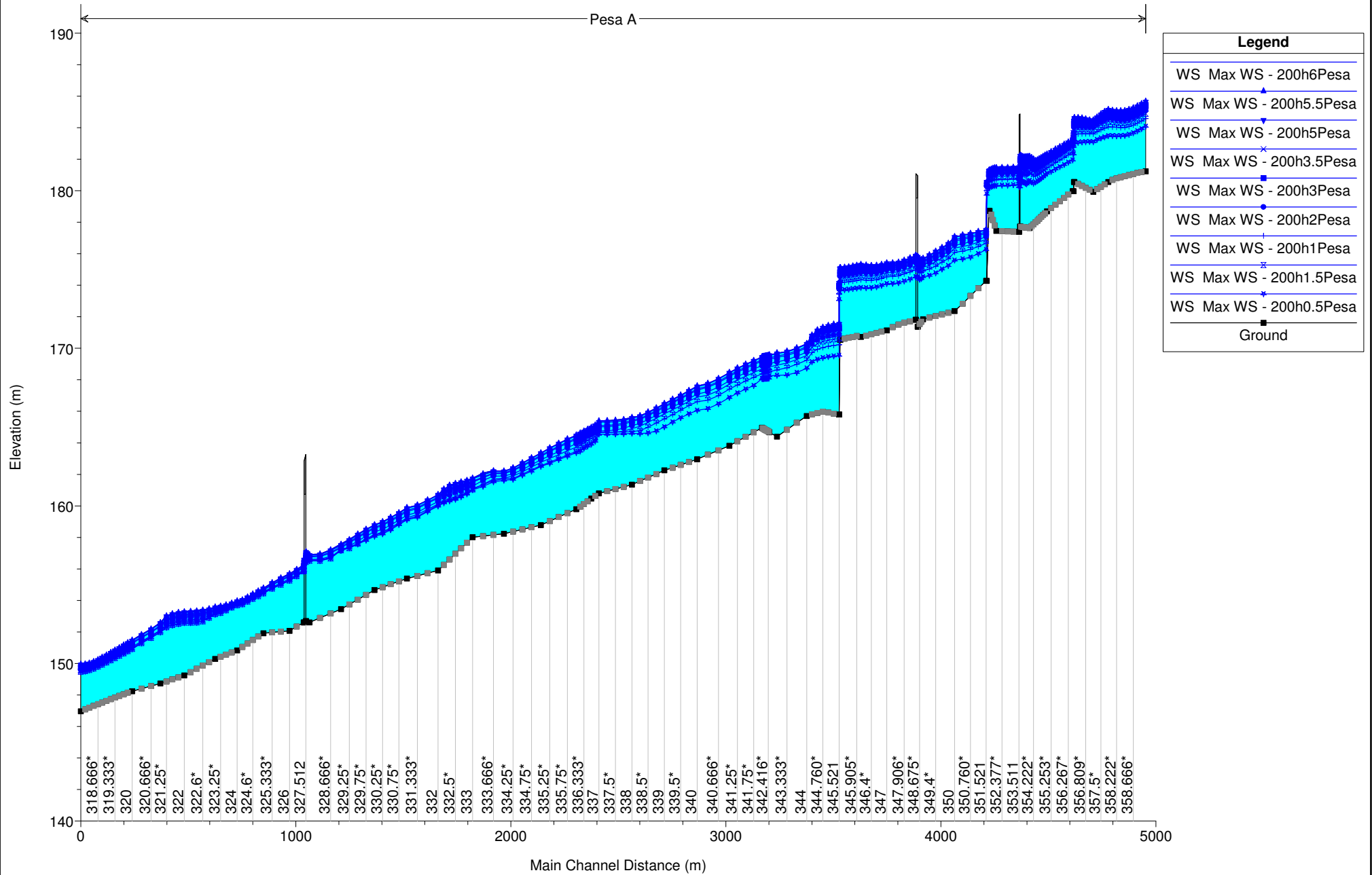
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Profilo longitudinale

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

Pesa A





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

MODELLAZIONE PER TR=30 anni

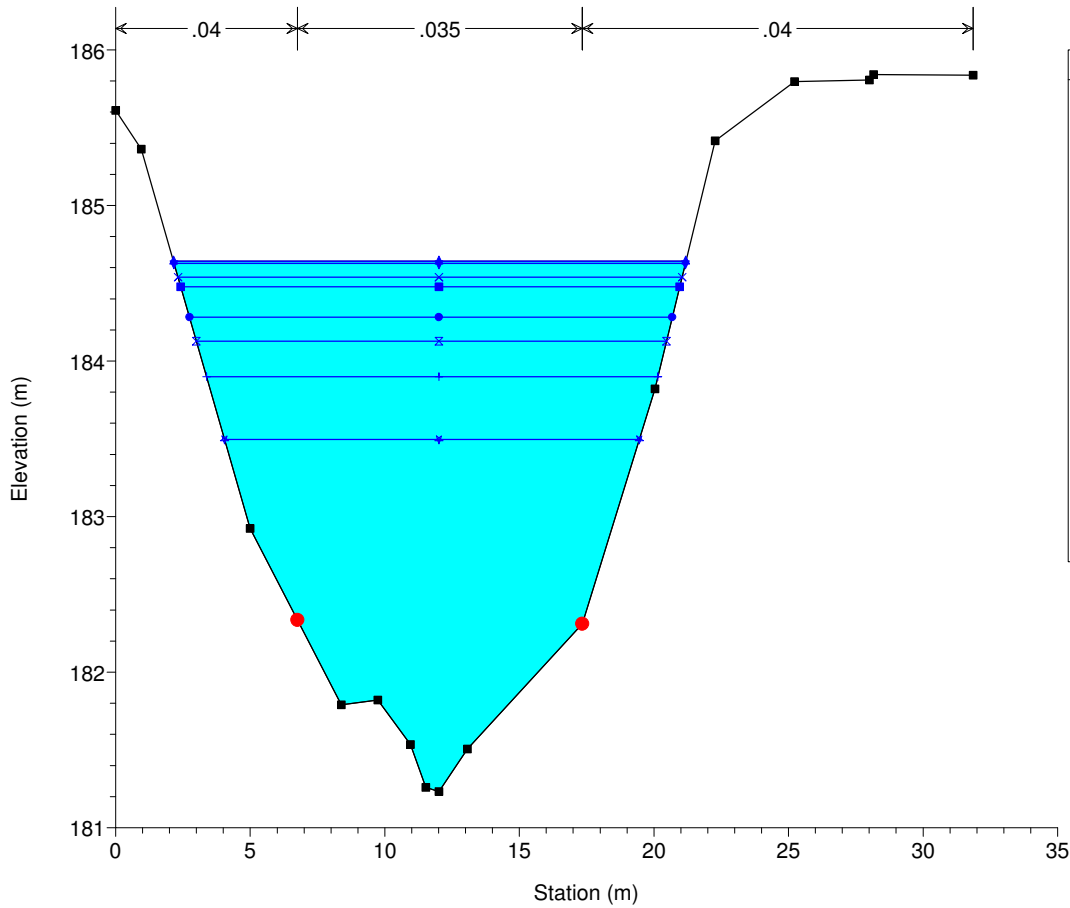
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Sezioni Trasversali (da monte verso valle)

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 359 PE359

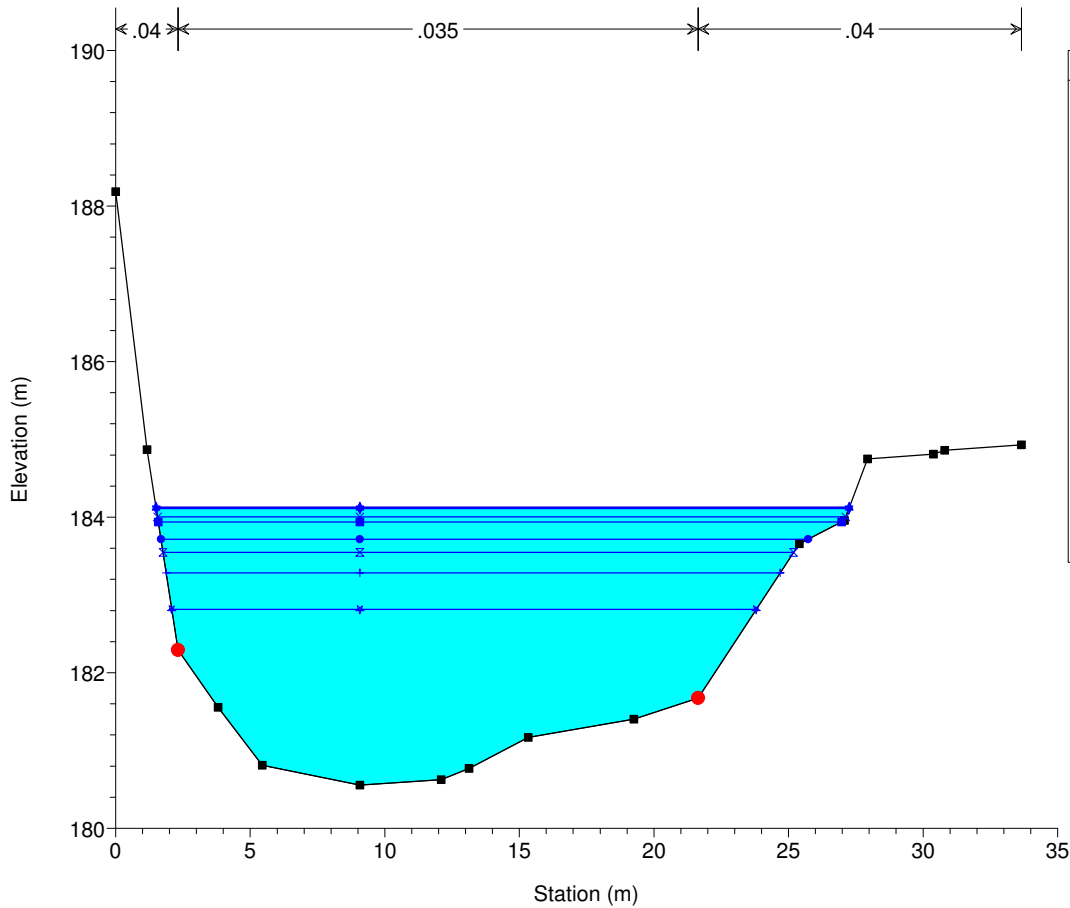


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	●
WS Max WS - 30h2Pesa	+
WS Max WS - 30h1.5Pesa	×
WS Max WS - 30h1Pesa	+
WS Max WS - 30h0.5Pesa	+
Ground	■
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 358 PE358

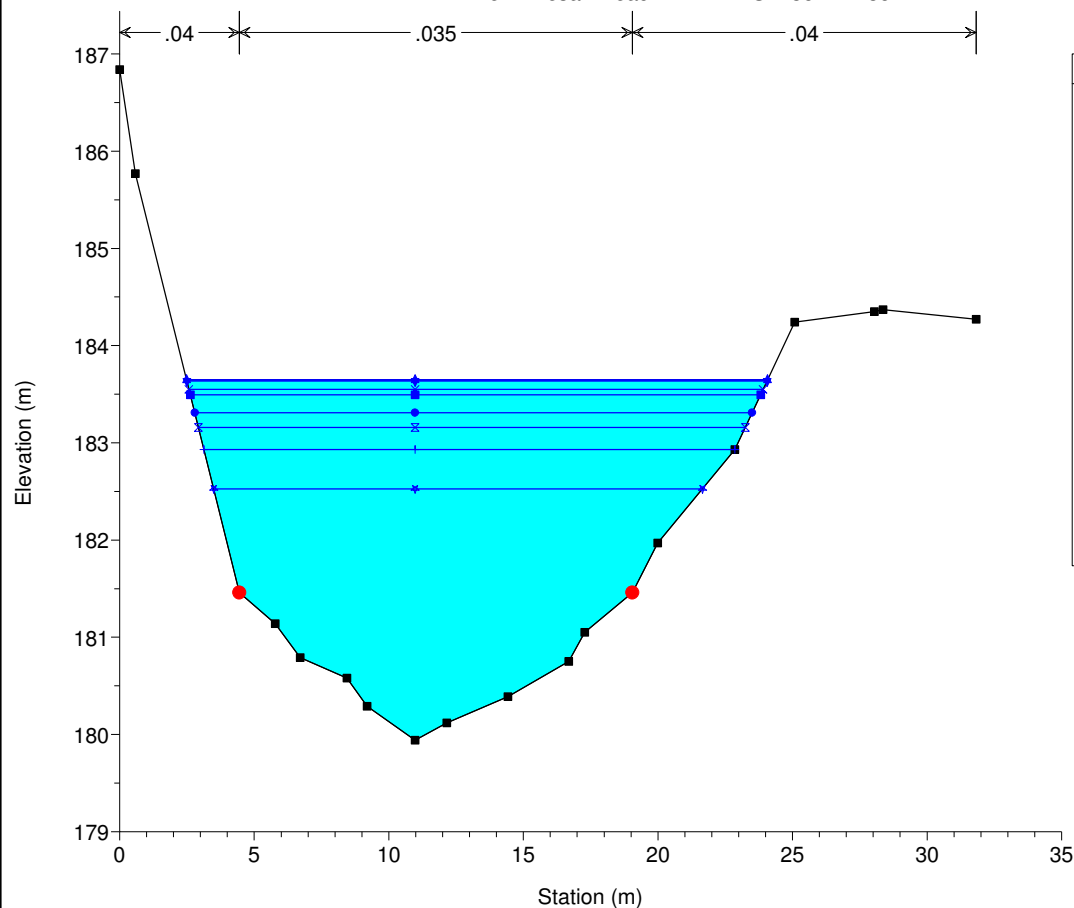


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	●
WS Max WS - 30h2Pesa	+
WS Max WS - 30h1.5Pesa	×
WS Max WS - 30h1Pesa	+
WS Max WS - 30h0.5Pesa	+
Ground	■
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 357 PE357

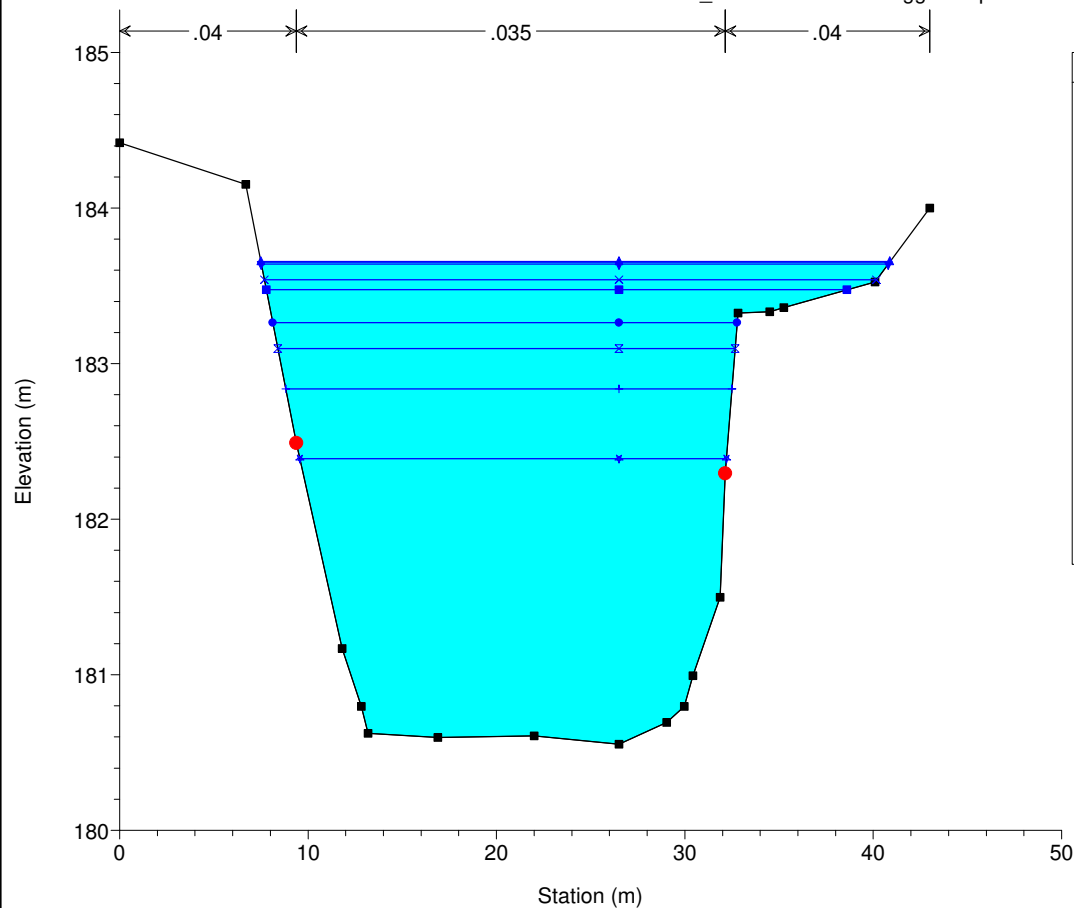


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	●
WS Max WS - 30h2Pesa	◆
WS Max WS - 30h1.5Pesa	+
WS Max WS - 30h1Pesa	×
WS Max WS - 30h0.5Pesa	+
Ground	■
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 356.523 PE356_C - MODIFICATA: aggiunto pto 19 da CTR 2k

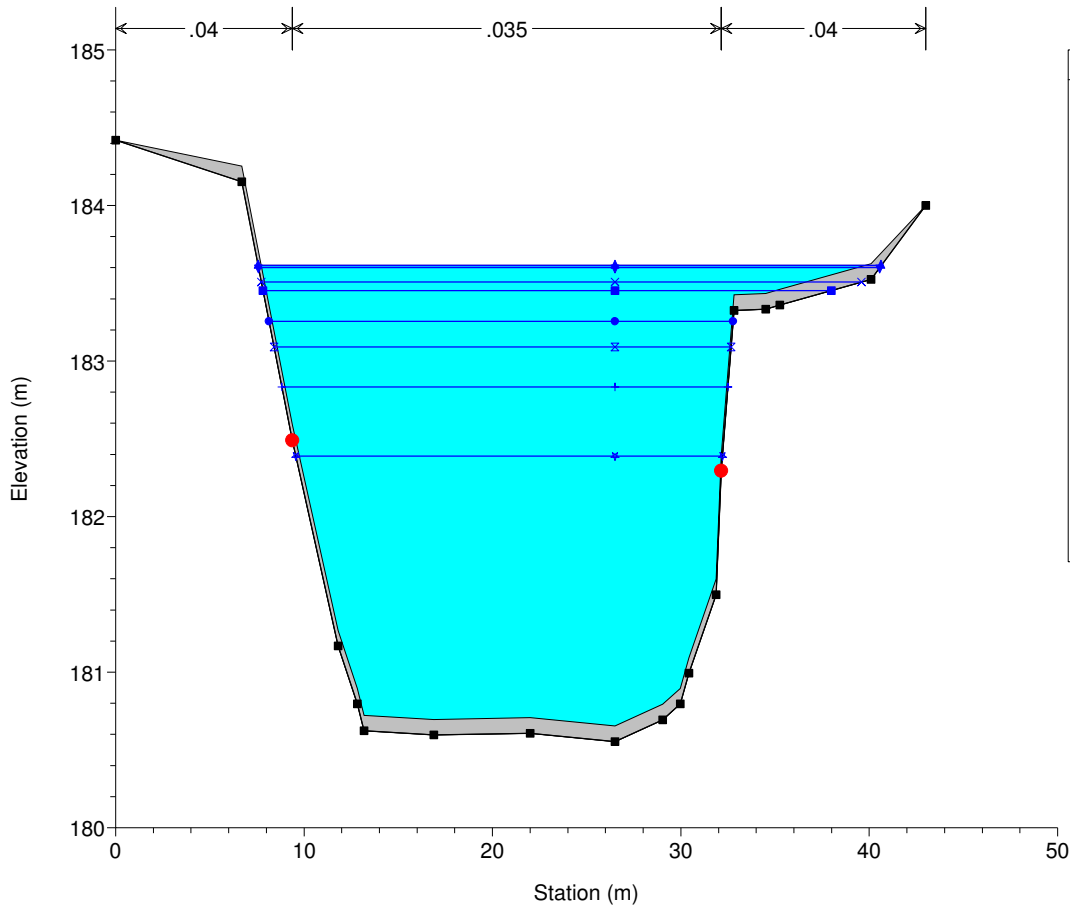


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	●
WS Max WS - 30h2Pesa	◆
WS Max WS - 30h1.5Pesa	+
WS Max WS - 30h1Pesa	×
WS Max WS - 30h0.5Pesa	+
Ground	■
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

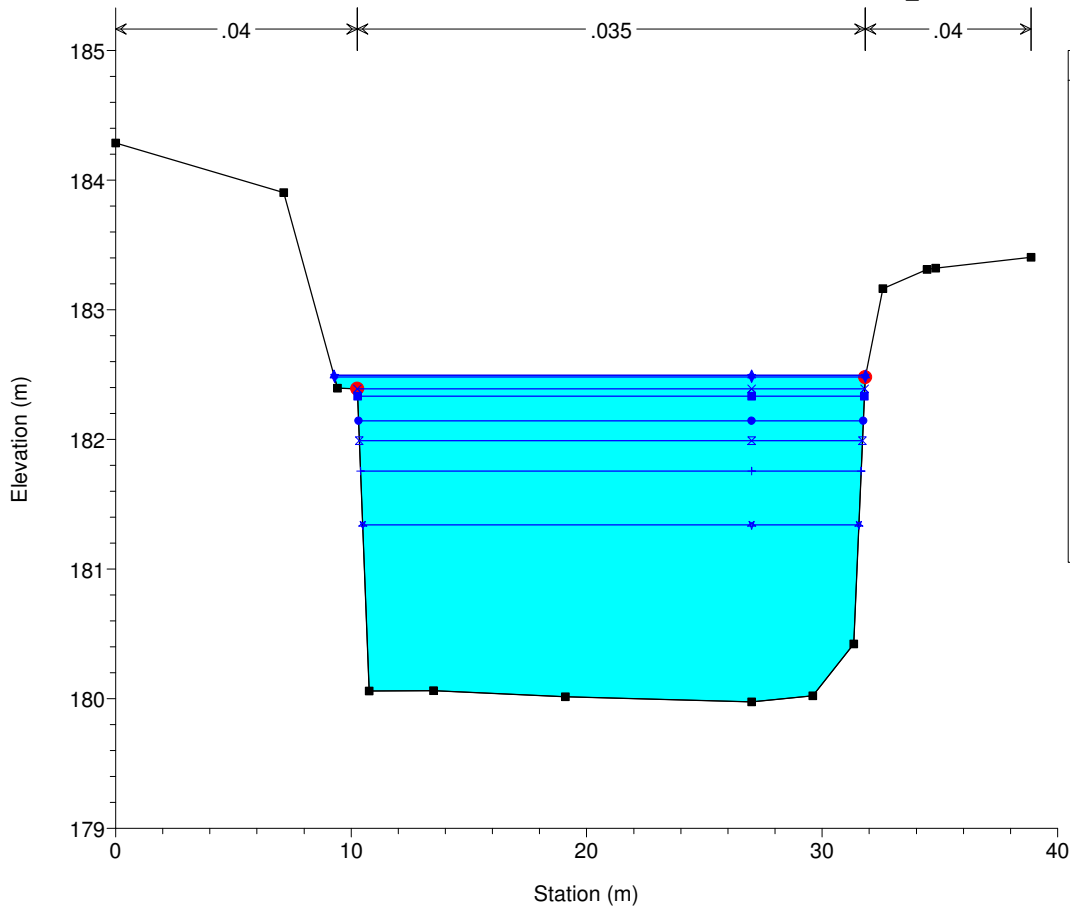
River = Pesa Reach = A RS = 356.522 IS



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

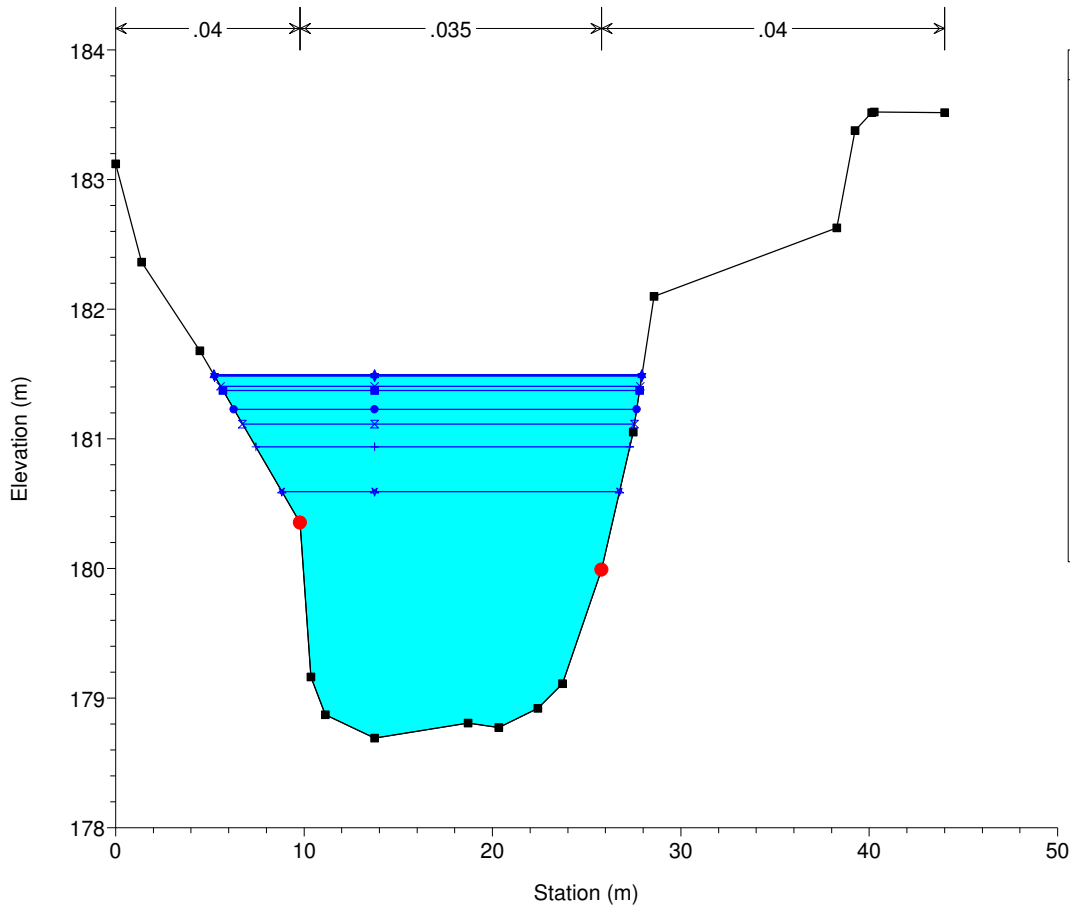
River = Pesa Reach = A RS = 356.521 PE356_A



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

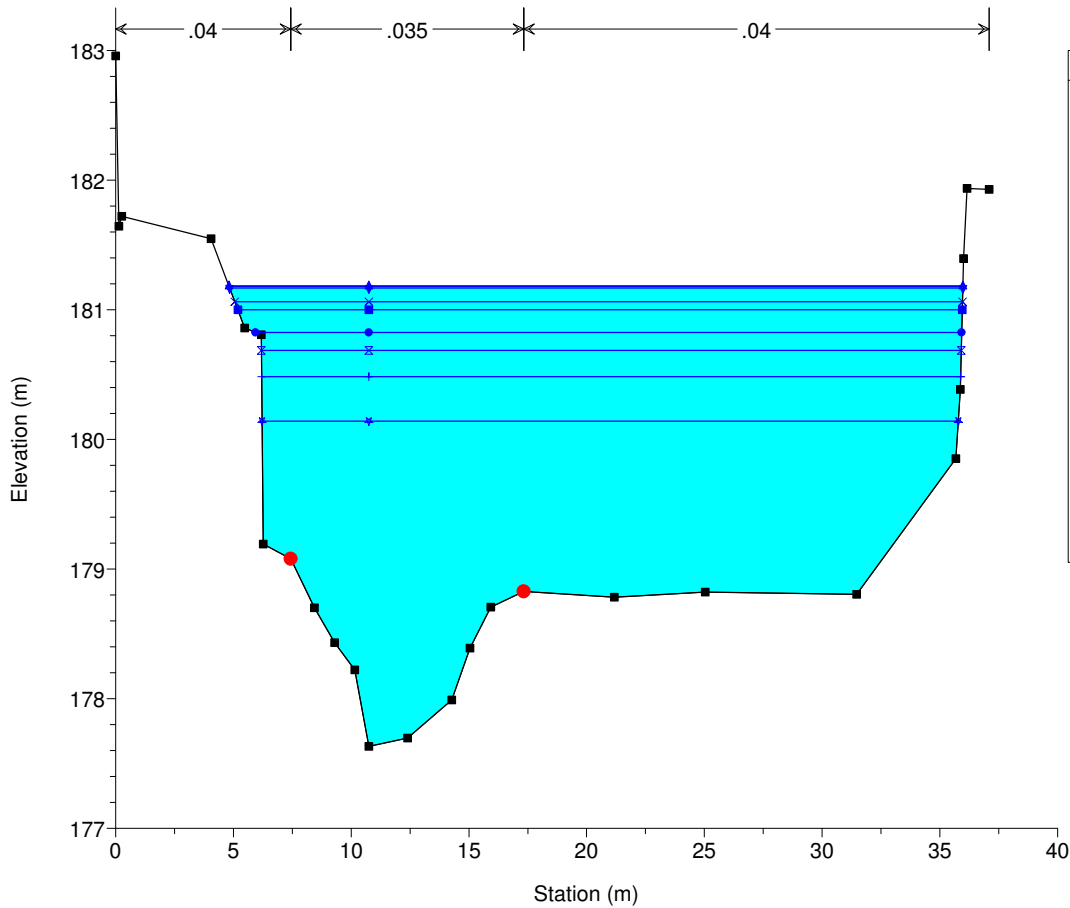
River = Pesa Reach = A RS = 355 PE355



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

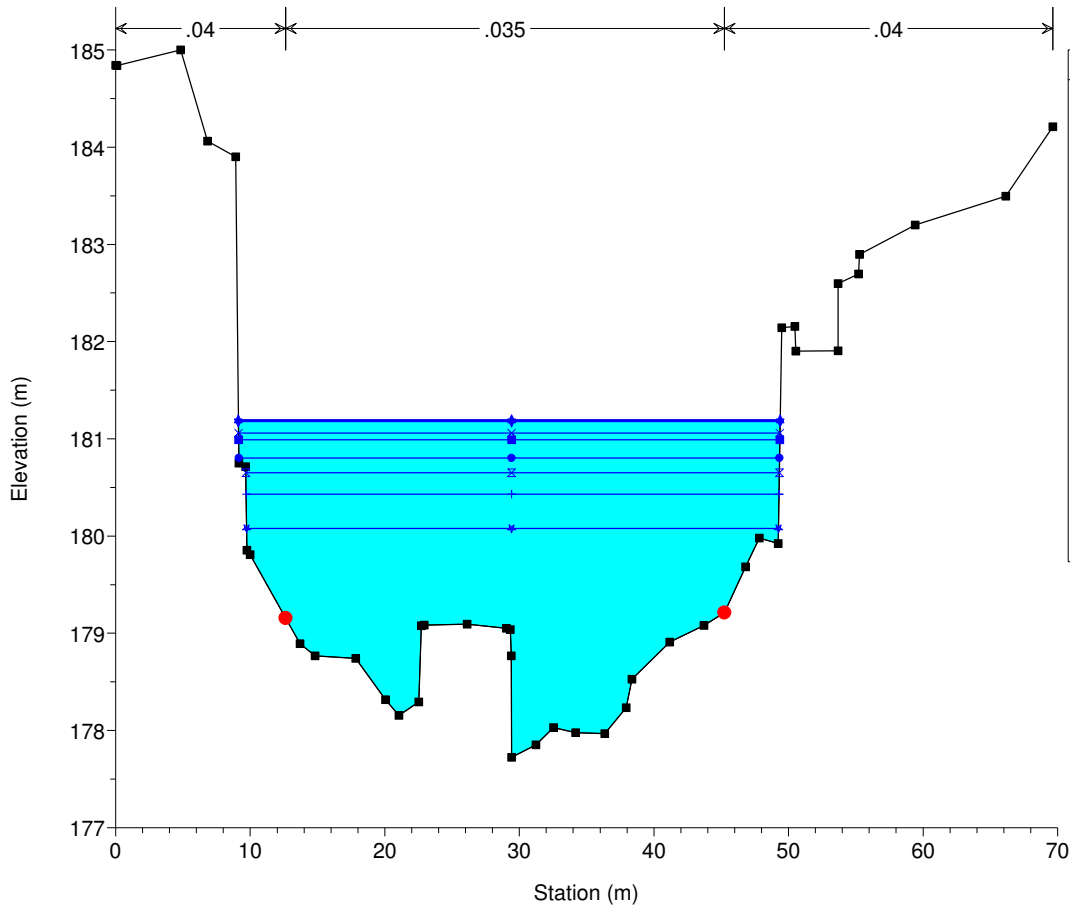
River = Pesa Reach = A RS = 354 PE354



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

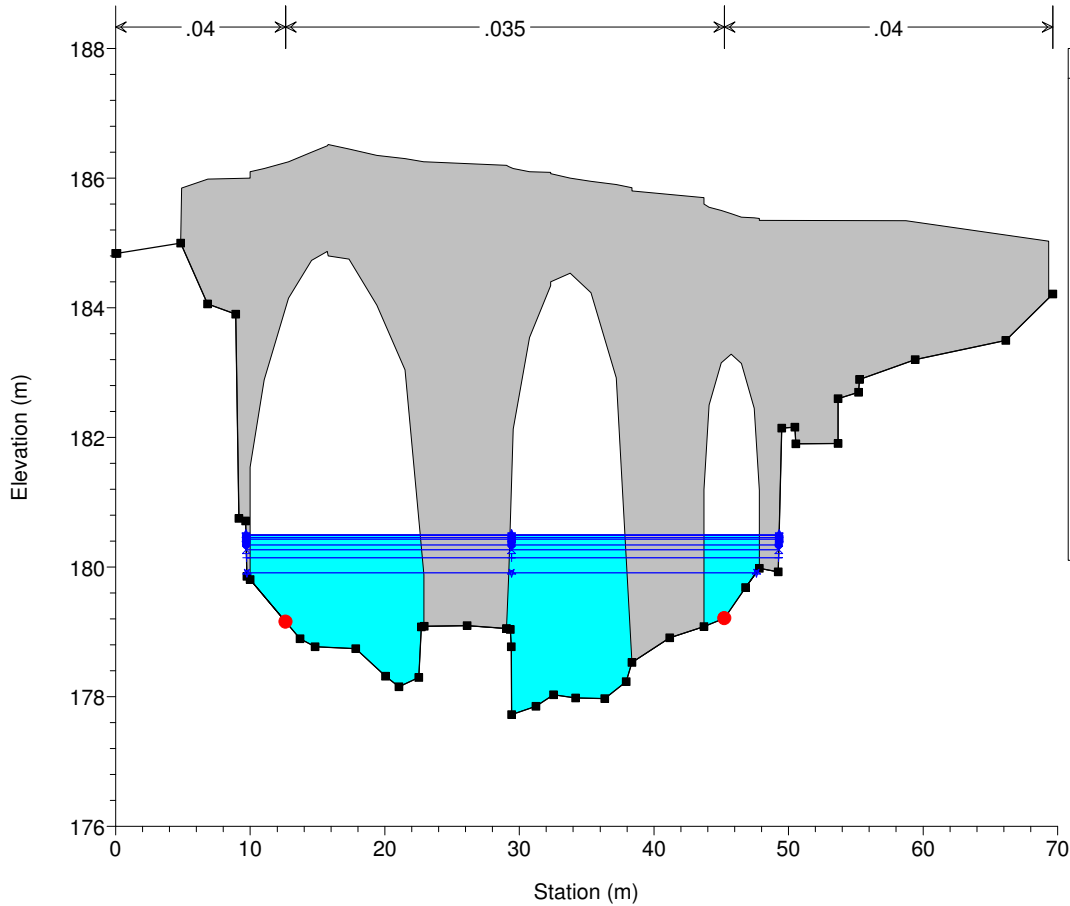
River = Pesa Reach = A RS = 353.513 PE353_C



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

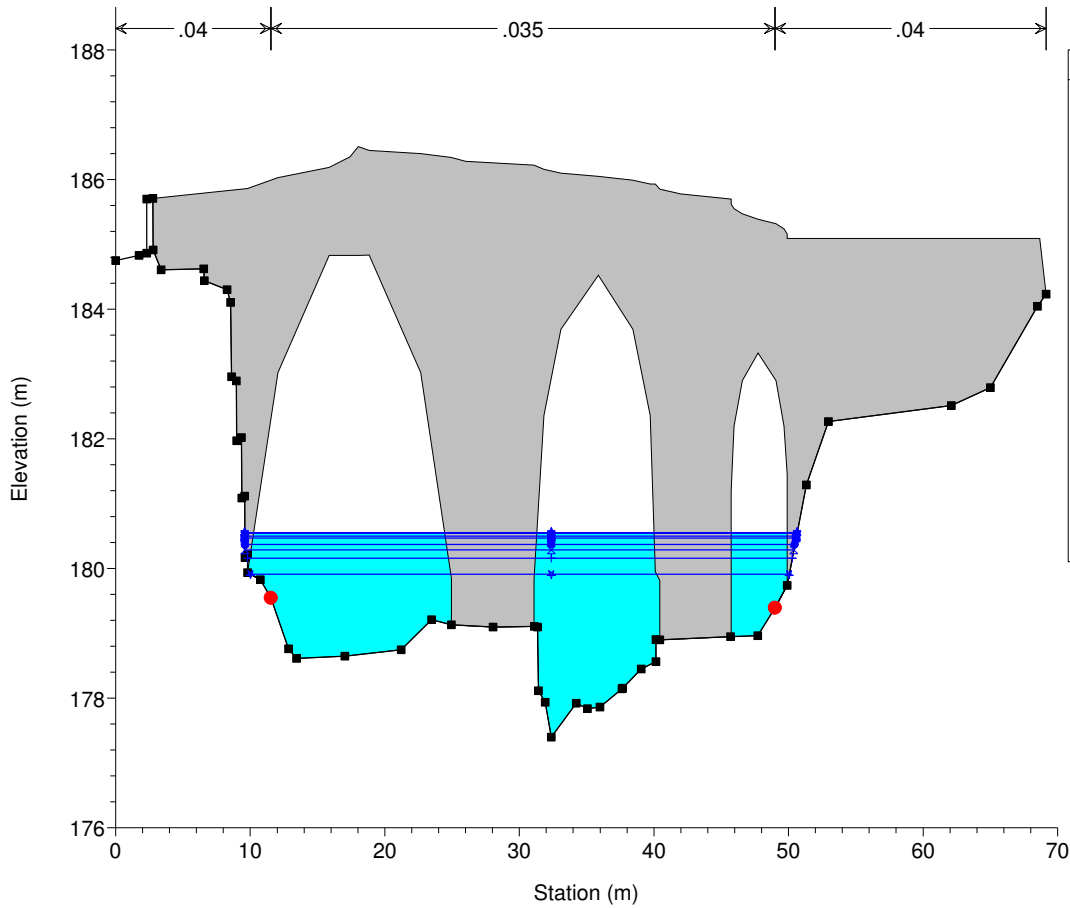
River = Pesa Reach = A RS = 353.512 BR



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

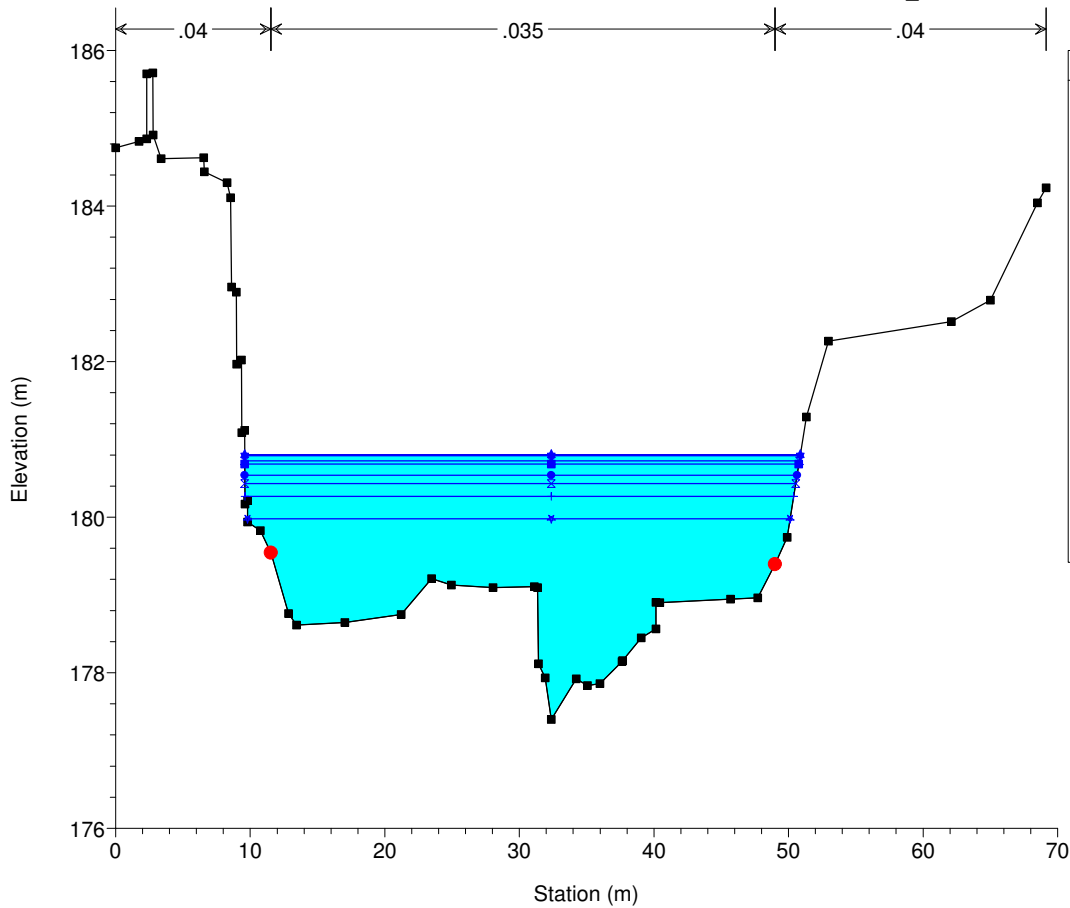
River = Pesa Reach = A RS = 353.512 BR



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

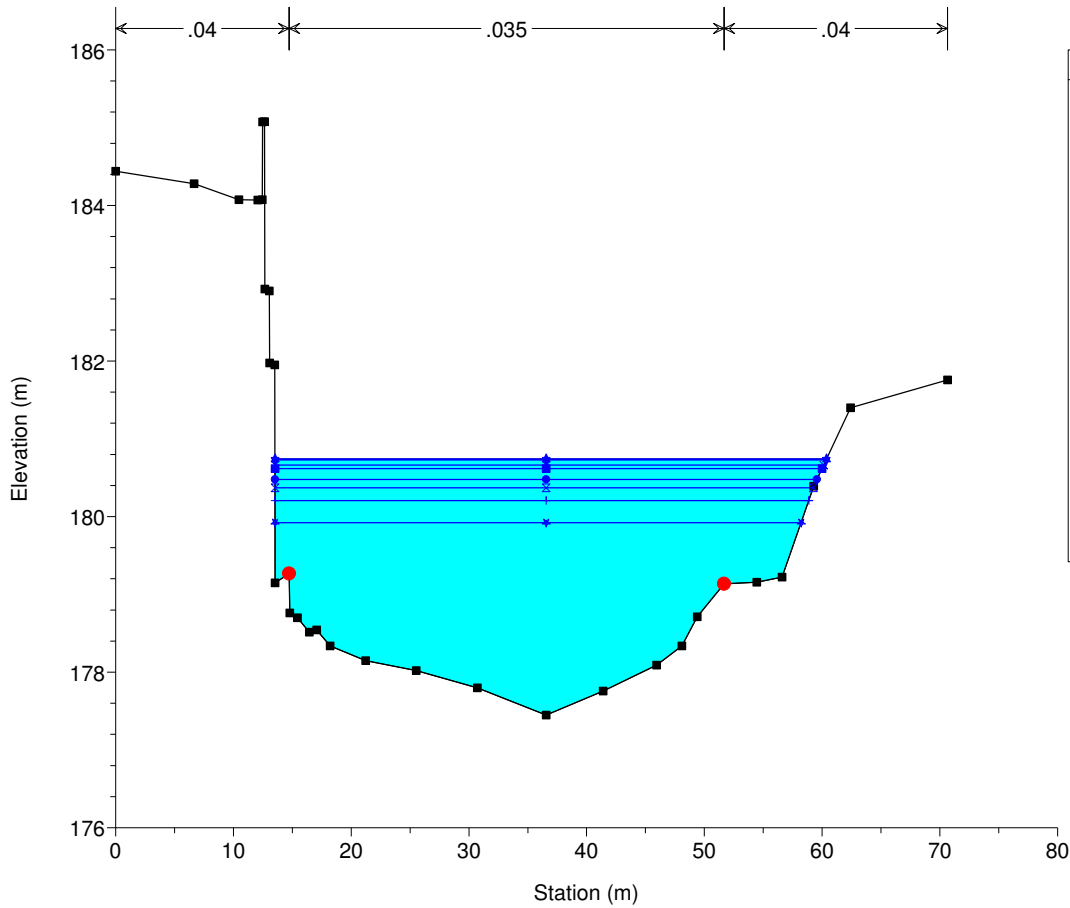
River = Pesa Reach = A RS = 353.511 PE353_A



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

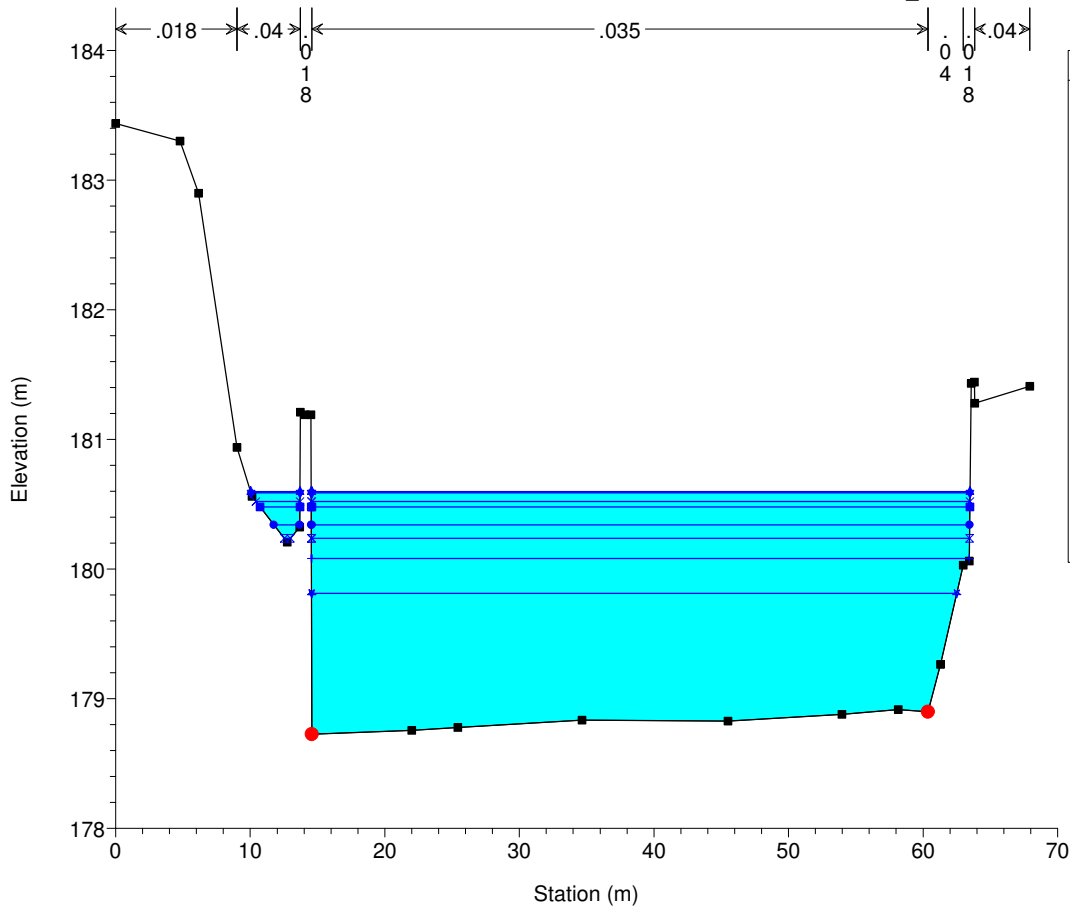
River = Pesa Reach = A RS = 352 PE352



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

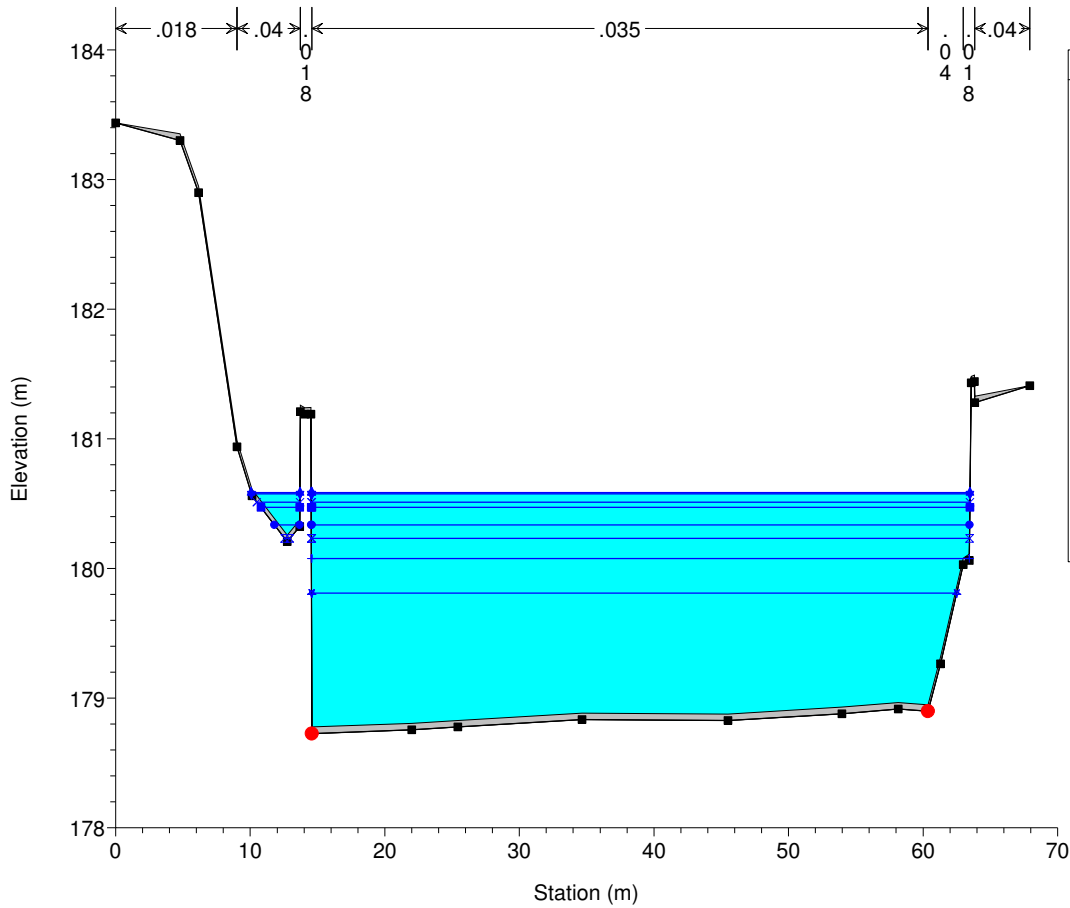
River = Pesa Reach = A RS = 351.523 PE351_A



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

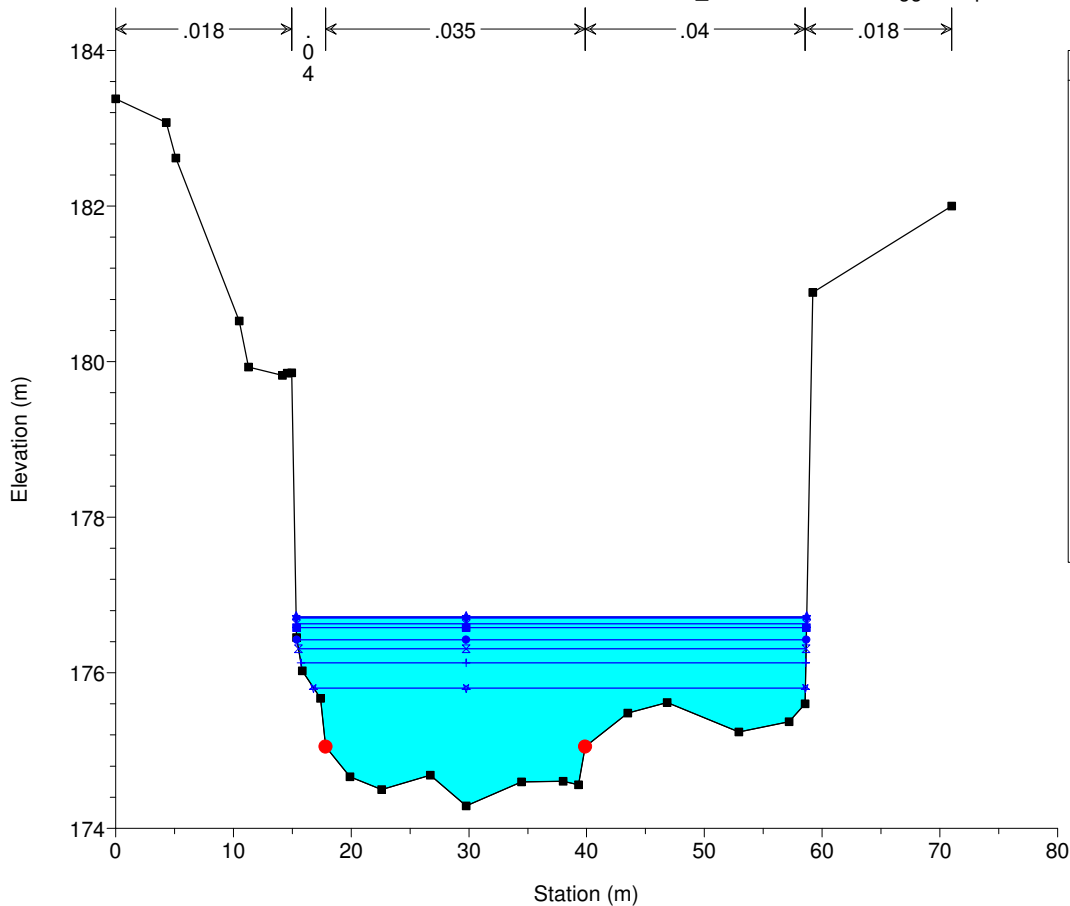
River = Pesa Reach = A RS = 351.522 IS



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

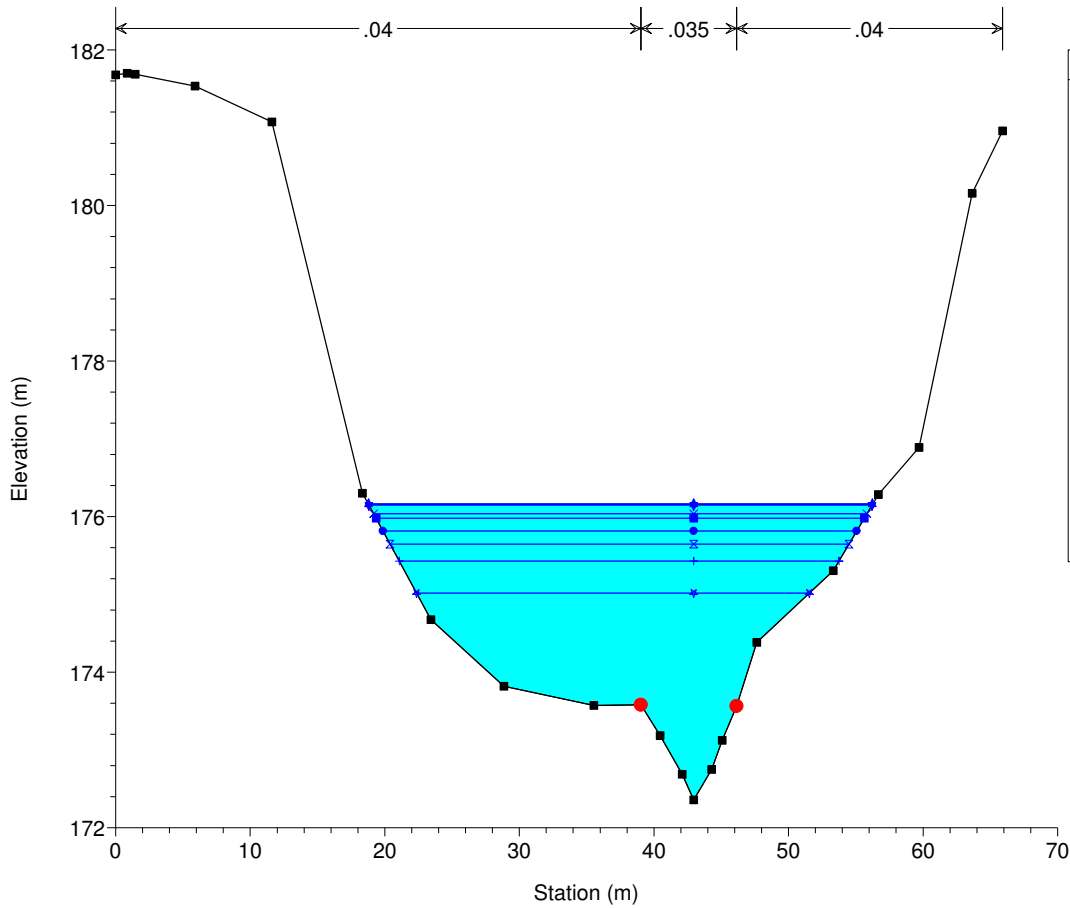
River = Pesa Reach = A RS = 351.521 PE351_C - MODIFICATA: aggiunto pto 27 da CTR 2k



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

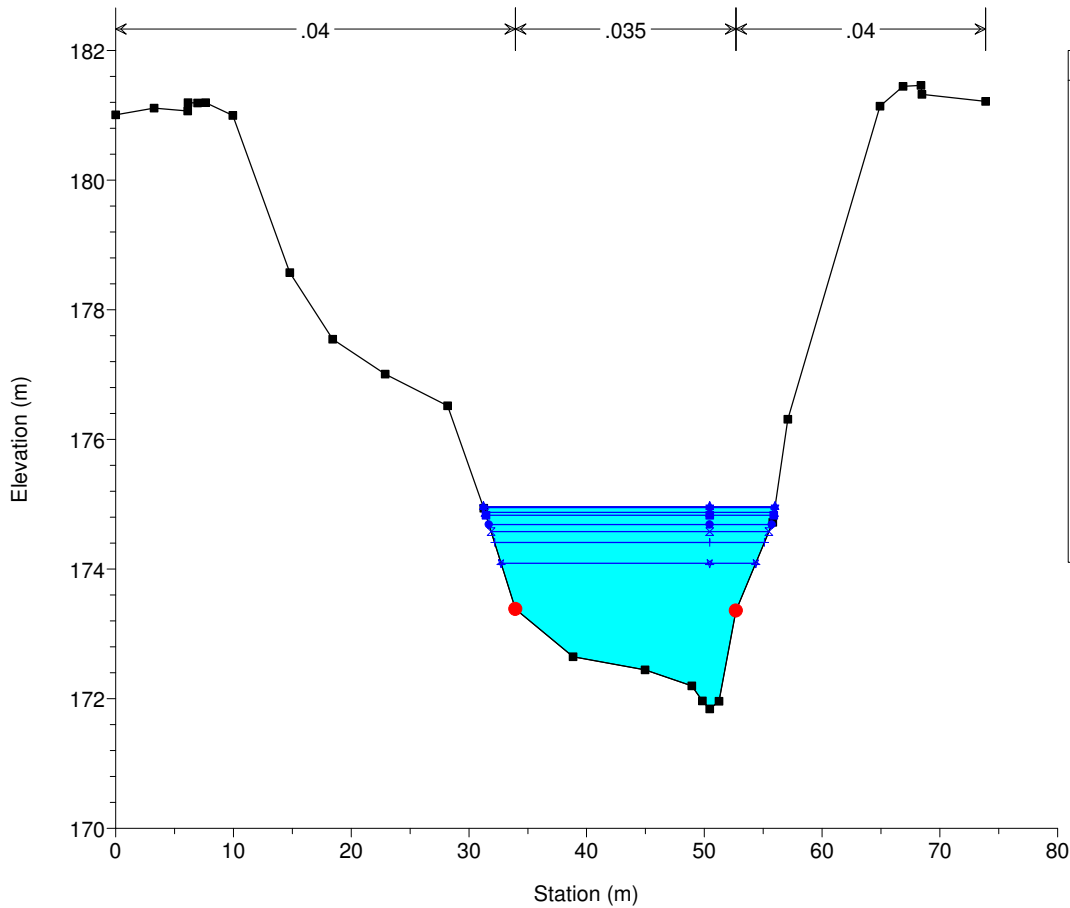
River = Pesa Reach = A RS = 350 PE350



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

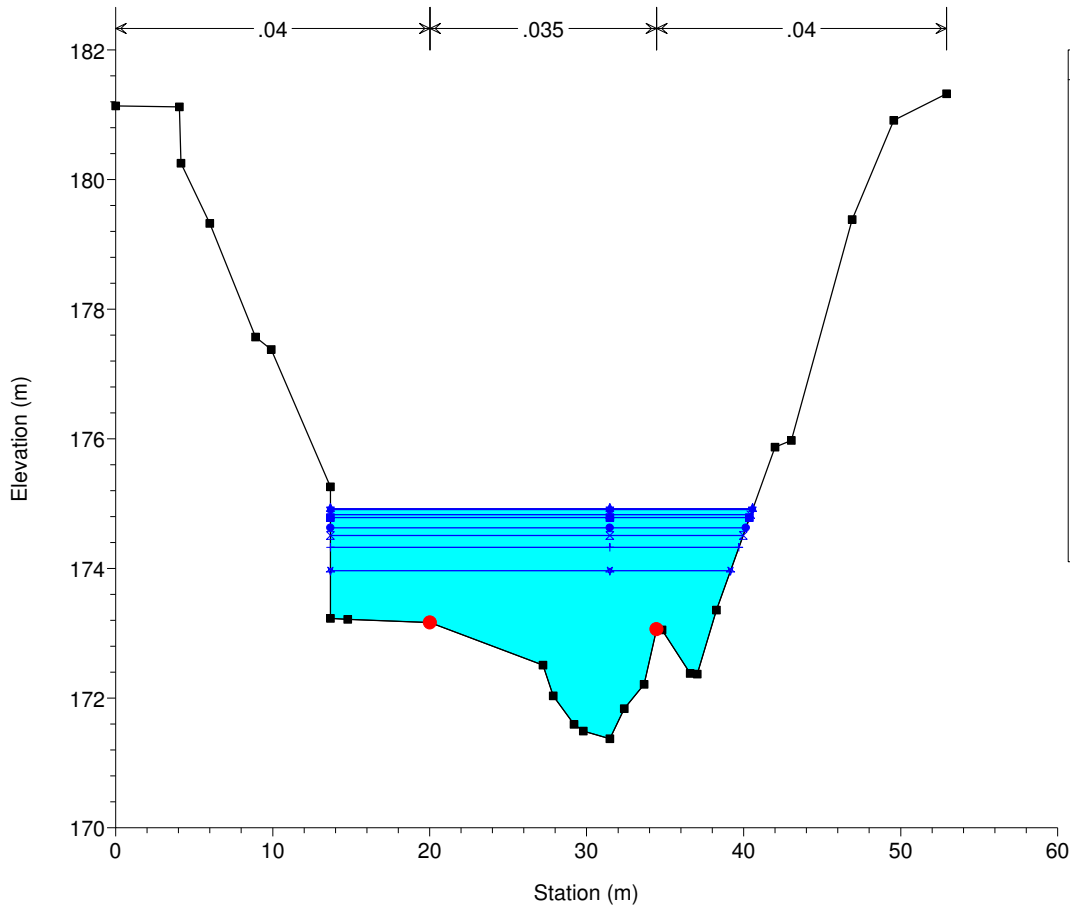
River = Pesa Reach = A RS = 349 PE349



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

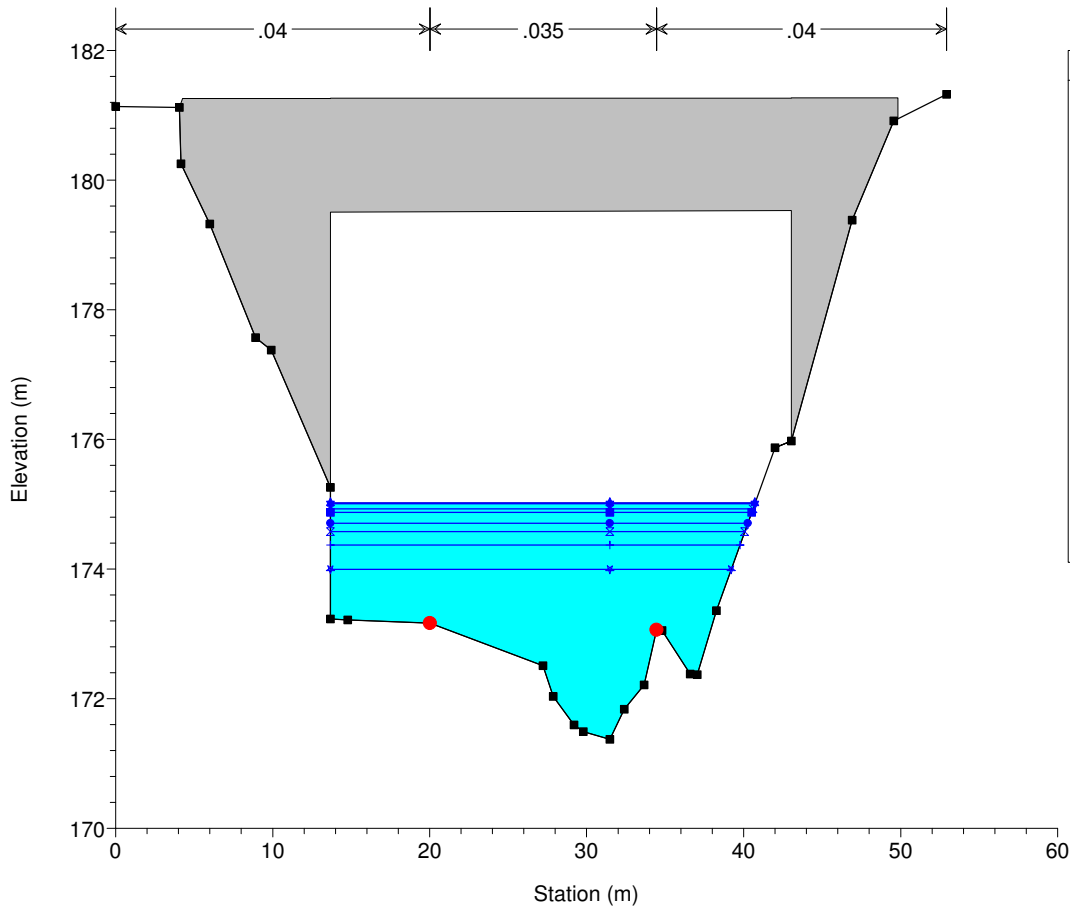
River = Pesa Reach = A RS = 348.513 PE348_C



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

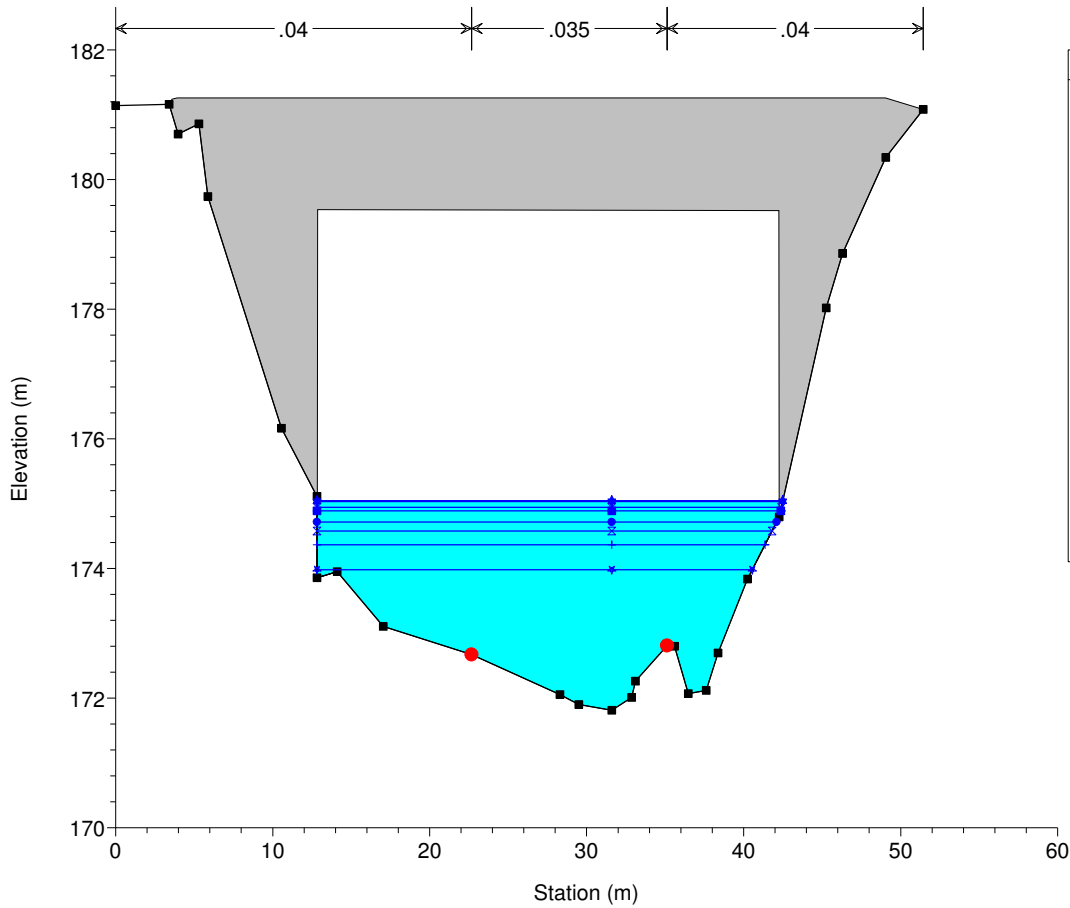
River = Pesa Reach = A RS = 348.512 BR



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

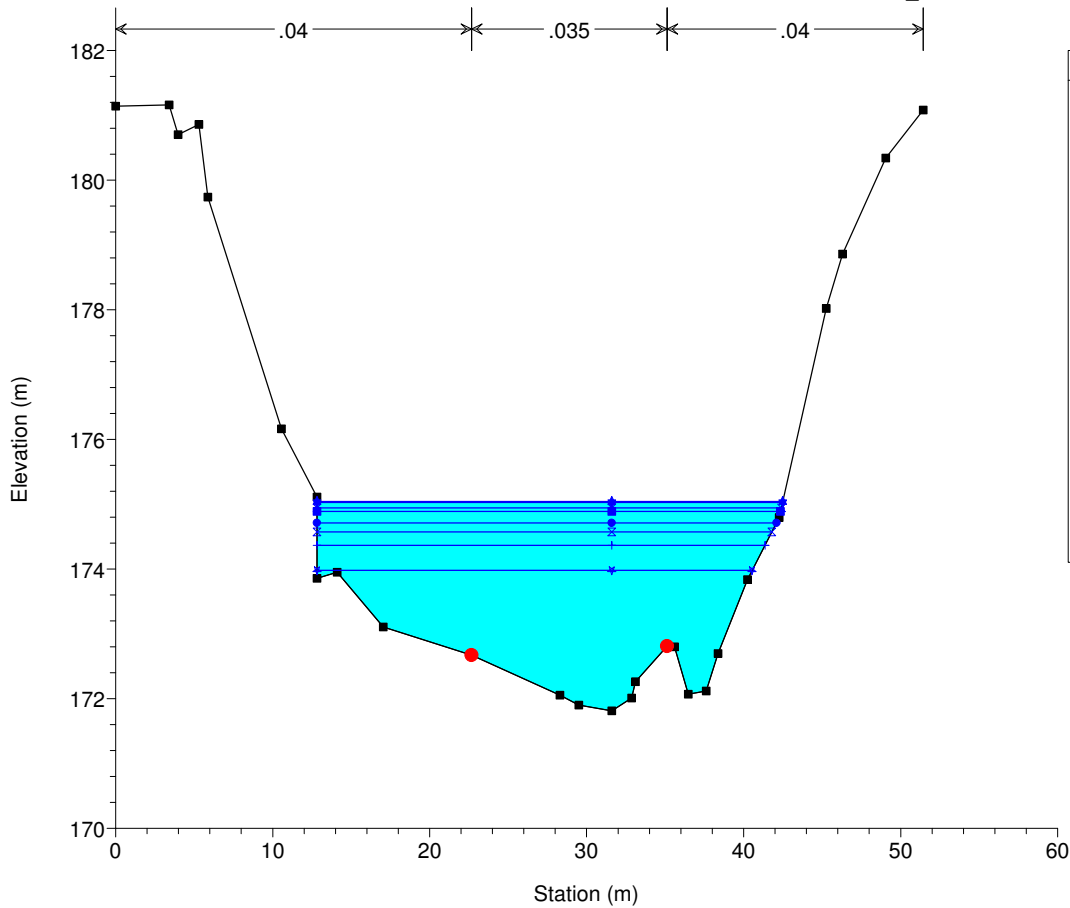
River = Pesa Reach = A RS = 348.512 BR



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

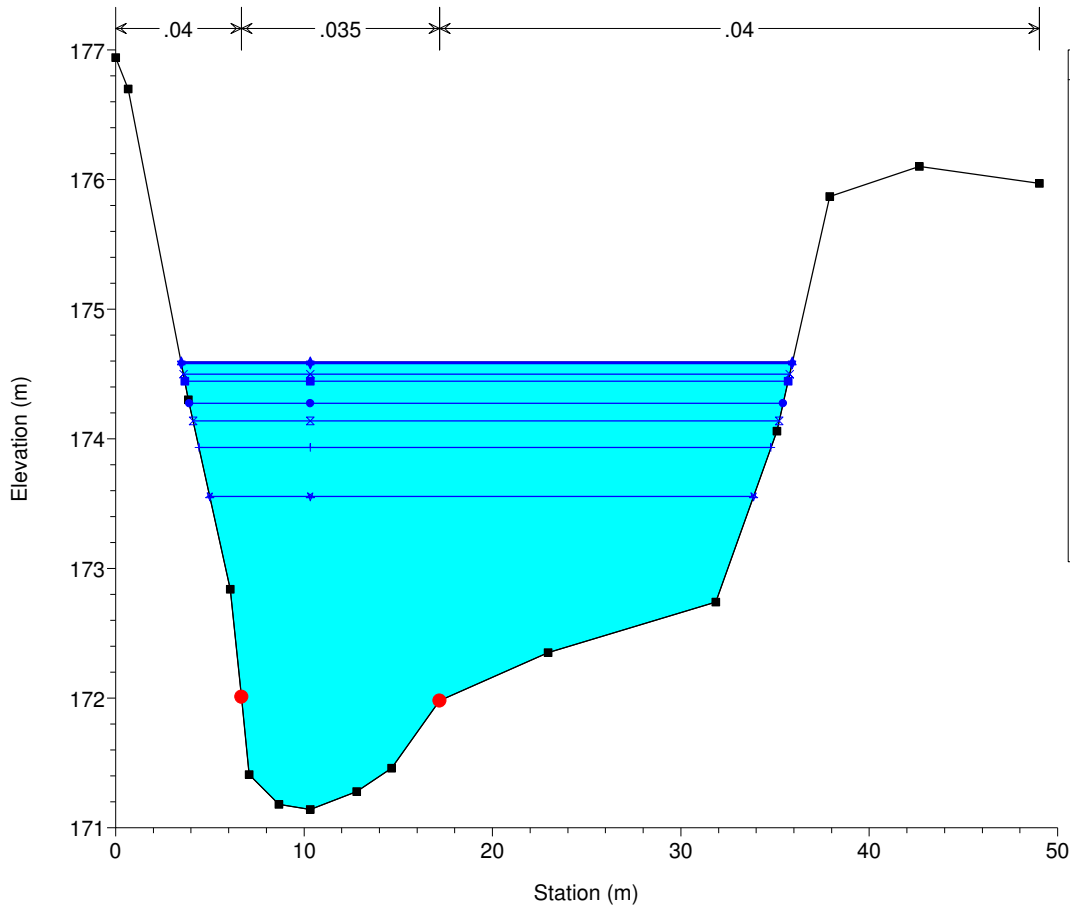
River = Pesa Reach = A RS = 348.511 PE348_A



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 347 PE347

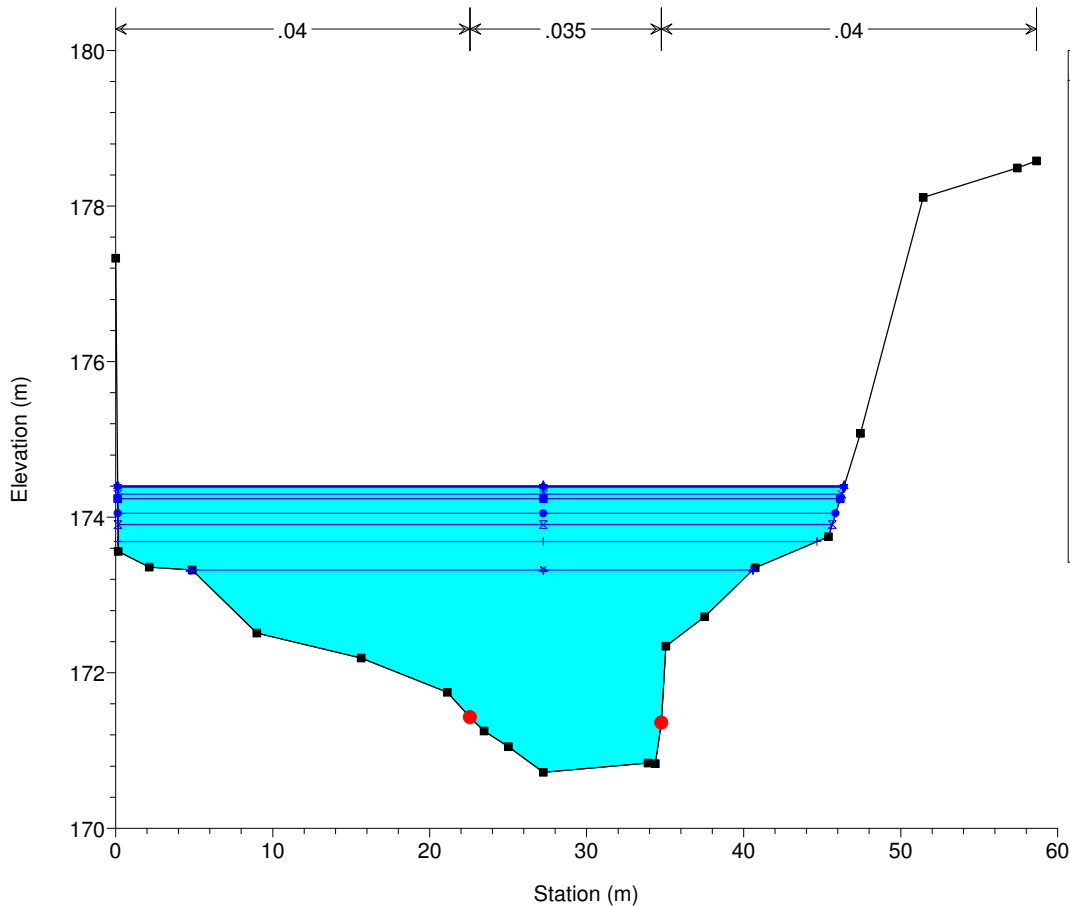


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	●
WS Max WS - 30h2Pesa	+
WS Max WS - 30h1.5Pesa	×
WS Max WS - 30h1Pesa	+
WS Max WS - 30h0.5Pesa	+
Ground	■
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 346 PE346

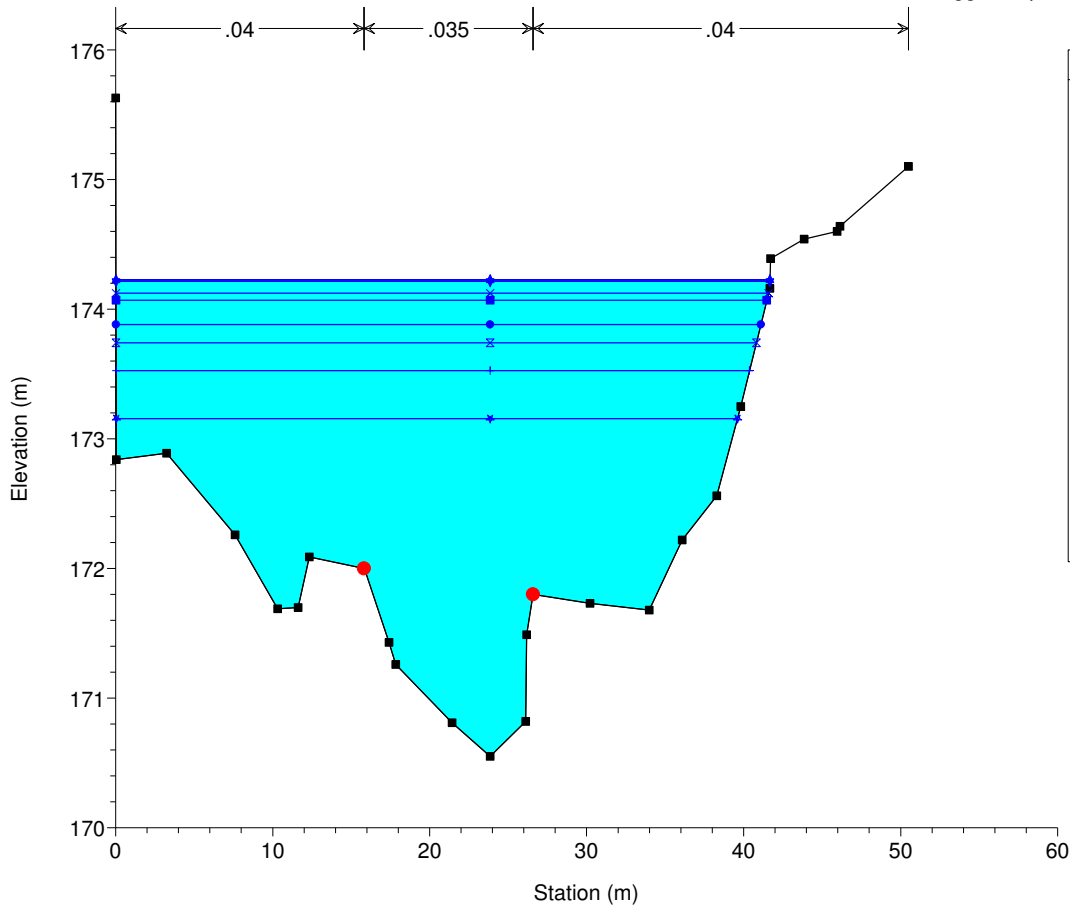


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	●
WS Max WS - 30h2Pesa	+
WS Max WS - 30h1.5Pesa	×
WS Max WS - 30h1Pesa	+
WS Max WS - 30h0.5Pesa	+
Ground	■
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

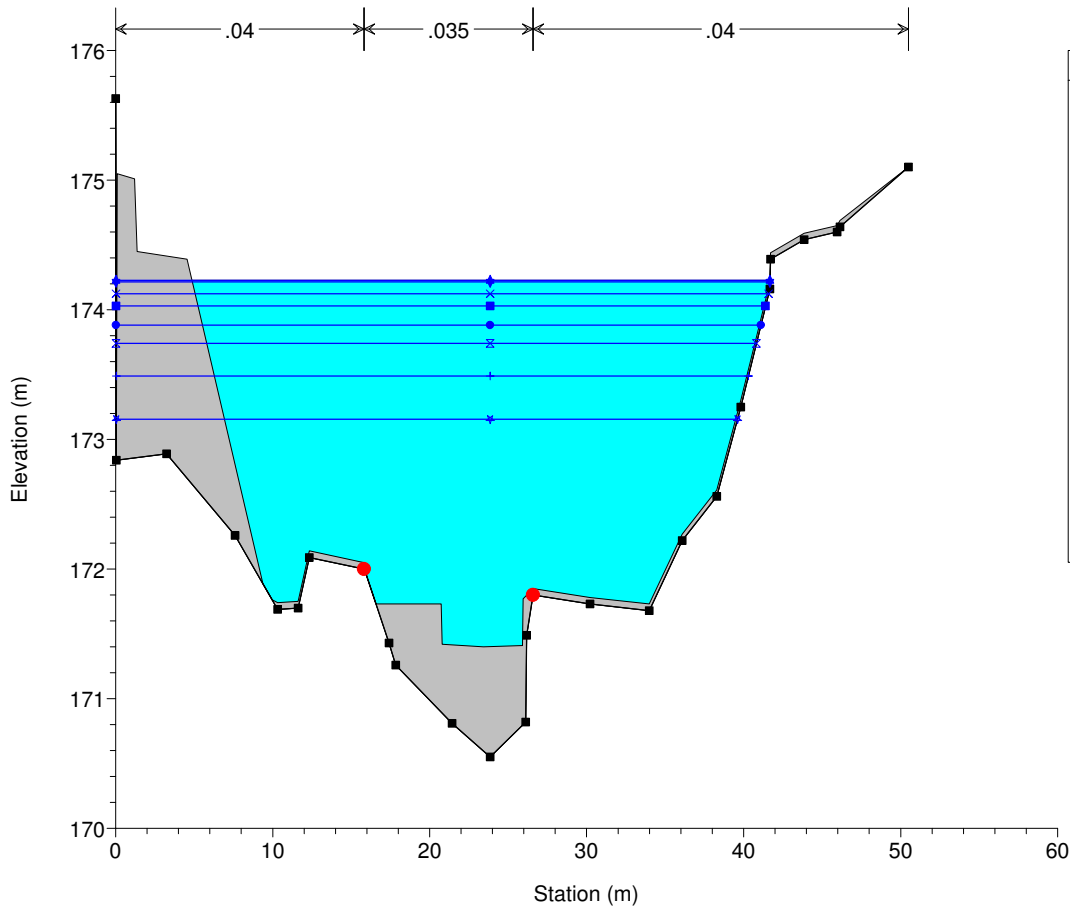
River = Pesa Reach = A RS = 345.526 PE345_C - MODIFICATA: aggiunto pto 27



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

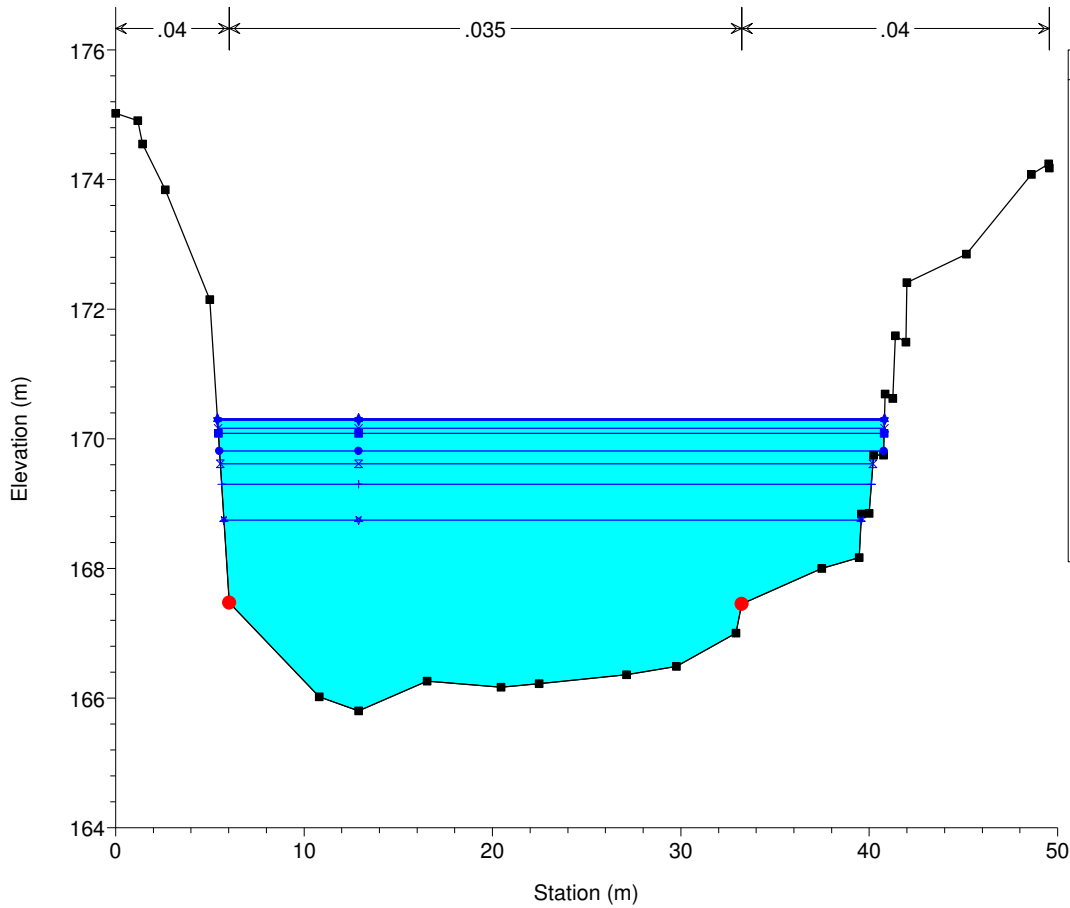
River = Pesa Reach = A RS = 345.524 IS



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

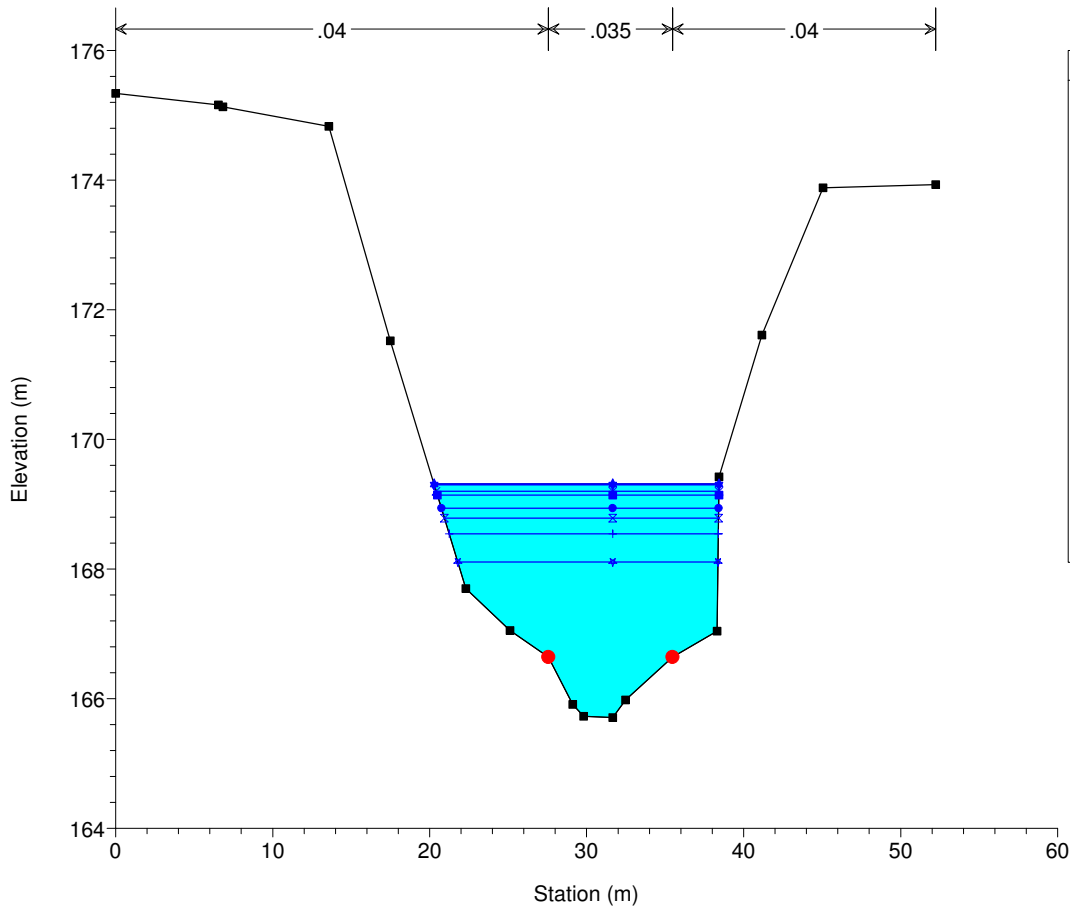
River = Pesa Reach = A RS = 345.521 PE345_A



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

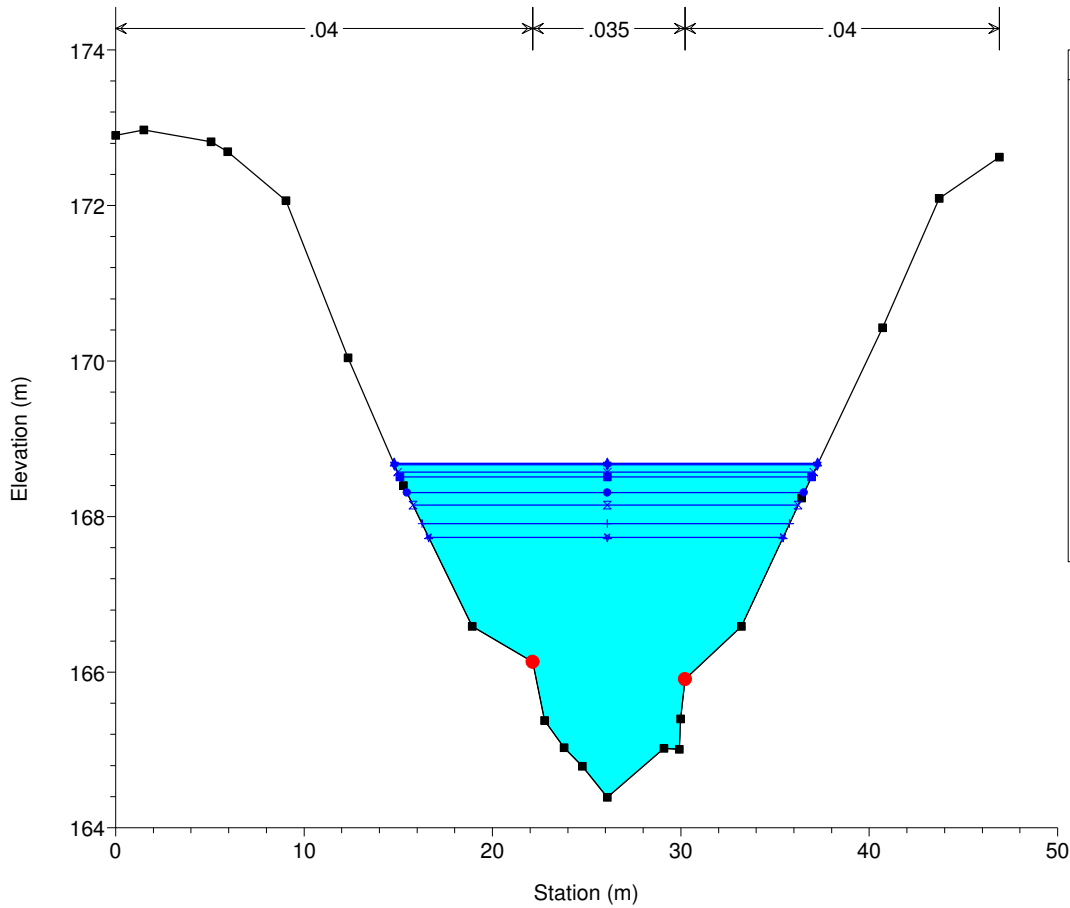
River = Pesa Reach = A RS = 344 PE344



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

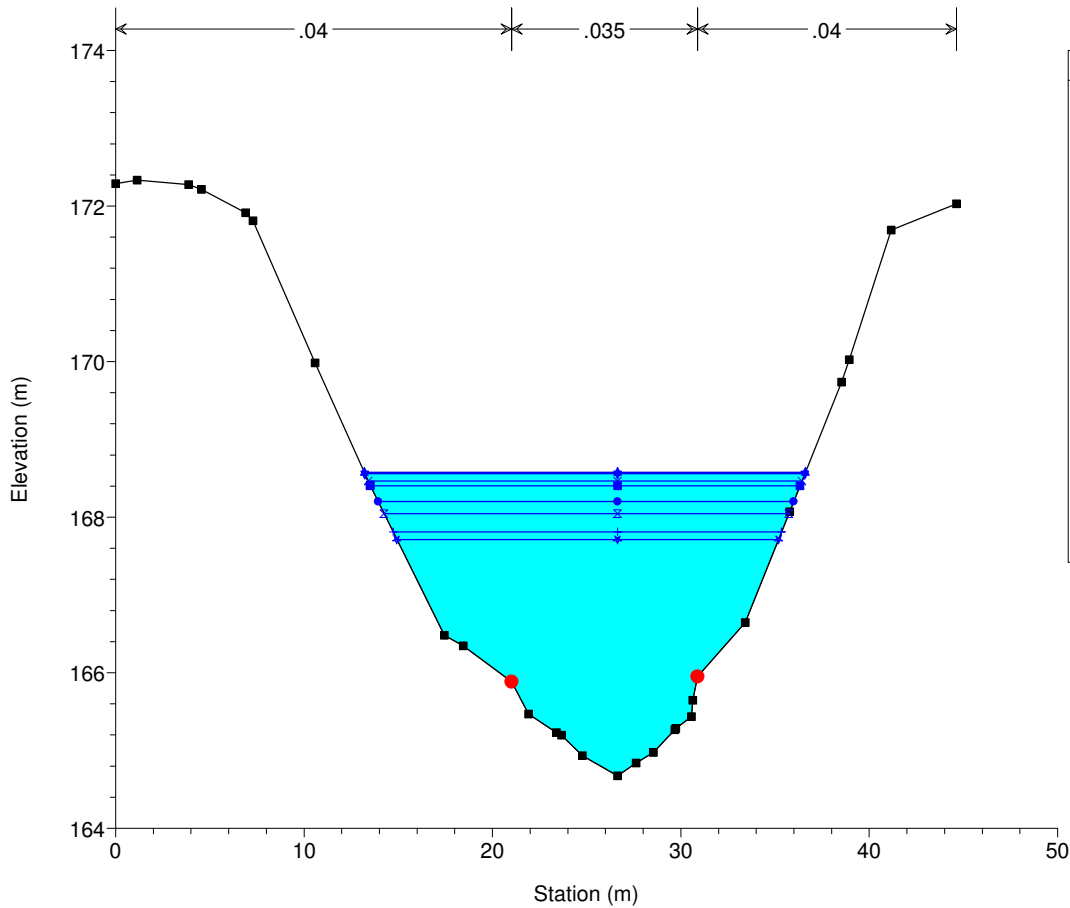
River = Pesa Reach = A RS = 343 PE343



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

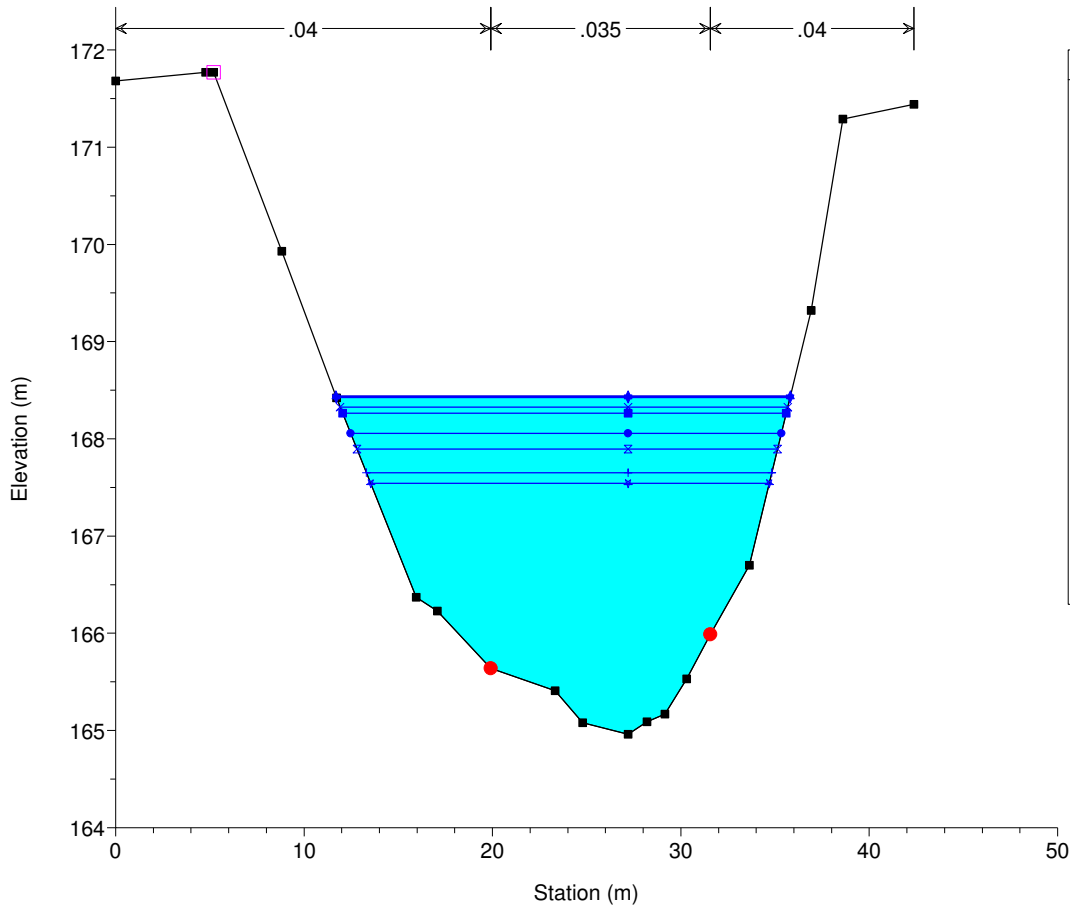
River = Pesa Reach = A RS = 342.5



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

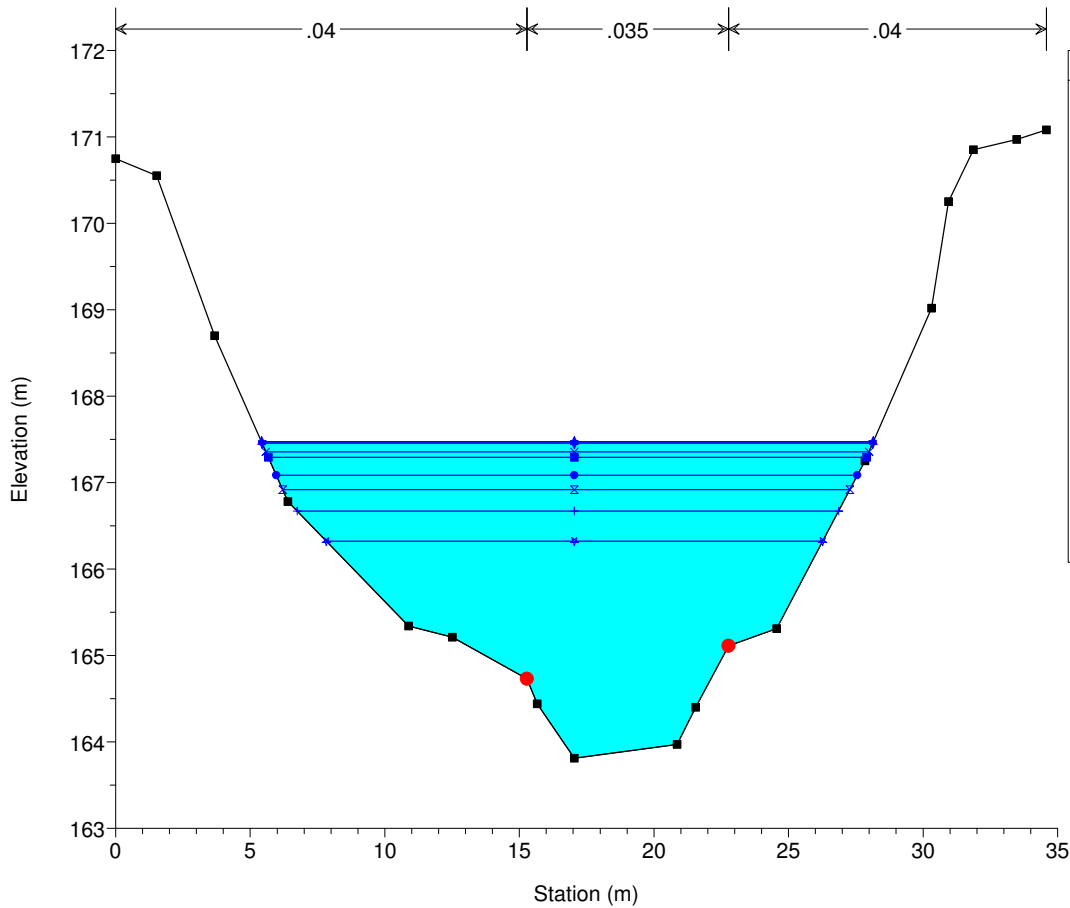
River = Pesa Reach = A RS = 342 PE342



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

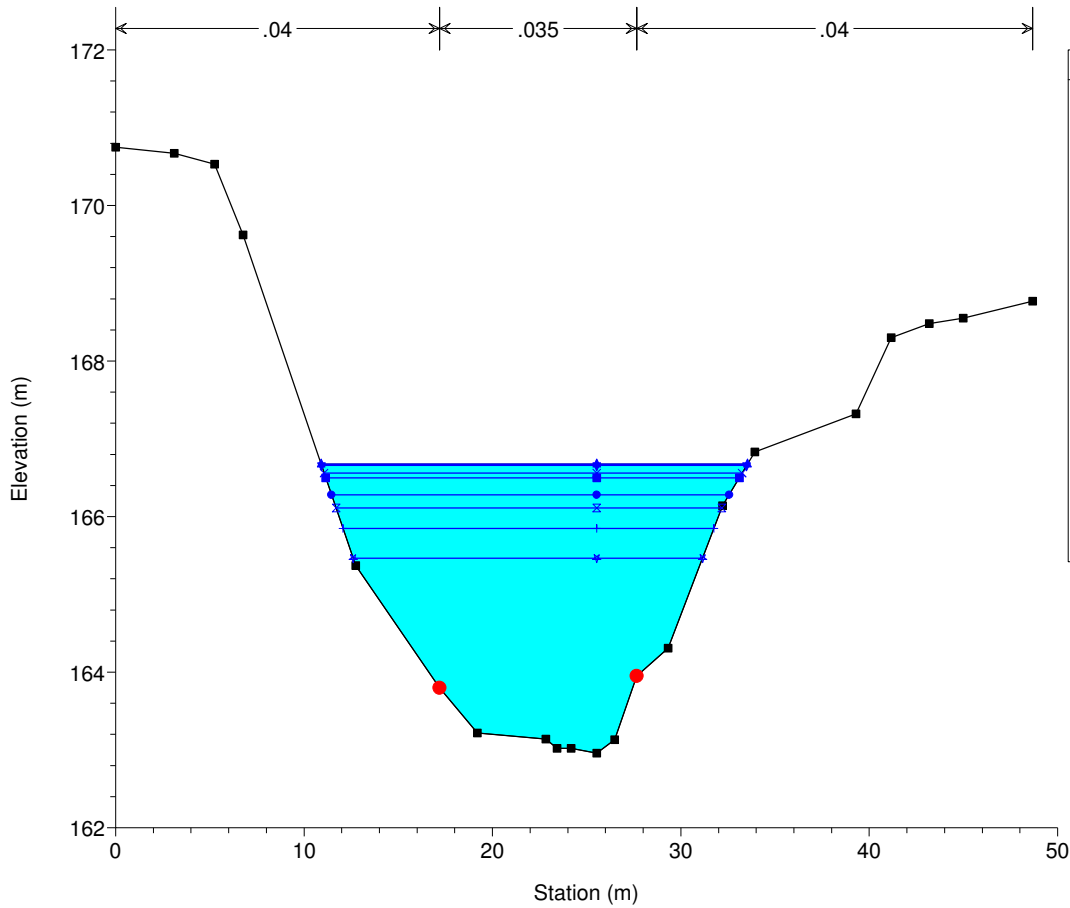
River = Pesa Reach = A RS = 341 PE341



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

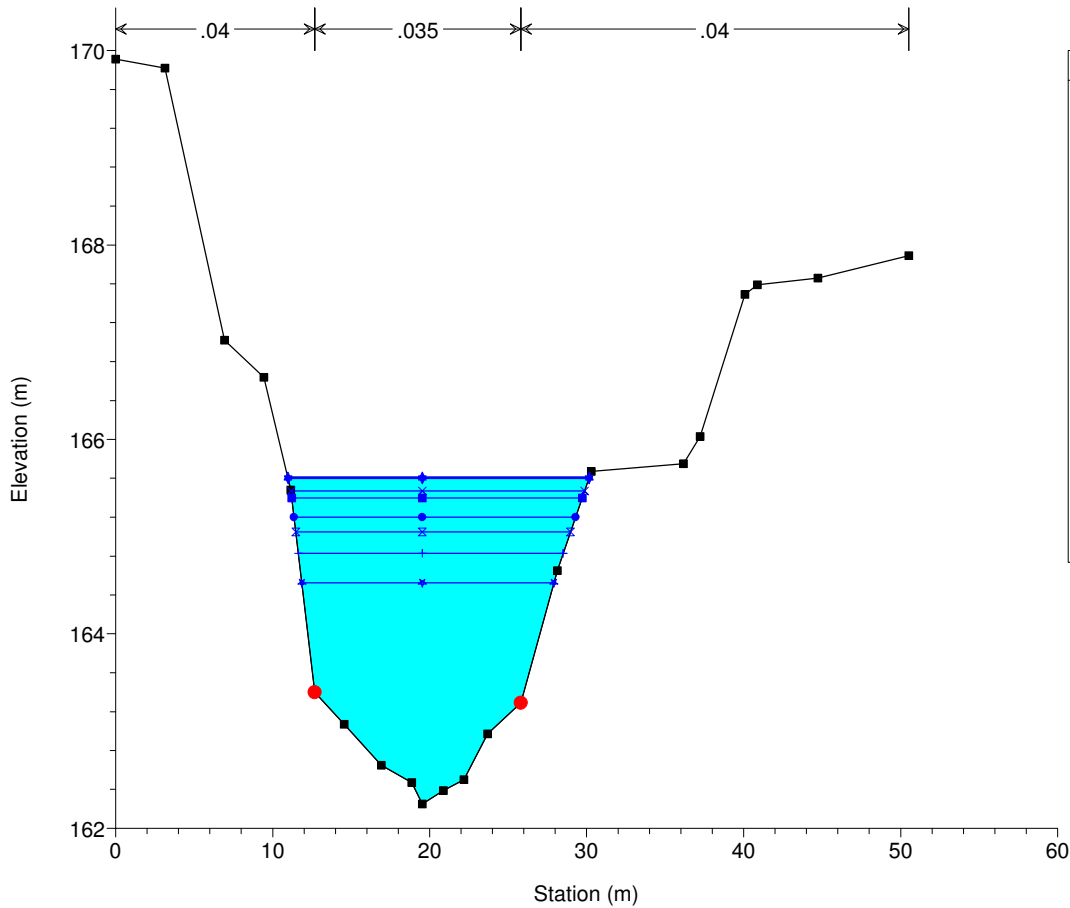
River = Pesa Reach = A RS = 340 PE340



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

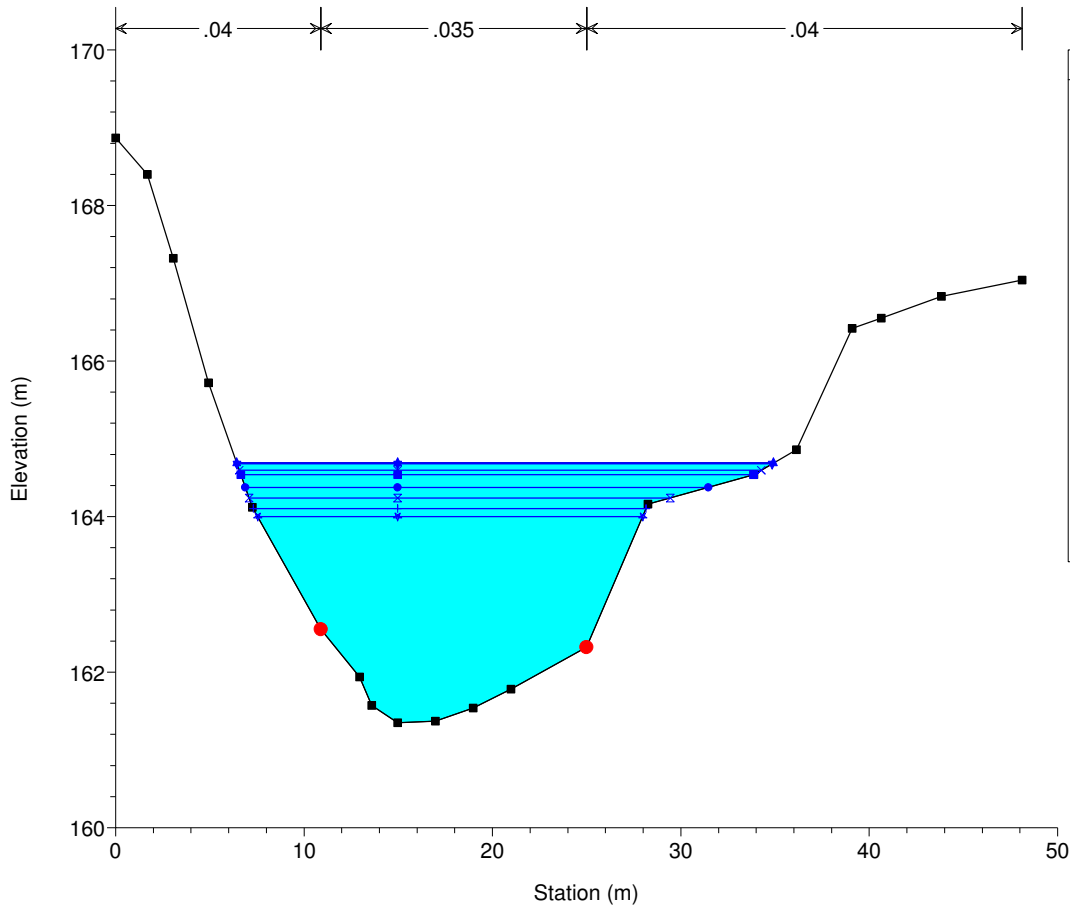
River = Pesa Reach = A RS = 339 PE339



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

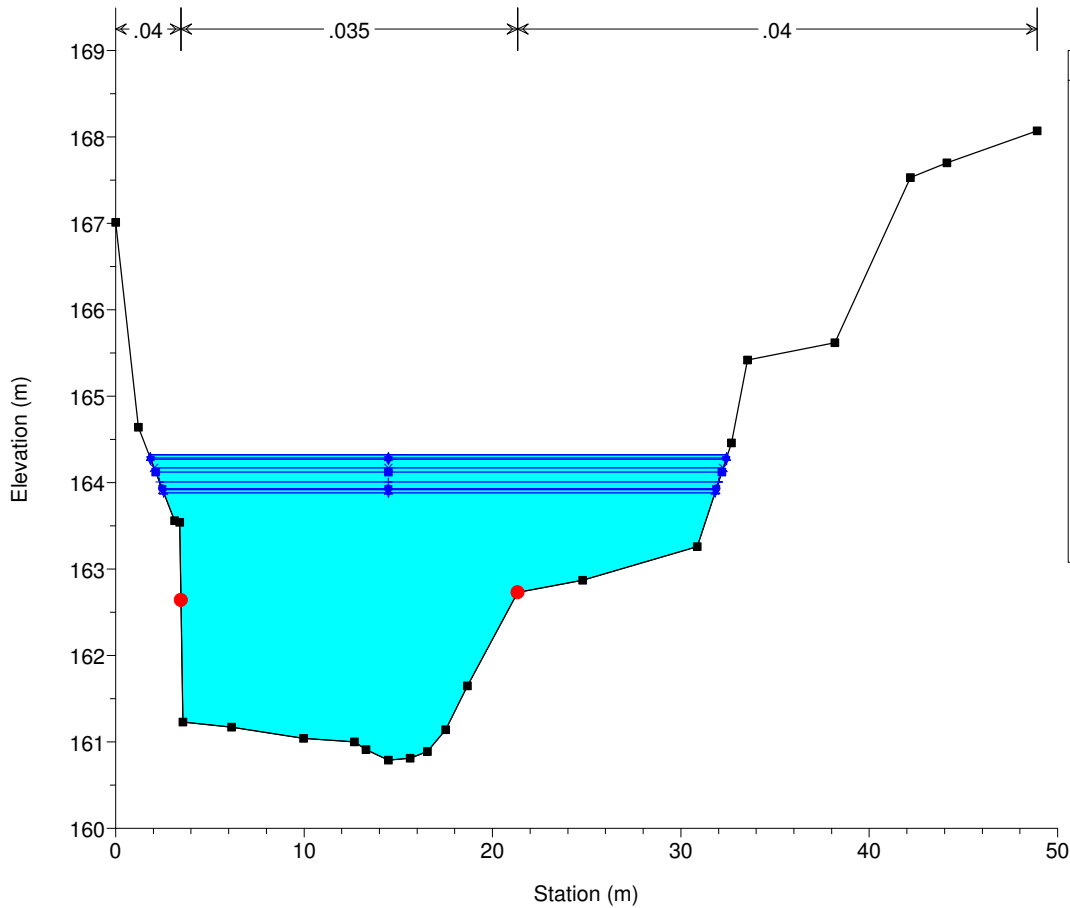
River = Pesa Reach = A RS = 338 PE338



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

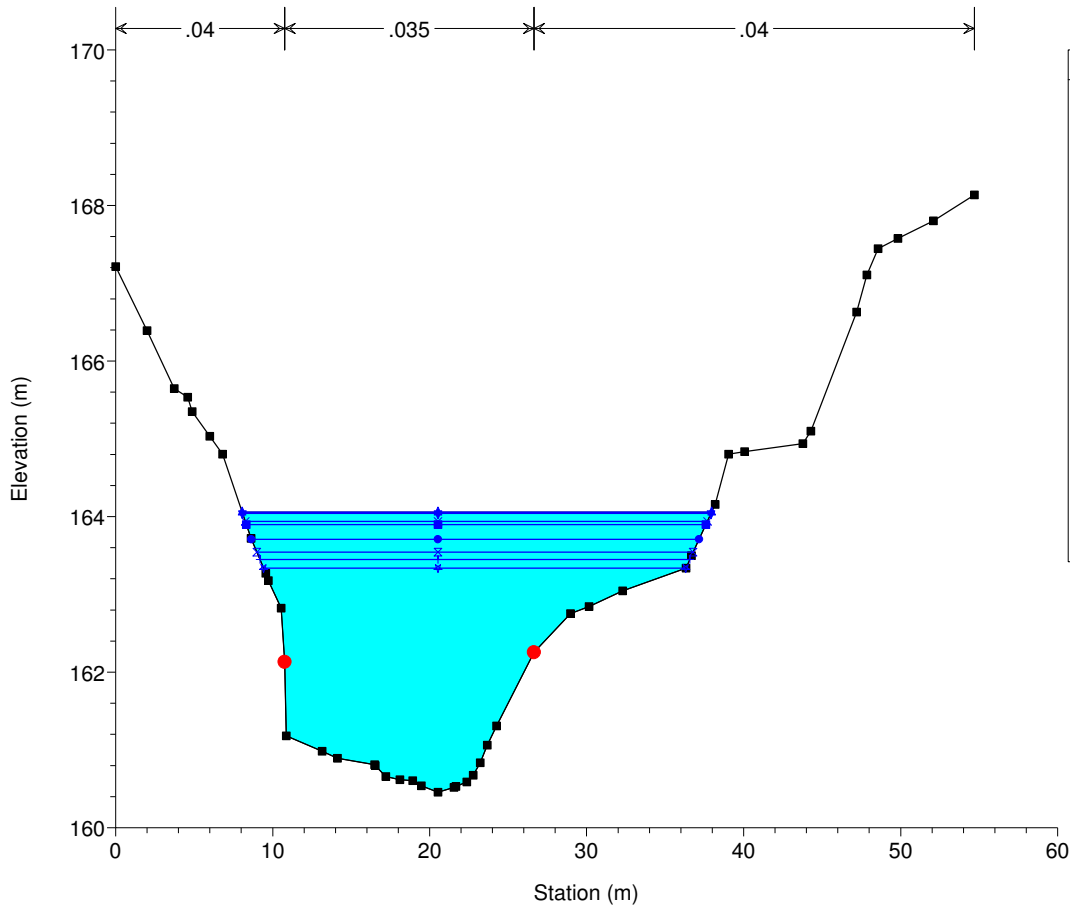
River = Pesa Reach = A RS = 337 PE337



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

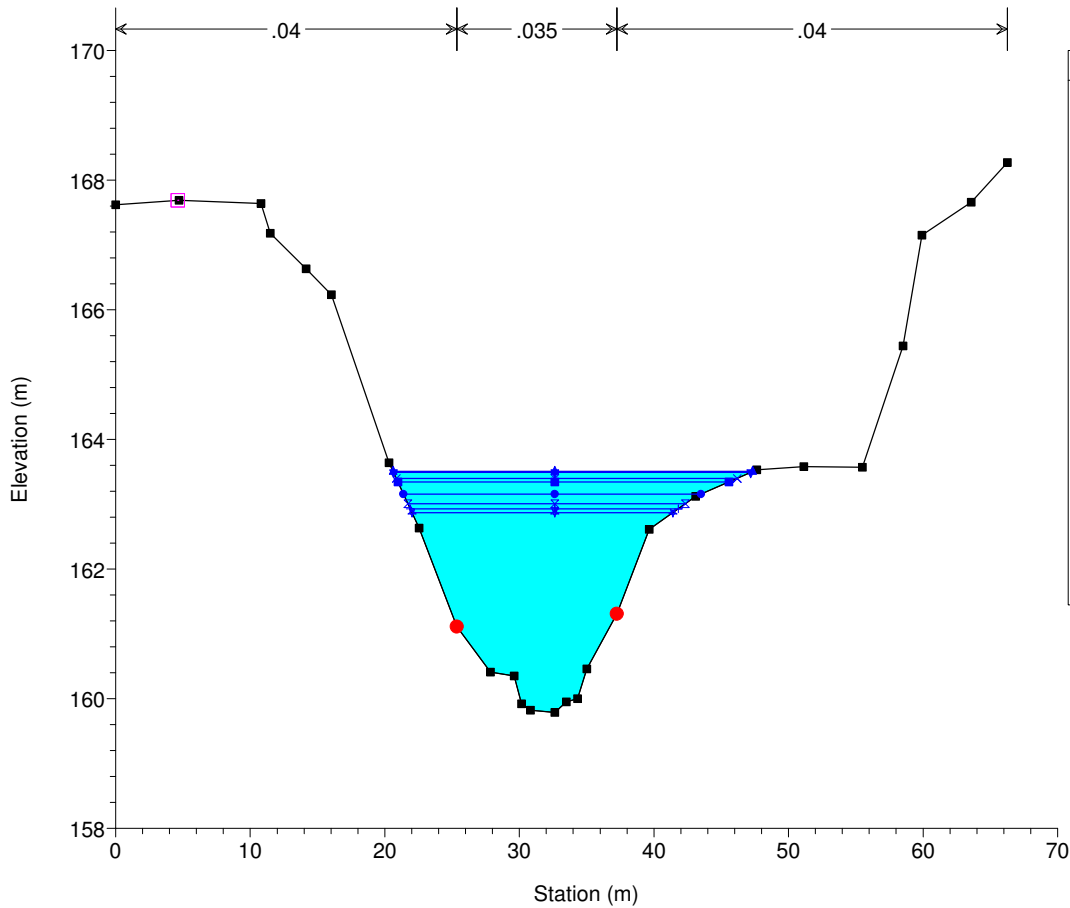
River = Pesa Reach = A RS = 336.666



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

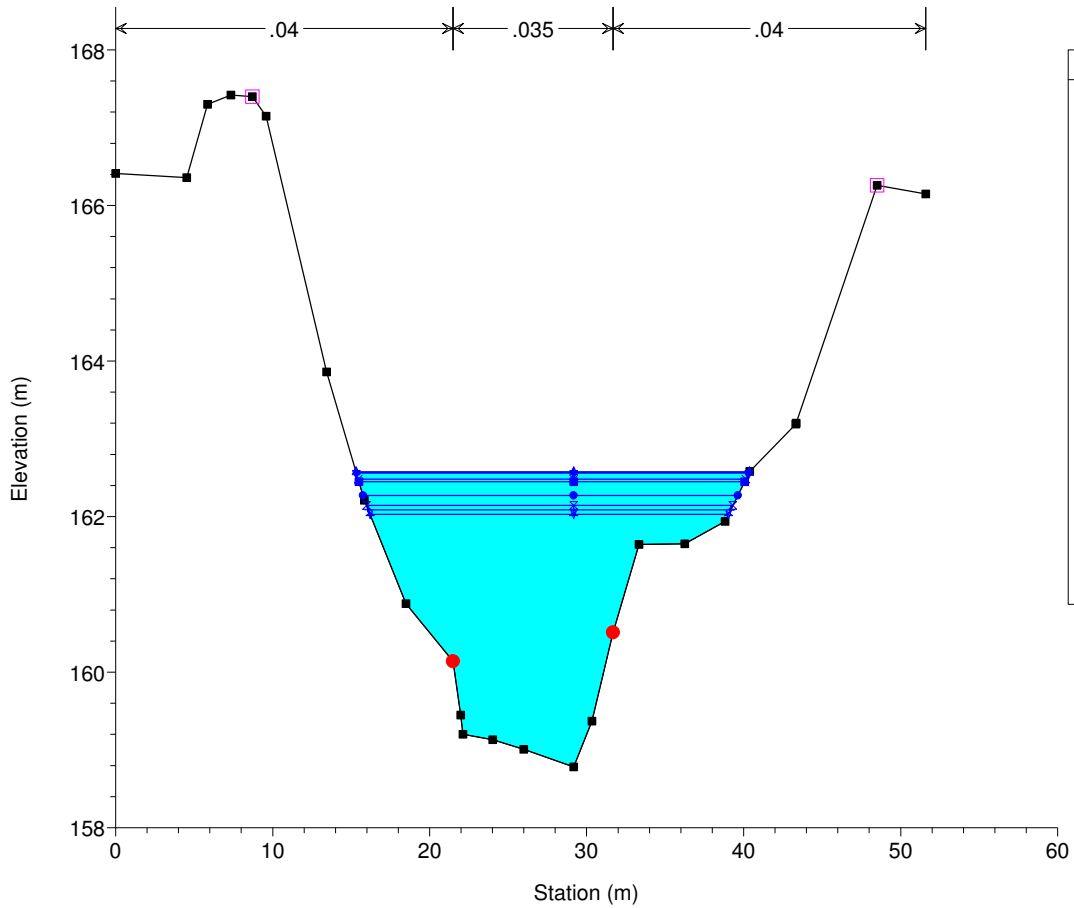
River = Pesa Reach = A RS = 336 PE336



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

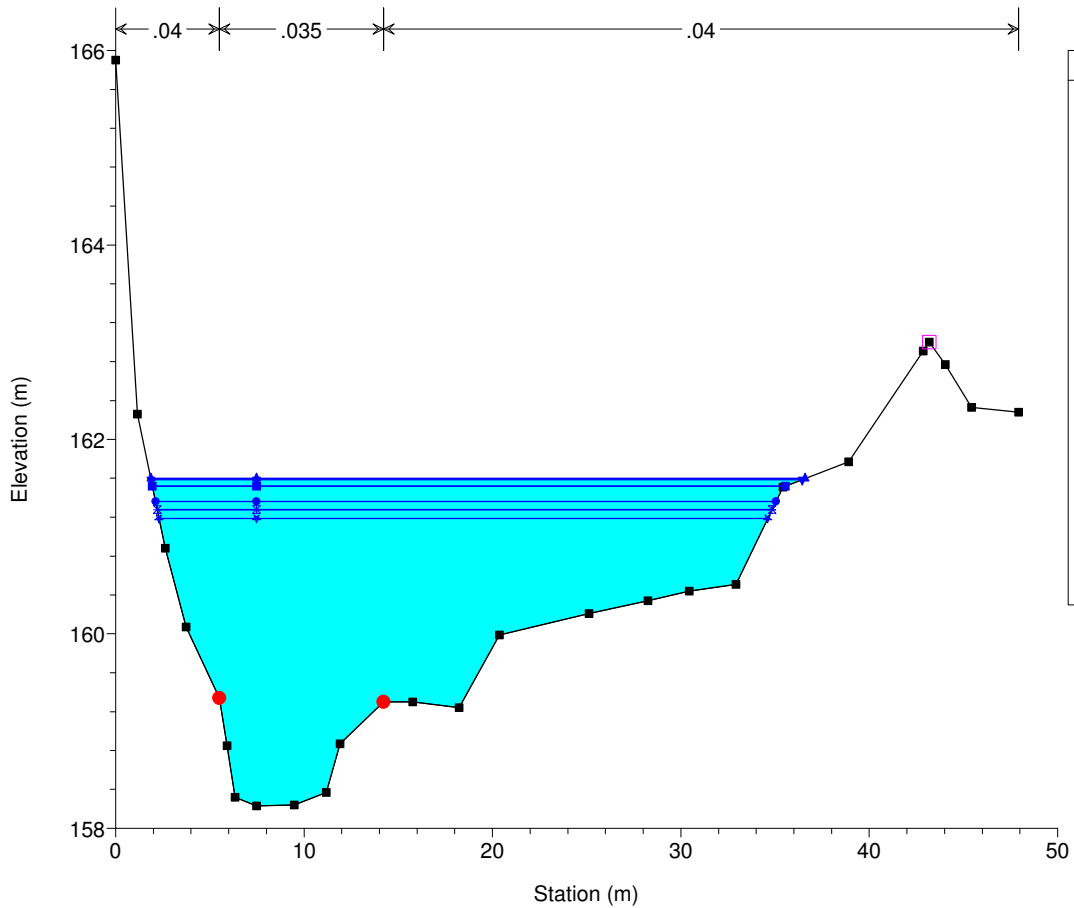
River = Pesa Reach = A RS = 335 PE335



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

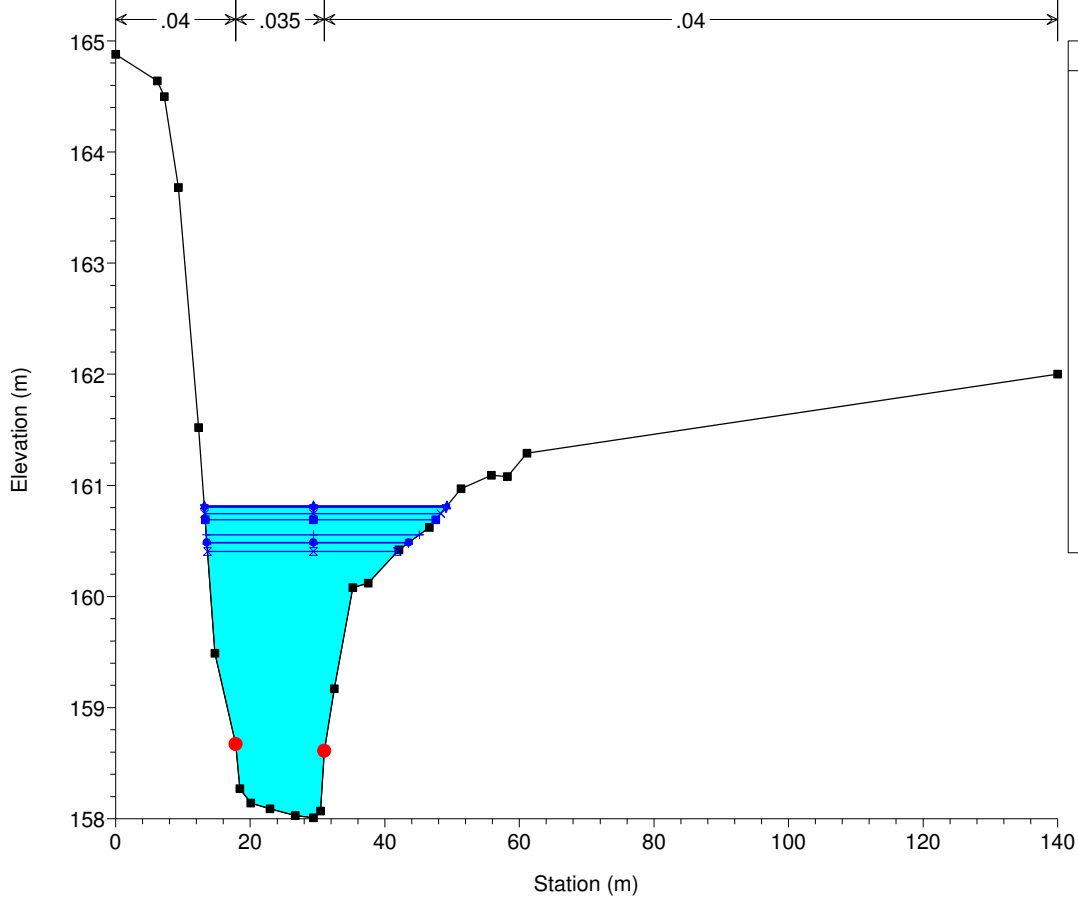
River = Pesa Reach = A RS = 334 PE334



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

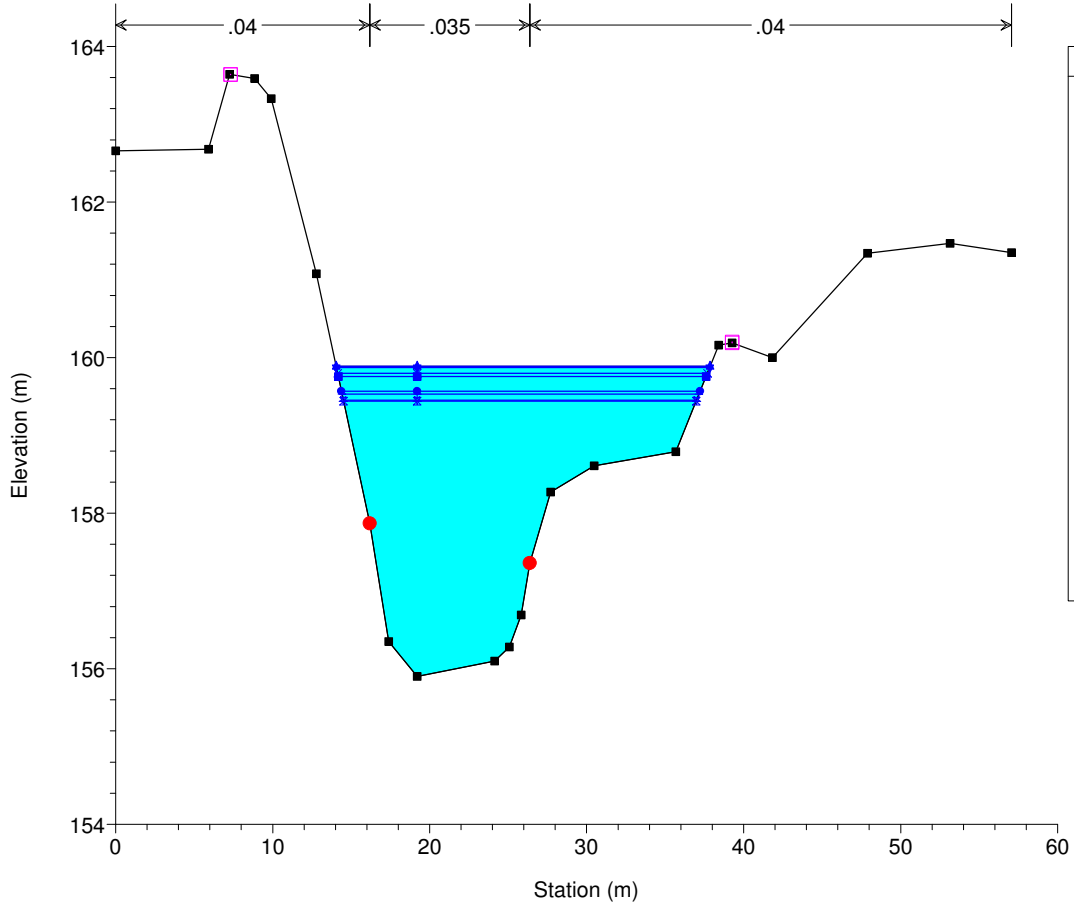
River = Pesa Reach = A RS = 333 PE333 - MODIFICATA: aggiunto pto 24 da CTR 10k



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

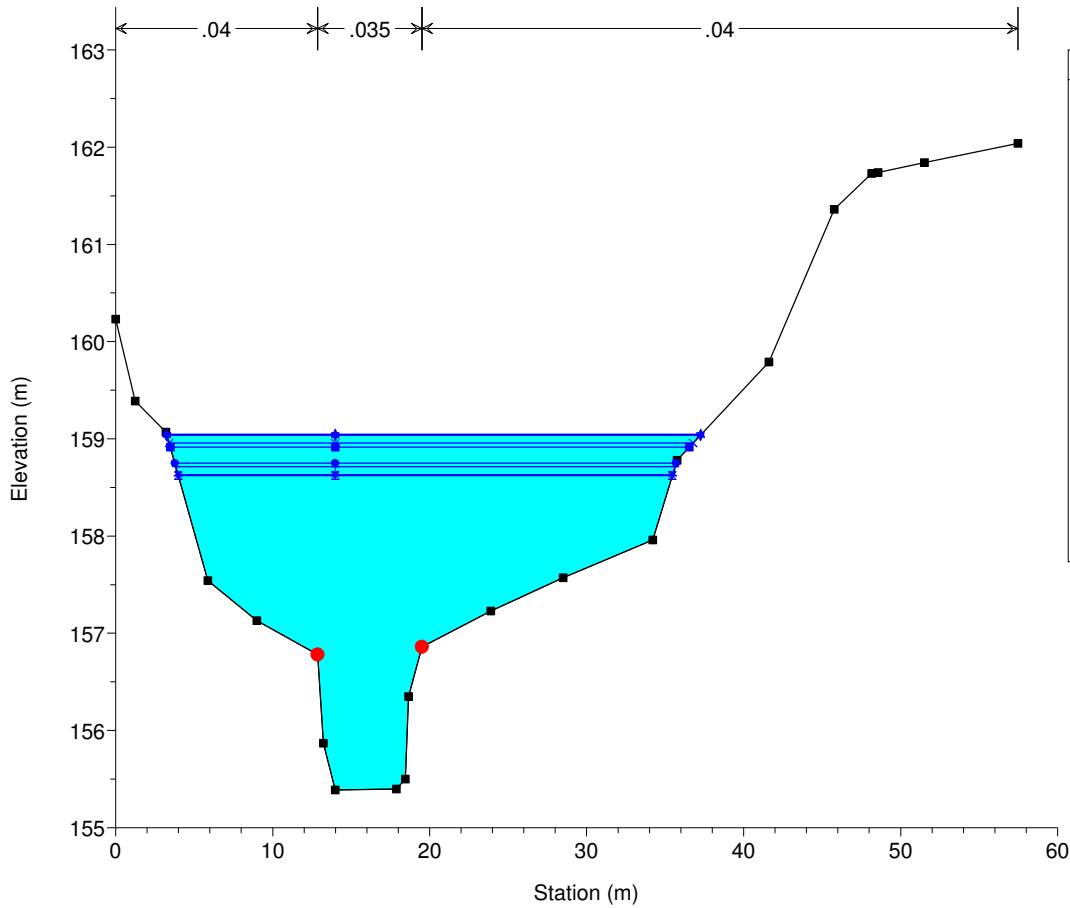
River = Pesa Reach = A RS = 332 PE332



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

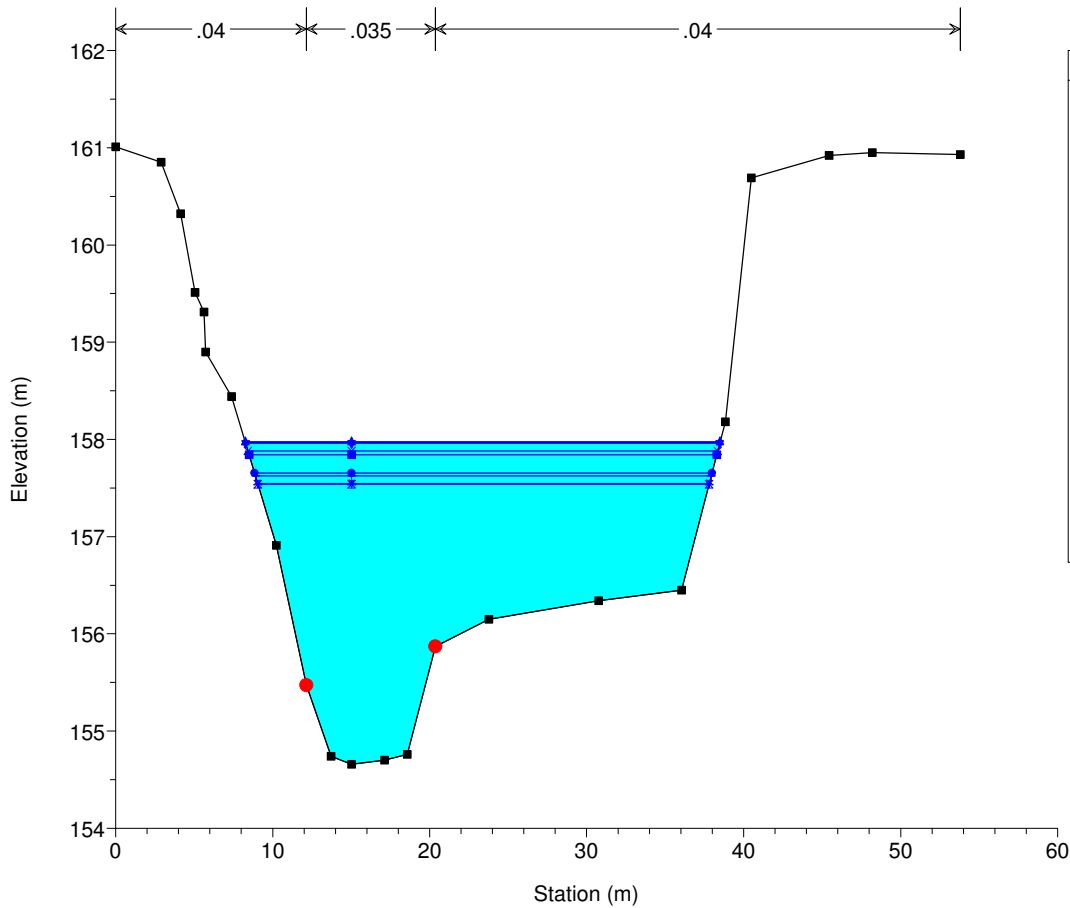
River = Pesa Reach = A RS = 331 PE331



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

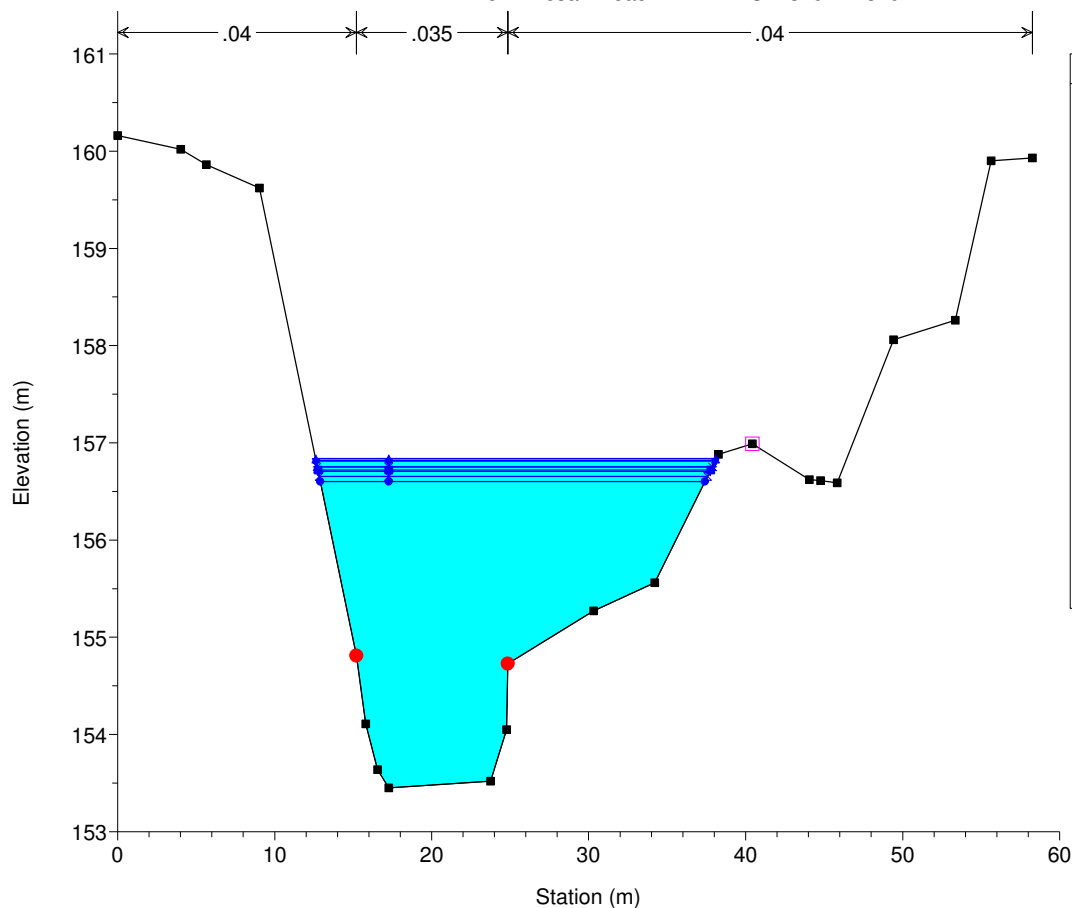
River = Pesa Reach = A RS = 330 PE330



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

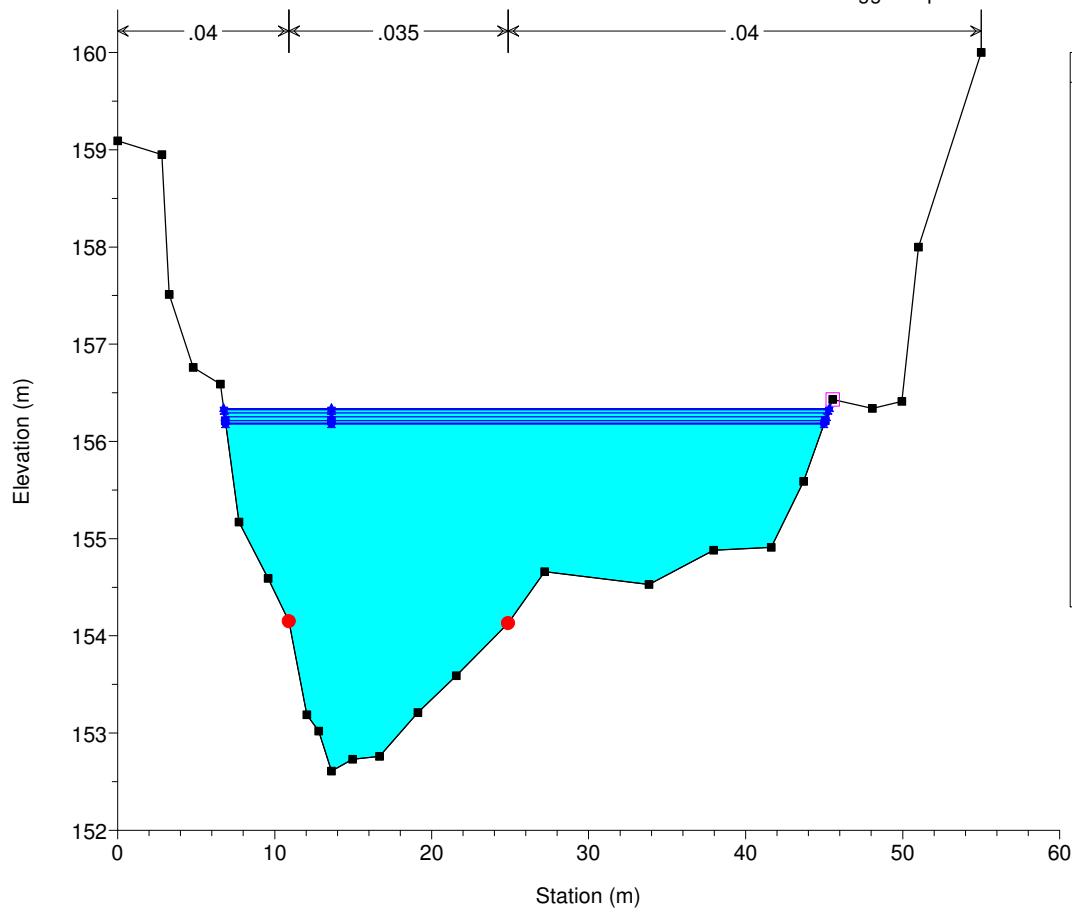
River = Pesa Reach = A RS = 329 PE329



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

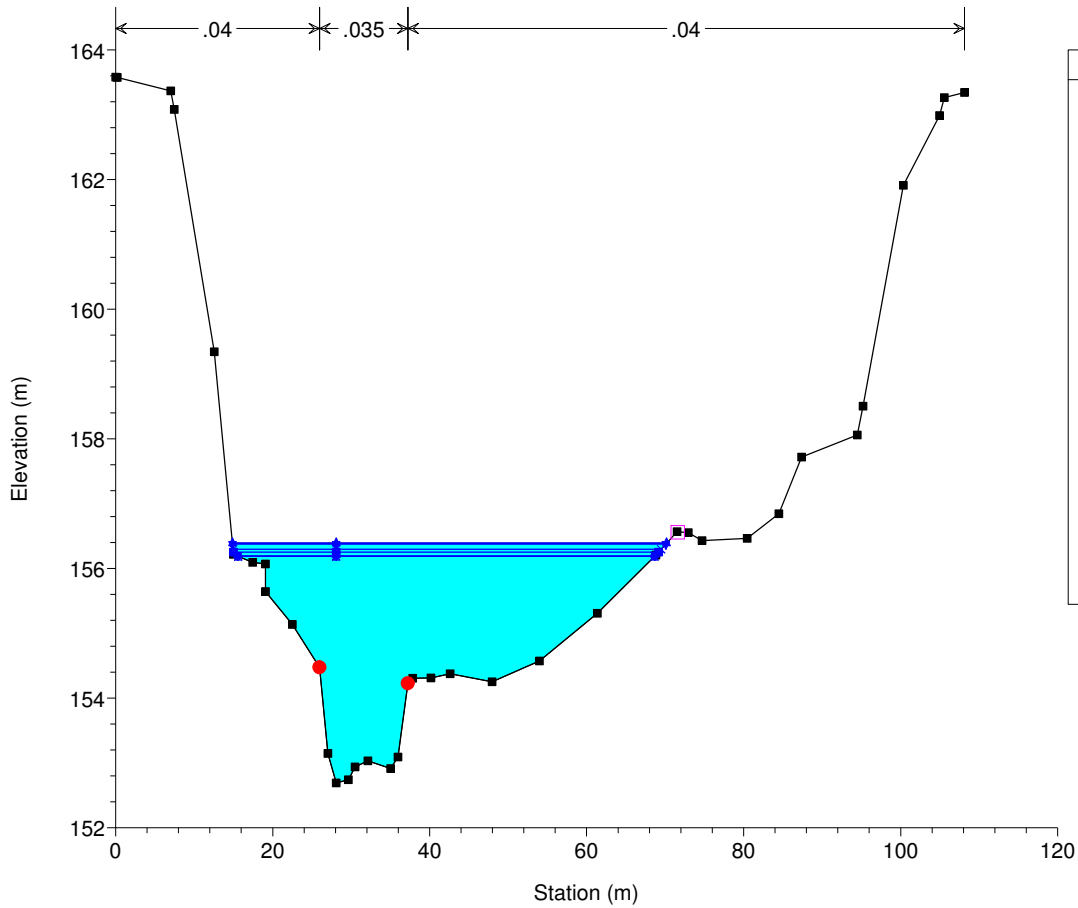
River = Pesa Reach = A RS = 328 PE328 - MODIFICATA: aggiunti pti 25-26 da CTR 2k



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

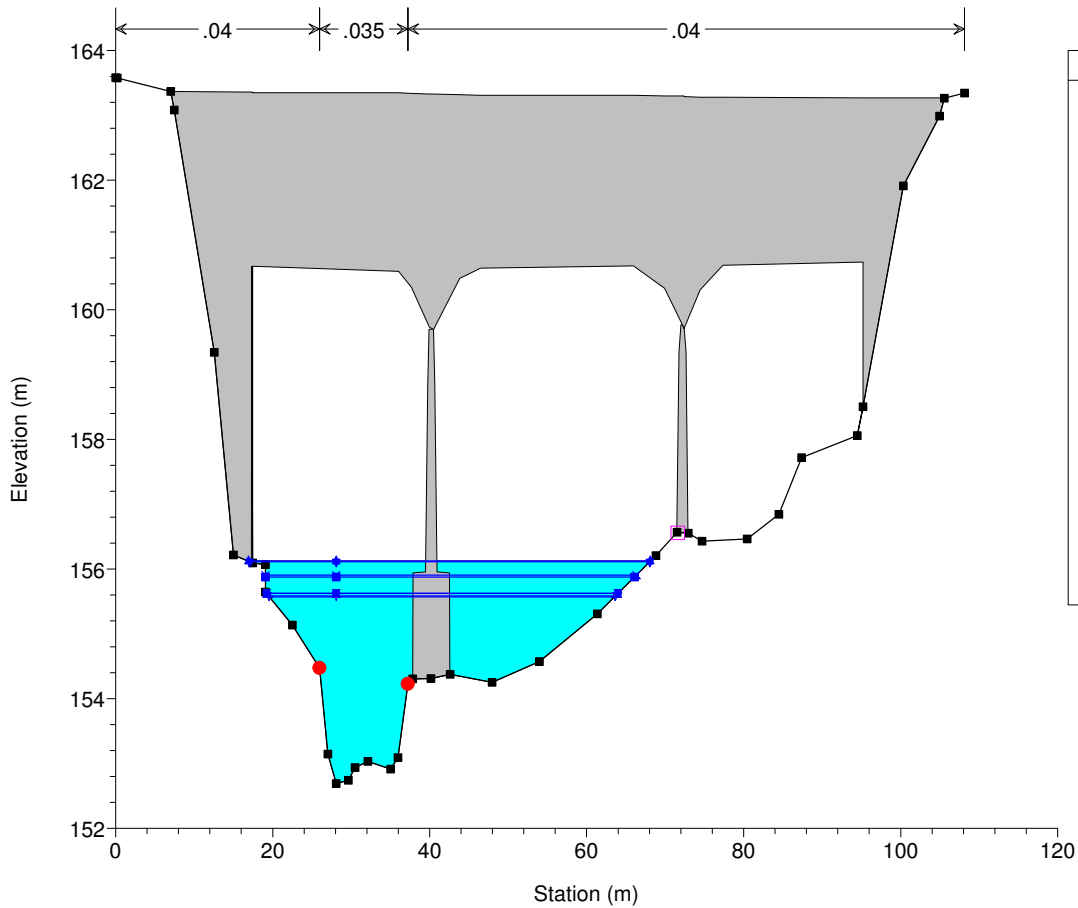
River = Pesa Reach = A RS = 327.513 PE327_C



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

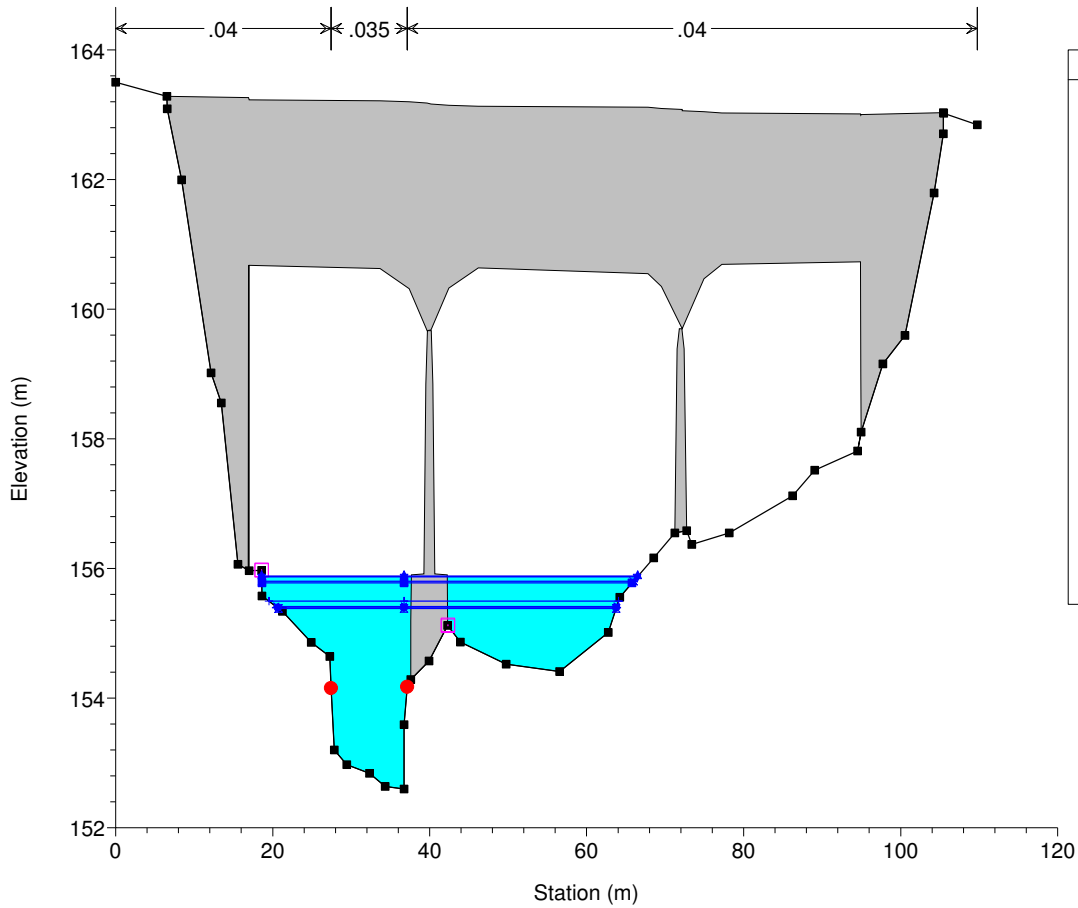
River = Pesa Reach = A RS = 327.512 BR



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

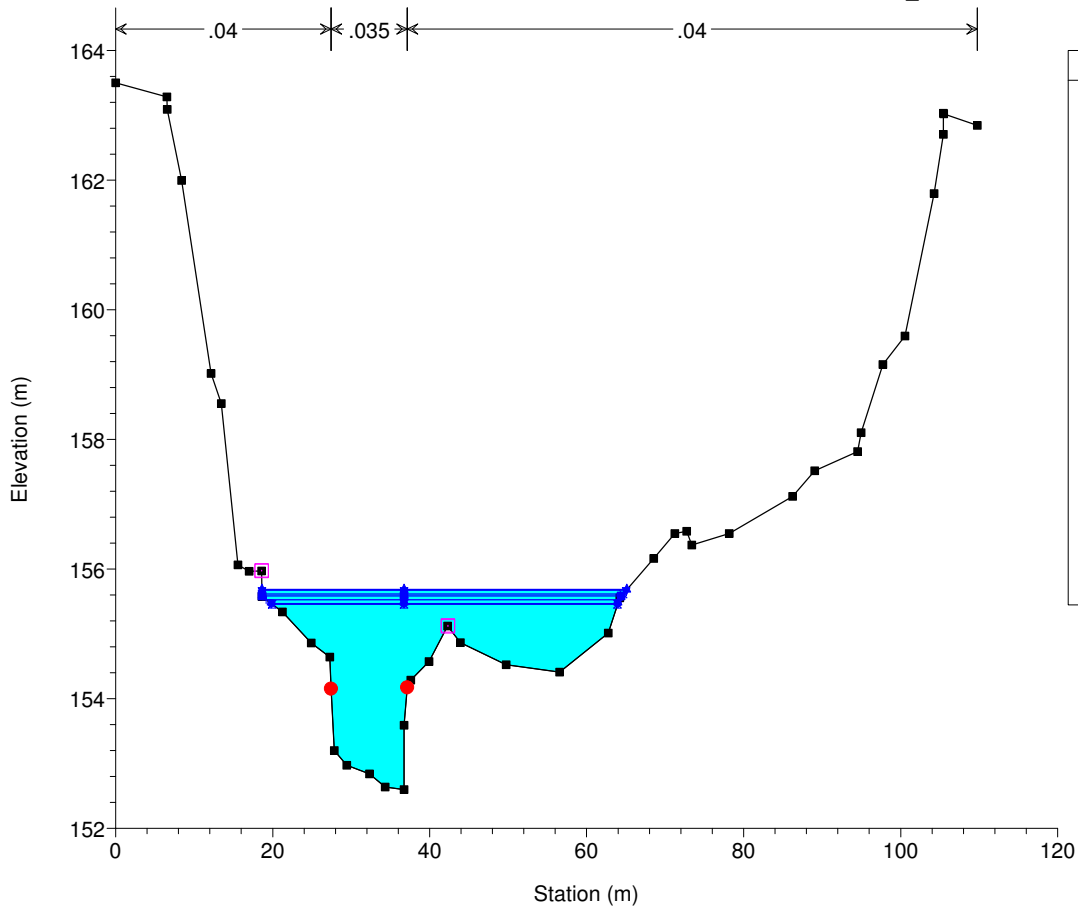
River = Pesa Reach = A RS = 327.512 BR



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

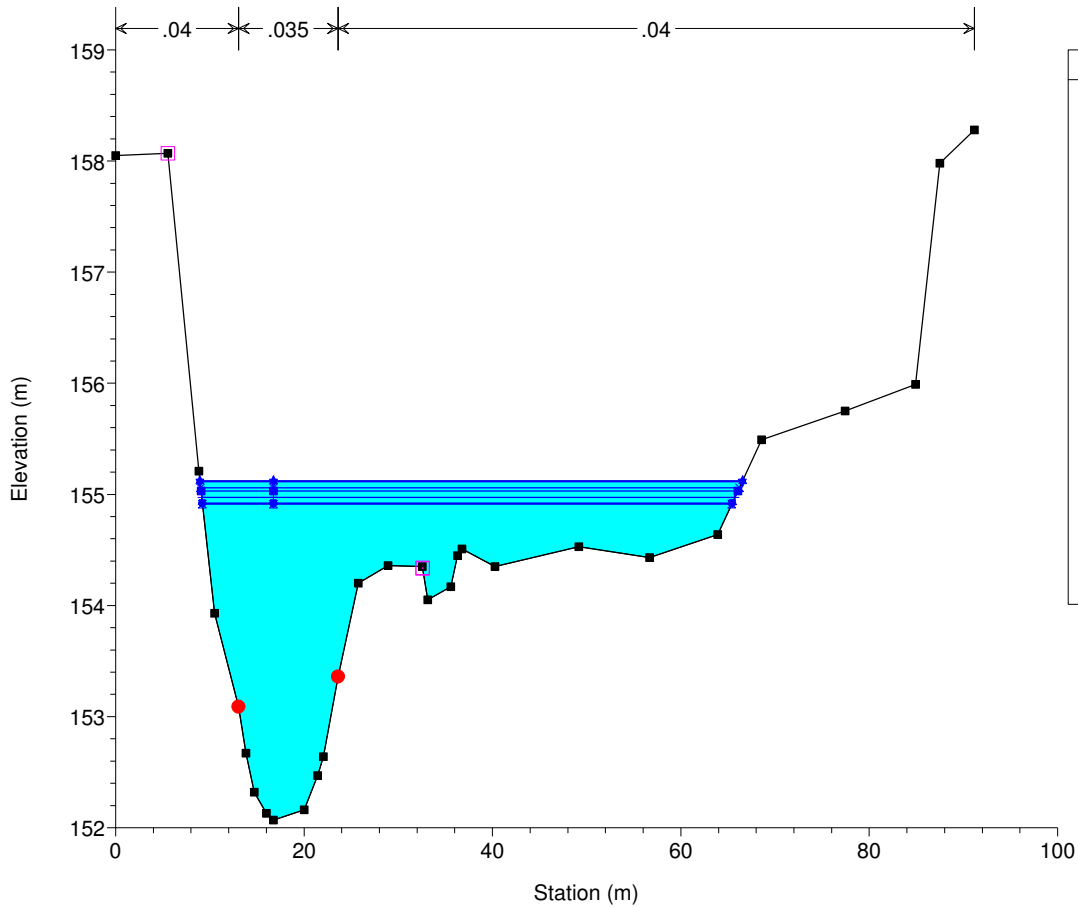
River = Pesa Reach = A RS = 327.511 PE327_A



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

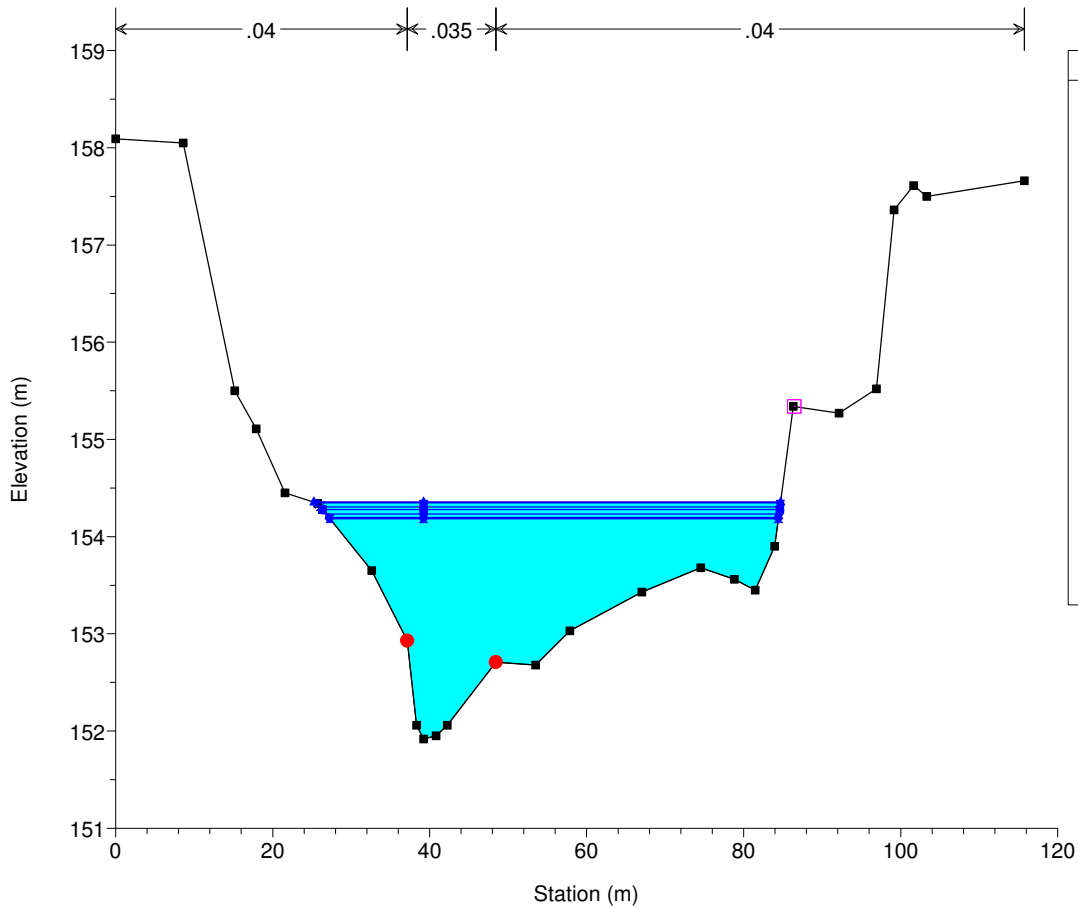
River = Pesa Reach = A RS = 326 PE326



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

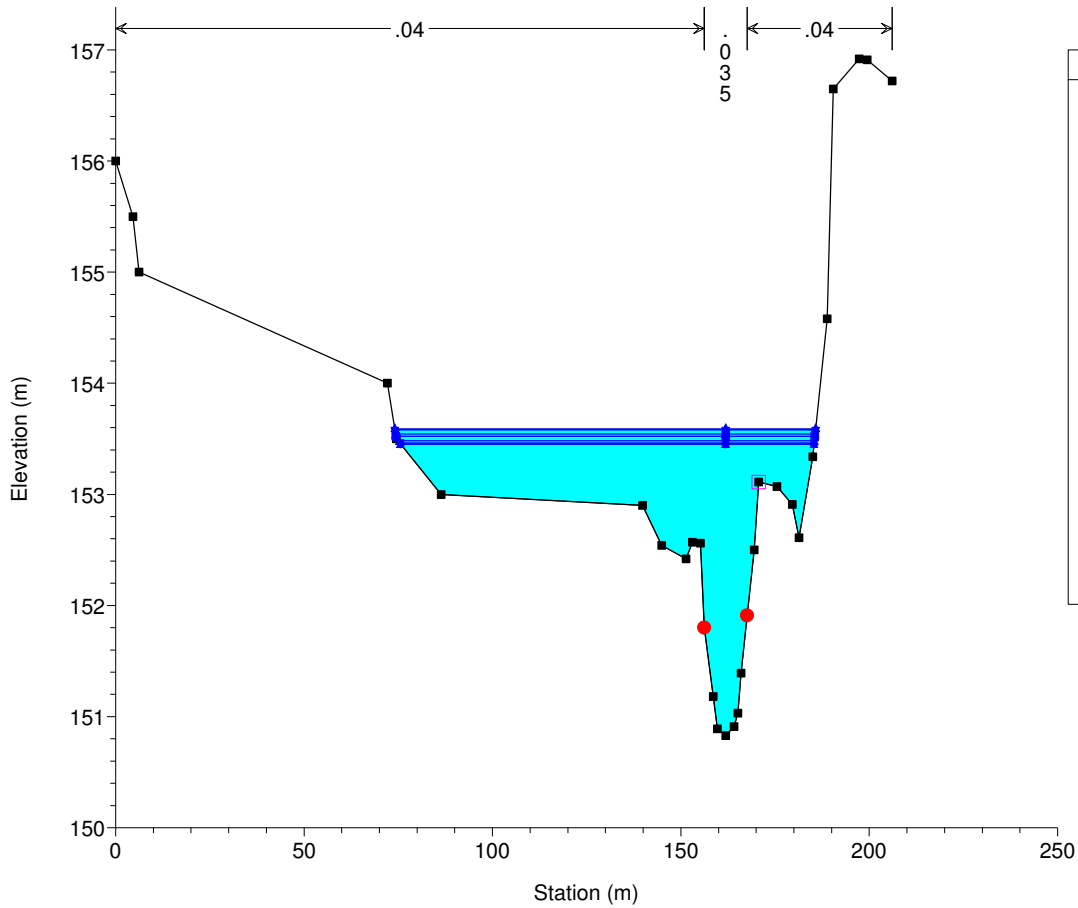
River = Pesa Reach = A RS = 325 PE325



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

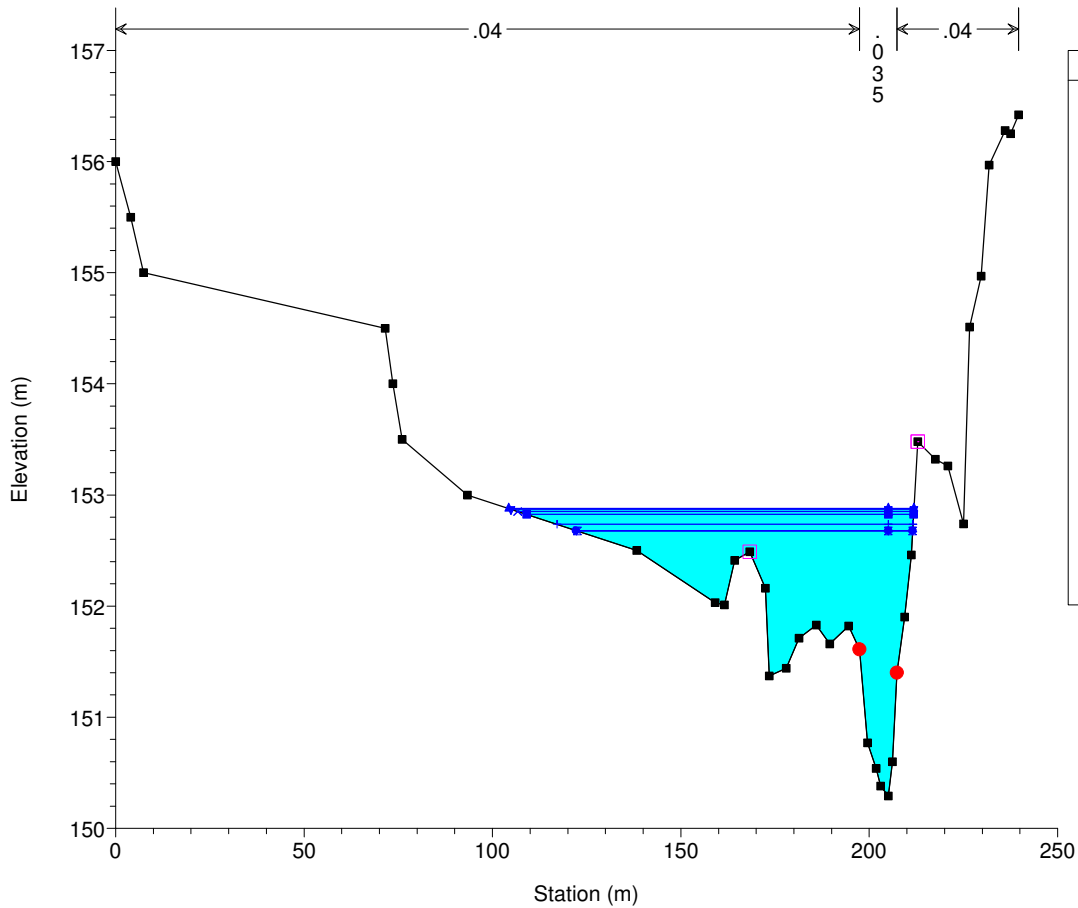
River = Pesa Reach = A RS = 324 PE324



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

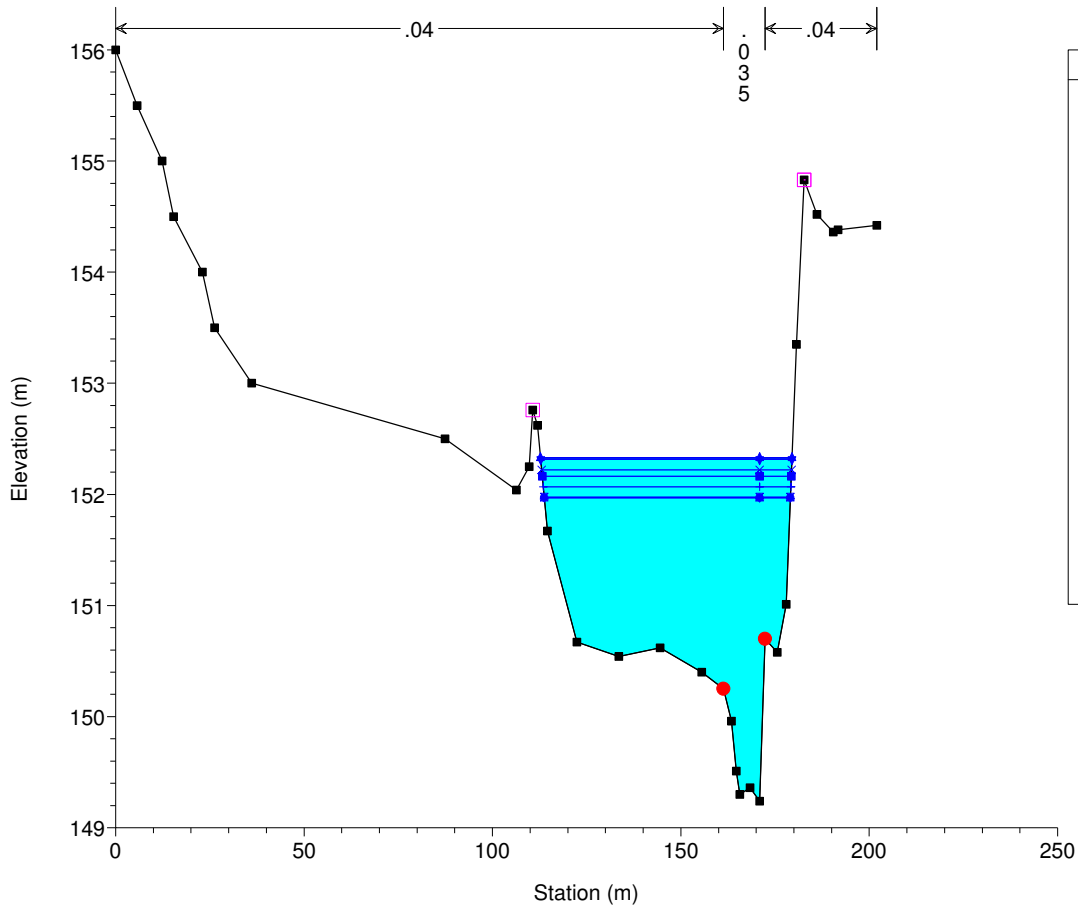
River = Pesa Reach = A RS = 323 PE323



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 322 PE322

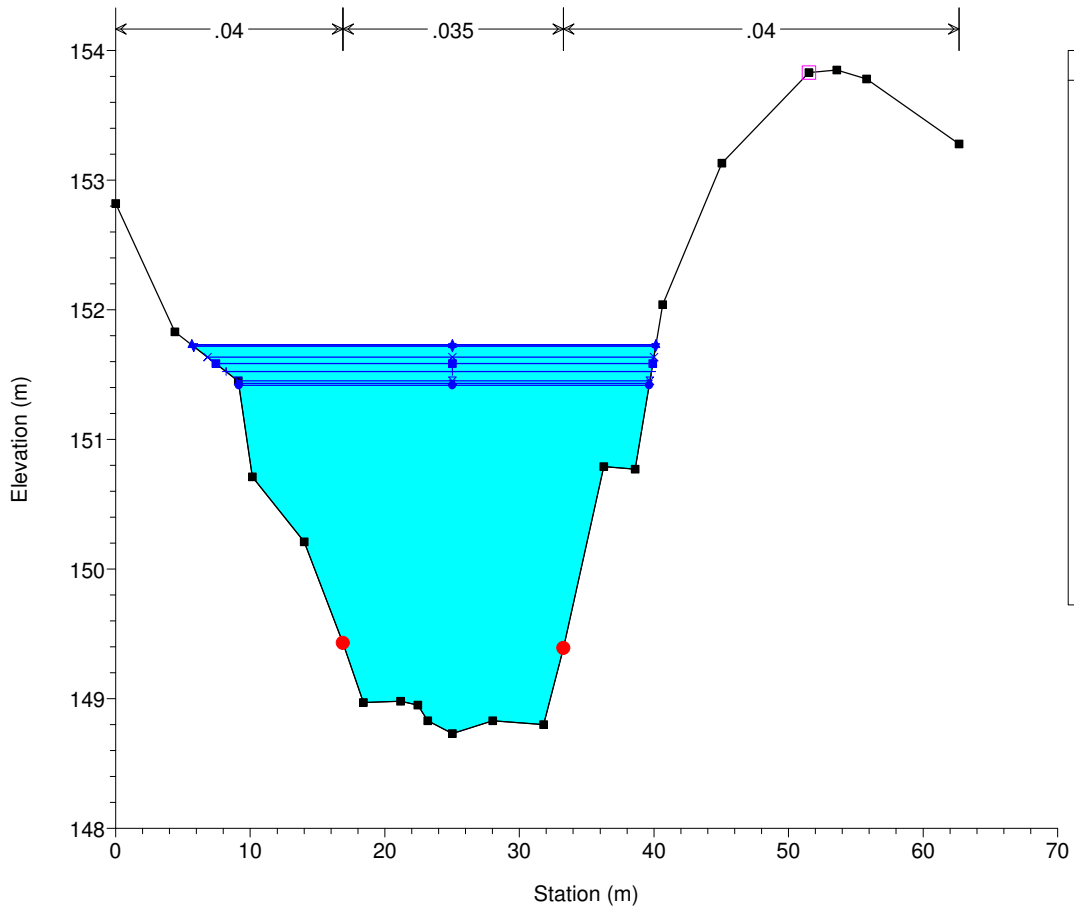


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	+
WS Max WS - 30h1Pesa	×
WS Max WS - 30h1.5Pesa	+
WS Max WS - 30h0.5Pesa	●
WS Max WS - 30h2Pesa	●
Ground	■
Levee	□
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 321 PE321

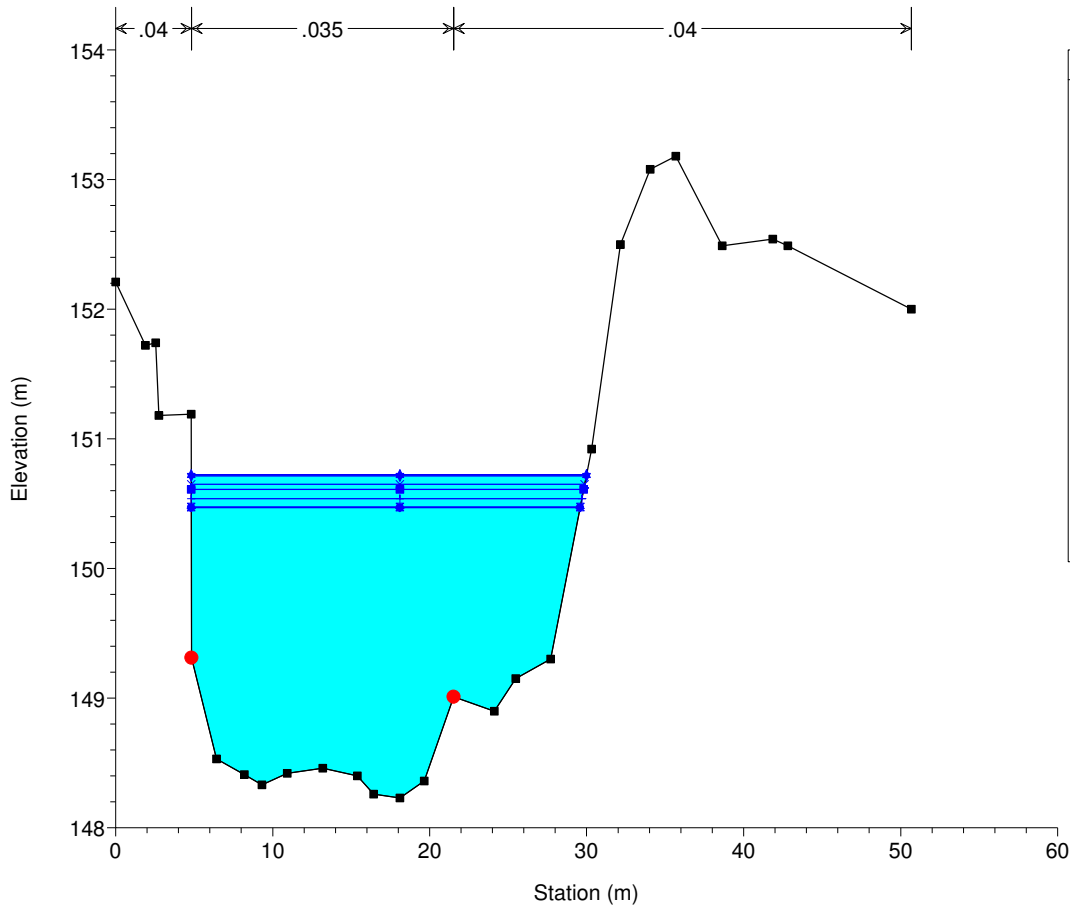


Legend	
WS Max WS - 30h6	▲
WS Max WS - 30h5.5	▼
WS Max WS - 30h5	×
WS Max WS - 30h3.5Pesa	■
WS Max WS - 30h3Pesa	+
WS Max WS - 30h1Pesa	×
WS Max WS - 30h1.5Pesa	+
WS Max WS - 30h0.5Pesa	●
WS Max WS - 30h2Pesa	●
Ground	■
Levee	□
Bank Sta	●

Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

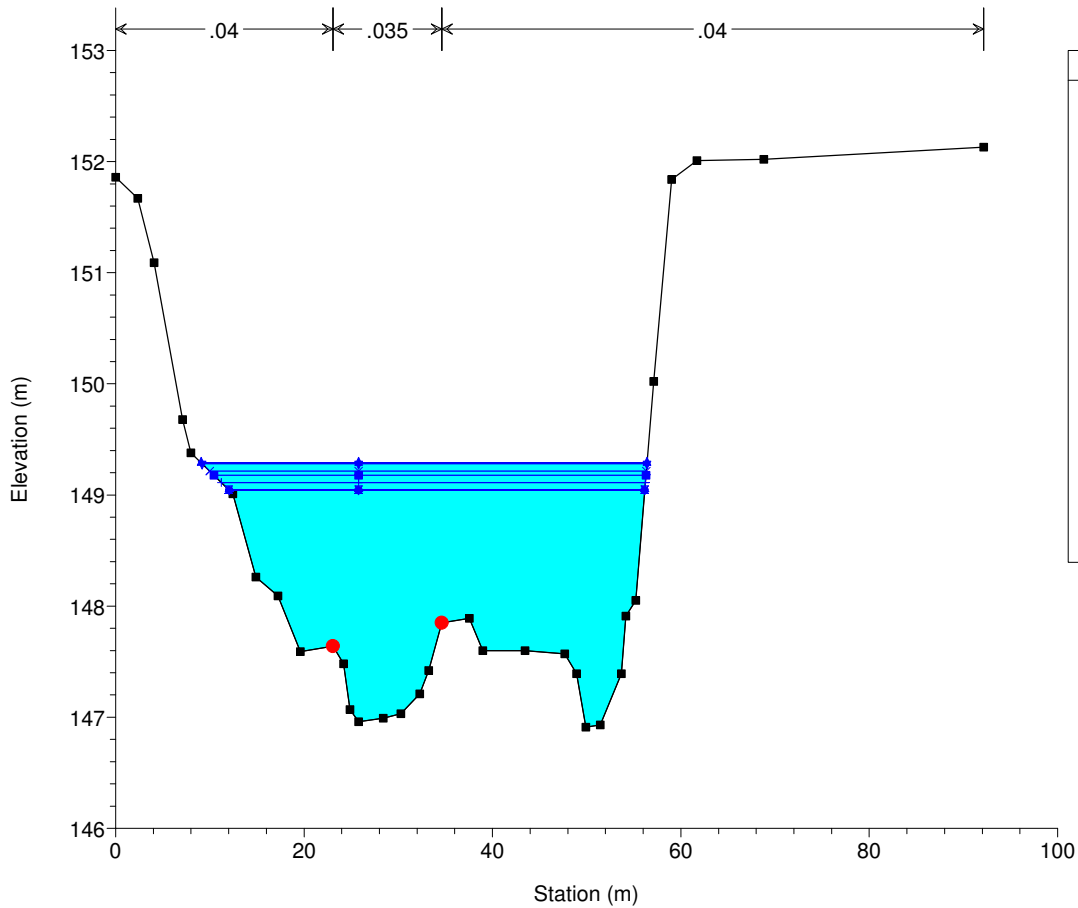
River = Pesa Reach = A RS = 320 PE320



Pesa Plan: 1) 30h6 2) 30h5.5 3) 30h5 4) 30h3.5Pesa 5) 30h3Pesa 6) 30h2Pesa 7) 30h1.5Pesa 8) 30h1Pesa 9) 30h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 318 PE318





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

MODELLAZIONE PER TR=200 anni

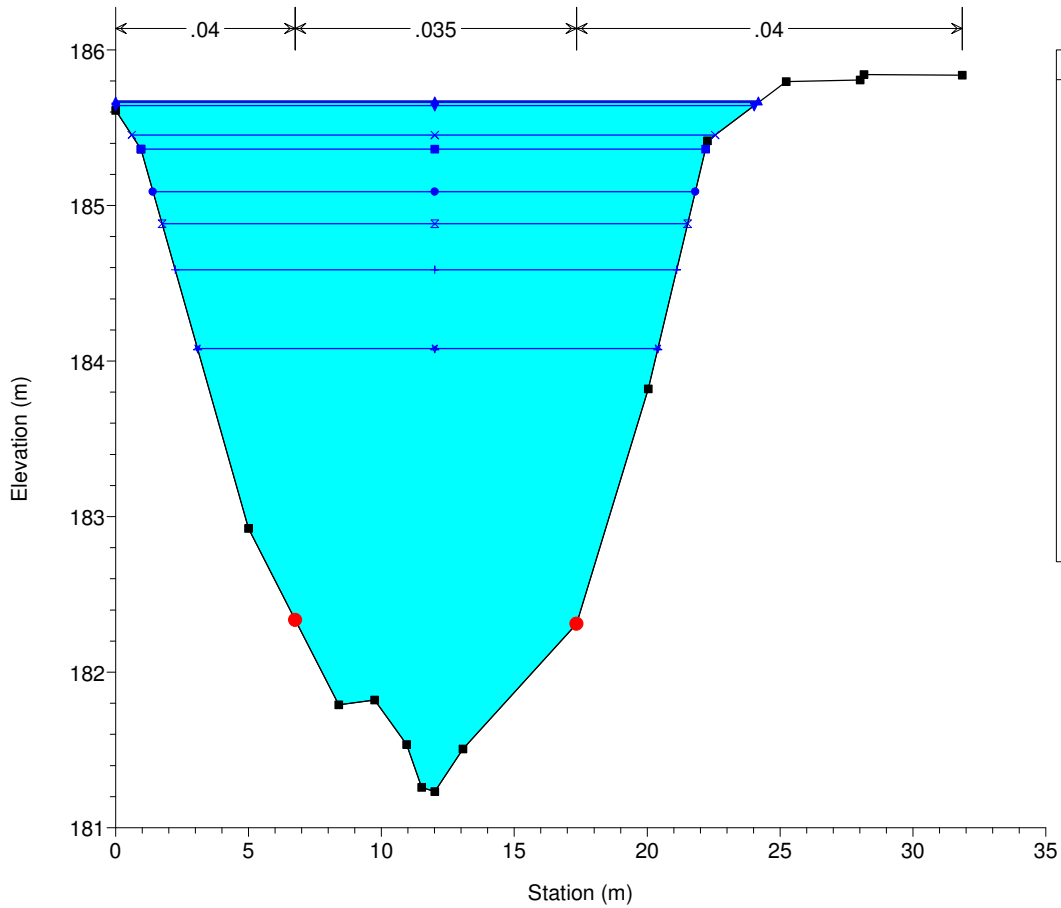
DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Sezioni Trasversali (da monte verso valle)

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

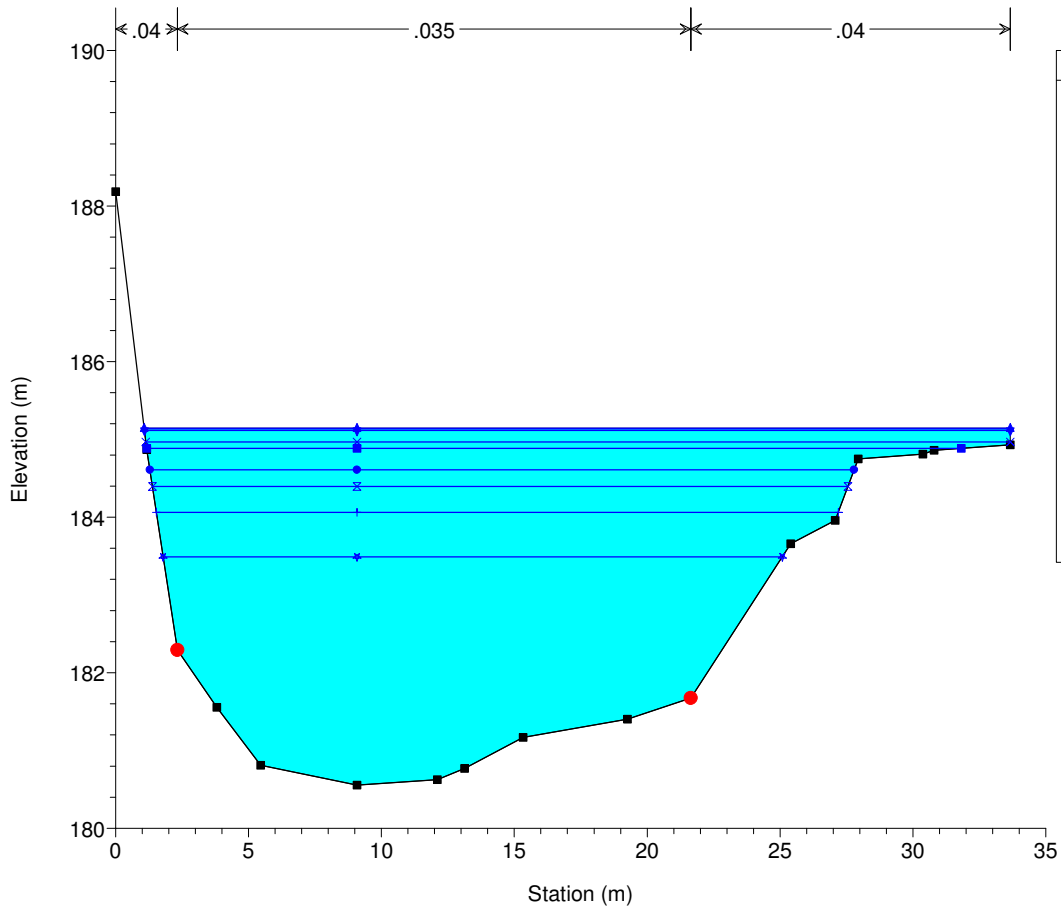
River = Pesa Reach = A RS = 359 PE359



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

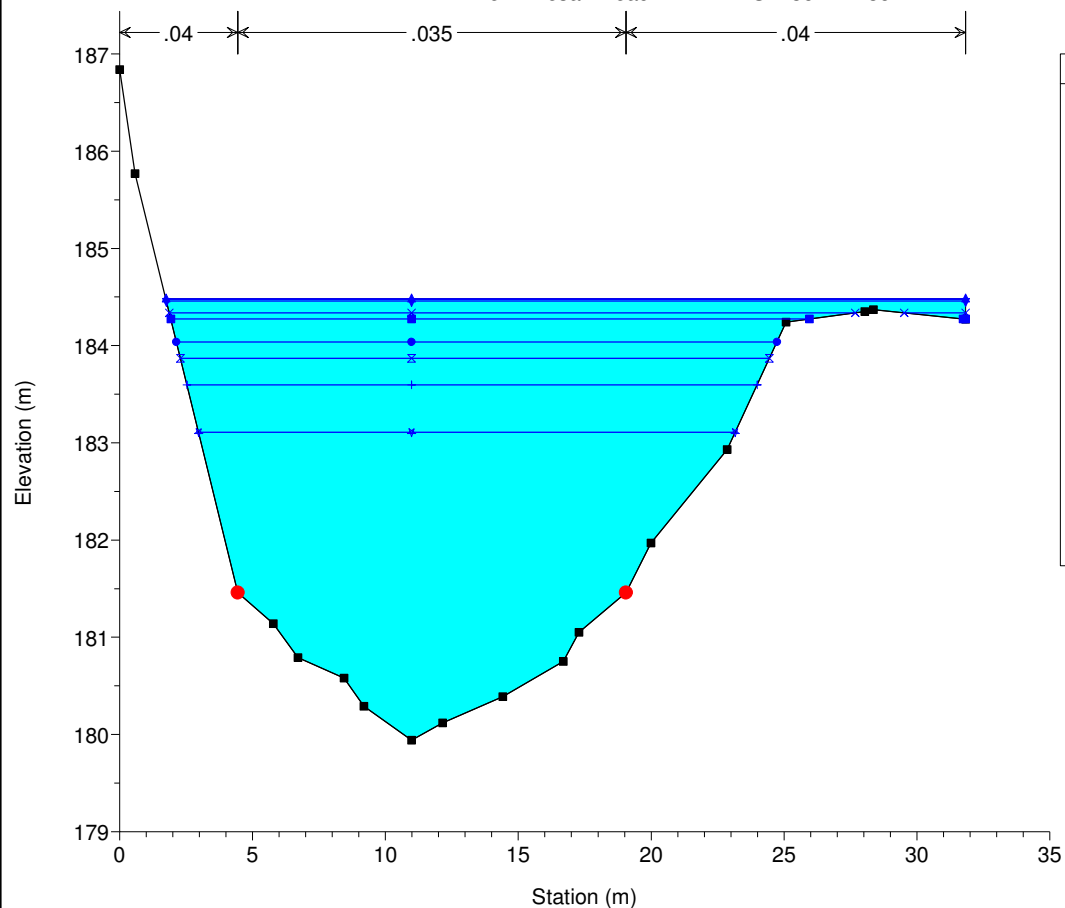
River = Pesa Reach = A RS = 358 PE358



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 357 PE357

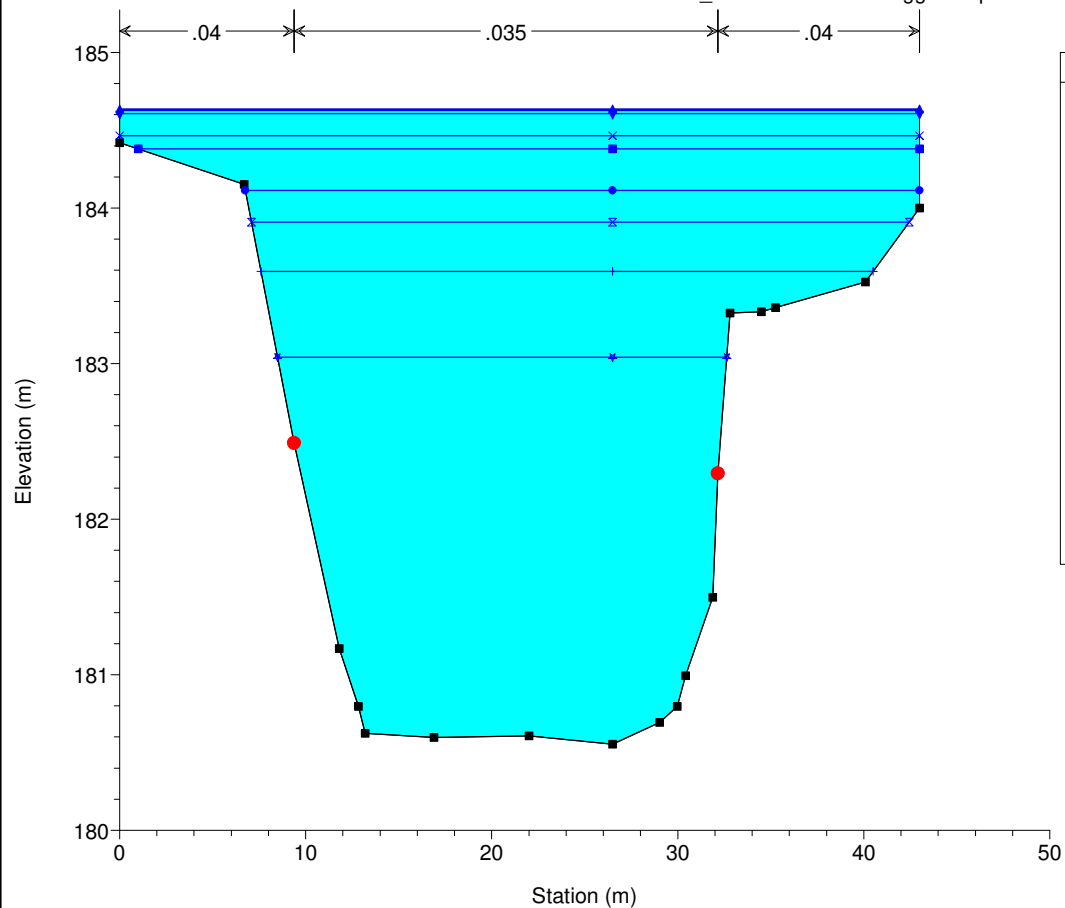


Legend	
WS Max WS - 200h6Pesa	
WS Max WS - 200h5.5Pesa	
WS Max WS - 200h5Pesa	
WS Max WS - 200h3.5Pesa	
WS Max WS - 200h3Pesa	
WS Max WS - 200h2Pesa	
WS Max WS - 200h1.5Pesa	
WS Max WS - 200h1Pesa	
WS Max WS - 200h0.5Pesa	
Ground	
Bank Sta	

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 356.523 PE356_C - MODIFICATA: aggiunto pto 19 da CTR 2k

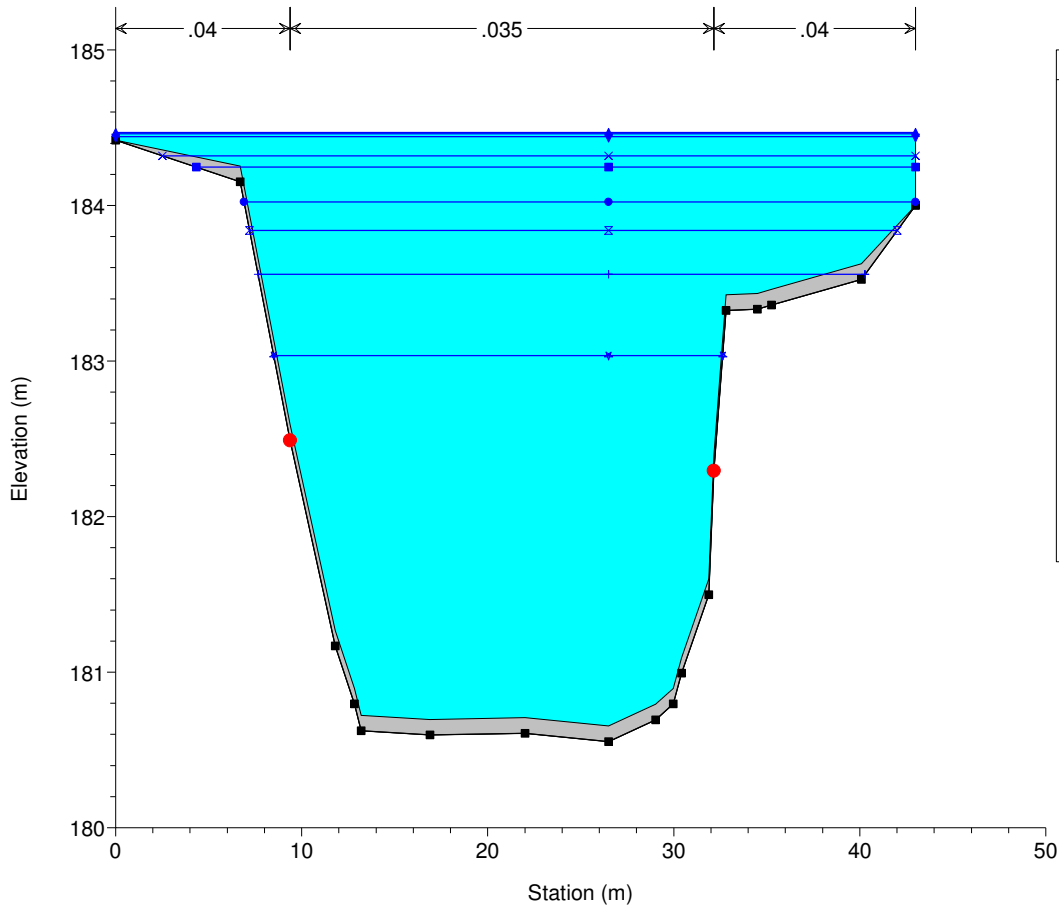


Legend	
WS Max WS - 200h6Pesa	
WS Max WS - 200h5.5Pesa	
WS Max WS - 200h5Pesa	
WS Max WS - 200h3.5Pesa	
WS Max WS - 200h3Pesa	
WS Max WS - 200h2Pesa	
WS Max WS - 200h1.5Pesa	
WS Max WS - 200h1Pesa	
WS Max WS - 200h0.5Pesa	
Ground	
Bank Sta	

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

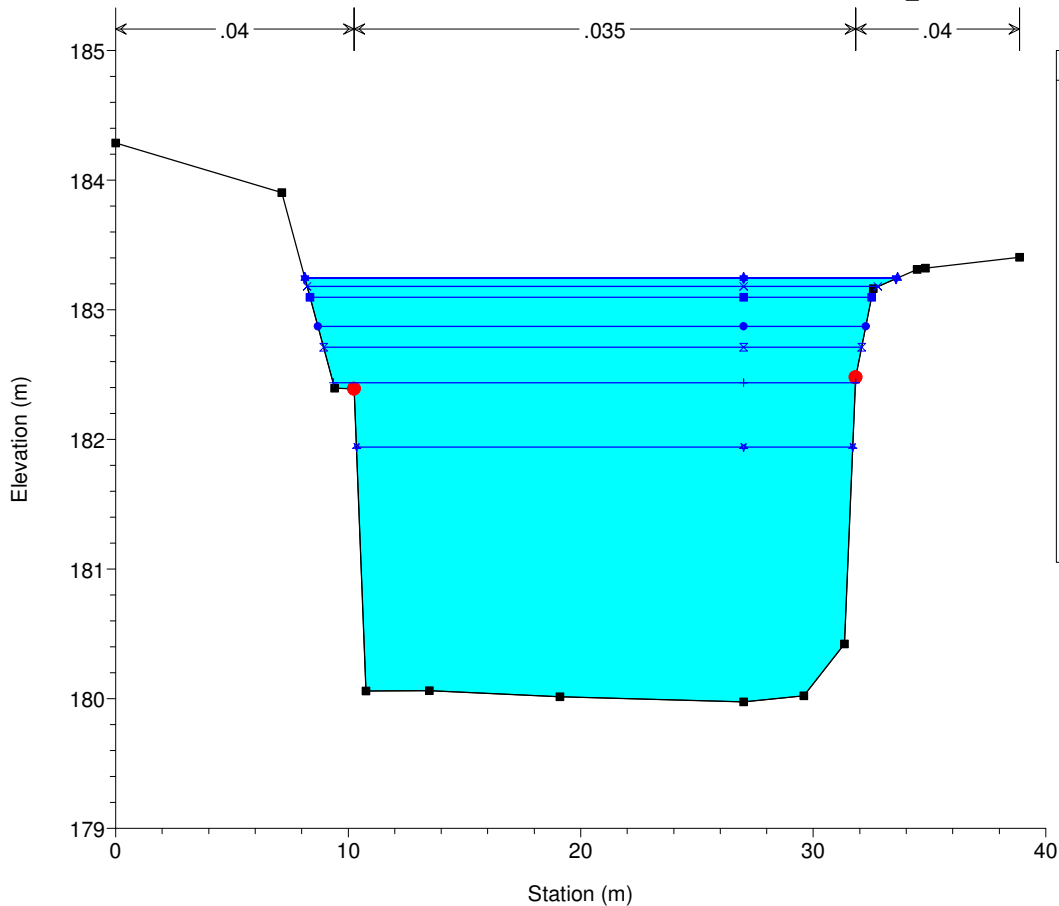
River = Pesa Reach = A RS = 356.522 IS



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

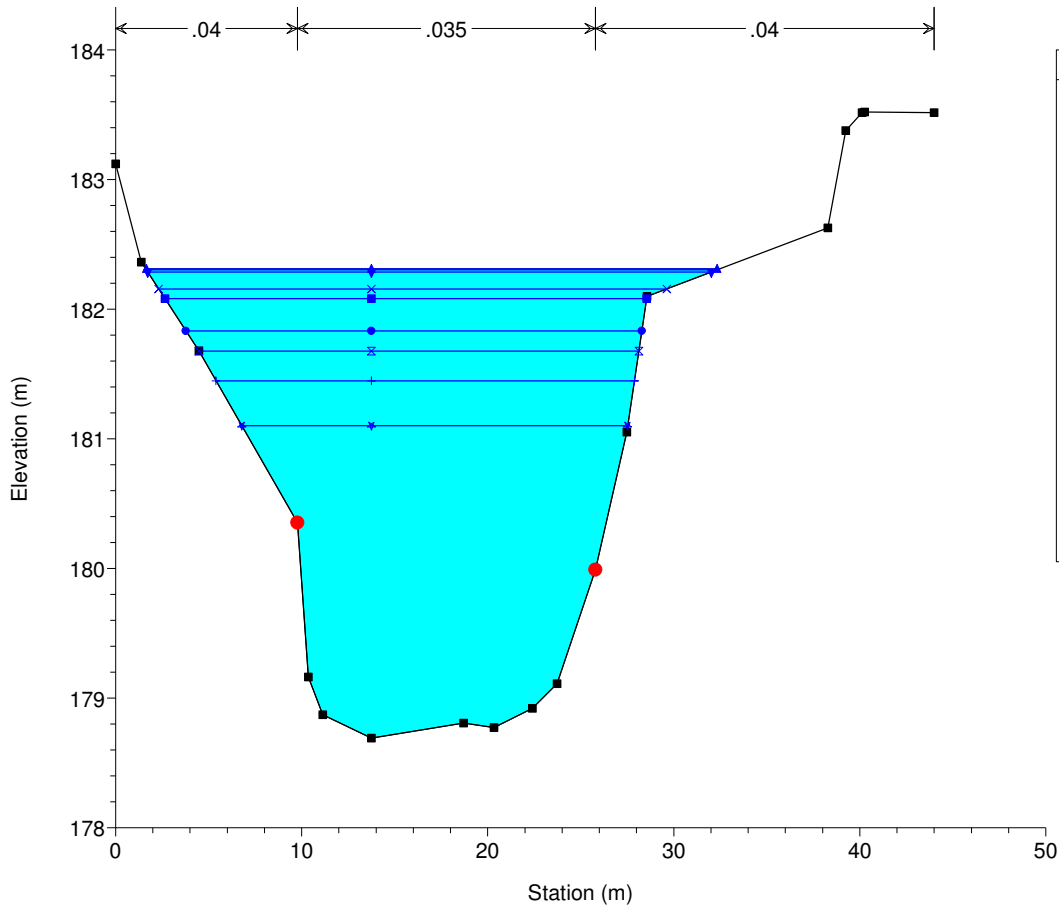
River = Pesa Reach = A RS = 356.521 PE356_A



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

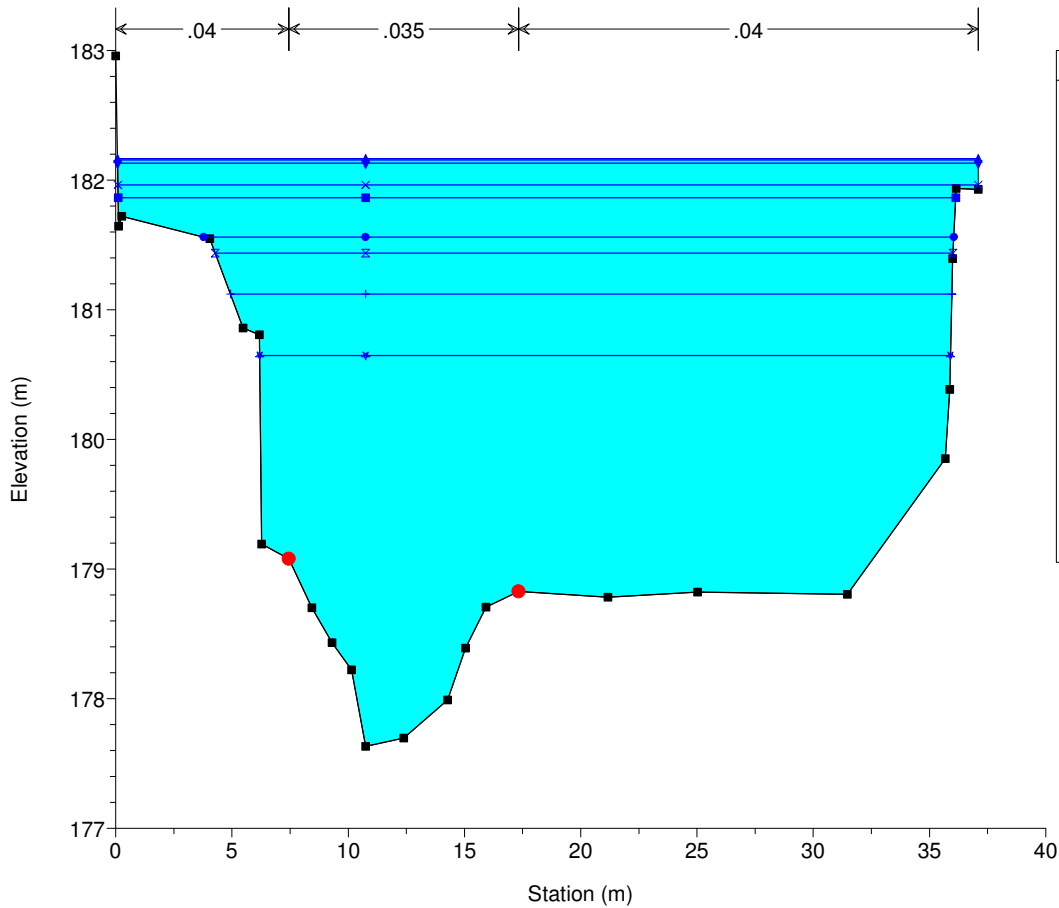
River = Pesa Reach = A RS = 355 PE355



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

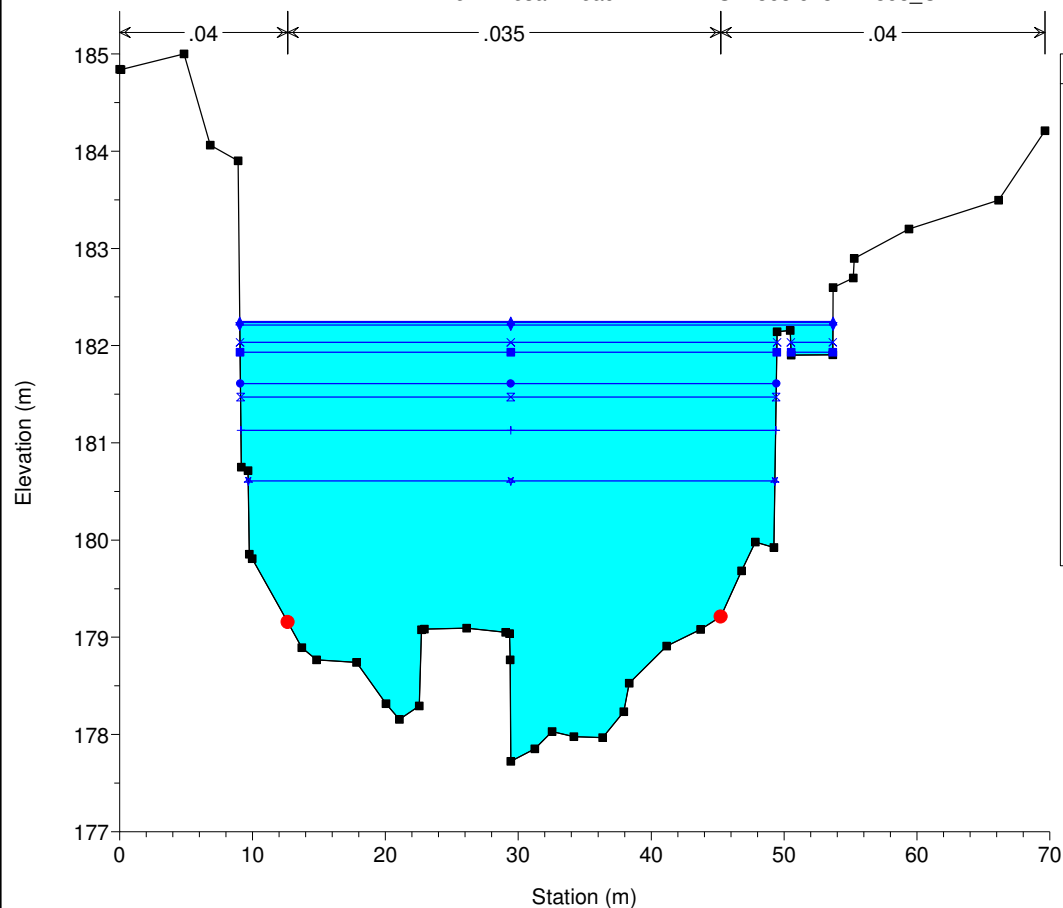
River = Pesa Reach = A RS = 354 PE354



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

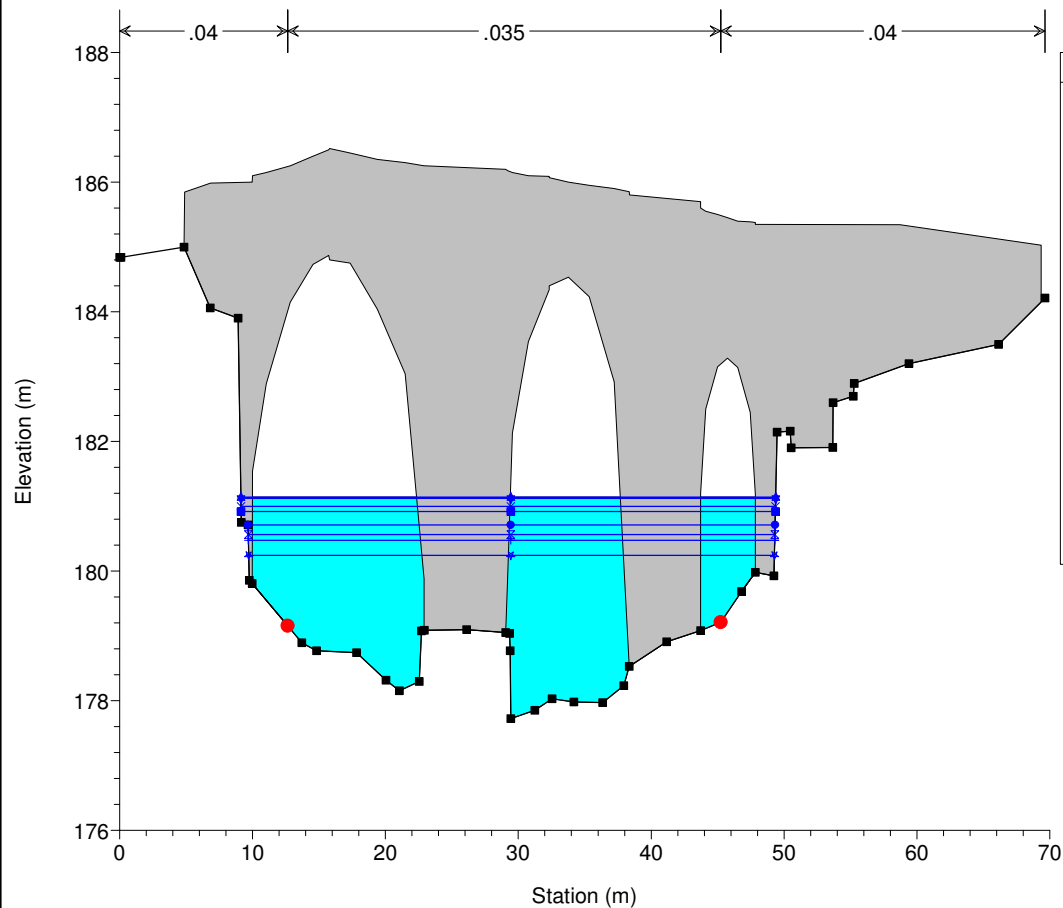
River = Pesa Reach = A RS = 353.513 PE353_C



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

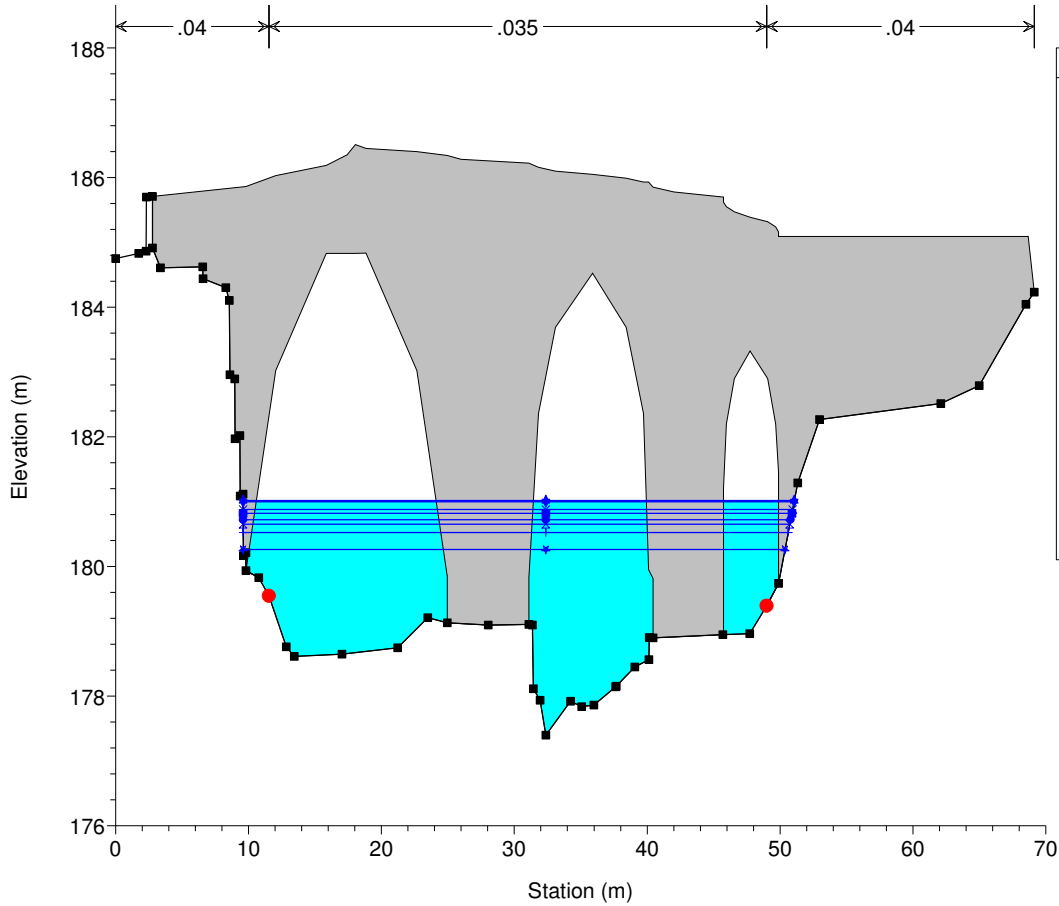
River = Pesa Reach = A RS = 353.512 BR



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

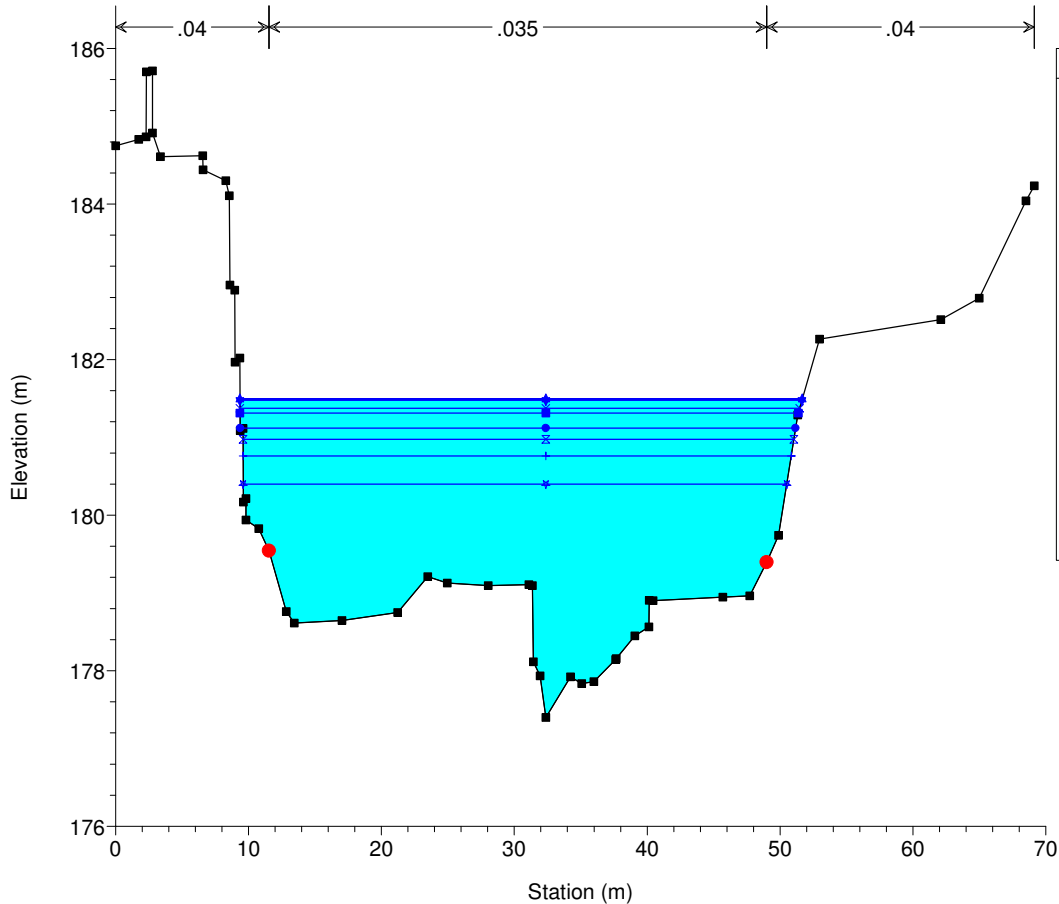
River = Pesa Reach = A RS = 353.512 BR



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

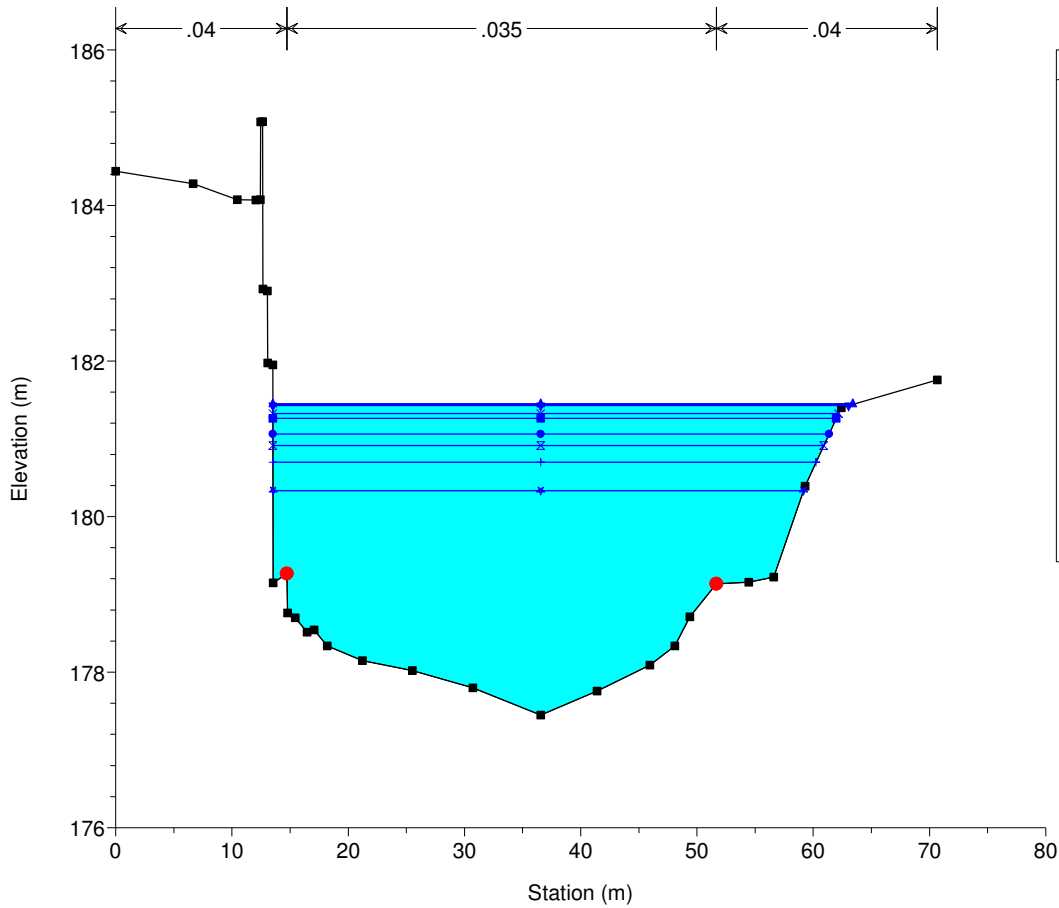
River = Pesa Reach = A RS = 353.511 PE353_A



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

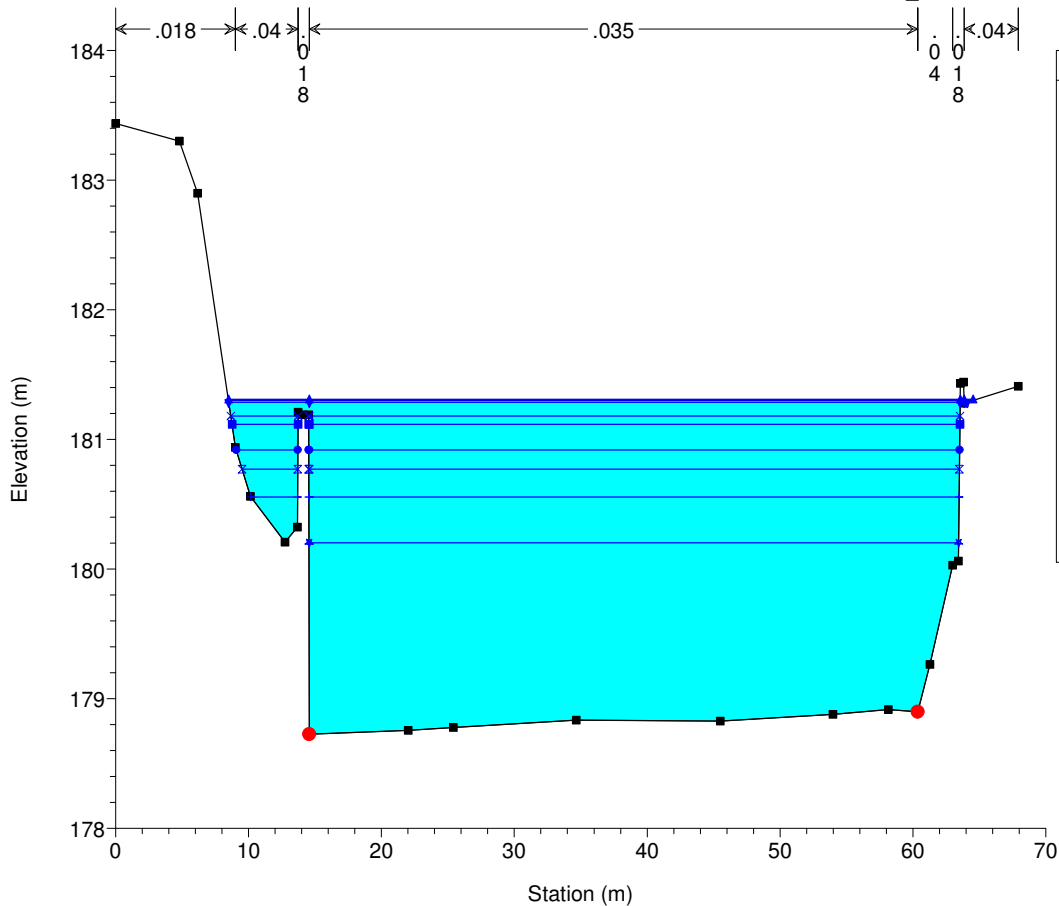
River = Pesa Reach = A RS = 352 PE352



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

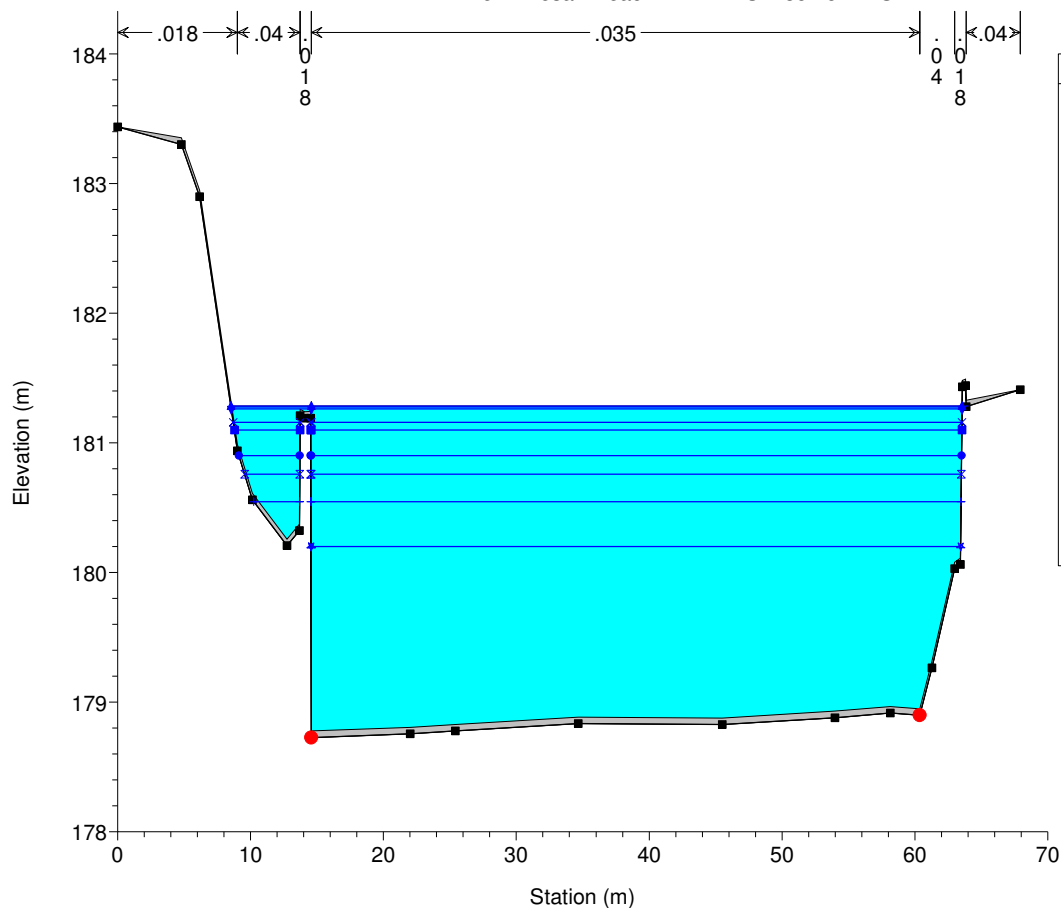
River = Pesa Reach = A RS = 351.523 PE351_A



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

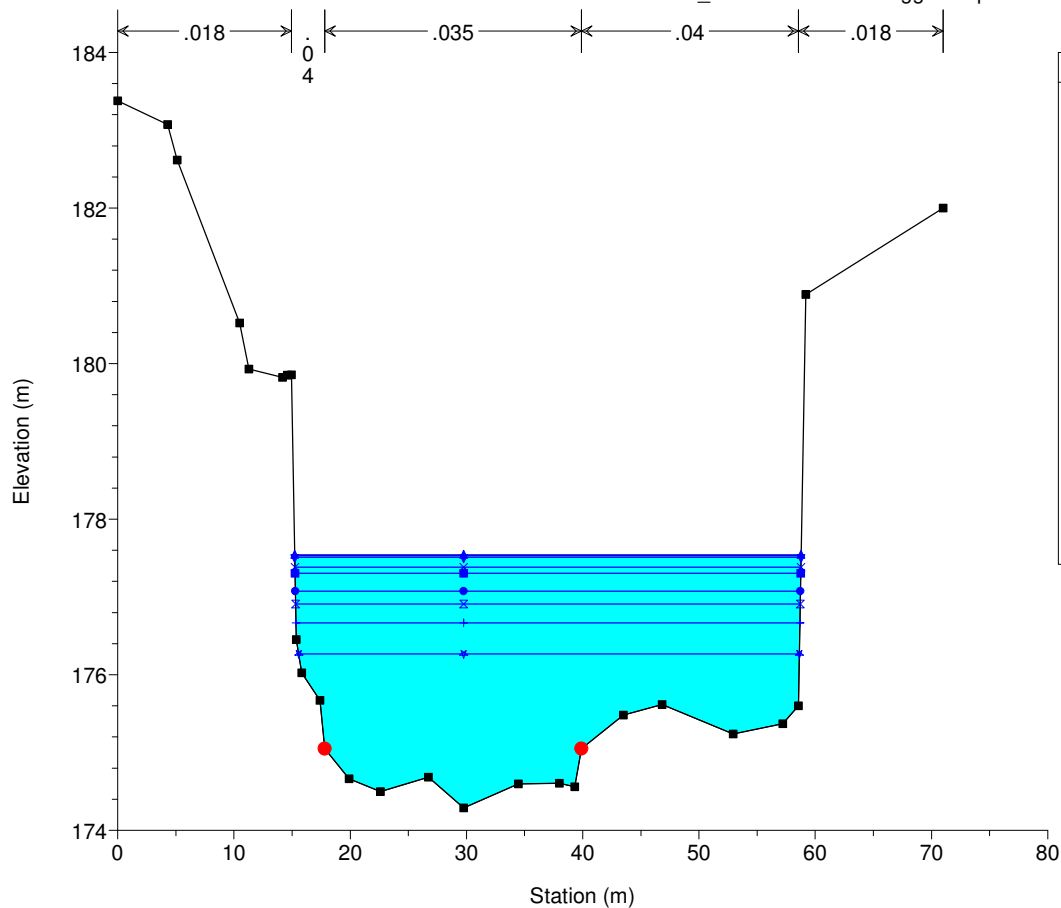
River = Pesa Reach = A RS = 351.522 IS



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

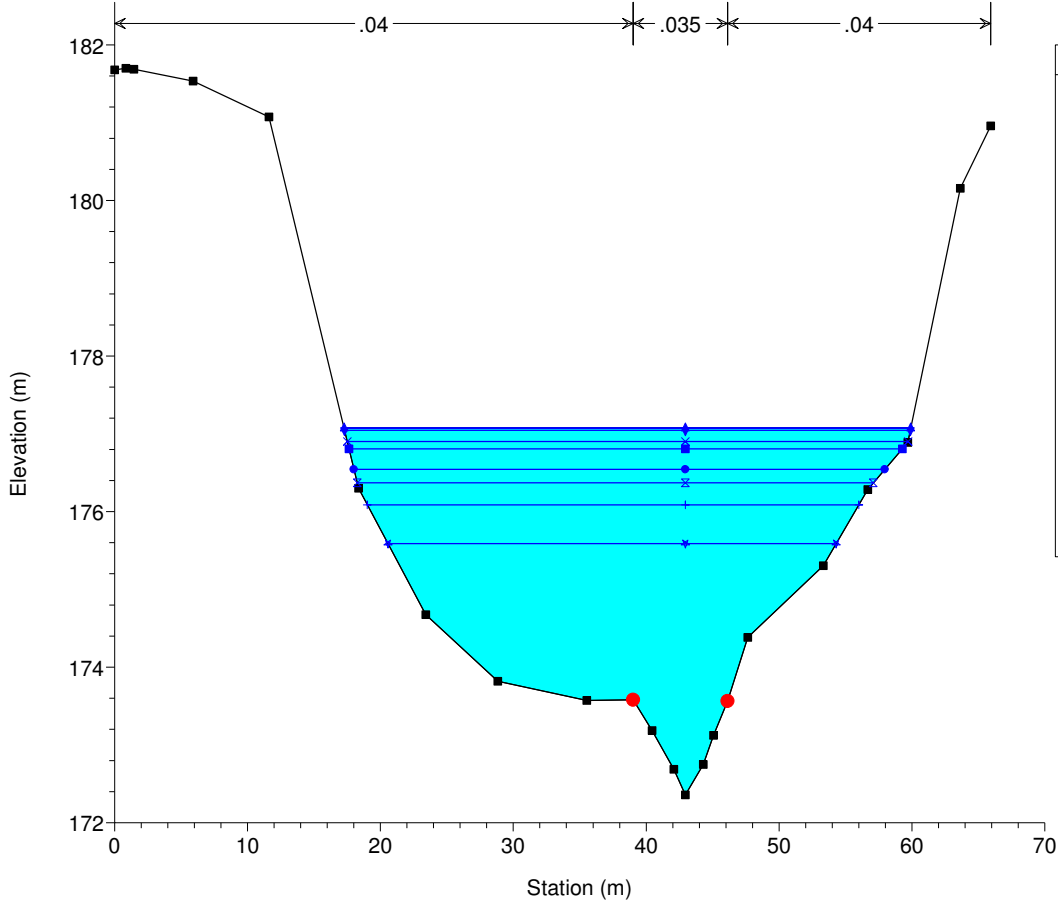
River = Pesa Reach = A RS = 351.521 PE351_C - MODIFICATA: aggiunto pto 27 da CTR 2k



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

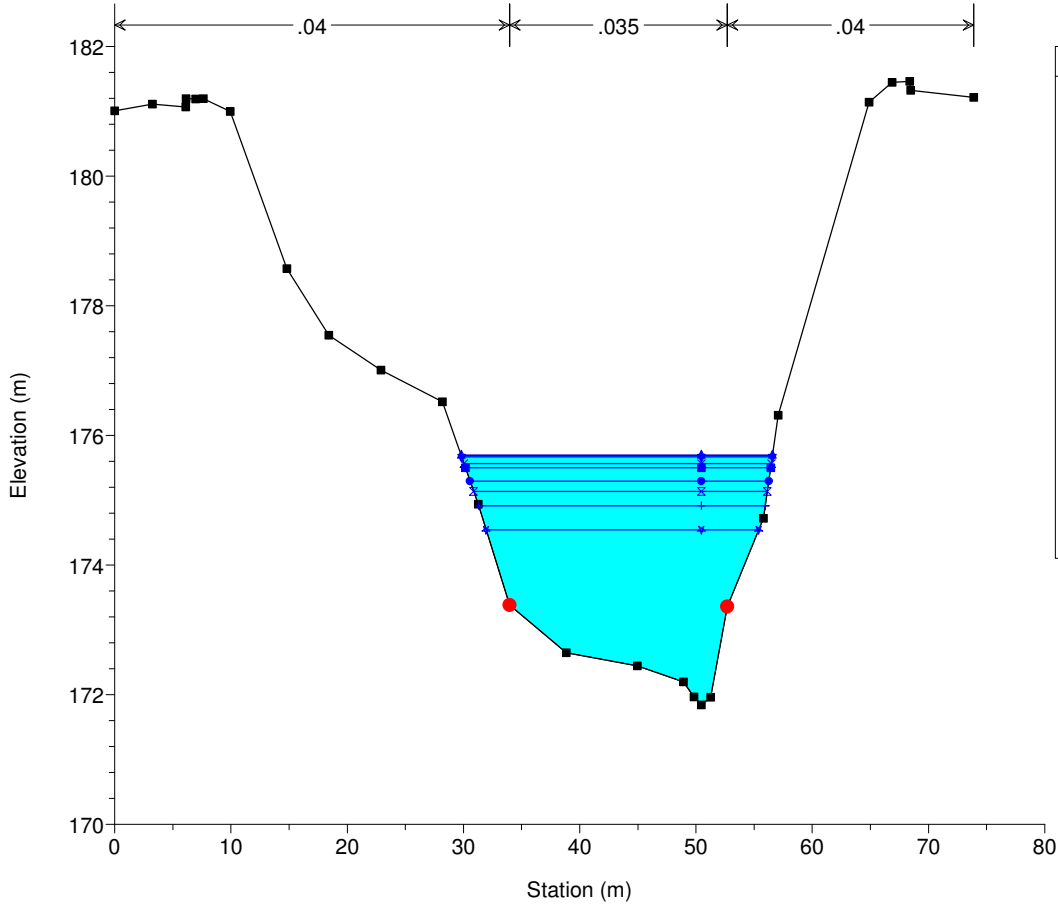
River = Pesa Reach = A RS = 350 PE350



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

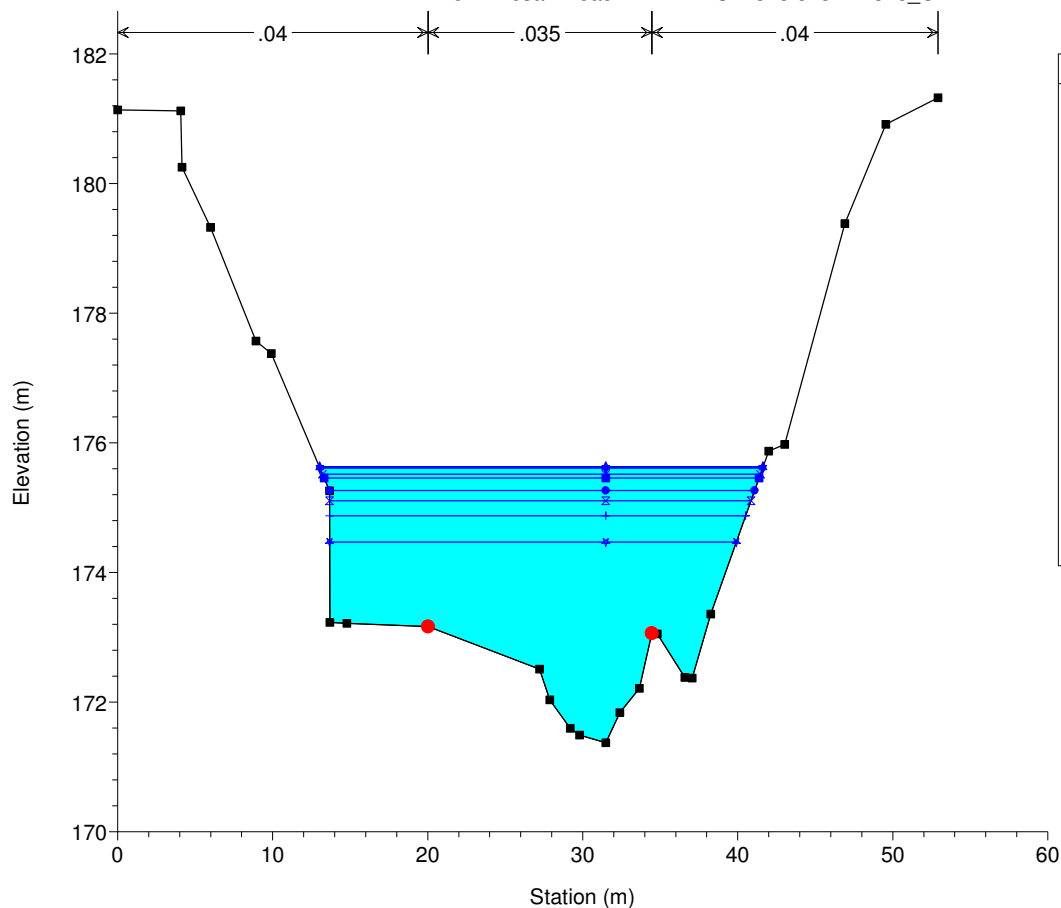
River = Pesa Reach = A RS = 349 PE349



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

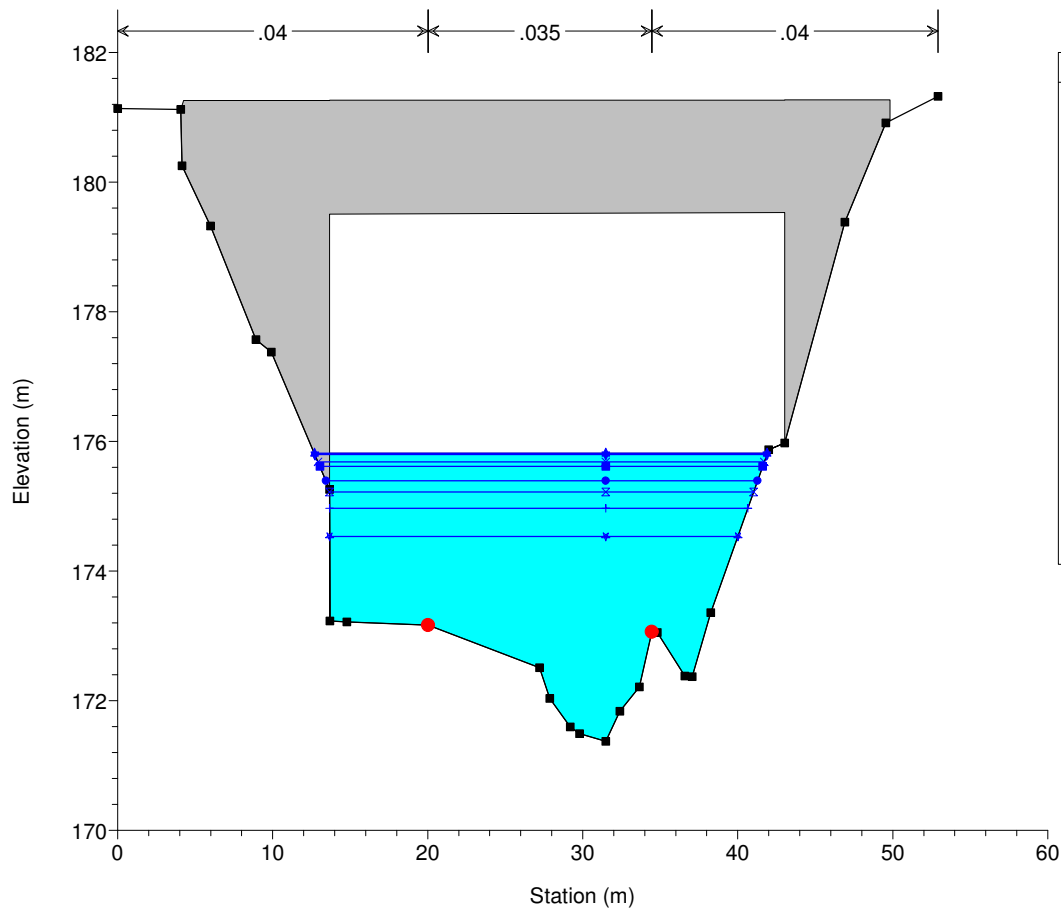
River = Pesa Reach = A RS = 348.513 PE348_C



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

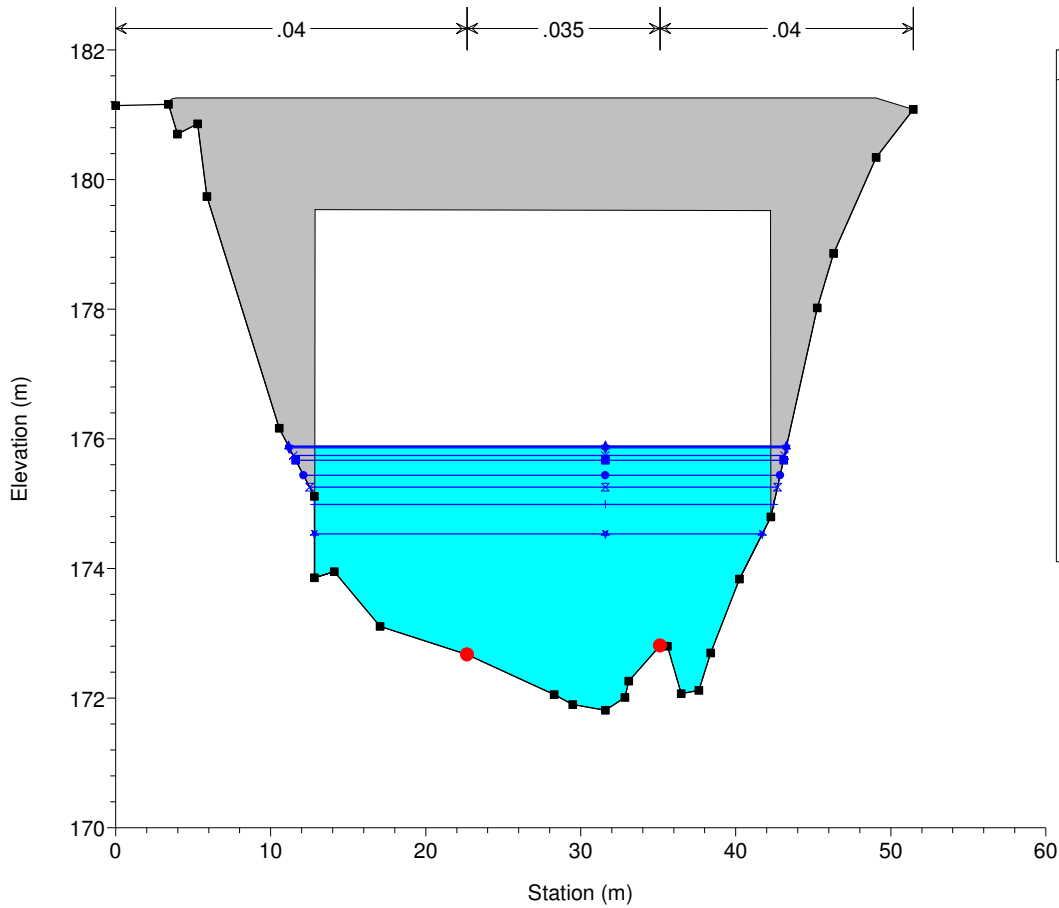
River = Pesa Reach = A RS = 348.512 BR



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

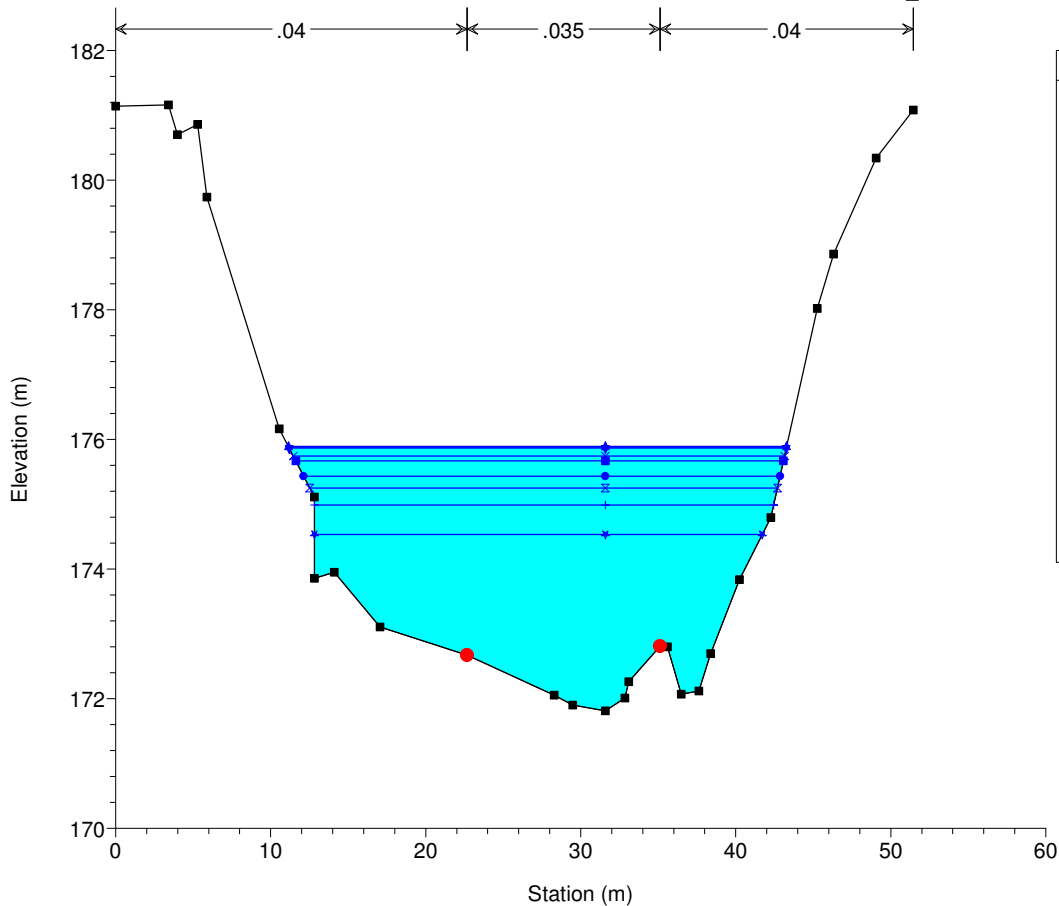
River = Pesa Reach = A RS = 348.512 BR



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

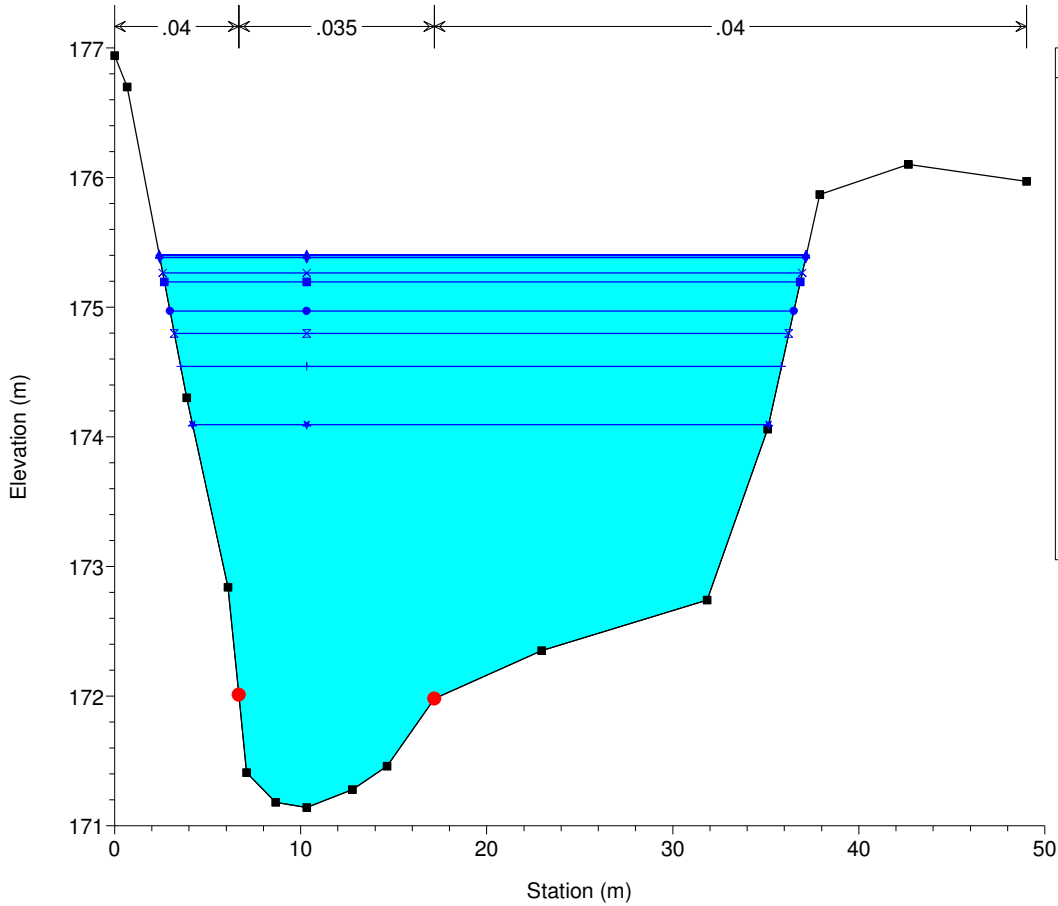
River = Pesa Reach = A RS = 348.511 PE348_A



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

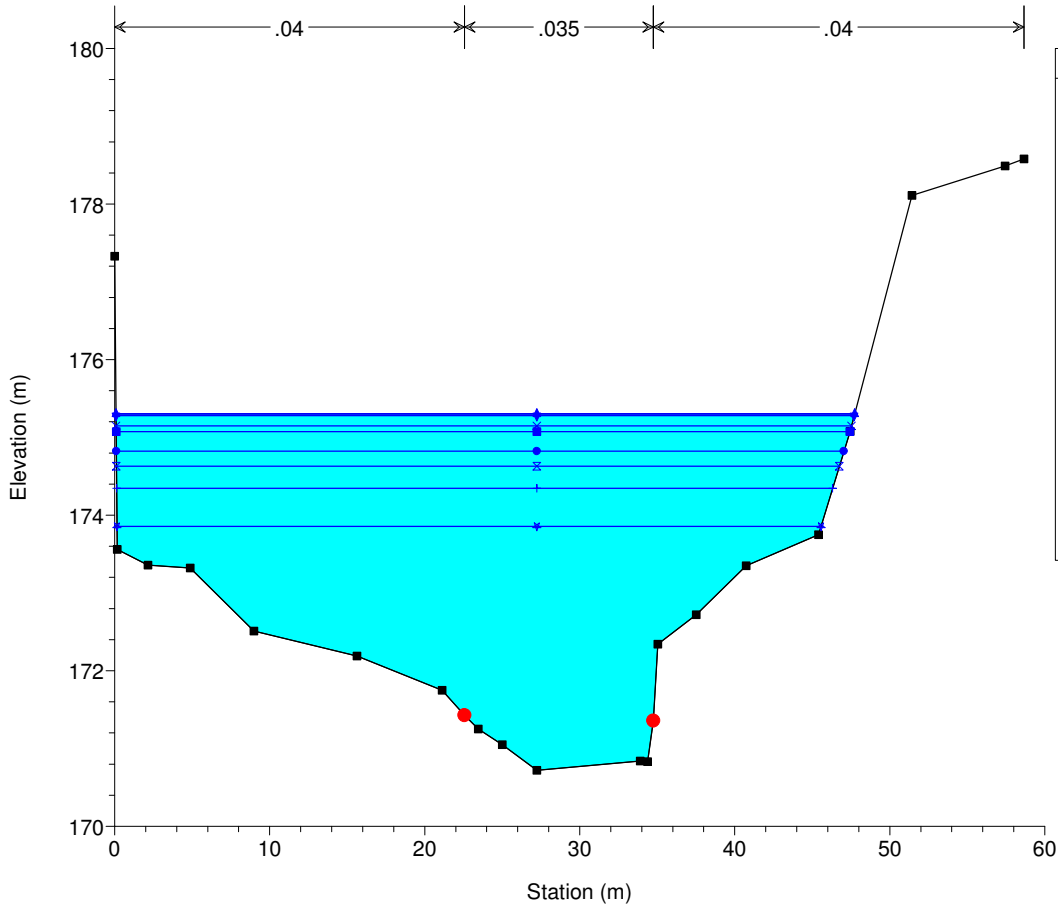
River = Pesa Reach = A RS = 347 PE347



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

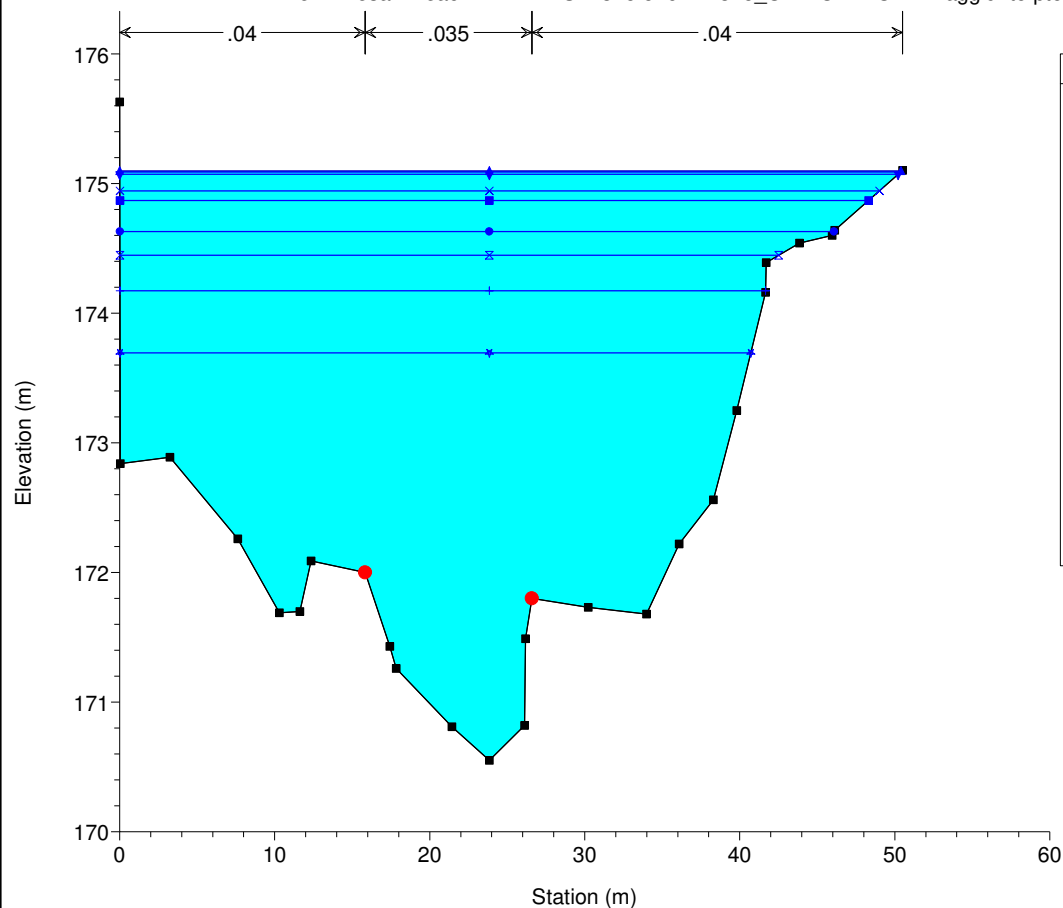
River = Pesa Reach = A RS = 346 PE346



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 345.526 PE345_C - MODIFICATA: aggiunto pto 27

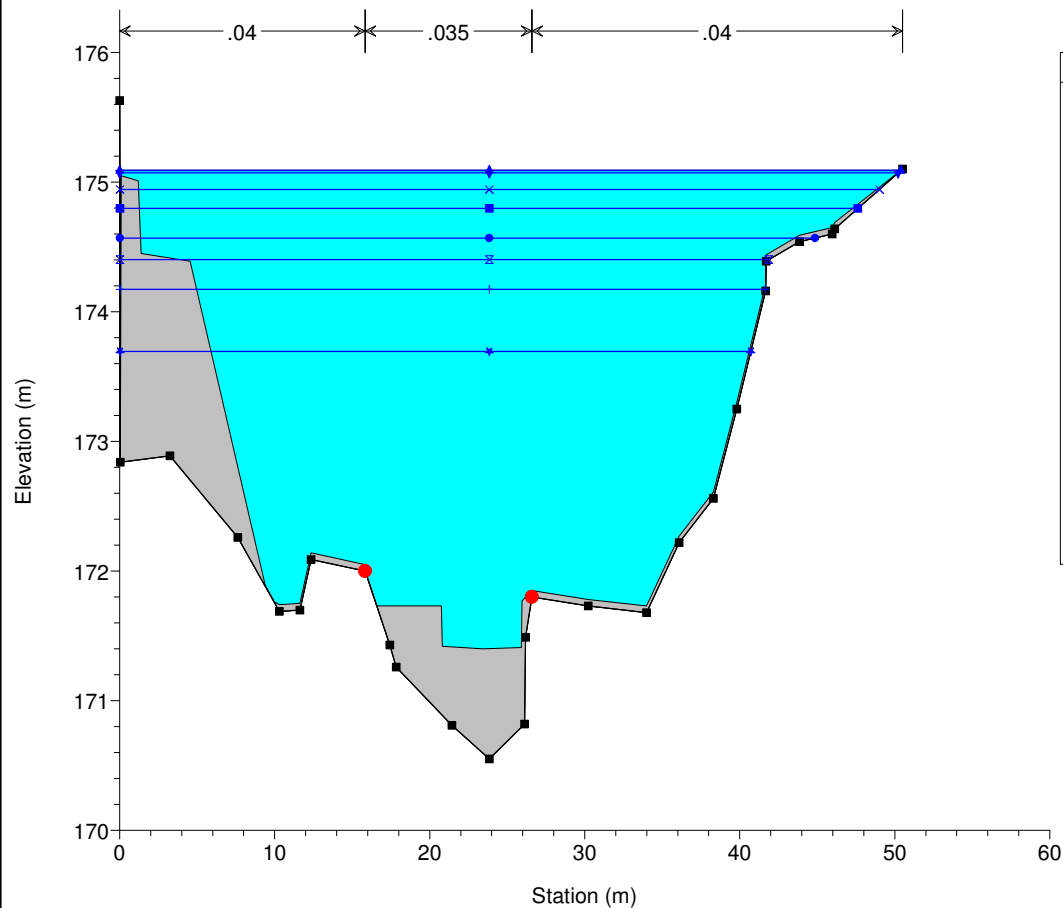


Legend	
WS Max WS - 200h6Pesa	▲
WS Max WS - 200h5.5Pesa	▼
WS Max WS - 200h5Pesa	×
WS Max WS - 200h3.5Pesa	■
WS Max WS - 200h3Pesa	●
WS Max WS - 200h2Pesa	×
WS Max WS - 200h1.5Pesa	▲
WS Max WS - 200h1Pesa	▼
WS Max WS - 200h0.5Pesa	■
Ground	■
Bank Sta	●

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 345.524 IS

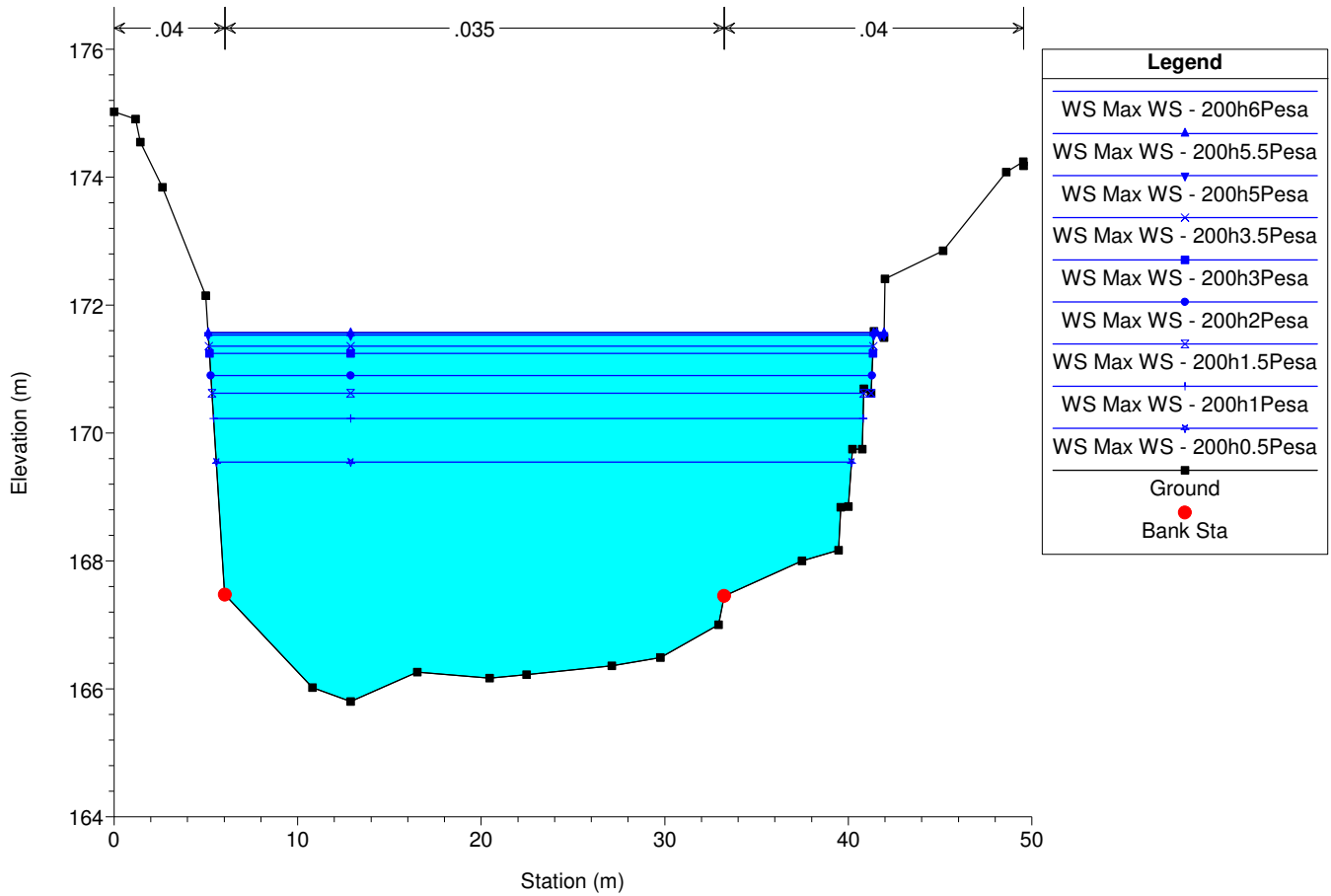


Legend	
WS Max WS - 200h6Pesa	▲
WS Max WS - 200h5.5Pesa	▼
WS Max WS - 200h5Pesa	×
WS Max WS - 200h3.5Pesa	■
WS Max WS - 200h3Pesa	●
WS Max WS - 200h2Pesa	×
WS Max WS - 200h1.5Pesa	▲
WS Max WS - 200h1Pesa	▼
WS Max WS - 200h0.5Pesa	■
Ground	■
Bank Sta	●

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

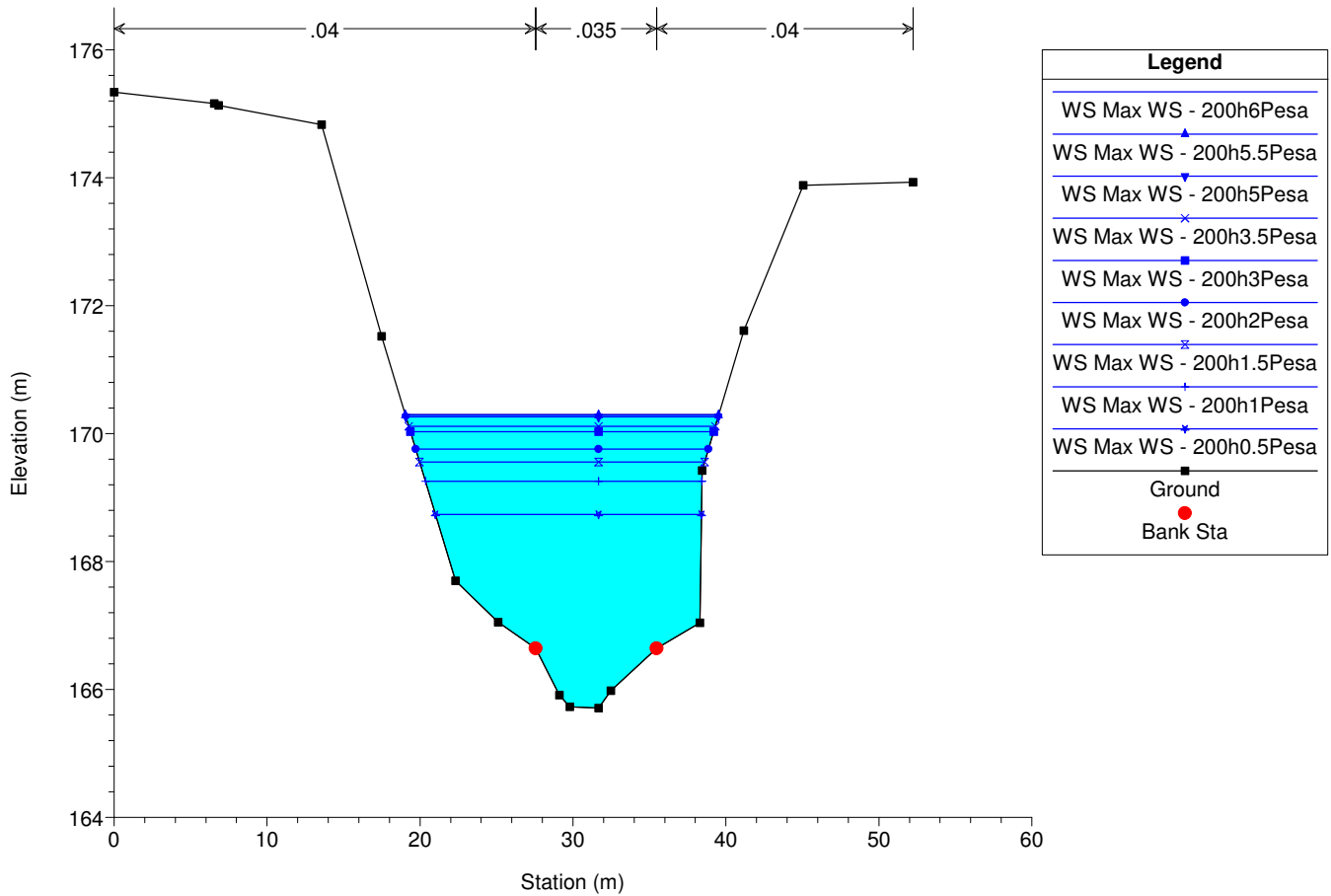
River = Pesa Reach = A RS = 345.521 PE345_A



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

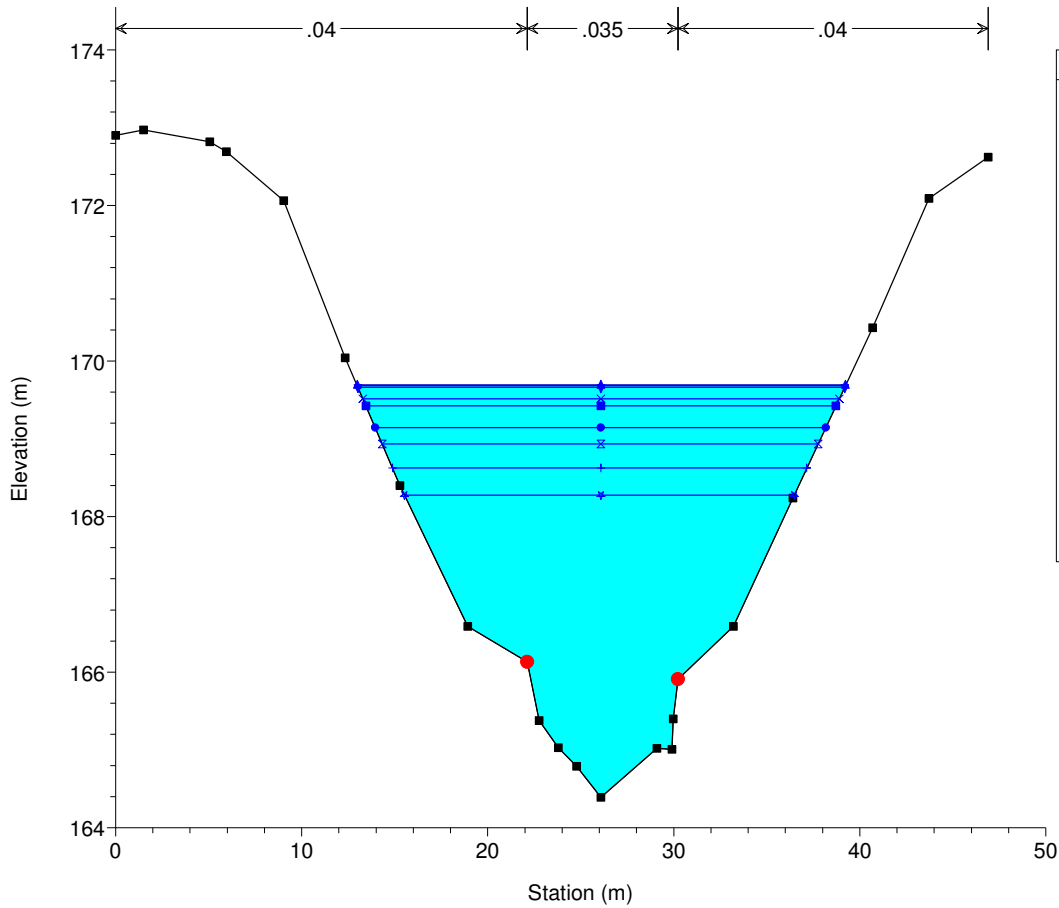
River = Pesa Reach = A RS = 344 PE344



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 343 PE343

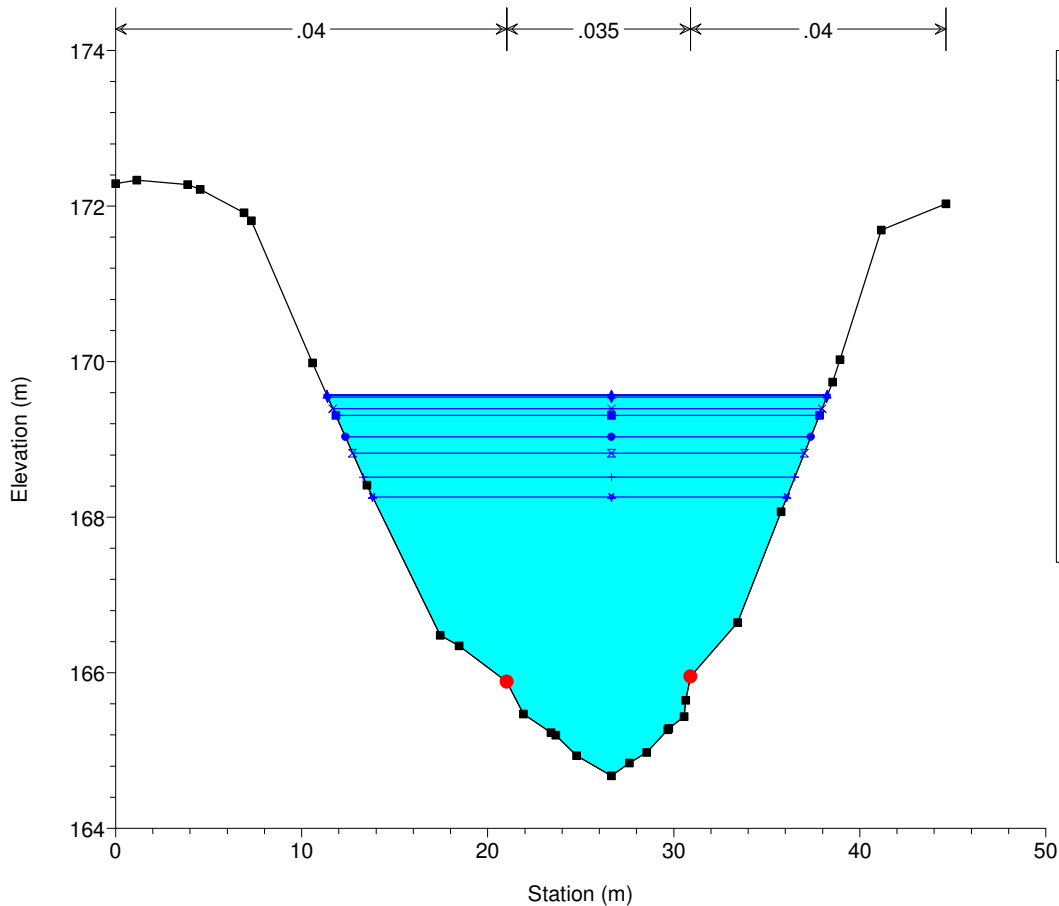


Legend	
WS Max WS - 200h6Pesa	▲
WS Max WS - 200h5.5Pesa	▼
WS Max WS - 200h5Pesa	×
WS Max WS - 200h3.5Pesa	■
WS Max WS - 200h3Pesa	●
WS Max WS - 200h2Pesa	×
WS Max WS - 200h1.5Pesa	+
WS Max WS - 200h1Pesa	▲
WS Max WS - 200h0.5Pesa	▼
Ground	■
Bank Sta	●

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 342.5

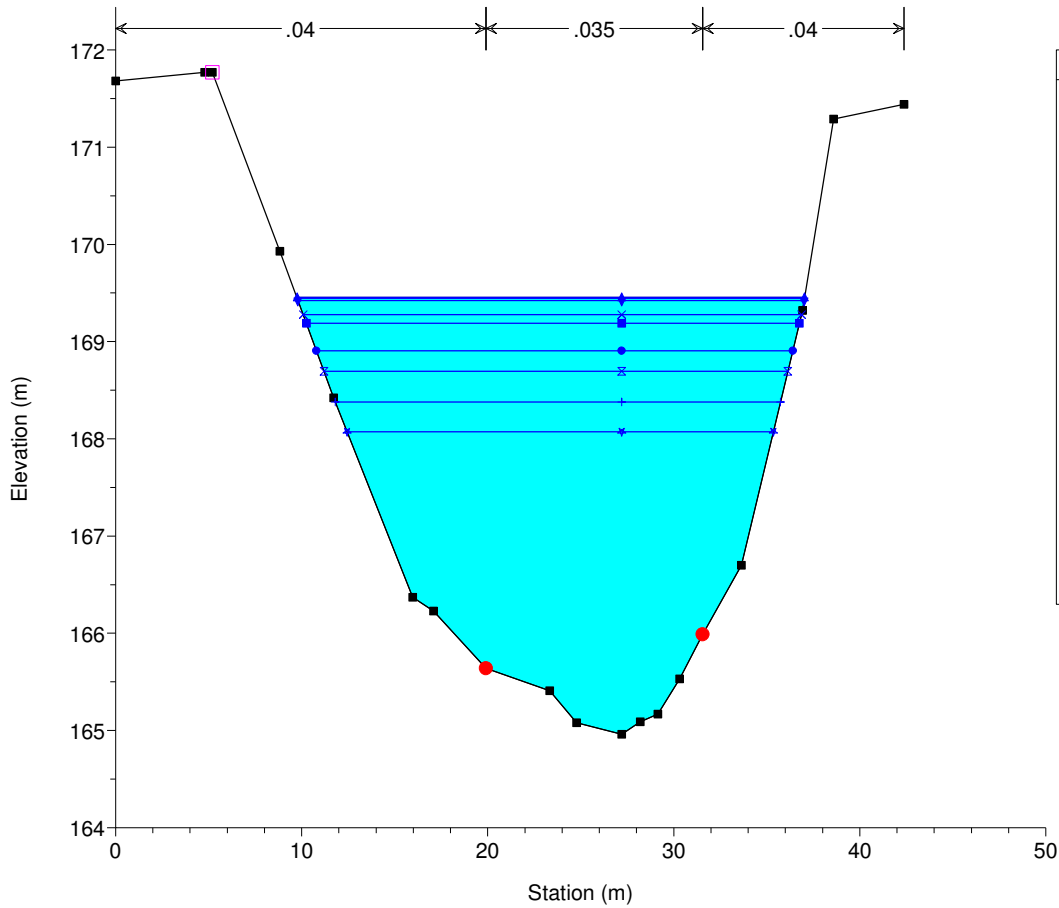


Legend	
WS Max WS - 200h6Pesa	▲
WS Max WS - 200h5.5Pesa	▼
WS Max WS - 200h5Pesa	×
WS Max WS - 200h3.5Pesa	■
WS Max WS - 200h3Pesa	●
WS Max WS - 200h2Pesa	×
WS Max WS - 200h1.5Pesa	+
WS Max WS - 200h1Pesa	▲
WS Max WS - 200h0.5Pesa	▼
Ground	■
Bank Sta	●

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

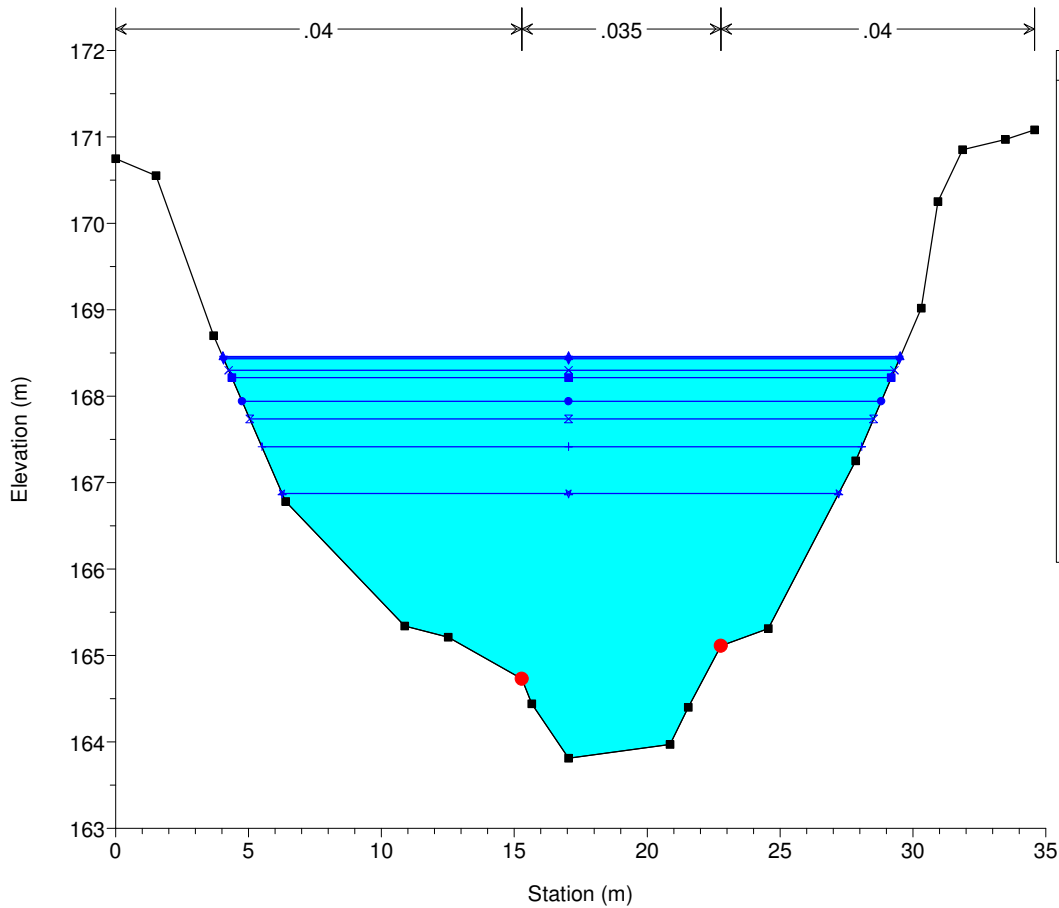
River = Pesa Reach = A RS = 342 PE342



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

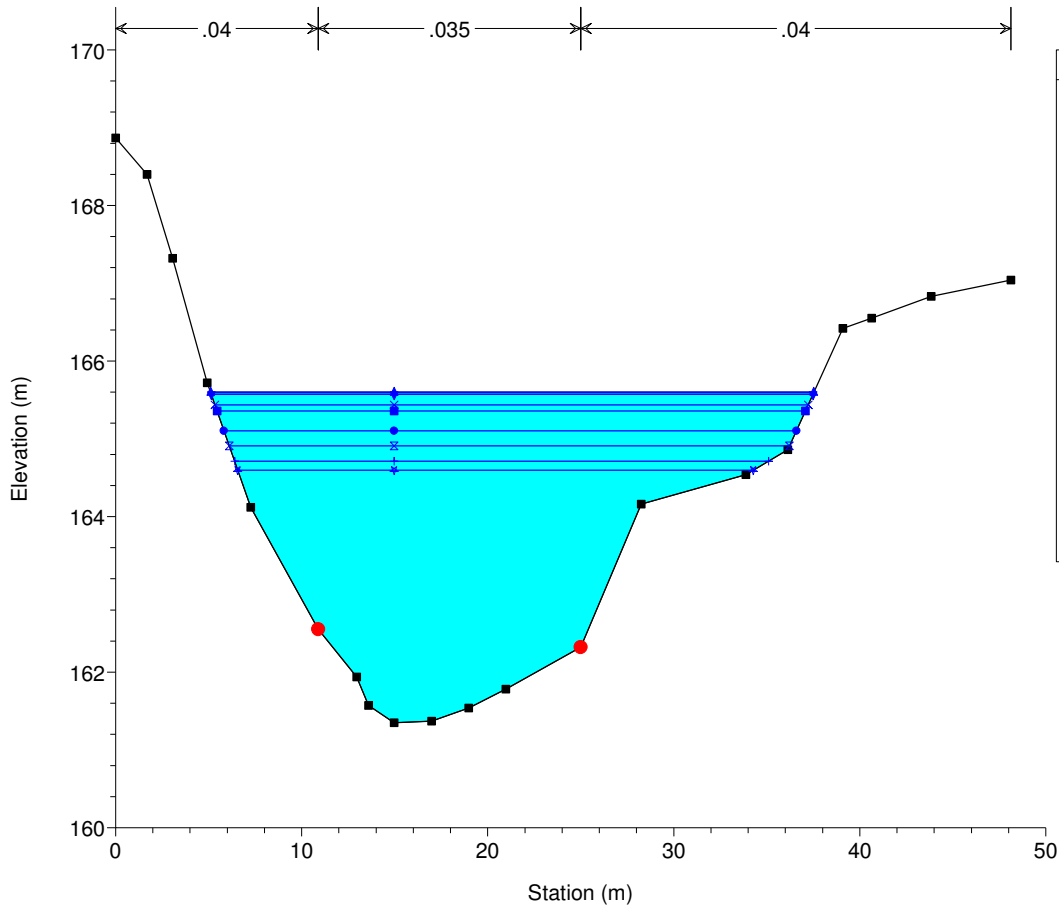
River = Pesa Reach = A RS = 341 PE341



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

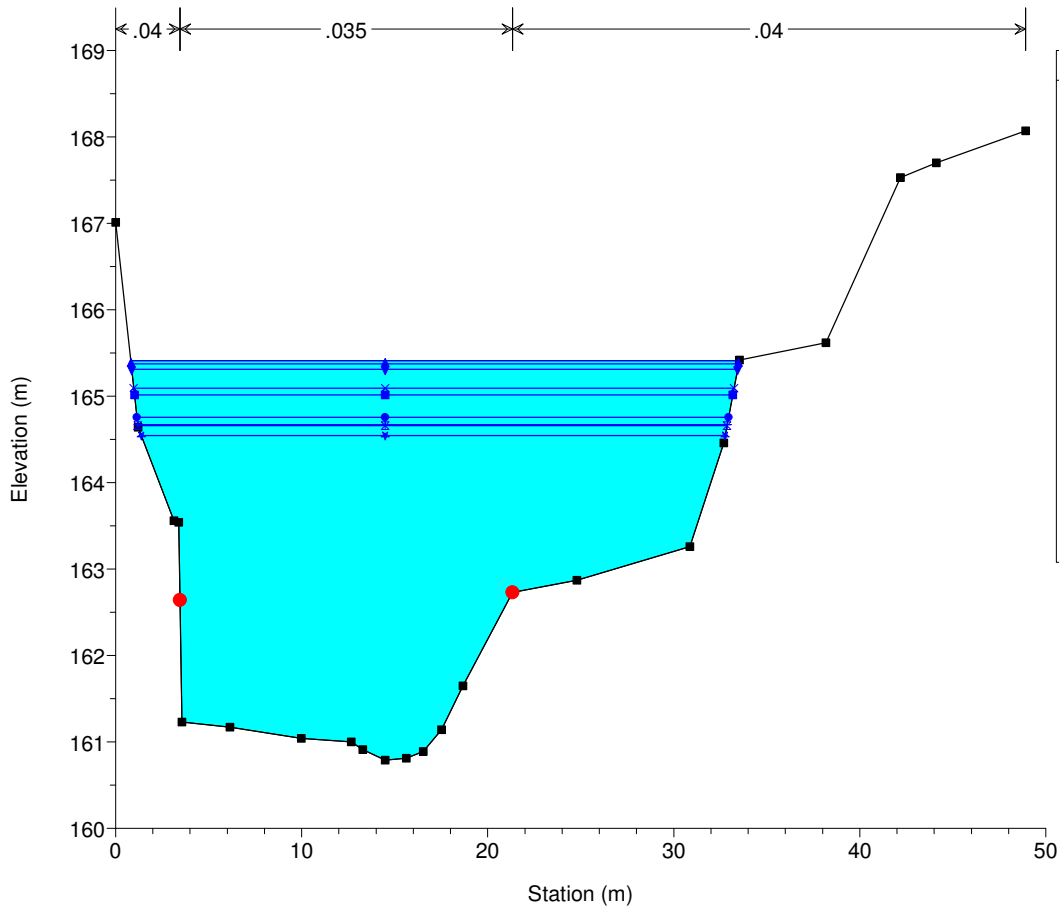
River = Pesa Reach = A RS = 338 PE338



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

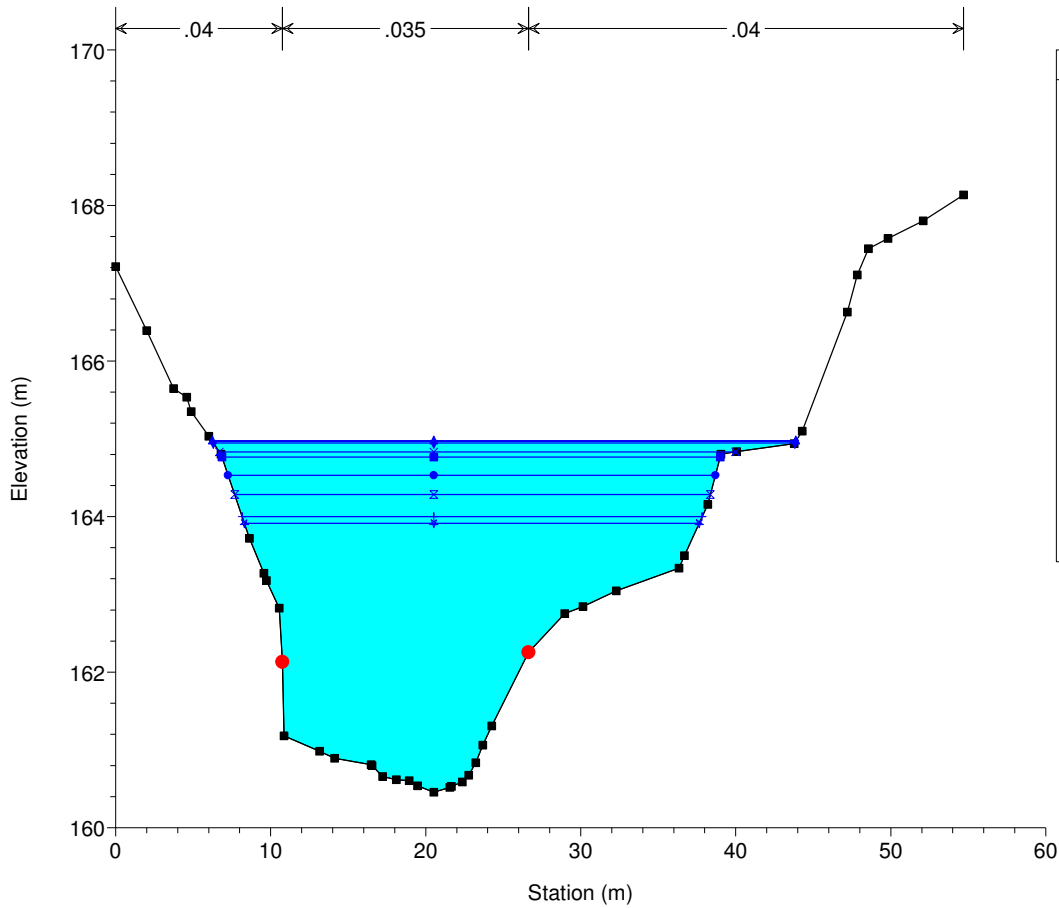
River = Pesa Reach = A RS = 337 PE337



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

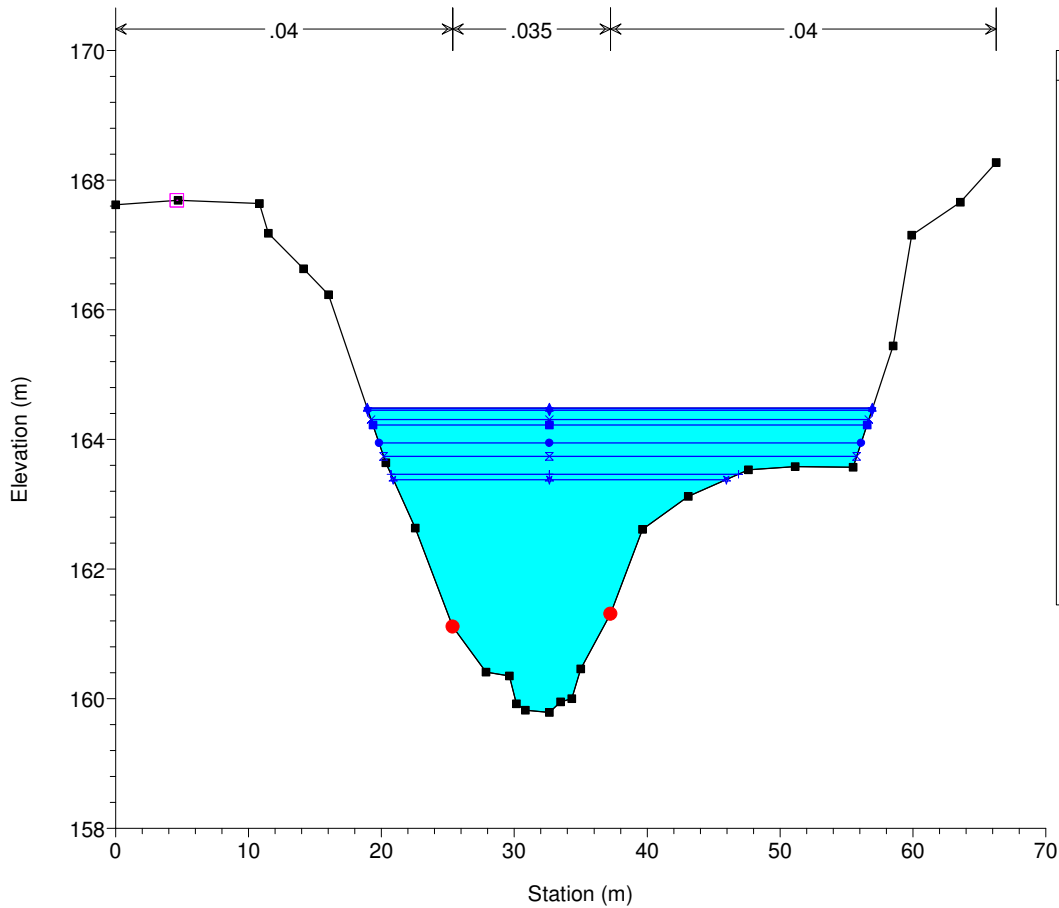
River = Pesa Reach = A RS = 336.666



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

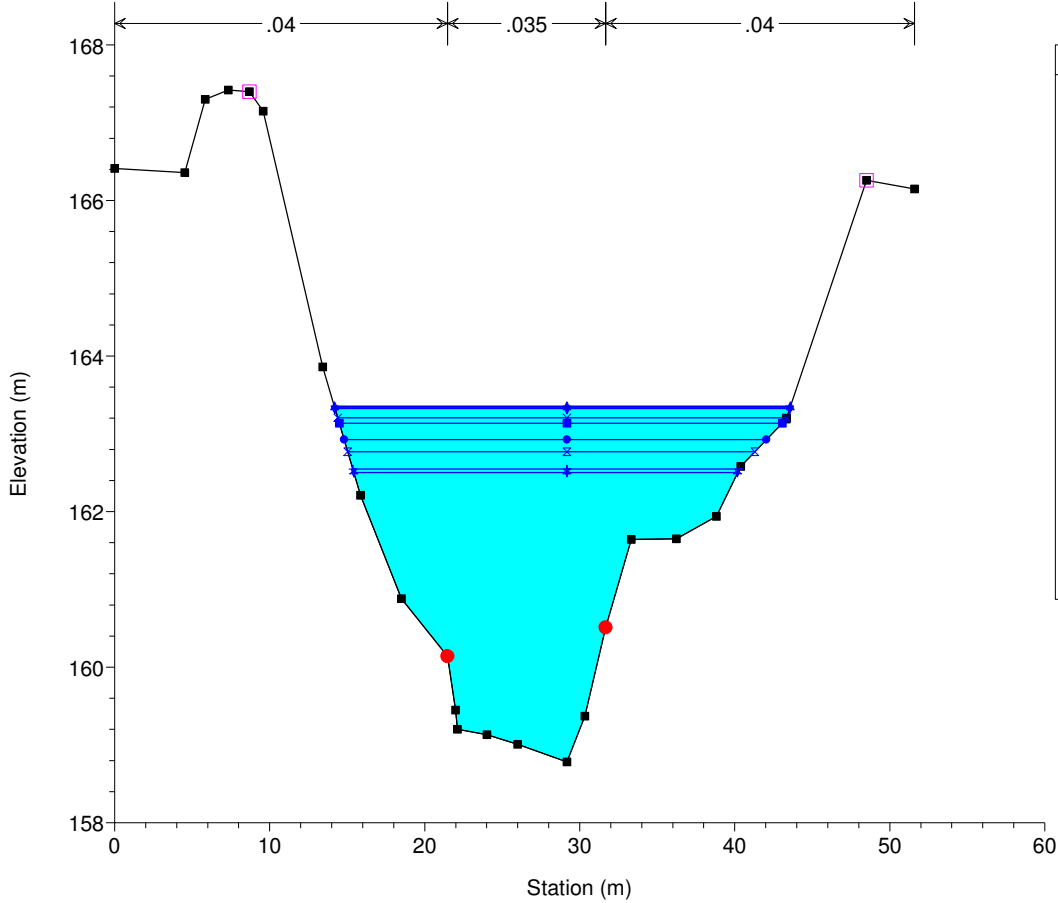
River = Pesa Reach = A RS = 336 PE336



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

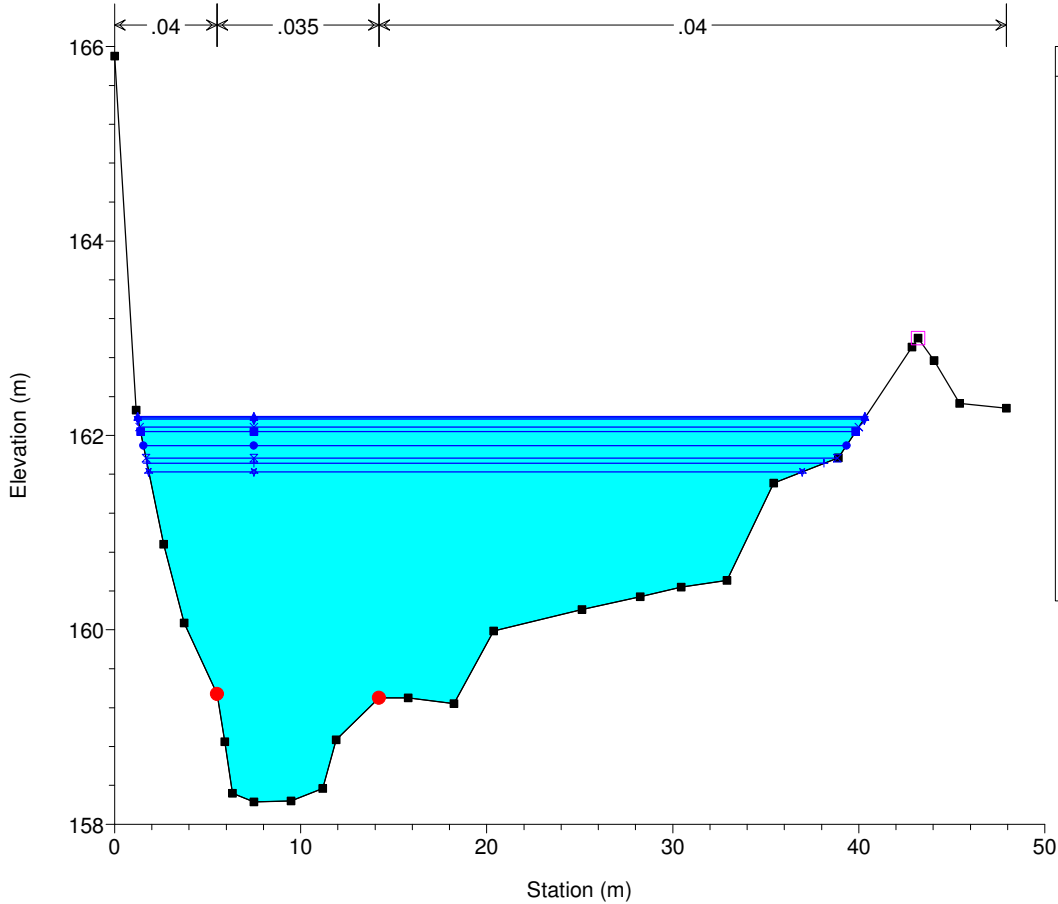
River = Pesa Reach = A RS = 335 PE335



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

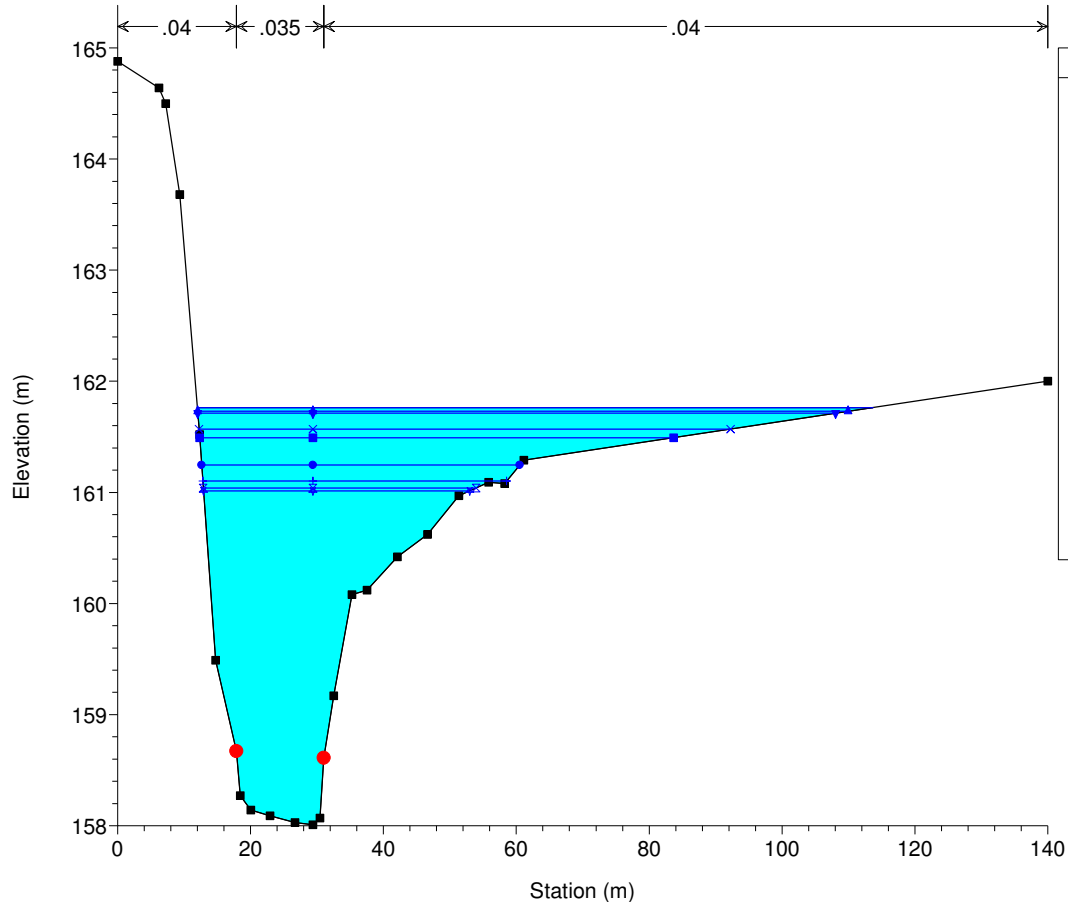
River = Pesa Reach = A RS = 334 PE334



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

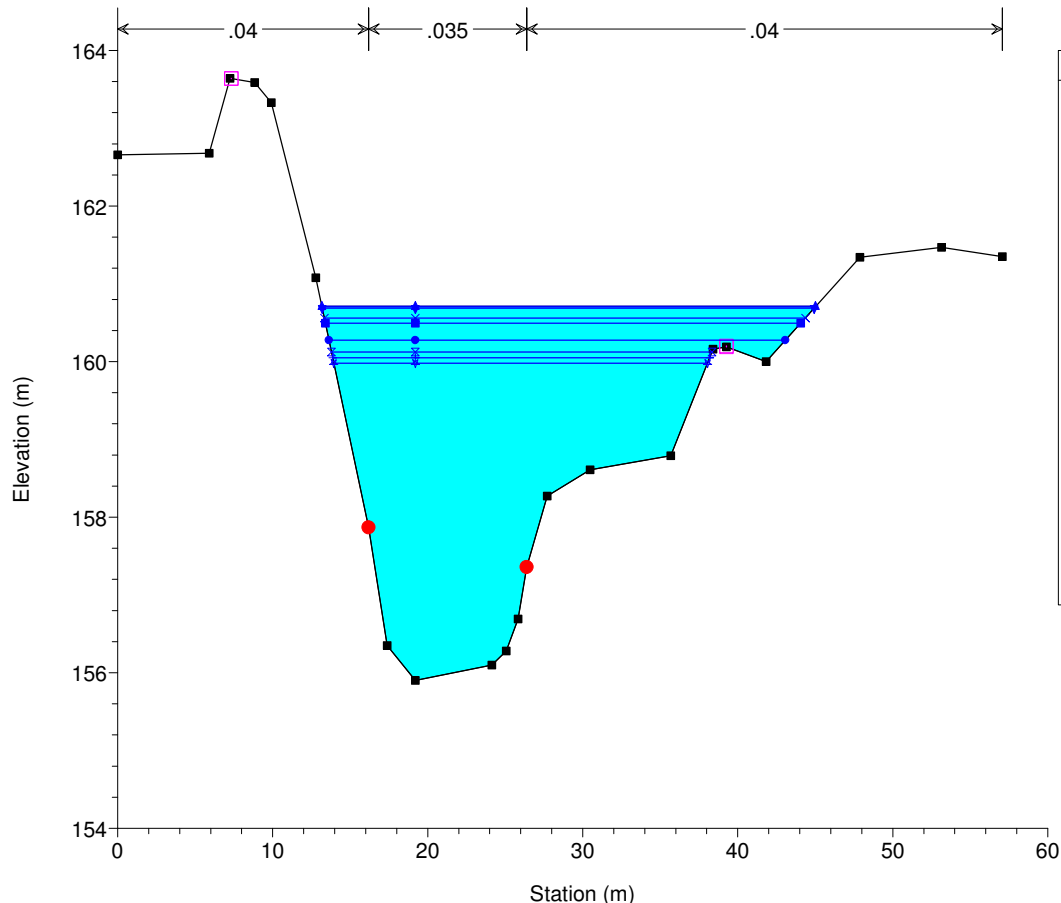
River = Pesa Reach = A RS = 333 PE333 - MODIFICATA: aggiunto pto 24 da CTR 10k



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

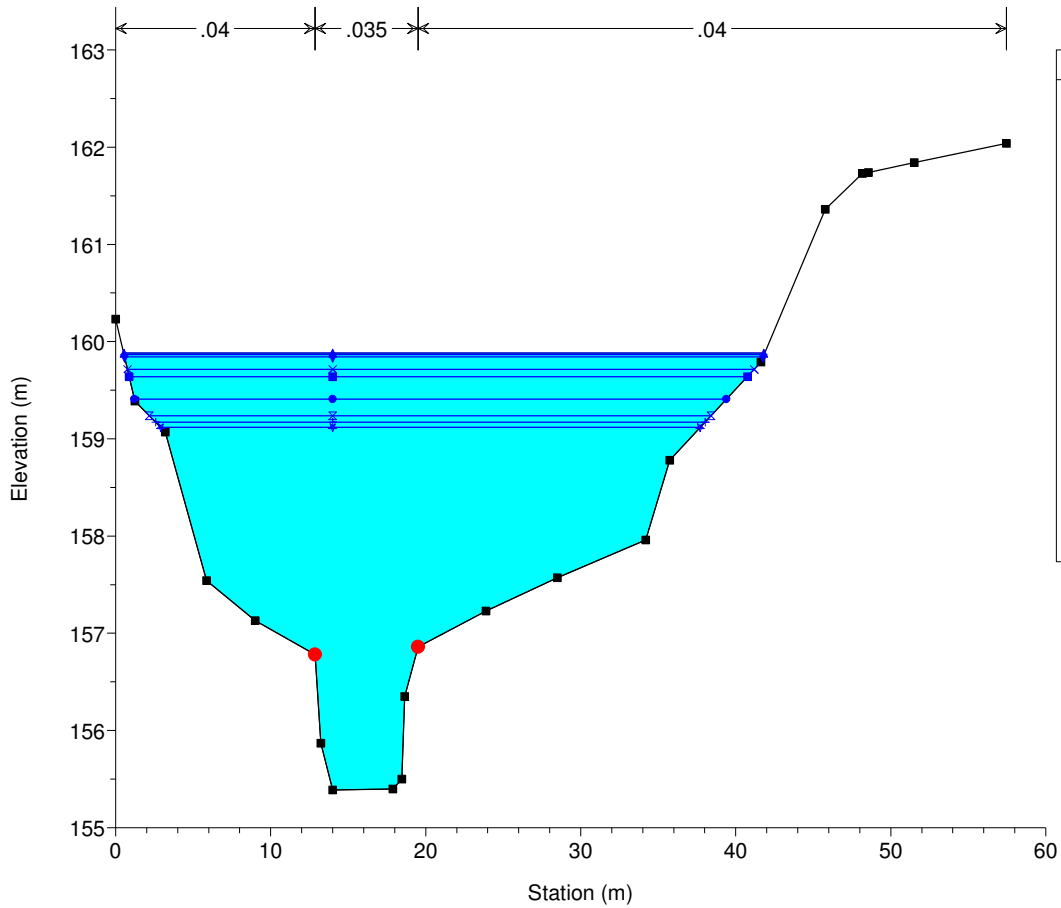
River = Pesa Reach = A RS = 332 PE332



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

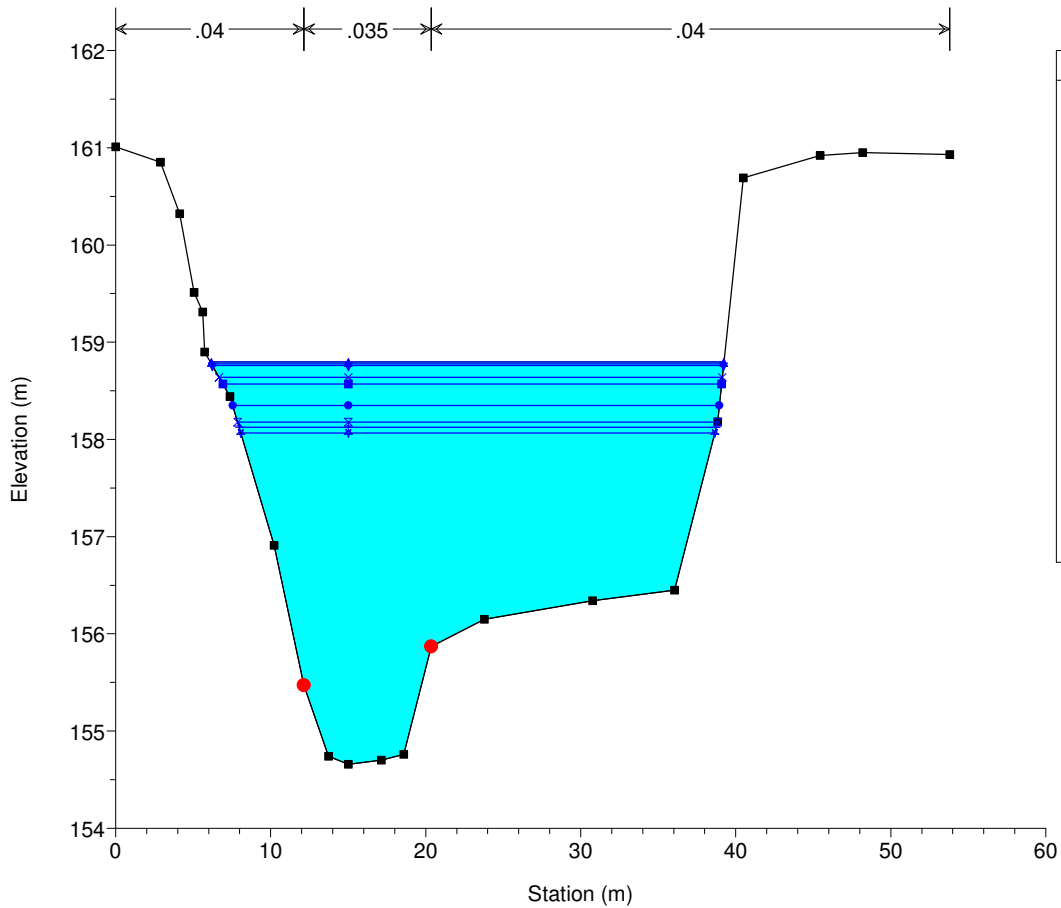
River = Pesa Reach = A RS = 331 PE331



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

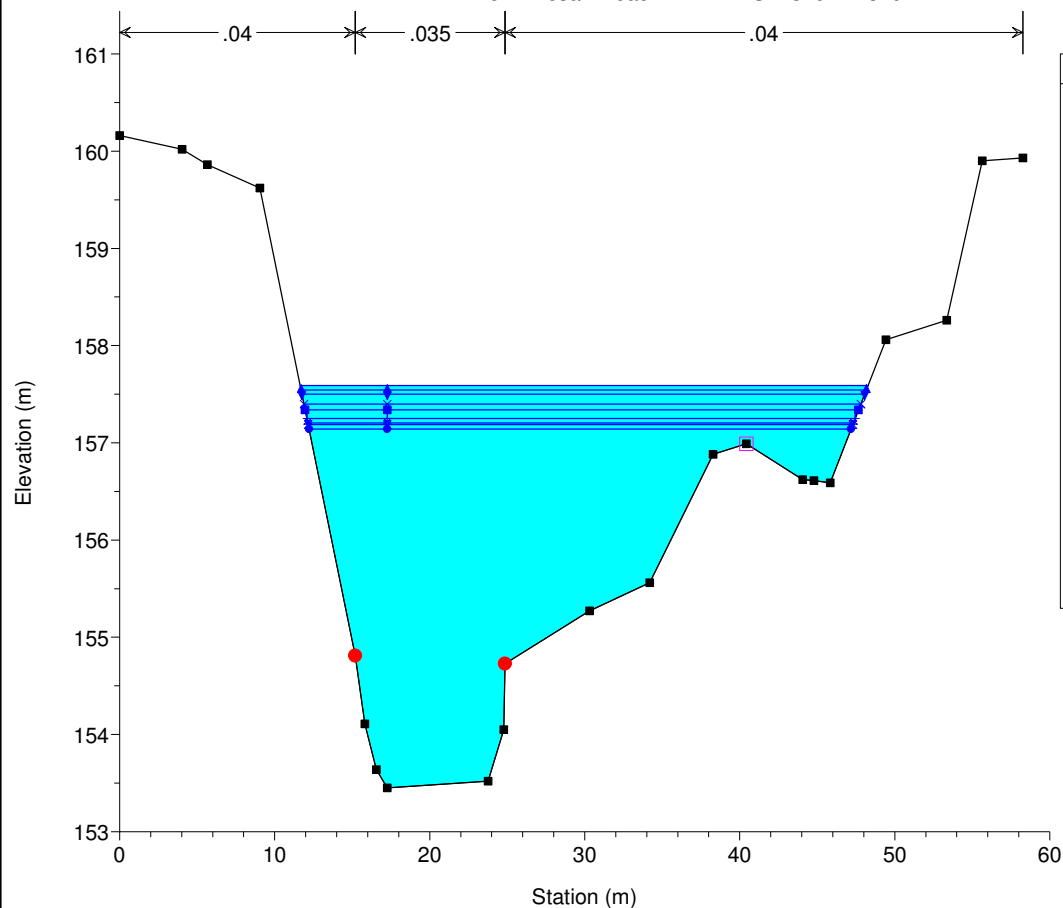
River = Pesa Reach = A RS = 330 PE330



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

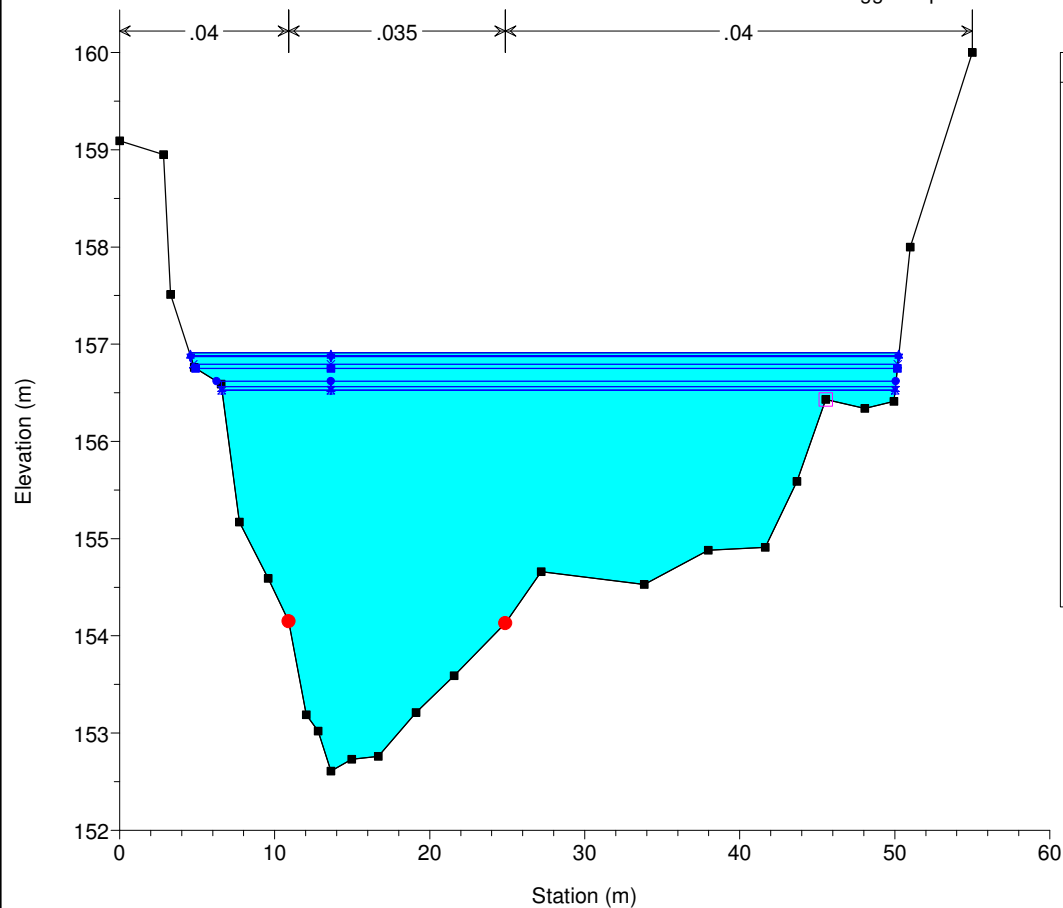
River = Pesa Reach = A RS = 329 PE329



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

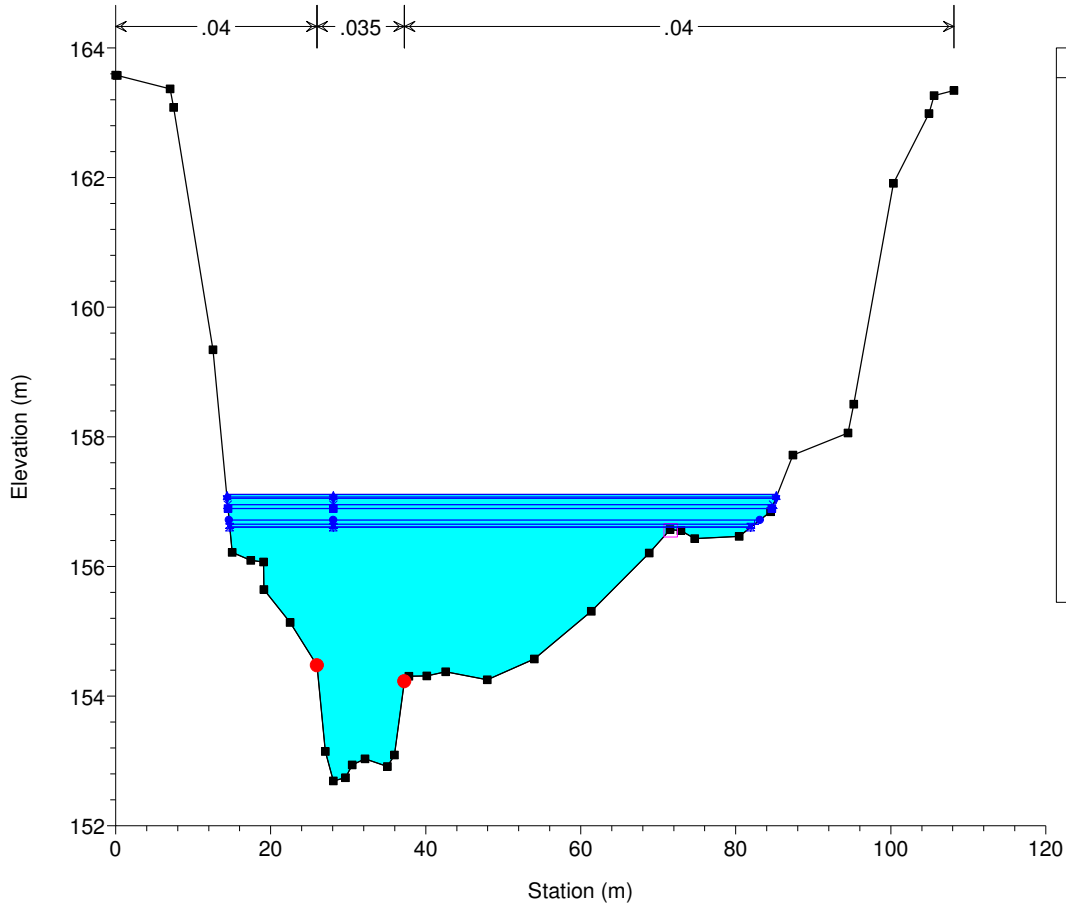
River = Pesa Reach = A RS = 328 PE328 - MODIFICATA: aggiunti pti 25-26 da CTR 2k



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

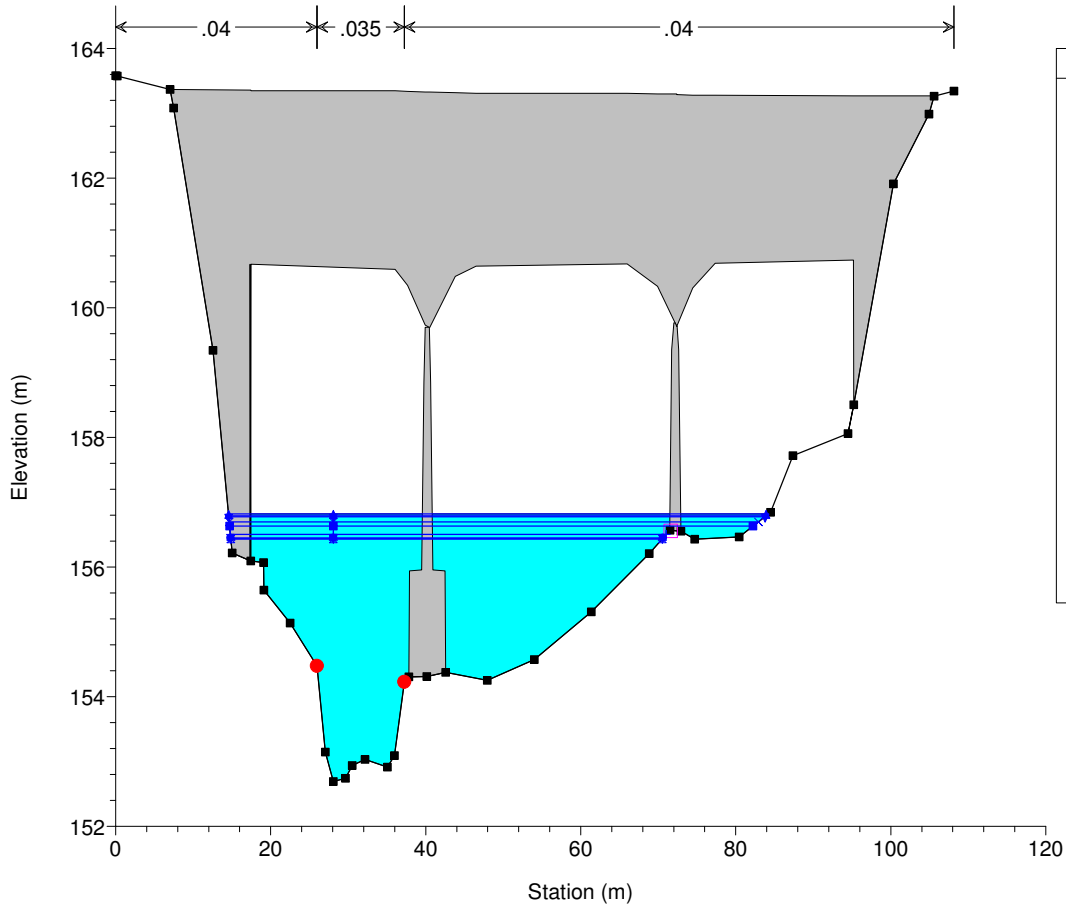
River = Pesa Reach = A RS = 327.513 PE327_C



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

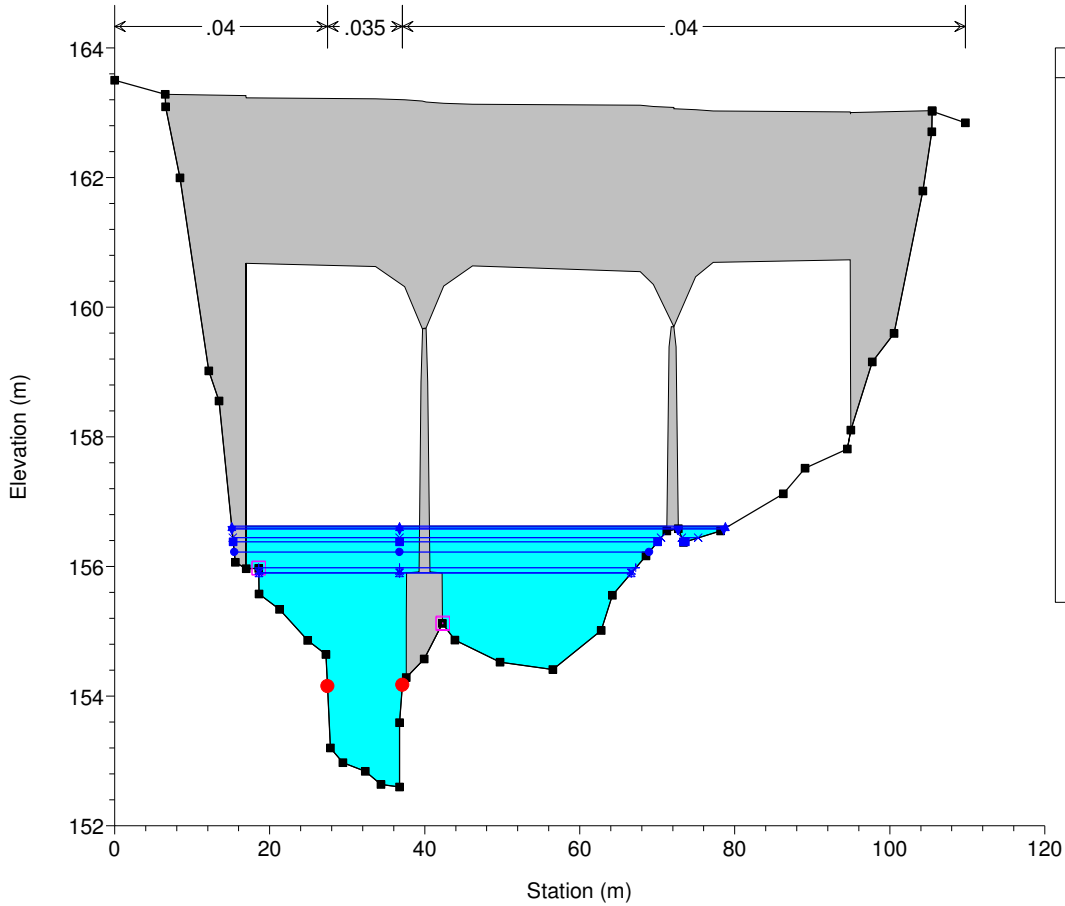
River = Pesa Reach = A RS = 327.512 BR



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

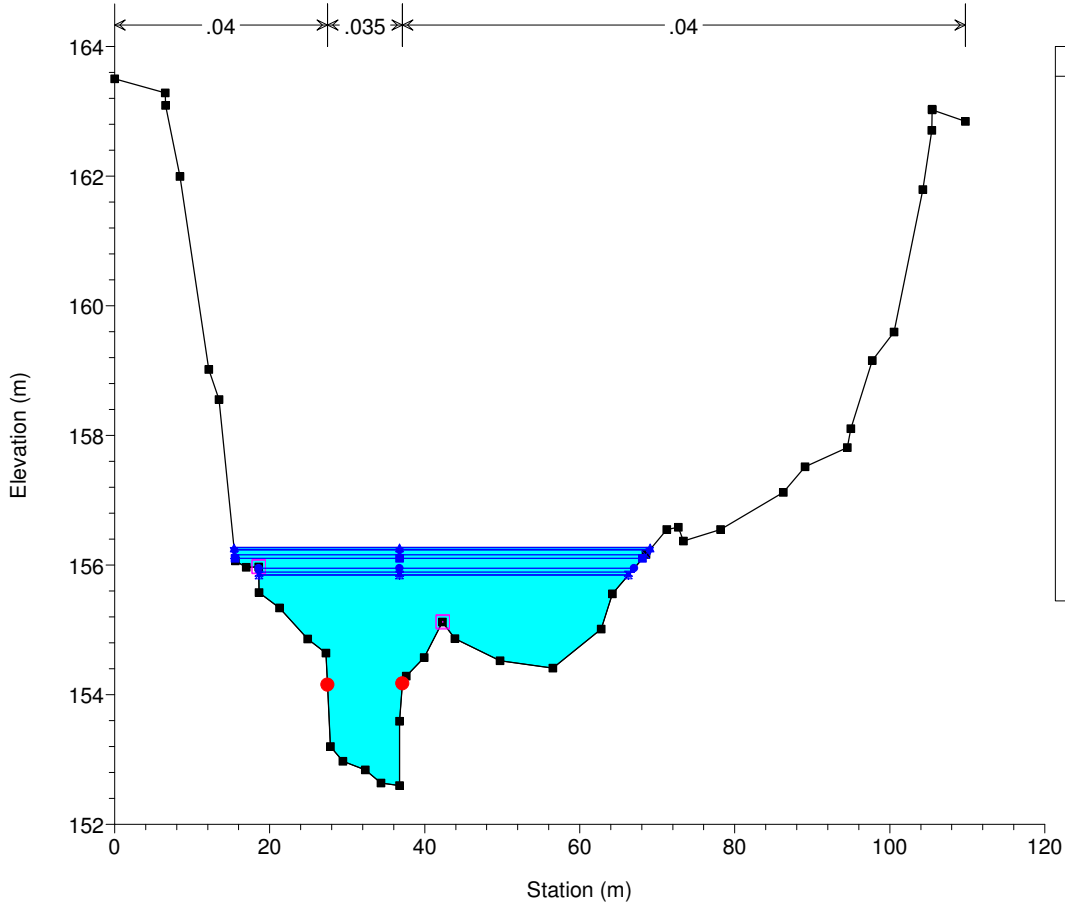
River = Pesa Reach = A RS = 327.512 BR



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

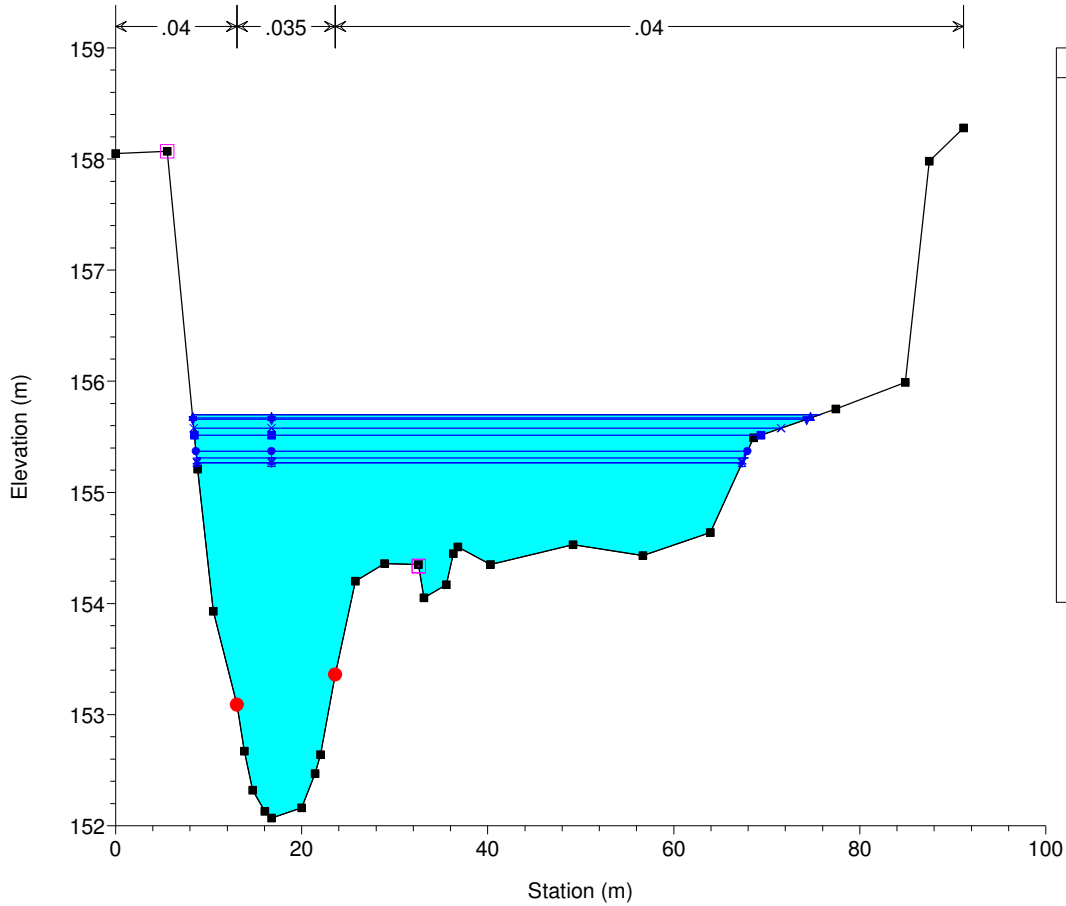
River = Pesa Reach = A RS = 327.511 PE327_A



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

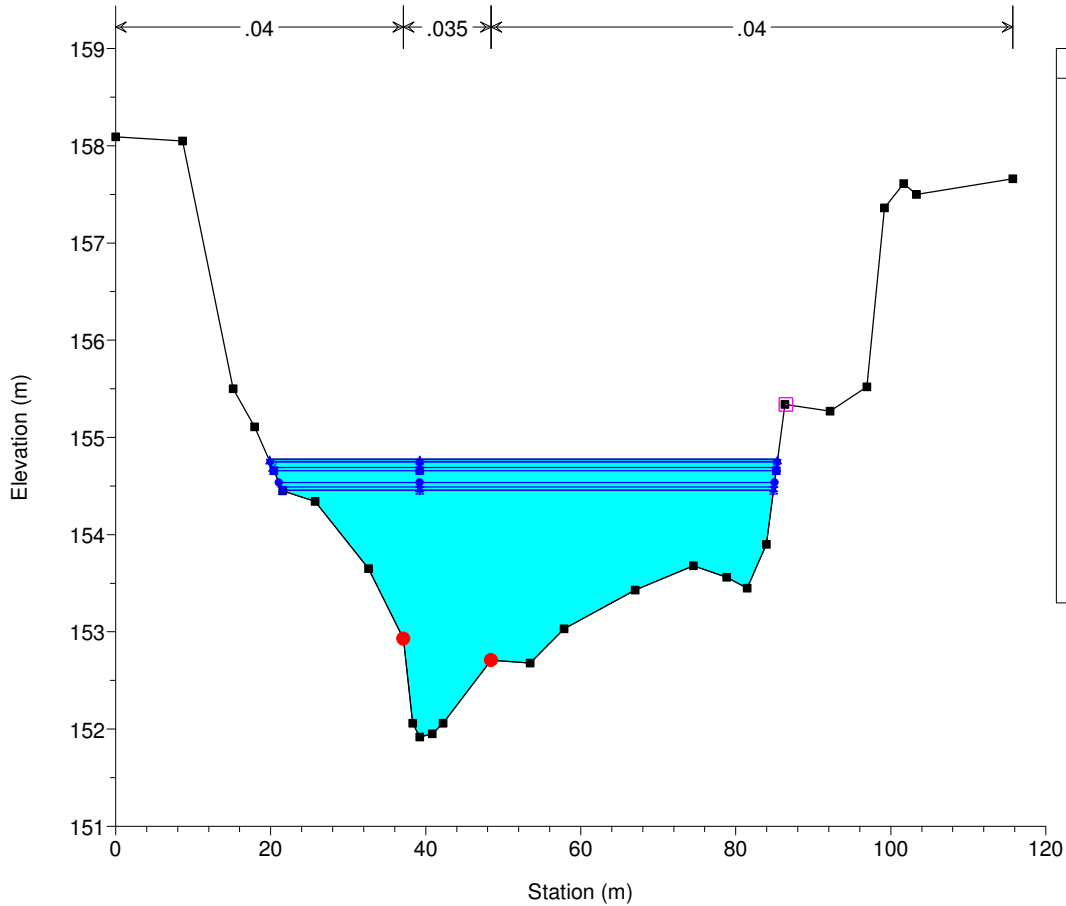
River = Pesa Reach = A RS = 326 PE326



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

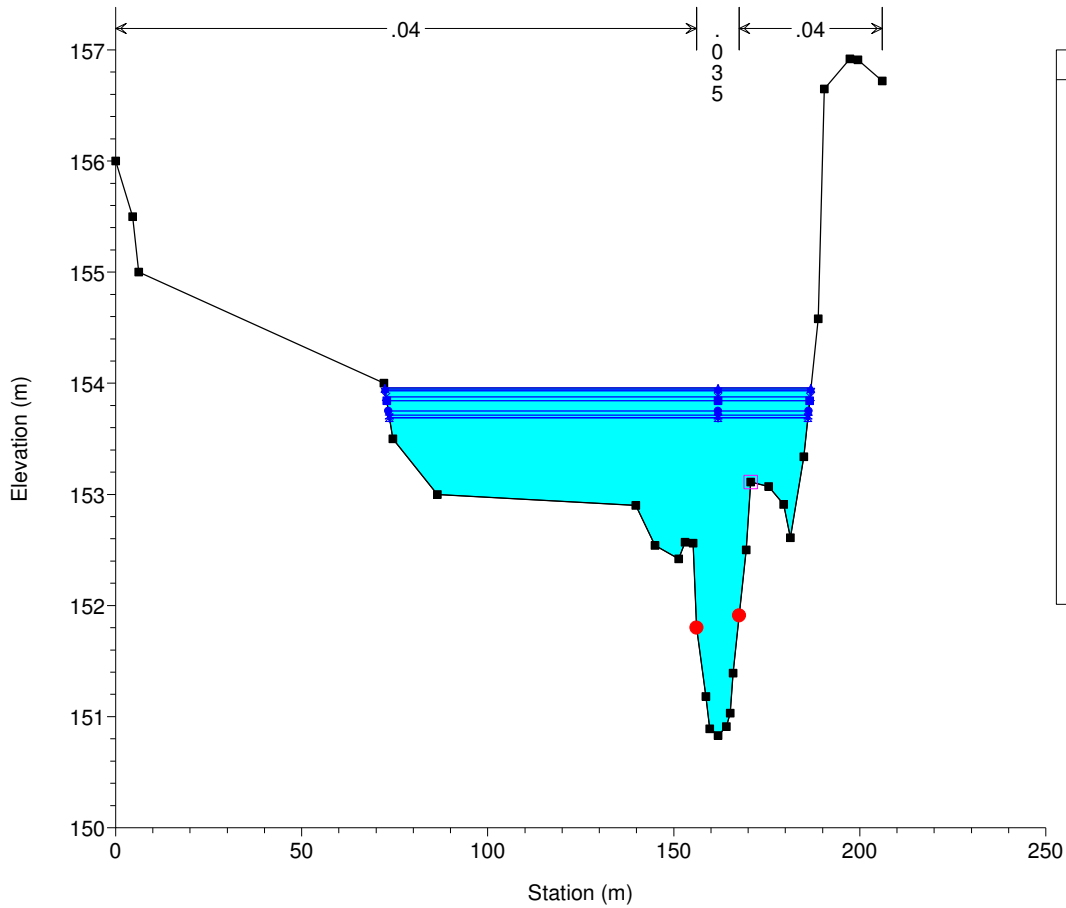
River = Pesa Reach = A RS = 325 PE325



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

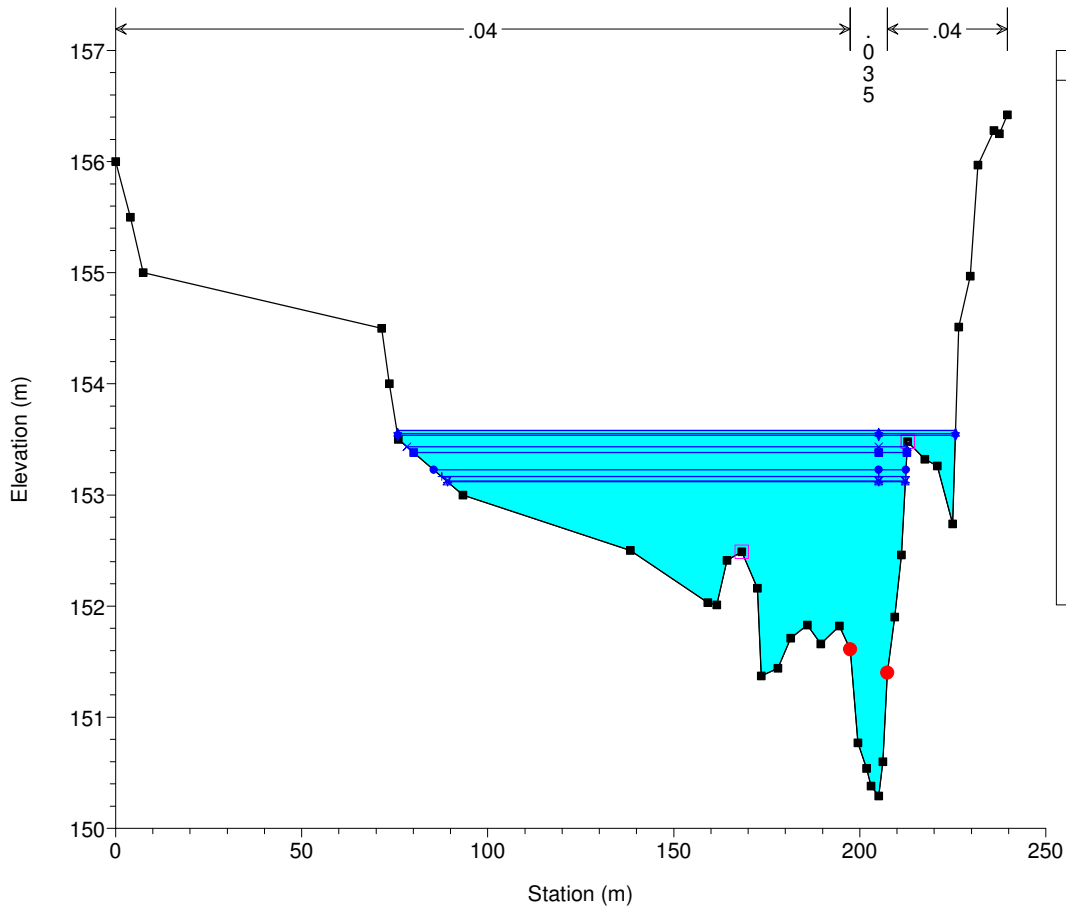
River = Pesa Reach = A RS = 324 PE324



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

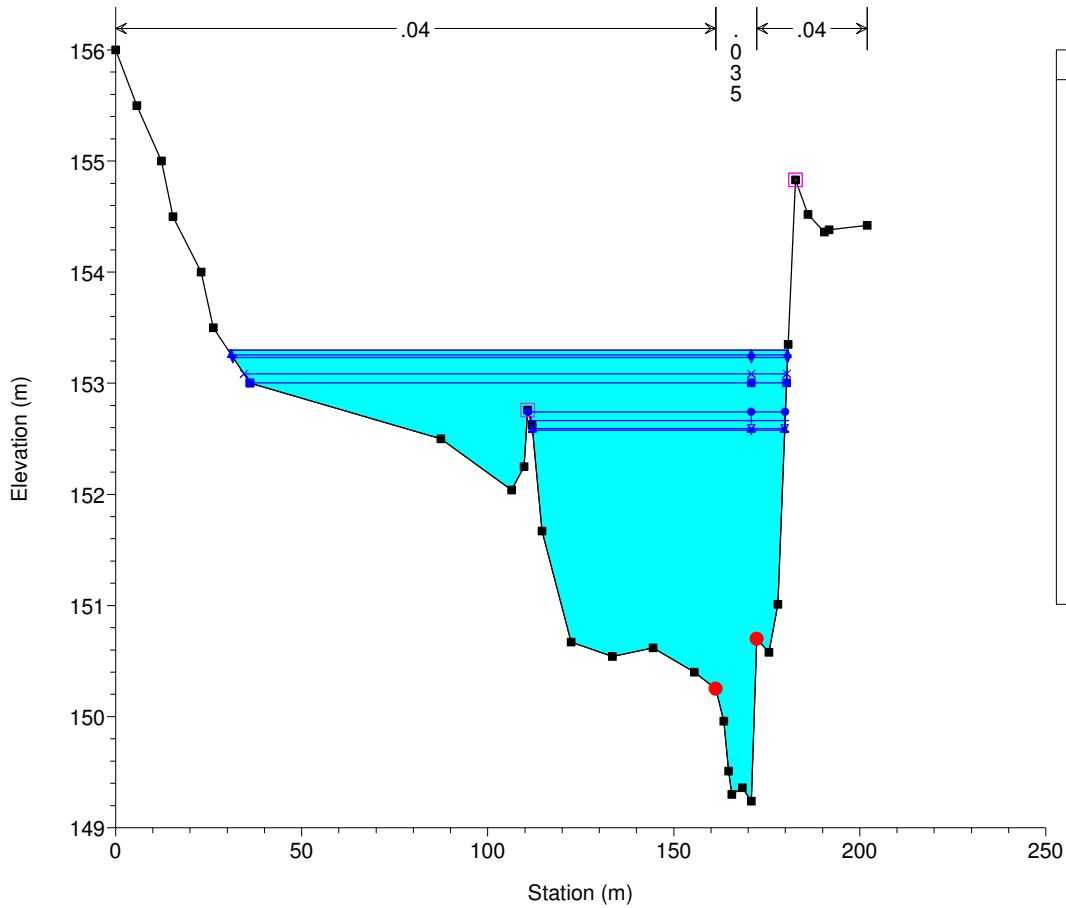
River = Pesa Reach = A RS = 323 PE323



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 322 PE322

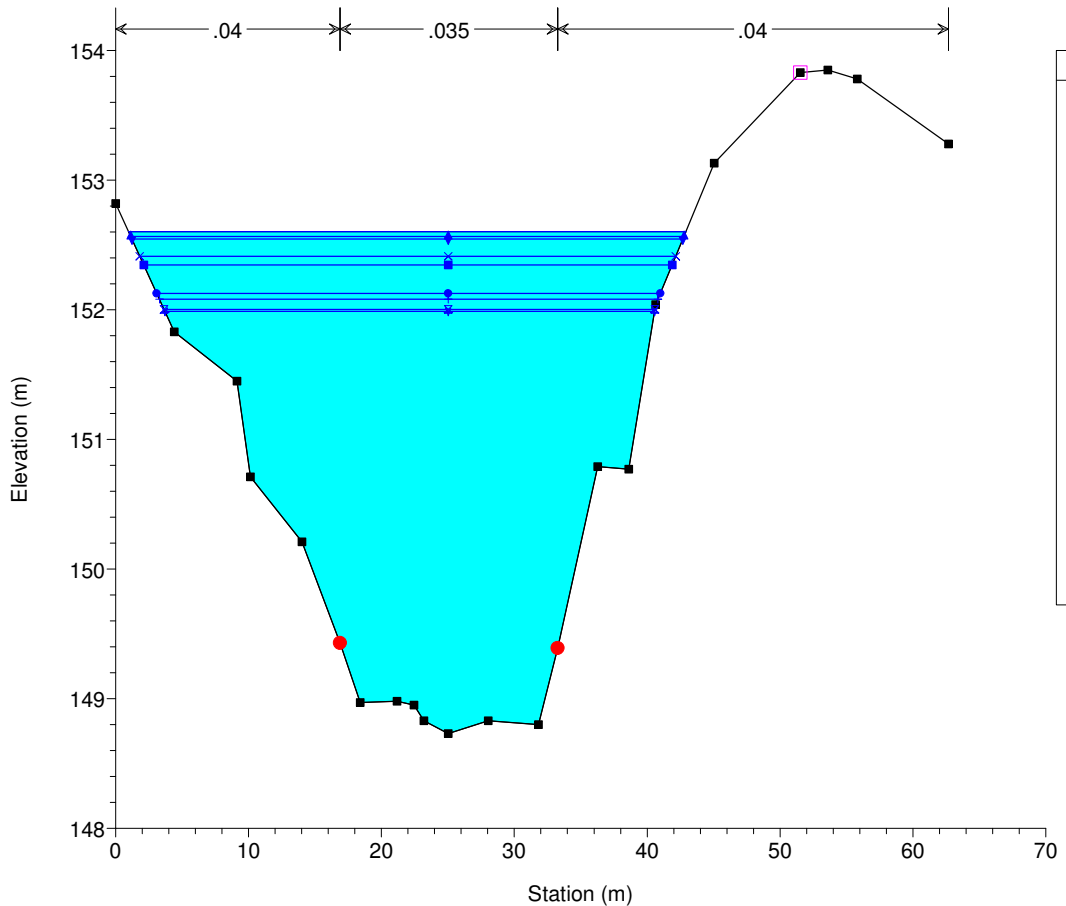


Legend	
WS Max WS - 200h6Pesa	▲
WS Max WS - 200h5.5Pesa	▼
WS Max WS - 200h5Pesa	×
WS Max WS - 200h3.5Pesa	■
WS Max WS - 200h3Pesa	●
WS Max WS - 200h2Pesa	+
WS Max WS - 200h1Pesa	×
WS Max WS - 200h1.5Pesa	▲
WS Max WS - 200h0.5Pesa	▼
Ground	■
Levee	□
Bank Sta	●

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 321 PE321

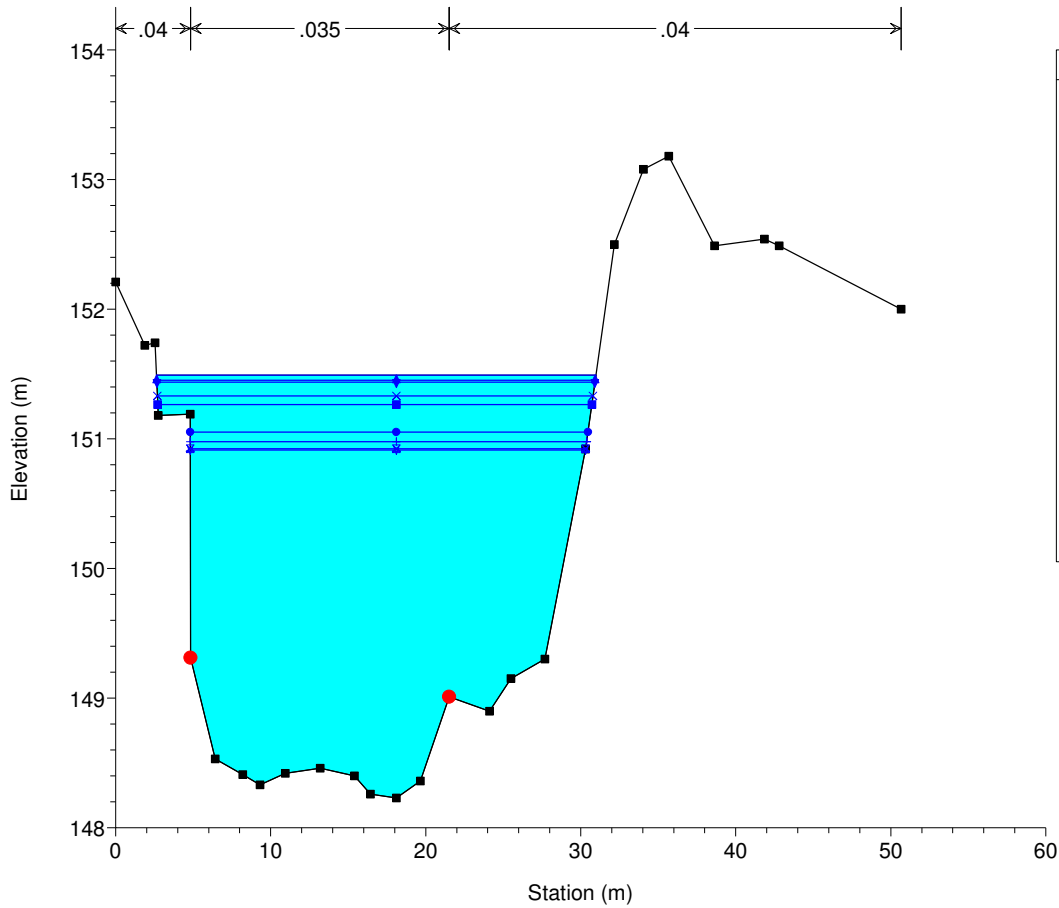


Legend	
WS Max WS - 200h6Pesa	▲
WS Max WS - 200h5.5Pesa	▼
WS Max WS - 200h5Pesa	×
WS Max WS - 200h3.5Pesa	■
WS Max WS - 200h3Pesa	●
WS Max WS - 200h2Pesa	+
WS Max WS - 200h1Pesa	×
WS Max WS - 200h1.5Pesa	▲
WS Max WS - 200h0.5Pesa	▼
Ground	■
Levee	□
Bank Sta	●

Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

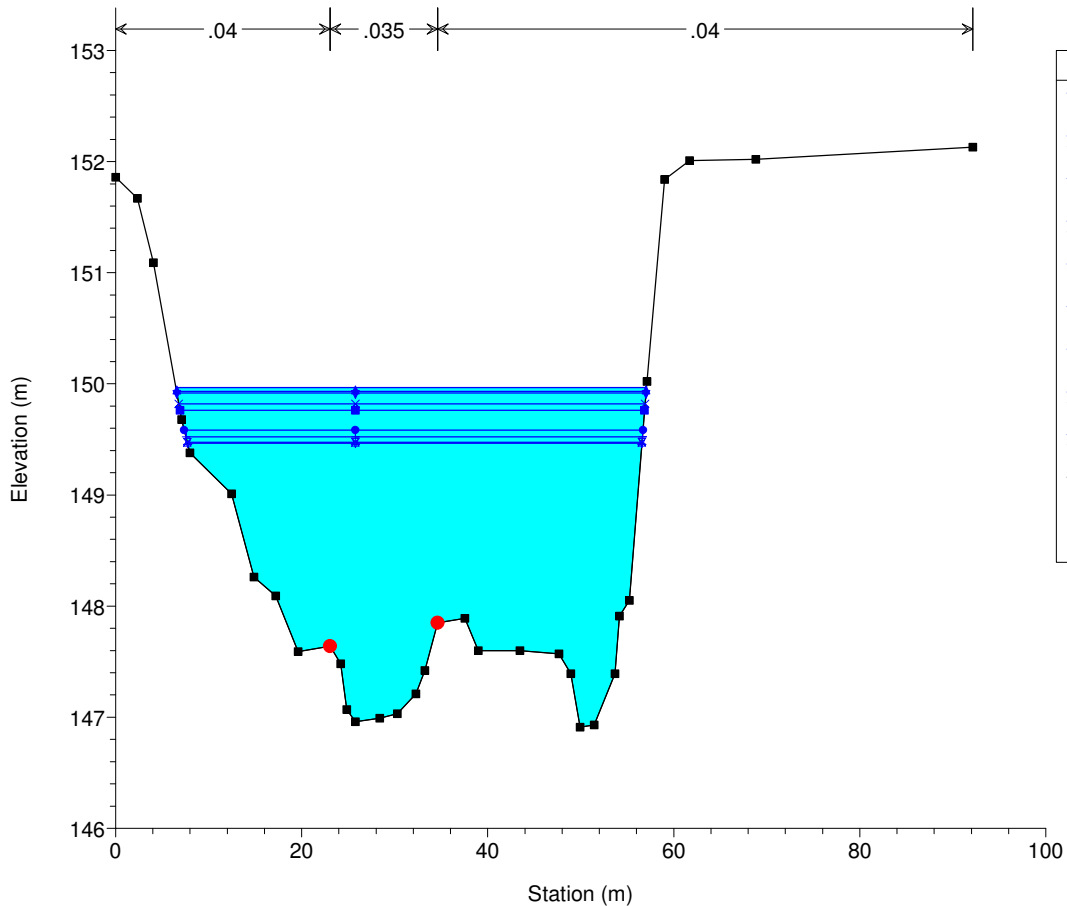
River = Pesa Reach = A RS = 320 PE320



Pesa Plan: 1) 200h6Pesa 2) 200h5.5Pesa 3) 200h5Pesa 4) 200h3.5Pesa 5) 200h3Pesa 6) 200h2Pesa 7) 200h1.5Pesa 8) 200h1Pesa 9) 200h0.5Pesa

Geom: Pesa

River = Pesa Reach = A RS = 318 PE318





ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Dati idraulici

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	359	Max WS	30h6	182.71	181.23	184.64	184.69	185.85	0.008351	5.17	41.00	19.04	0.97
A	359	Max WS	30h5.5	182.41	181.23	184.64	184.69	185.85	0.008350	5.16	40.96	19.04	0.97
A	359	Max WS	30h5	180.98	181.23	184.63	184.68	185.83	0.008345	5.15	40.74	19.00	0.97
A	359	Max WS	30h3.5Pesa	169.89	181.23	184.54	184.57	185.69	0.008280	5.02	39.05	18.73	0.96
A	359	Max WS	30h3Pesa	163.16	181.23	184.48	184.50	185.60	0.008306	4.95	37.91	18.54	0.96
A	359	Max WS	30h2Pesa	141.50	181.23	184.28	184.29	185.30	0.008254	4.70	34.34	17.94	0.95
A	359	Max WS	30h1.5Pesa	126.04	181.23	184.13	184.12	185.07	0.008287	4.51	31.61	17.47	0.94
A	359	Max WS	30h1Pesa	104.02	181.23	183.90	183.87	184.73	0.008228	4.20	27.69	16.77	0.92
A	359	Max WS	30h0.5Pesa	69.96	181.23	183.50	183.42	184.12	0.008001	3.60	21.20	15.41	0.88
A	358	Max WS	30h6	182.71	180.56	184.13		184.56	0.002481	2.96	65.91	25.76	0.54
A	358	Max WS	30h5.5	182.40	180.56	184.12		184.55	0.002482	2.96	65.83	25.76	0.54
A	358	Max WS	30h5	180.98	180.56	184.11		184.54	0.002484	2.95	65.47	25.74	0.54
A	358	Max WS	30h3.5Pesa	169.88	180.56	184.00		184.41	0.002480	2.88	62.77	25.58	0.54
A	358	Max WS	30h3Pesa	163.15	180.56	183.94		184.34	0.002475	2.83	61.11	25.39	0.53
A	358	Max WS	30h2Pesa	141.50	180.56	183.72		184.07	0.002453	2.67	55.62	24.05	0.52
A	358	Max WS	30h1.5Pesa	126.04	180.56	183.55		183.87	0.002442	2.55	51.60	23.43	0.52
A	358	Max WS	30h1Pesa	104.02	180.56	183.28		183.56	0.002453	2.37	45.47	22.81	0.51
A	358	Max WS	30h0.5Pesa	69.96	180.56	182.81		183.02	0.002500	2.04	35.04	21.72	0.49
A	357	Max WS	30h6	183.20	179.94	183.65		184.36	0.004298	3.86	52.12	21.59	0.71
A	357	Max WS	30h5.5	182.90	179.94	183.65		184.36	0.004295	3.85	52.07	21.59	0.71
A	357	Max WS	30h5	181.47	179.94	183.64		184.35	0.004289	3.84	51.82	21.56	0.71
A	357	Max WS	30h3.5Pesa	170.38	179.94	183.55		184.22	0.004198	3.73	49.97	21.33	0.69
A	357	Max WS	30h3Pesa	163.65	179.94	183.49		184.14	0.004145	3.66	48.80	21.19	0.69
A	357	Max WS	30h2Pesa	142.00	179.94	183.31		183.88	0.003968	3.42	44.91	20.71	0.67
A	357	Max WS	30h1.5Pesa	126.54	179.94	183.16		183.68	0.003862	3.25	41.86	20.32	0.65
A	357	Max WS	30h1Pesa	104.52	179.94	182.93		183.37	0.003694	2.99	37.26	19.73	0.63
A	357	Max WS	30h0.5Pesa	70.46	179.94	182.53		182.83	0.003286	2.48	29.61	18.16	0.57
A	356.523	Max WS	30h6	183.20	180.55	183.66	182.69	184.05	0.002559	2.80	68.14	33.40	0.53
A	356.523	Max WS	30h5.5	182.89	180.55	183.65	182.69	184.05	0.002559	2.80	68.04	33.38	0.53
A	356.523	Max WS	30h5	181.47	180.55	183.64	182.68	184.03	0.002561	2.79	67.62	33.28	0.53
A	356.523	Max WS	30h3.5Pesa	170.38	180.55	183.54	182.61	183.92	0.002572	2.73	64.26	32.49	0.53
A	356.523	Max WS	30h3Pesa	163.65	180.55	183.47	182.56	183.84	0.002577	2.69	62.24	30.82	0.53
A	356.523	Max WS	30h2Pesa	141.99	180.55	183.26	182.40	183.59	0.002567	2.54	56.47	24.66	0.52
A	356.523	Max WS	30h1.5Pesa	126.54	180.55	183.10	182.27	183.40	0.002585	2.43	52.40	24.28	0.51
A	356.523	Max WS	30h1Pesa	104.51	180.55	182.84	182.08	183.10	0.002647	2.27	46.17	23.69	0.51
A	356.523	Max WS	30h0.5Pesa	70.46	180.55	182.39	181.76	182.59	0.002754	1.97	35.75	22.65	0.50
A	356.522			Inl Struct									
A	356.521	Max WS	30h6	183.20	179.98	182.50		183.13	0.005847	3.54	51.86	22.58	0.73
A	356.521	Max WS	30h5.5	182.89	179.98	182.49		183.13	0.005848	3.54	51.81	22.57	0.73
A	356.521	Max WS	30h5	181.47	179.98	182.48		183.11	0.005853	3.53	51.54	22.54	0.73
A	356.521	Max WS	30h3.5Pesa	170.38	179.98	182.39		182.99	0.005852	3.44	49.48	21.55	0.73
A	356.521	Max WS	30h3Pesa	163.65	179.98	182.33		182.92	0.005816	3.39	48.30	21.52	0.72
A	356.521	Max WS	30h2Pesa	142.00	179.98	182.14		182.67	0.005765	3.21	44.19	21.44	0.71
A	356.521	Max WS	30h1.5Pesa	126.54	179.98	181.99		182.48	0.005808	3.09	40.94	21.37	0.71
A	356.521	Max WS	30h1Pesa	104.51	179.98	181.76		182.19	0.005956	2.91	35.94	21.26	0.71
A	356.521	Max WS	30h0.5Pesa	70.46	179.98	181.34		181.68	0.006553	2.59	27.16	21.07	0.73
A	355	Max WS	30h6	184.20	178.69	181.49	181.37	182.43	0.007245	4.36	45.13	22.73	0.87
A	355	Max WS	30h5.5	183.88	178.69	181.49	181.37	182.43	0.007239	4.35	45.09	22.72	0.87
A	355	Max WS	30h5	182.47	178.69	181.48	181.36	182.41	0.007220	4.34	44.88	22.67	0.87
A	355	Max WS	30h3.5Pesa	171.37	178.69	181.40	181.26	182.29	0.007122	4.22	43.12	22.28	0.86
A	355	Max WS	30h3Pesa	164.64	178.69	181.37		182.21	0.006892	4.11	42.41	22.11	0.84
A	355	Max WS	30h2Pesa	143.00	178.69	181.23		181.96	0.006470	3.82	39.25	21.38	0.81
A	355	Max WS	30h1.5Pesa	126.32	178.69	181.11		181.75	0.006055	3.57	36.84	20.80	0.78
A	355	Max WS	30h1Pesa	105.51	178.69	180.94		181.48	0.005669	3.27	33.27	19.85	0.74
A	355	Max WS	30h0.5Pesa	71.08	178.69	180.59		180.96	0.004946	2.69	26.74	17.92	0.67
A	354	Max WS	30h6	184.27	177.63	181.18		181.54	0.002945	3.06	73.47	31.16	0.57
A	354	Max WS	30h5.5	184.00	177.63	181.18		181.54	0.002946	3.06	73.39	31.16	0.57
A	354	Max WS	30h5	182.53	177.63	181.17		181.52	0.002945	3.05	73.02	31.13	0.57
A	354	Max WS	30h3.5Pesa	171.47	177.63	181.06		181.41	0.002997	3.00	69.71	30.89	0.57
A	354	Max WS	30h3Pesa	164.71	177.63	181.00		181.33	0.003011	2.97	67.80	30.76	0.57
A	354	Max WS	30h2Pesa	143.06	177.63	180.82		181.12	0.002920	2.80	62.47	29.98	0.56
A	354	Max WS	30h1.5Pesa	127.60	177.63	180.69		180.96	0.002876	2.67	58.35	29.72	0.55
A	354	Max WS	30h1Pesa	105.58	177.63	180.48		180.72	0.002773	2.48	52.32	29.68	0.53
A	354	Max WS	30h0.5Pesa	71.52	177.63	180.14		180.31	0.002502	2.11	42.14	29.57	0.49
A	353.513	Max WS	30h6	184.30	177.72	181.19	180.10	181.40	0.001552	2.04	95.81	40.26	0.40
A	353.513	Max WS	30h5.5	184.01	177.72	181.19	180.09	181.39	0.001553	2.04	95.70	40.26	0.40
A	353.513	Max WS	30h5	182.57	177.72	181.18	180.08	181.38	0.001556	2.03	95.17	40.26	0.40
A	353.513	Max WS	30h3.5Pesa	171.48	177.72	181.06	180.02	181.26	0.001617	2.01	90.37	40.24	0.41
A	353.513	Max WS	30h3Pesa	164.74	177.72	180.99	179.97	181.18	0.001645	1.99	87.63	40.22	0.41
A	353.513	Max WS	30h2Pesa	143.09	177.72	180.80	179.85	180.98	0.001653	1.89	80.01	40.19	0.41
A	353.513	Max WS	30h1.5Pesa	127.63	177.72	180.65	179.76	180.81	0.001676	1.81	74.00	39.65	0.40
A	353.513	Max WS	30h1Pesa	105.61	177.72	180.43	179.62	180.57	0.001699	1.69	65.32	39.60	0.40
A	353.513	Max WS	30h0.5Pesa	71.56	177.72	180.08	179.39	180.18	0.001652	1.45	51.31	39.53	0.38
A	353.512			Bridge									
A	353.511	Max WS	30h6	184.30	177.40	180.80		181.07	0.002627	2.31	81.77	41.29	0.51
A	353.511	Max WS	30h5.5	184.01	177.40	180.80		181.07	0.002627	2.31	81.69	41.28	0.51
A	353.511	Max WS	30h5	182.57	177.40	180.79		181.06	0.002622	2.30	81.34	41.28	0.51
A	353.511	Max WS	30h3.5Pesa	171.48	177.40	180.72		180.98	0.002586	2.24	78.56	41.21	0.50

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	353.511	Max WS	30h3Pesa	164.74	177.40	180.68		180.92	0.002562	2.19	76.85	41.17	0.50
A	353.511	Max WS	30h2Pesa	143.09	177.40	180.54		180.75	0.002491	2.06	71.02	41.04	0.49
A	353.511	Max WS	30h1.5Pesa	127.64	177.40	180.43		180.63	0.002433	1.95	66.62	40.94	0.48
A	353.511	Max WS	30h1Pesa	105.61	177.40	180.27		180.43	0.002343	1.79	59.89	40.78	0.46
A	353.511	Max WS	30h0.5Pesa	71.56	177.40	179.98		180.09	0.002160	1.50	48.17	40.30	0.43
A	352	Max WS	30h6	184.38	177.45	180.74		180.89	0.001012	1.74	112.14	46.84	0.34
A	352	Max WS	30h5.5	184.07	177.45	180.74		180.89	0.001011	1.74	112.05	46.84	0.34
A	352	Max WS	30h5	182.65	177.45	180.73		180.88	0.001006	1.73	111.65	46.81	0.34
A	352	Max WS	30h3.5Pesa	171.56	177.45	180.66		180.80	0.000971	1.67	108.47	46.60	0.33
A	352	Max WS	30h3Pesa	164.82	177.45	180.62		180.75	0.000949	1.64	106.49	46.47	0.33
A	352	Max WS	30h2Pesa	143.18	177.45	180.48		180.59	0.000871	1.51	99.95	46.04	0.31
A	352	Max WS	30h1.5Pesa	127.72	177.45	180.37		180.47	0.000811	1.41	95.02	45.72	0.30
A	352	Max WS	30h1Pesa	105.70	177.45	180.21		180.29	0.000715	1.27	87.58	45.34	0.27
A	352	Max WS	30h0.5Pesa	71.64	177.45	179.92		179.97	0.000537	1.00	74.74	44.68	0.23
A	351.523	Max WS	30h6	184.41	178.73	180.60	179.99	180.84	0.002772	2.21	85.55	52.63	0.53
A	351.523	Max WS	30h5.5	184.10	178.73	180.60	179.99	180.84	0.002772	2.21	85.45	52.62	0.53
A	351.523	Max WS	30h5	182.67	178.73	180.59	179.98	180.83	0.002775	2.20	85.00	52.60	0.53
A	351.523	Max WS	30h3.5Pesa	171.58	178.73	180.52	179.94	180.75	0.002795	2.15	81.49	52.21	0.53
A	351.523	Max WS	30h3Pesa	164.85	178.73	180.48	179.91	180.70	0.002807	2.12	79.33	51.89	0.53
A	351.523	Max WS	30h2Pesa	143.20	178.73	180.34	179.81	180.55	0.002845	2.01	72.27	50.85	0.52
A	351.523	Max WS	30h1.5Pesa	127.74	178.73	180.24	179.74	180.43	0.002879	1.93	67.05	49.37	0.52
A	351.523	Max WS	30h1Pesa	105.72	178.73	180.08	179.63	180.24	0.002931	1.80	59.40	48.89	0.51
A	351.523	Max WS	30h0.5Pesa	71.67	178.73	179.81	179.45	179.93	0.003023	1.56	46.40	47.95	0.50
A	351.522			Inl Struct									
A	351.521	Max WS	30h6	184.41	174.29	176.72		177.07	0.003751	2.89	74.20	43.35	0.63
A	351.521	Max WS	30h5.5	184.10	174.29	176.71		177.07	0.003753	2.88	74.11	43.35	0.63
A	351.521	Max WS	30h5	182.67	174.29	176.70		177.06	0.003762	2.88	73.69	43.35	0.63
A	351.521	Max WS	30h3.5Pesa	171.58	174.29	176.63		176.97	0.003829	2.83	70.37	43.33	0.63
A	351.521	Max WS	30h3Pesa	164.85	174.29	176.58		176.92	0.003875	2.81	68.31	43.32	0.63
A	351.521	Max WS	30h2Pesa	143.20	174.29	176.43		176.74	0.004016	2.71	61.61	43.25	0.64
A	351.521	Max WS	30h1.5Pesa	127.74	174.29	176.31		176.61	0.004139	2.63	56.58	43.11	0.64
A	351.521	Max WS	30h1Pesa	105.72	174.29	176.13		176.41	0.004434	2.53	48.72	42.89	0.65
A	351.521	Max WS	30h0.5Pesa	71.54	174.29	175.80		176.06	0.005254	2.36	34.95	41.77	0.68
A	350	Max WS	30h6	184.52	172.36	176.16		176.55	0.003320	3.44	74.11	37.47	0.61
A	350	Max WS	30h5.5	184.21	172.36	176.16		176.55	0.003320	3.44	74.02	37.45	0.61
A	350	Max WS	30h5	182.79	172.36	176.15		176.53	0.003324	3.43	73.57	37.37	0.61
A	350	Max WS	30h3.5Pesa	171.68	172.36	176.04		176.42	0.003434	3.41	69.48	36.65	0.62
A	350	Max WS	30h3Pesa	164.96	172.36	175.98		176.35	0.003454	3.37	67.35	36.27	0.62
A	350	Max WS	30h2Pesa	143.32	172.36	175.81		176.16	0.003357	3.20	61.46	35.19	0.61
A	350	Max WS	30h1.5Pesa	127.86	172.36	175.65		175.98	0.003511	3.15	55.66	34.10	0.61
A	350	Max WS	30h1Pesa	105.83	172.36	175.43		175.73	0.003533	2.98	48.42	32.68	0.61
A	350	Max WS	30h0.5Pesa	72.48	172.36	175.01		175.28	0.003834	2.75	35.57	29.18	0.61
A	349	Max WS	30h6	184.63	171.84	174.96		175.72	0.006178	3.93	49.97	24.78	0.81
A	349	Max WS	30h5.5	184.32	171.84	174.96		175.71	0.006174	3.93	49.93	24.78	0.81
A	349	Max WS	30h5	182.90	171.84	174.95		175.70	0.006159	3.91	49.71	24.75	0.81
A	349	Max WS	30h3.5Pesa	171.80	171.84	174.87		175.59	0.006081	3.81	47.87	24.56	0.80
A	349	Max WS	30h3Pesa	165.07	171.84	174.83		175.52	0.006018	3.74	46.76	24.45	0.79
A	349	Max WS	30h2Pesa	143.43	171.84	174.69		175.29	0.005681	3.48	43.38	24.04	0.76
A	349	Max WS	30h1.5Pesa	127.97	171.84	174.58		175.12	0.005430	3.29	40.80	23.61	0.74
A	349	Max WS	30h1Pesa	105.95	171.84	174.41		174.86	0.005074	2.99	36.79	22.91	0.70
A	349	Max WS	30h0.5Pesa	72.37	171.84	174.09		174.40	0.004553	2.50	29.67	21.62	0.64
A	348.513	Max WS	30h6	184.65	171.37	174.92	174.49	175.51	0.005105	3.71	58.22	26.90	0.74
A	348.513	Max WS	30h5.5	184.35	171.37	174.92	174.49	175.50	0.005103	3.70	58.16	26.90	0.74
A	348.513	Max WS	30h5	182.92	171.37	174.91	174.49	175.49	0.005094	3.69	57.90	26.88	0.73
A	348.513	Max WS	30h3.5Pesa	171.82	171.37	174.83	174.41	175.38	0.005013	3.59	55.86	26.77	0.73
A	348.513	Max WS	30h3Pesa	165.09	171.37	174.78	174.36	175.32	0.004964	3.52	54.59	26.70	0.72
A	348.513	Max WS	30h2Pesa	143.45	171.37	174.63	174.21	175.10	0.004766	3.30	50.44	26.47	0.70
A	348.513	Max WS	30h1.5Pesa	127.99	171.37	174.51	174.10	174.94	0.004604	3.14	47.33	26.29	0.68
A	348.513	Max WS	30h1Pesa	105.97	171.37	174.32	173.92	174.69	0.004377	2.88	42.49	26.02	0.65
A	348.513	Max WS	30h0.5Pesa	72.37	171.37	173.97	173.63	174.24	0.004293	2.50	33.23	25.48	0.63
A	348.512			Bridge									
A	348.511	Max WS	30h6	184.65	171.81	175.04		175.50	0.003644	3.40	66.64	29.67	0.65
A	348.511	Max WS	30h5.5	184.35	171.81	175.04		175.49	0.003644	3.40	66.57	29.67	0.65
A	348.511	Max WS	30h5	182.92	171.81	175.03		175.48	0.003640	3.39	66.25	29.66	0.65
A	348.511	Max WS	30h3.5Pesa	171.82	171.81	174.94		175.38	0.003614	3.31	63.72	29.58	0.64
A	348.511	Max WS	30h3Pesa	165.09	171.81	174.89		175.31	0.003598	3.26	62.16	29.53	0.64
A	348.511	Max WS	30h2Pesa	143.45	171.81	174.71		175.09	0.003533	3.08	56.96	29.27	0.62
A	348.511	Max WS	30h1.5Pesa	127.99	171.81	174.58		174.93	0.003488	2.95	52.99	28.98	0.61
A	348.511	Max WS	30h1Pesa	105.97	171.81	174.36		174.67	0.003430	2.75	46.93	28.53	0.60
A	348.511	Max WS	30h0.5Pesa	72.37	171.81	173.98		174.22	0.003470	2.42	36.07	27.72	0.58
A	347	Max WS	30h6	185.75	171.14	174.59		174.98	0.002791	3.20	73.63	32.45	0.57
A	347	Max WS	30h5.5	185.45	171.14	174.59		174.98	0.002789	3.20	73.56	32.44	0.57
A	347	Max WS	30h5	184.02	171.14	174.58		174.97	0.002784	3.19	73.23	32.41	0.57
A	347	Max WS	30h3.5Pesa	172.92	171.14	174.50		174.86	0.002740	3.11	70.56	32.17	0.56
A	347	Max WS	30h3Pesa	166.20	171.14	174.45		174.80	0.002716	3.06	68.88	32.02	0.56
A	347	Max WS	30h2Pesa	144.55	171.14	174.27		174.59	0.002618	2.89	63.41	31.52	0.54
A	347	Max WS	30h1.5Pesa	129.10	171.14	174.14		174.43	0.002554	2.77	59.18	31.11	0.53
A	347	Max WS	30h1Pesa	107.07	171.14	173.93		174.19	0.002431	2.56	52.89	30.36	0.51

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	347	Max WS	30h0.5Pesa	73.33	171.14	173.56		173.75	0.002256	2.22	41.69	28.86	0.48
A	346	Max WS	30h6	186.05	170.72	174.40		174.64	0.001578	2.57	98.64	46.28	0.44
A	346	Max WS	30h5.5	185.74	170.72	174.40		174.64	0.001578	2.57	98.53	46.27	0.44
A	346	Max WS	30h5	184.32	170.72	174.39		174.62	0.001577	2.56	98.01	46.26	0.44
A	346	Max WS	30h3.5Pesa	173.21	170.72	174.30		174.53	0.001578	2.52	93.80	46.11	0.44
A	346	Max WS	30h3Pesa	166.49	170.72	174.24		174.47	0.001581	2.49	91.14	46.02	0.44
A	346	Max WS	30h2Pesa	144.85	170.72	174.05		174.26	0.001583	2.40	82.46	45.72	0.43
A	346	Max WS	30h1.5Pesa	129.39	170.72	173.90		174.11	0.001588	2.33	75.86	45.50	0.43
A	346	Max WS	30h1Pesa	107.37	170.72	173.69		173.88	0.001575	2.21	66.08	44.53	0.42
A	346	Max WS	30h0.5Pesa	73.52	170.72	173.32		173.46	0.001351	1.86	50.89	35.83	0.38
A	345.526	Max WS	30h6	186.32	170.55	174.23	173.31	174.45	0.001872	2.55	95.06	41.65	0.45
A	345.526	Max WS	30h5.5	186.02	170.55	174.22	173.31	174.45	0.001872	2.55	94.96	41.65	0.45
A	345.526	Max WS	30h5	184.59	170.55	174.21	173.30	174.44	0.001871	2.54	94.51	41.65	0.45
A	345.526	Max WS	30h3.5Pesa	173.49	170.55	174.12	173.24	174.34	0.001868	2.49	90.78	41.57	0.45
A	345.526	Max WS	30h3Pesa	166.76	170.55	174.07	173.21	174.28	0.001865	2.46	88.46	41.45	0.45
A	345.526	Max WS	30h2Pesa	145.12	170.55	173.88	173.09	174.08	0.001855	2.35	80.75	41.07	0.44
A	345.526	Max WS	30h1.5Pesa	129.66	170.55	173.74	172.89	173.92	0.001848	2.27	74.98	40.78	0.44
A	345.526	Max WS	30h1Pesa	107.64	170.55	173.53	172.81	173.69	0.001835	2.14	66.30	40.34	0.43
A	345.526	Max WS	30h0.5Pesa	73.70	170.55	173.16	172.53	173.29	0.001795	1.90	51.50	39.57	0.42
A	345.524			Inl Struct									
A	345.521	Max WS	30h6	186.32	165.80	170.31		170.43	0.000520	1.60	124.90	35.41	0.26
A	345.521	Max WS	30h5.5	186.01	165.80	170.30		170.43	0.000520	1.60	124.78	35.41	0.26
A	345.521	Max WS	30h5	184.58	165.80	170.29		170.41	0.000519	1.60	124.20	35.41	0.26
A	345.521	Max WS	30h3.5Pesa	173.49	165.80	170.16		170.28	0.000513	1.55	119.84	35.37	0.25
A	345.521	Max WS	30h3Pesa	166.76	165.80	170.08		170.20	0.000510	1.53	117.03	35.35	0.25
A	345.521	Max WS	30h2Pesa	145.12	165.80	169.81		169.92	0.000504	1.44	107.48	35.26	0.25
A	345.521	Max WS	30h1.5Pesa	129.66	165.80	169.61		169.71	0.000494	1.37	100.47	34.65	0.24
A	345.521	Max WS	30h1Pesa	107.64	165.80	169.30		169.38	0.000485	1.27	89.67	34.50	0.24
A	345.521	Max WS	30h0.5Pesa	73.61	165.80	168.75		168.81	0.000472	1.09	70.71	33.83	0.23
A	344	Max WS	30h6	186.44	165.71	169.31		170.35	0.006914	5.07	45.87	18.16	0.90
A	344	Max WS	30h5.5	186.13	165.71	169.31		170.34	0.006911	5.07	45.83	18.15	0.90
A	344	Max WS	30h5	184.71	165.71	169.30		170.32	0.006904	5.05	45.60	18.14	0.90
A	344	Max WS	30h3.5Pesa	173.61	165.71	169.20		170.18	0.006831	4.92	43.86	18.01	0.89
A	344	Max WS	30h3Pesa	166.88	165.71	169.14		170.09	0.006771	4.84	42.81	17.93	0.88
A	344	Max WS	30h2Pesa	145.24	165.71	168.94		169.79	0.006633	4.58	39.19	17.67	0.86
A	344	Max WS	30h1.5Pesa	129.78	165.71	168.79		169.57	0.006515	4.37	36.51	17.46	0.85
A	344	Max WS	30h1Pesa	107.76	165.71	168.54		169.23	0.006403	4.07	32.32	17.14	0.83
A	344	Max WS	30h0.5Pesa	73.72	165.71	168.11		168.65	0.006355	3.56	24.95	16.57	0.80
A	343	Max WS	30h6	186.55	164.39	168.68		169.46	0.004820	4.37	53.83	22.50	0.72
A	343	Max WS	30h5.5	186.24	164.39	168.68		169.45	0.004817	4.37	53.77	22.49	0.72
A	343	Max WS	30h5	184.81	164.39	168.67		169.44	0.004811	4.36	53.49	22.44	0.72
A	343	Max WS	30h3.5Pesa	173.71	164.39	168.57		169.31	0.004742	4.25	51.34	22.08	0.71
A	343	Max WS	30h3Pesa	166.99	164.39	168.51		169.23	0.004712	4.19	49.96	21.84	0.71
A	343	Max WS	30h2Pesa	145.34	164.39	168.31		168.96	0.004547	3.96	45.62	21.07	0.69
A	343	Max WS	30h1.5Pesa	129.89	164.39	168.15		168.75	0.004428	3.79	42.35	20.44	0.67
A	343	Max WS	30h1Pesa	107.87	164.39	167.91		168.43	0.004192	3.50	37.59	19.50	0.65
A	343	Max WS	30h0.5Pesa	53.05	164.39	167.73		167.89	0.001304	1.87	34.21	18.80	0.36
A	342.5	Max WS	30h6	186.55	164.67	168.58		169.28	0.004269	4.12	55.87	23.42	0.71
A	342.5	Max WS	30h5.5	186.24	164.67	168.57		169.28	0.004269	4.11	55.81	23.41	0.71
A	342.5	Max WS	30h5	184.81	164.67	168.56		169.26	0.004264	4.10	55.52	23.37	0.71
A	342.5	Max WS	30h3.5Pesa	173.71	164.67	168.46		169.14	0.004222	4.00	53.26	23.02	0.70
A	342.5	Max WS	30h3Pesa	166.99	164.67	168.40		169.06	0.004189	3.94	51.90	22.81	0.69
A	342.5	Max WS	30h2Pesa	145.34	164.67	168.20		168.79	0.004087	3.73	47.32	22.06	0.68
A	342.5	Max WS	30h1.5Pesa	129.89	164.67	168.05		168.59	0.003995	3.56	43.97	21.49	0.67
A	342.5	Max WS	30h1Pesa	107.87	164.67	167.81		168.28	0.003841	3.30	38.97	20.61	0.64
A	342.5	Max WS	30h0.5Pesa	52.94	164.67	167.71		167.84	0.001067	1.70	37.02	20.26	0.34
A	342	Max WS	30h6	187.55	164.96	168.44		169.11	0.004334	3.97	56.52	24.13	0.72
A	342	Max WS	30h5.5	187.24	164.96	168.44		169.11	0.004332	3.97	56.46	24.13	0.72
A	342	Max WS	30h5	185.81	164.96	168.42		169.09	0.004333	3.96	56.16	24.09	0.72
A	342	Max WS	30h3.5Pesa	174.71	164.96	168.33		168.97	0.004316	3.87	53.84	23.77	0.71
A	342	Max WS	30h3Pesa	167.99	164.96	168.26		168.89	0.004320	3.82	52.36	23.56	0.71
A	342	Max WS	30h2Pesa	146.34	164.96	168.06		168.63	0.004321	3.64	47.52	22.87	0.70
A	342	Max WS	30h1.5Pesa	130.89	164.96	167.89		168.43	0.004343	3.50	43.87	22.33	0.70
A	342	Max WS	30h1Pesa	108.87	164.96	167.65		168.13	0.004355	3.28	38.54	21.52	0.69
A	342	Max WS	30h0.5Pesa	63.28	164.96	167.54		167.72	0.001760	2.02	36.22	21.16	0.43
A	341	Max WS	30h6	188.55	163.81	167.47		168.38	0.006342	4.85	50.21	22.74	0.85
A	341	Max WS	30h5.5	188.24	163.81	167.47		168.37	0.006343	4.84	50.14	22.73	0.85
A	341	Max WS	30h5	185.85	163.81	167.46		168.35	0.006304	4.81	49.80	22.69	0.84
A	341	Max WS	30h3.5Pesa	175.71	163.81	167.36		168.23	0.006403	4.75	47.57	22.41	0.85
A	341	Max WS	30h3Pesa	168.98	163.81	167.29		168.15	0.006448	4.71	46.14	22.23	0.85
A	341	Max WS	30h2Pesa	147.34	163.81	167.08		167.89	0.006555	4.53	41.55	21.59	0.84
A	341	Max WS	30h1.5Pesa	131.89	163.81	166.92		167.70	0.006731	4.42	37.99	21.07	0.85
A	341	Max WS	30h1Pesa	109.86	163.81	166.67		167.39	0.006907	4.21	32.90	20.12	0.84
A	341	Max WS	30h0.5Pesa	81.44	163.81	166.32		166.94	0.007001	3.84	26.18	18.45	0.83
A	340	Max WS	30h6	188.54	162.96	166.67		167.41	0.004203	4.13	55.35	22.63	0.71
A	340	Max WS	30h5.5	188.23	162.96	166.67		167.40	0.004203	4.13	55.28	22.62	0.71
A	340	Max WS	30h5	186.80	162.96	166.66		167.38	0.004208	4.12	54.95	22.56	0.71
A	340	Max WS	30h3.5Pesa	175.20	162.96	166.56		167.25	0.004129	4.00	52.80	22.19	0.70

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	340	Max WS	30h3Pesa	168.98	162.96	166.50		167.17	0.004124	3.95	51.44	21.95	0.70
A	340	Max WS	30h2Pesa	147.33	162.96	166.28		166.90	0.004076	3.75	46.76	21.11	0.69
A	340	Max WS	30h1.5Pesa	131.88	162.96	166.11		166.68	0.004072	3.61	43.18	20.47	0.68
A	340	Max WS	30h1Pesa	109.86	162.96	165.85		166.36	0.004064	3.38	37.93	19.69	0.67
A	340	Max WS	30h0.5Pesa	81.34	162.96	165.46		165.89	0.004082	3.05	30.57	18.54	0.65
A	339	Max WS	30h6	188.54	162.25	165.61	165.50	166.69	0.006978	4.73	43.80	19.21	0.90
A	339	Max WS	30h5.5	188.23	162.25	165.61	165.50	166.68	0.006977	4.73	43.75	19.20	0.90
A	339	Max WS	30h5	186.80	162.25	165.60	165.49	166.67	0.006969	4.71	43.54	19.16	0.90
A	339	Max WS	30h3.5Pesa	176.15	162.25	165.47	165.38	166.53	0.007303	4.68	41.12	18.71	0.91
A	339	Max WS	30h3Pesa	168.98	162.25	165.40	165.31	166.43	0.007404	4.62	39.78	18.50	0.91
A	339	Max WS	30h2Pesa	147.33	162.25	165.20	165.10	166.14	0.007420	4.39	36.18	17.94	0.90
A	339	Max WS	30h1.5Pesa	131.88	162.25	165.05	164.94	165.92	0.007455	4.22	33.50	17.50	0.89
A	339	Max WS	30h1Pesa	109.86	162.25	164.83		165.59	0.007407	3.93	29.69	16.87	0.88
A	339	Max WS	30h0.5Pesa	81.23	162.25	164.52		165.11	0.007051	3.44	24.70	16.06	0.83
A	338	Max WS	30h6	188.54	161.35	164.69		165.49	0.005127	4.13	53.08	28.51	0.77
A	338	Max WS	30h5.5	188.23	161.35	164.69		165.48	0.005127	4.13	53.01	28.49	0.77
A	338	Max WS	30h5	186.80	161.35	164.68		165.47	0.005120	4.11	52.71	28.40	0.77
A	338	Max WS	30h3.5Pesa	175.70	161.35	164.59		165.35	0.005067	4.01	50.40	27.70	0.76
A	338	Max WS	30h3Pesa	168.98	161.35	164.54		165.28	0.005068	3.96	48.85	27.21	0.76
A	338	Max WS	30h2Pesa	147.33	161.35	164.38		165.03	0.004813	3.71	44.66	24.57	0.73
A	338	Max WS	30h1.5Pesa	131.88	161.35	164.24		164.83	0.004660	3.52	41.47	22.36	0.72
A	338	Max WS	30h1Pesa	83.63	161.35	164.10		164.37	0.002283	2.37	38.54	20.86	0.50
A	338	Max WS	30h0.5Pesa	80.81	161.35	164.00		164.28	0.002508	2.41	36.41	20.44	0.52
A	337	Max WS	30h6	162.94	160.79	164.32		164.64	0.002101	2.62	69.85	30.72	0.48
A	337	Max WS	30h5.5	155.83	160.79	164.29		164.59	0.002012	2.54	68.72	30.60	0.46
A	337	Max WS	30h5	186.79	160.79	164.27		164.71	0.002951	3.07	68.23	30.54	0.56
A	337	Max WS	30h3.5Pesa	175.70	160.79	164.17		164.60	0.002964	3.01	65.23	30.22	0.56
A	337	Max WS	30h3Pesa	168.97	160.79	164.12		164.53	0.002926	2.95	63.74	30.05	0.55
A	337	Max WS	30h2Pesa	147.33	160.79	163.93		164.30	0.002907	2.81	57.95	29.41	0.55
A	337	Max WS	30h1.5Pesa	76.42	160.79	163.92		164.02	0.000792	1.46	57.69	29.38	0.29
A	337	Max WS	30h1Pesa	83.59	160.79	164.01		164.12	0.000836	1.54	60.34	29.68	0.29
A	337	Max WS	30h0.5Pesa	80.32	160.79	163.88		164.00	0.000922	1.57	56.62	29.26	0.31
A	336.666	Max WS	30h6	191.03	160.46	164.06		164.62	0.003574	3.47	63.03	29.91	0.63
A	336.666	Max WS	30h5.5	190.72	160.46	164.05		164.62	0.003575	3.47	62.95	29.89	0.63
A	336.666	Max WS	30h5	189.29	160.46	164.04		164.60	0.003582	3.46	62.55	29.84	0.63
A	336.666	Max WS	30h3.5Pesa	178.20	160.46	163.94		164.48	0.003627	3.41	59.50	29.43	0.63
A	336.666	Max WS	30h3Pesa	171.47	160.46	163.90		164.42	0.003550	3.34	58.28	29.27	0.62
A	336.666	Max WS	30h2Pesa	149.82	160.46	163.71		164.19	0.003518	3.18	52.79	28.51	0.61
A	336.666	Max WS	30h1.5Pesa	134.37	160.46	163.54		164.00	0.003595	3.08	48.16	27.79	0.61
A	336.666	Max WS	30h1Pesa	126.18	160.46	163.45		163.90	0.003653	3.03	45.57	27.38	0.61
A	336.666	Max WS	30h0.5Pesa	117.38	160.46	163.34		163.78	0.003754	2.99	42.58	26.90	0.62
A	336	Max WS	30h6	191.03	159.79	163.51	163.36	164.47	0.005865	4.56	49.66	26.74	0.82
A	336	Max WS	30h5.5	190.72	159.79	163.50	163.36	164.46	0.005866	4.56	49.59	26.70	0.82
A	336	Max WS	30h5	189.29	159.79	163.49	163.35	164.45	0.005863	4.54	49.28	26.55	0.82
A	336	Max WS	30h3.5Pesa	178.19	159.79	163.40	163.21	164.32	0.005837	4.45	46.89	25.33	0.81
A	336	Max WS	30h3Pesa	171.47	159.79	163.34	163.12	164.24	0.005796	4.38	45.53	24.60	0.81
A	336	Max WS	30h2Pesa	149.82	159.79	163.16		163.97	0.005648	4.14	41.16	22.13	0.79
A	336	Max WS	30h1.5Pesa	134.37	159.79	163.01		163.76	0.005570	3.96	37.97	20.63	0.78
A	336	Max WS	30h1Pesa	125.54	159.79	162.93		163.64	0.005427	3.83	36.39	19.93	0.76
A	336	Max WS	30h0.5Pesa	116.45	159.79	162.87		163.51	0.005093	3.66	35.21	19.39	0.74
A	335	Max WS	30h6	191.03	158.78	162.57	162.46	163.49	0.005727	4.56	51.17	25.05	0.79
A	335	Max WS	30h5.5	190.72	158.78	162.57	162.46	163.48	0.005723	4.56	51.12	25.04	0.79
A	335	Max WS	30h5	189.28	158.78	162.56	162.44	163.47	0.005711	4.54	50.86	25.00	0.79
A	335	Max WS	30h3.5Pesa	178.19	158.78	162.48		163.35	0.005596	4.43	48.89	24.69	0.78
A	335	Max WS	30h3Pesa	171.47	158.78	162.45		163.28	0.005415	4.32	48.05	24.55	0.76
A	335	Max WS	30h2Pesa	149.82	158.78	162.27		163.03	0.005213	4.09	43.82	23.87	0.74
A	335	Max WS	30h1.5Pesa	134.37	158.78	162.14		162.84	0.005017	3.90	40.74	23.33	0.72
A	335	Max WS	30h1Pesa	125.27	158.78	162.08		162.73	0.004730	3.74	39.41	23.07	0.70
A	335	Max WS	30h0.5Pesa	115.24	158.78	162.03		162.61	0.004339	3.53	38.11	22.82	0.67
A	334	Max WS	30h6	191.01	158.23	161.60		162.21	0.005283	4.14	63.07	34.77	0.76
A	334	Max WS	30h5.5	190.70	158.23	161.60		162.20	0.005283	4.13	62.99	34.73	0.76
A	334	Max WS	30h5	189.26	158.23	161.59		162.19	0.005280	4.12	62.61	34.57	0.76
A	334	Max WS	30h3.5Pesa	170.14	158.23	161.52		162.04	0.004666	3.82	60.31	33.60	0.71
A	334	Max WS	30h3Pesa	170.36	158.23	161.52		162.04	0.004680	3.82	60.30	33.59	0.71
A	334	Max WS	30h2Pesa	149.82	158.23	161.36		161.85	0.004679	3.68	55.03	32.93	0.70
A	334	Max WS	30h1.5Pesa	134.37	158.23	161.28		161.72	0.004321	3.47	52.39	32.64	0.67
A	334	Max WS	30h1Pesa	121.89	158.23	161.27		161.64	0.003588	3.16	52.22	32.62	0.61
A	334	Max WS	30h0.5Pesa	113.25	158.23	161.19		161.54	0.003615	3.10	49.41	32.31	0.61
A	333	Max WS	30h6	191.01	158.01	160.81	160.85	161.68	0.006637	4.44	53.90	36.10	0.86
A	333	Max WS	30h5.5	190.70	158.01	160.81	160.85	161.68	0.006638	4.44	53.82	36.07	0.86
A	333	Max WS	30h5	189.26	158.01	160.80	160.84	161.66	0.006630	4.43	53.50	35.94	0.86
A	333	Max WS	30h3.5Pesa	178.18	158.01	160.75	160.75	161.56	0.006442	4.30	51.44	35.09	0.85
A	333	Max WS	30h3Pesa	174.00	158.01	160.69	160.71	161.52	0.006724	4.33	49.50	34.27	0.86
A	333	Max WS	30h2Pesa	149.80	158.01	160.49	160.40	161.28	0.006942	4.17	42.89	30.03	0.86
A	333	Max WS	30h1.5Pesa	117.72	158.01	160.41		160.94	0.004892	3.42	40.56	28.23	0.72
A	333	Max WS	30h1Pesa	118.27	158.01	160.55		161.01	0.003868	3.17	45.03	31.68	0.65
A	333	Max WS	30h0.5Pesa	113.83	158.01	160.48		160.94	0.004025	3.17	42.82	29.97	0.66
A	332	Max WS	30h6	192.00	155.90	159.89		160.73	0.004877	4.37	53.28	23.83	0.73
A	332	Max WS	30h5.5	191.71	155.90	159.89		160.73	0.004876	4.36	53.22	23.82	0.73

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	332	Max WS	30h5	190.25	155.90	159.87		160.71	0.004866	4.35	52.95	23.78	0.73
A	332	Max WS	30h3.5Pesa	178.10	155.90	159.80		160.59	0.004673	4.20	51.12	23.55	0.71
A	332	Max WS	30h3Pesa	174.03	155.90	159.76		160.54	0.004675	4.17	50.21	23.43	0.71
A	332	Max WS	30h2Pesa	150.80	155.90	159.57		160.27	0.004435	3.92	45.85	22.85	0.69
A	332	Max WS	30h1.5Pesa	135.46	155.90	159.44		160.08	0.004234	3.73	42.91	22.46	0.67
A	332	Max WS	30h1Pesa	146.13	155.90	159.53		160.21	0.004382	3.86	44.94	22.73	0.68
A	332	Max WS	30h0.5Pesa	136.99	155.90	159.45		160.10	0.004261	3.75	43.19	22.50	0.67
A	331	Max WS	30h6	192.00	155.39	159.04		159.64	0.005691	4.22	62.84	34.03	0.73
A	331	Max WS	30h5.5	191.71	155.39	159.04		159.64	0.005689	4.22	62.77	34.02	0.73
A	331	Max WS	30h5	190.25	155.39	159.04		159.63	0.005647	4.20	62.59	33.98	0.73
A	331	Max WS	30h3.5Pesa	179.18	155.39	158.96		159.53	0.005629	4.13	59.90	33.38	0.72
A	331	Max WS	30h3Pesa	173.51	155.39	158.91		159.48	0.005626	4.09	58.48	33.05	0.72
A	331	Max WS	30h2Pesa	150.80	155.39	158.75		159.28	0.005499	3.91	53.12	31.93	0.71
A	331	Max WS	30h1.5Pesa	135.42	155.39	158.62		159.13	0.005531	3.81	49.06	31.46	0.71
A	331	Max WS	30h1Pesa	145.98	155.39	158.71		159.23	0.005468	3.87	52.00	31.80	0.71
A	331	Max WS	30h0.5Pesa	136.67	155.39	158.63		159.14	0.005540	3.82	49.36	31.50	0.71
A	330	Max WS	30h6	192.00	154.66	157.97		158.67	0.005704	4.38	58.61	30.25	0.80
A	330	Max WS	30h5.5	191.71	154.66	157.97		158.67	0.005705	4.38	58.55	30.24	0.80
A	330	Max WS	30h5	190.24	154.66	157.96		158.65	0.005707	4.37	58.22	30.20	0.80
A	330	Max WS	30h3.5Pesa	179.17	154.66	157.88		158.55	0.005704	4.29	55.83	29.93	0.79
A	330	Max WS	30h3Pesa	173.37	154.66	157.84		158.50	0.005678	4.24	54.64	29.79	0.79
A	330	Max WS	30h2Pesa	150.80	154.66	157.66		158.28	0.005795	4.10	49.16	29.14	0.79
A	330	Max WS	30h1.5Pesa	135.40	154.66	157.54		158.12	0.005715	3.96	45.76	28.73	0.78
A	330	Max WS	30h1Pesa	145.84	154.66	157.62		158.23	0.005715	4.04	48.25	29.03	0.78
A	330	Max WS	30h0.5Pesa	136.16	154.66	157.54		158.13	0.005715	3.96	45.95	28.76	0.78
A	329	Max WS	30h6	184.74	153.45	156.84		157.66	0.005968	4.44	51.76	25.53	0.79
A	329	Max WS	30h5.5	191.70	153.45	156.82	156.73	157.72	0.006577	4.65	51.32	25.46	0.83
A	329	Max WS	30h5	190.24	153.45	156.81	156.72	157.70	0.006543	4.63	51.12	25.43	0.83
A	329	Max WS	30h3.5Pesa	179.17	153.45	156.75		157.59	0.006277	4.48	49.65	25.17	0.81
A	329	Max WS	30h3Pesa	173.21	153.45	156.72		157.53	0.006141	4.40	48.81	25.03	0.80
A	329	Max WS	30h2Pesa	120.66	153.45	156.60		157.05	0.003521	3.24	45.86	24.51	0.60
A	329	Max WS	30h1.5Pesa	133.86	153.45	156.66		157.17	0.004012	3.51	47.20	24.74	0.64
A	329	Max WS	30h1Pesa	145.64	153.45	156.75		157.31	0.004151	3.64	49.64	25.17	0.66
A	329	Max WS	30h0.5Pesa	96.57	153.45	156.71		156.96	0.001946	2.47	48.47	24.97	0.45
A	328	Max WS	30h6	193.00	152.61	156.34		156.71	0.002716	3.07	79.81	38.59	0.56
A	328	Max WS	30h5.5	192.70	152.61	156.33		156.71	0.002714	3.06	79.74	38.58	0.56
A	328	Max WS	30h5	191.24	152.61	156.32		156.69	0.002709	3.05	79.37	38.55	0.56
A	328	Max WS	30h3.5Pesa	180.17	152.61	156.25		156.61	0.002660	2.98	76.62	38.34	0.55
A	328	Max WS	30h3Pesa	174.08	152.61	156.21		156.56	0.002627	2.93	75.12	38.22	0.54
A	328	Max WS	30h2Pesa	110.72	152.61	156.18		156.32	0.001115	1.90	73.87	38.12	0.35
A	328	Max WS	30h1.5Pesa	109.51	152.61	156.18		156.32	0.001091	1.88	73.86	38.12	0.35
A	328	Max WS	30h1Pesa	117.78	152.61	156.19		156.35	0.001247	2.01	74.18	38.14	0.37
A	328	Max WS	30h0.5Pesa	110.50	152.61	156.29		156.42	0.000944	1.79	78.19	38.46	0.33
A	327.513	Max WS	30h6	193.00	152.69	156.39	155.71	156.66	0.002254	2.81	96.97	55.30	0.49
A	327.513	Max WS	30h5.5	192.70	152.69	156.39	155.71	156.66	0.002254	2.81	96.85	55.29	0.49
A	327.513	Max WS	30h5	191.24	152.69	156.38	155.70	156.65	0.002256	2.81	96.26	55.20	0.49
A	327.513	Max WS	30h3.5Pesa	180.17	152.69	156.30	155.63	156.56	0.002269	2.77	91.81	54.53	0.49
A	327.513	Max WS	30h3Pesa	174.07	152.69	156.25	155.60	156.51	0.002271	2.75	89.40	54.17	0.49
A	327.513	Max WS	30h2Pesa	110.64	152.69	156.19	155.16	156.30	0.001013	1.81	85.96	53.05	0.33
A	327.513	Max WS	30h1.5Pesa	110.44	152.69	156.19	155.16	156.30	0.001009	1.81	85.97	53.06	0.33
A	327.513	Max WS	30h1Pesa	92.01	152.69	156.19	155.01	156.27	0.000700	1.50	86.00	53.08	0.27
A	327.513	Max WS	30h0.5Pesa	104.69	152.69	156.19	155.12	156.29	0.000902	1.71	86.18	53.17	0.31
A	327.512			Bridge									
A	327.511	Max WS	30h6	193.00	152.60	155.68	155.80	156.45	0.008394	4.58	59.57	46.49	0.88
A	327.511	Max WS	30h5.5	192.70	152.60	155.68	155.80	156.45	0.008393	4.58	59.50	46.48	0.88
A	327.511	Max WS	30h5	191.24	152.60	155.67	155.80	156.44	0.008393	4.57	59.15	46.42	0.88
A	327.511	Max WS	30h3.5Pesa	180.17	152.60	155.62	155.74	156.37	0.008382	4.50	56.43	46.00	0.87
A	327.511	Max WS	30h3Pesa	174.05	152.60	155.58	155.71	156.33	0.008361	4.46	54.93	45.76	0.87
A	327.511	Max WS	30h2Pesa	151.79	152.60	155.47	155.59	156.17	0.008161	4.27	49.62	44.12	0.85
A	327.511	Max WS	30h1.5Pesa	150.56	152.60	155.46	155.58	156.16	0.008164	4.27	49.28	44.02	0.85
A	327.511	Max WS	30h1Pesa	162.05	152.60	155.53	155.65	156.24	0.008162	4.34	52.33	44.96	0.86
A	327.511	Max WS	30h0.5Pesa	151.58	152.60	155.47	155.59	156.17	0.008107	4.26	49.70	44.15	0.85
A	326	Max WS	30h6	193.00	152.07	155.12	155.30	155.90	0.007093	4.57	64.11	57.62	0.89
A	326	Max WS	30h5.5	192.69	152.07	155.12	155.29	155.90	0.007089	4.57	64.04	57.61	0.88
A	326	Max WS	30h5	191.24	152.07	155.11	155.29	155.89	0.007075	4.56	63.69	57.57	0.88
A	326	Max WS	30h3.5Pesa	180.17	152.07	155.06	155.24	155.82	0.007060	4.49	60.61	57.20	0.88
A	326	Max WS	30h3Pesa	174.02	152.07	155.03	155.21	155.79	0.007033	4.45	58.92	57.00	0.88
A	326	Max WS	30h2Pesa	151.79	152.07	154.92	155.10	155.65	0.006905	4.28	52.60	56.24	0.86
A	326	Max WS	30h1.5Pesa	150.55	152.07	154.91	155.09	155.64	0.006890	4.27	52.26	56.20	0.86
A	326	Max WS	30h1Pesa	162.02	152.07	154.97	155.15	155.71	0.006945	4.36	55.65	56.61	0.87
A	326	Max WS	30h0.5Pesa	150.35	152.07	154.92	155.09	155.63	0.006716	4.23	52.81	56.27	0.85
A	325	Max WS	30h6	192.99	151.92	154.35	154.34	154.88	0.007575	4.00	69.48	59.50	0.88
A	325	Max WS	30h5.5	192.69	151.92	154.35	154.34	154.88	0.007567	4.00	69.42	59.46	0.88
A	325	Max WS	30h5	191.24	151.92	154.35	154.34	154.87	0.007550	3.98	69.08	59.23	0.88
A	325	Max WS	30h3.5Pesa	180.17	151.92	154.30		154.81	0.007424	3.90	66.59	58.54	0.87
A	325	Max WS	30h3Pesa	173.94	151.92	154.28		154.77	0.007355	3.85	65.16	58.26	0.86
A	325	Max WS	30h2Pesa	151.79	151.92	154.19		154.64	0.007088	3.66	59.92	57.20	0.84
A	325	Max WS	30h1.5Pesa	150.53	151.92	154.18		154.63	0.007102	3.66	59.52	57.12	0.84
A	325	Max WS	30h1Pesa	161.95	151.92	154.23		154.70	0.007194	3.75	62.42	57.71	0.85

HEC-RAS River: Pesa Reach: A Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	325	Max WS	30h0.5Pesa	151.01	151.92	154.20		154.63	0.006897	3.62	60.29	57.28	0.83
A	324	Max WS	30h6	192.99	150.83	153.59	153.63	153.99	0.005149	3.65	94.97	111.70	0.75
A	324	Max WS	30h5.5	192.69	150.83	153.59	153.63	153.99	0.005147	3.64	94.87	111.69	0.75
A	324	Max WS	30h5	191.23	150.83	153.58	153.63	153.98	0.005146	3.64	94.32	111.65	0.75
A	324	Max WS	30h3.5Pesa	180.17	150.83	153.54	153.60	153.94	0.005133	3.60	90.11	111.35	0.74
A	324	Max WS	30h3Pesa	173.87	150.83	153.52	153.58	153.92	0.005114	3.57	87.73	111.19	0.74
A	324	Max WS	30h2Pesa	151.79	150.83	153.45	153.51	153.83	0.004908	3.42	79.71	109.67	0.72
A	324	Max WS	30h1.5Pesa	148.76	150.83	153.46	153.49	153.81	0.004637	3.33	80.28	109.80	0.70
A	324	Max WS	30h1Pesa	161.88	150.83	153.48	153.54	153.87	0.005047	3.50	83.20	110.52	0.73
A	324	Max WS	30h0.5Pesa	146.91	150.83	153.46	153.49	153.80	0.004430	3.26	80.99	109.98	0.69
A	323	Max WS	30h6	192.99	150.29	152.88	153.02	153.38	0.008148	4.21	83.16	107.61	0.91
A	323	Max WS	30h5.5	192.68	150.29	152.88	153.02	153.38	0.008151	4.21	83.03	107.50	0.91
A	323	Max WS	30h5	191.23	150.29	152.87	152.97	153.37	0.008170	4.21	82.37	106.94	0.91
A	323	Max WS	30h3.5Pesa	177.24	150.29	152.85	152.92	153.31	0.007442	3.99	80.21	105.07	0.87
A	323	Max WS	30h3Pesa	173.72	150.29	152.82	152.91	153.29	0.007711	4.03	77.49	102.67	0.88
A	323	Max WS	30h2Pesa	151.78	150.29	152.68	152.56	153.21	0.009013	4.15	63.58	89.41	0.94
A	323	Max WS	30h1.5Pesa	151.16	150.29	152.67	152.56	153.21	0.009079	4.16	63.12	88.93	0.94
A	323	Max WS	30h1Pesa	161.56	150.29	152.74	152.56	153.25	0.008668	4.15	68.65	94.46	0.93
A	323	Max WS	30h0.5Pesa	151.34	150.29	152.68	152.56	153.21	0.009018	4.15	63.39	89.21	0.94
A	322	Max WS	30h6	192.97	149.24	152.33		152.48	0.001709	2.20	119.81	66.77	0.43
A	322	Max WS	30h5.5	192.66	149.24	152.33		152.48	0.001710	2.20	119.65	66.76	0.43
A	322	Max WS	30h5	191.21	149.24	152.31		152.47	0.001721	2.20	118.82	66.71	0.43
A	322	Max WS	30h3.5Pesa	180.15	149.24	152.22		152.37	0.001807	2.21	112.49	66.33	0.44
A	322	Max WS	30h3Pesa	173.57	149.24	152.16		152.32	0.001857	2.20	108.82	66.10	0.44
A	322	Max WS	30h2Pesa	151.77	149.24	151.97		152.12	0.002081	2.21	96.02	65.33	0.46
A	322	Max WS	30h1.5Pesa	150.52	149.24	151.97		152.12	0.002024	2.19	96.38	65.35	0.45
A	322	Max WS	30h1Pesa	161.32	149.24	152.07		152.22	0.001929	2.19	102.45	65.72	0.45
A	322	Max WS	30h0.5Pesa	151.12	149.24	151.97		152.12	0.002057	2.20	96.12	65.33	0.46
A	321	Max WS	30h6	192.97	148.73	151.73		152.28	0.003845	3.51	65.72	34.52	0.67
A	321	Max WS	30h5.5	192.66	148.73	151.73		152.28	0.003845	3.51	65.64	34.49	0.67
A	321	Max WS	30h5	191.20	148.73	151.72		152.26	0.003843	3.50	65.26	34.33	0.67
A	321	Max WS	30h3.5Pesa	180.15	148.73	151.63		152.16	0.003816	3.42	62.44	33.16	0.66
A	321	Max WS	30h3Pesa	173.57	148.73	151.59		152.09	0.003786	3.36	60.83	32.48	0.66
A	321	Max WS	30h2Pesa	151.76	148.73	151.42		151.87	0.003666	3.17	55.55	30.48	0.64
A	321	Max WS	30h1.5Pesa	150.14	148.73	151.45		151.88	0.003402	3.08	56.61	30.60	0.62
A	321	Max WS	30h1Pesa	161.14	148.73	151.52		151.99	0.003549	3.21	58.86	31.61	0.63
A	321	Max WS	30h0.5Pesa	150.90	148.73	151.43		151.87	0.003542	3.13	56.00	30.53	0.63
A	320	Max WS	30h6	193.97	148.23	150.72		151.57	0.007836	4.30	49.59	25.18	0.91
A	320	Max WS	30h5.5	193.66	148.23	150.72		151.57	0.007833	4.30	49.54	25.18	0.91
A	320	Max WS	30h5	192.20	148.23	150.71		151.55	0.007821	4.28	49.33	25.17	0.91
A	320	Max WS	30h3.5Pesa	181.15	148.23	150.65		151.45	0.007715	4.17	47.69	25.06	0.90
A	320	Max WS	30h3Pesa	174.56	148.23	150.61		151.38	0.007644	4.10	46.71	25.00	0.89
A	320	Max WS	30h2Pesa	152.76	148.23	150.47		151.16	0.007453	3.87	43.22	24.77	0.87
A	320	Max WS	30h1.5Pesa	153.60	148.23	150.47		151.17	0.007462	3.88	43.35	24.78	0.87
A	320	Max WS	30h1Pesa	163.67	148.23	150.54		151.27	0.007562	3.99	44.97	24.88	0.88
A	320	Max WS	30h0.5Pesa	153.06	148.23	150.47		151.16	0.007457	3.88	43.26	24.77	0.87
A	318	Max WS	30h6	193.97	146.96	149.29	148.90	149.68	0.005030	3.28	75.02	47.35	0.72
A	318	Max WS	30h5.5	193.66	146.96	149.29	148.90	149.67	0.005030	3.28	74.94	47.32	0.72
A	318	Max WS	30h5	192.20	146.96	149.28	148.89	149.66	0.005032	3.27	74.53	47.21	0.72
A	318	Max WS	30h3.5Pesa	181.14	146.96	149.21	148.83	149.58	0.005037	3.20	71.49	46.37	0.72
A	318	Max WS	30h3Pesa	174.55	146.96	149.18	148.80	149.54	0.005029	3.16	69.71	45.86	0.72
A	318	Max WS	30h2Pesa	152.76	146.96	149.04	148.70	149.37	0.005007	3.01	63.65	44.10	0.71
A	318	Max WS	30h1.5Pesa	153.57	146.96	149.05	148.70	149.37	0.005008	3.01	63.88	44.17	0.71
A	318	Max WS	30h1Pesa	163.61	146.96	149.11	148.75	149.45	0.004999	3.08	66.79	45.02	0.71
A	318	Max WS	30h0.5Pesa	153.02	146.96	149.04	148.70	149.37	0.005009	3.01	63.72	44.12	0.71



ALLEGATI

MODELLAZIONE HEC-RAS 4.1.0 "Pesa idrologico"

TORRENTE PESA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 0.5h, 1h, 1.5h, 2h, 3h, 3.5h, 5h, 5.5h, 6h

Dati idraulici

HEC-RAS River: Pesa Reach: A Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	359	Max WS	200h6Pesa	318.28	181.23	185.67	185.70	187.37	0.008167	6.27	62.50	24.25	1.01
A	359	Max WS	200h5.5Pesa	316.95	181.23	185.66	185.69	187.36	0.008162	6.26	62.31	24.19	1.01
A	359	Max WS	200h5Pesa	313.69	181.23	185.64	185.66	187.33	0.008152	6.23	61.82	24.03	1.01
A	359	Max WS	200h3.5Pesa	291.33	181.23	185.45	185.42	187.08	0.008373	6.11	57.46	21.96	1.02
A	359	Max WS	200h3Pesa	278.42	181.23	185.36	185.41	186.94	0.008352	6.00	55.49	21.24	1.01
A	359	Max WS	200h2Pesa	239.69	181.23	185.09	185.21	186.52	0.008343	5.69	49.83	20.41	1.00
A	359	Max WS	200h1.5Pesa	212.60	181.23	184.88	184.96	186.22	0.008351	5.45	45.70	19.78	0.99
A	359	Max WS	200h1Pesa	175.76	181.23	184.59	184.63	185.76	0.008316	5.09	39.95	18.87	0.97
A	359	Max WS	200h0.5Pesa	121.15	181.23	184.08	184.07	185.00	0.008247	4.44	30.79	17.32	0.93
A	358	Max WS	200h6Pesa	318.27	180.56	185.14		185.83	0.002762	3.78	94.51	32.59	0.60
A	358	Max WS	200h5.5Pesa	316.95	180.56	185.13		185.82	0.002761	3.77	94.23	32.58	0.60
A	358	Max WS	200h5Pesa	313.68	180.56	185.11		185.79	0.002758	3.76	93.56	32.58	0.60
A	358	Max WS	200h3.5Pesa	291.31	180.56	184.97		185.61	0.002736	3.65	88.83	32.53	0.59
A	358	Max WS	200h3Pesa	278.41	180.56	184.88		185.50	0.002689	3.57	86.14	30.66	0.58
A	358	Max WS	200h2Pesa	239.69	180.56	184.61		185.14	0.002532	3.29	78.55	26.51	0.56
A	358	Max WS	200h1.5Pesa	212.59	180.56	184.40		184.87	0.002489	3.13	72.89	26.18	0.55
A	358	Max WS	200h1Pesa	175.75	180.56	184.06		184.48	0.002485	2.92	64.18	25.66	0.54
A	358	Max WS	200h0.5Pesa	121.14	180.56	183.49		183.80	0.002445	2.51	50.26	23.30	0.52
A	357	Max WS	200h6Pesa	318.77	179.94	184.48	184.10	185.74	0.005589	5.17	72.08	30.09	0.84
A	357	Max WS	200h5.5Pesa	317.44	179.94	184.47	184.11	185.73	0.005582	5.16	71.87	30.09	0.84
A	357	Max WS	200h5Pesa	314.17	179.94	184.46	184.13	185.70	0.005561	5.14	71.39	30.07	0.84
A	357	Max WS	200h3.5Pesa	291.81	179.94	184.34	184.02	185.48	0.005318	4.92	67.78	28.13	0.81
A	357	Max WS	200h3Pesa	278.90	179.94	184.27		185.34	0.005103	4.76	66.10	24.13	0.79
A	357	Max WS	200h2Pesa	240.19	179.94	184.04		184.96	0.004771	4.40	60.71	22.60	0.76
A	357	Max WS	200h1.5Pesa	213.09	179.94	183.87		184.69	0.004517	4.14	56.92	22.16	0.73
A	357	Max WS	200h1Pesa	176.25	179.94	183.60		184.29	0.004245	3.79	50.96	21.45	0.70
A	357	Max WS	200h0.5Pesa	121.64	179.94	183.11		183.61	0.003831	3.20	40.85	20.20	0.65
A	356.523	Max WS	200h6Pesa	318.77	180.55	184.64	183.65	185.19	0.002560	3.42	105.49	43.00	0.56
A	356.523	Max WS	200h5.5Pesa	317.44	180.55	184.63	183.64	185.19	0.002561	3.41	105.14	43.00	0.56
A	356.523	Max WS	200h5Pesa	314.17	180.55	184.61	183.61	185.16	0.002561	3.40	104.27	43.00	0.56
A	356.523	Max WS	200h3.5Pesa	291.79	180.55	184.47	183.42	185.00	0.002570	3.32	98.16	43.00	0.56
A	356.523	Max WS	200h3Pesa	278.88	180.55	184.38	183.31	184.90	0.002573	3.27	94.53	42.01	0.55
A	356.523	Max WS	200h2Pesa	240.18	180.55	184.11	183.07	184.58	0.002544	3.09	84.21	36.25	0.54
A	356.523	Max WS	200h1.5Pesa	213.09	180.55	183.91	182.90	184.35	0.002538	2.96	76.88	35.37	0.54
A	356.523	Max WS	200h1Pesa	176.25	180.55	183.59	182.64	183.98	0.002565	2.76	66.05	32.91	0.53
A	356.523	Max WS	200h0.5Pesa	121.64	180.55	183.04	182.23	183.33	0.002597	2.40	51.04	24.15	0.51
A	356.522			Inl Struct									
A	356.521	Max WS	200h6Pesa	316.40	179.98	183.25		184.33	0.006954	4.63	69.59	25.50	0.83
A	356.521	Max WS	200h5.5Pesa	316.39	179.98	183.25		184.33	0.006955	4.63	69.59	25.49	0.83
A	356.521	Max WS	200h5Pesa	314.17	179.98	183.24		184.31	0.006894	4.60	69.46	25.42	0.83
A	356.521	Max WS	200h3.5Pesa	291.80	179.98	183.18		184.14	0.006363	4.36	67.92	24.54	0.79
A	356.521	Max WS	200h3Pesa	278.90	179.98	183.10		184.03	0.006379	4.29	65.90	24.14	0.79
A	356.521	Max WS	200h2Pesa	240.18	179.98	182.87		183.69	0.006149	4.00	60.57	23.56	0.77
A	356.521	Max WS	200h1.5Pesa	213.09	179.98	182.71		183.43	0.005924	3.77	56.79	23.14	0.74
A	356.521	Max WS	200h1Pesa	176.25	179.98	182.44		183.06	0.005854	3.49	50.57	22.46	0.73
A	356.521	Max WS	200h0.5Pesa	121.64	179.98	181.94		182.42	0.005825	3.05	39.88	21.34	0.71
A	355	Max WS	200h6Pesa	319.77	178.69	182.31	182.52	183.76	0.007997	5.51	65.87	30.85	0.96
A	355	Max WS	200h5.5Pesa	318.44	178.69	182.30	182.50	183.75	0.007992	5.50	65.66	30.69	0.96
A	355	Max WS	200h5Pesa	315.17	178.69	182.29	182.45	183.72	0.007978	5.48	65.14	30.30	0.96
A	355	Max WS	200h3.5Pesa	292.80	178.69	182.16	182.09	183.51	0.007941	5.32	61.37	27.32	0.95
A	355	Max WS	200h3Pesa	279.90	178.69	182.08	182.08	183.39	0.007870	5.21	59.37	25.90	0.94
A	355	Max WS	200h2Pesa	241.18	178.69	181.83	181.84	183.02	0.007906	4.95	53.13	24.52	0.93
A	355	Max WS	200h1.5Pesa	214.08	178.69	181.68	181.62	182.75	0.007613	4.68	49.39	23.66	0.90
A	355	Max WS	200h1Pesa	177.24	178.69	181.45	181.32	182.35	0.007164	4.28	44.08	22.49	0.86
A	355	Max WS	200h0.5Pesa	122.02	178.69	181.10		181.71	0.005765	3.47	36.58	20.74	0.76
A	354	Max WS	200h6Pesa	319.83	177.63	182.17		182.69	0.003041	3.77	107.12	37.01	0.61
A	354	Max WS	200h5.5Pesa	318.50	177.63	182.16		182.68	0.003046	3.77	106.75	37.01	0.61
A	354	Max WS	200h5Pesa	315.23	177.63	182.13		182.65	0.003060	3.76	105.84	37.01	0.61
A	354	Max WS	200h3.5Pesa	292.86	177.63	181.96		182.47	0.003146	3.70	99.65	36.99	0.61
A	354	Max WS	200h3Pesa	279.96	177.63	181.87		182.36	0.003095	3.61	96.08	36.02	0.61
A	354	Max WS	200h2Pesa	241.25	177.63	181.56		182.02	0.003190	3.46	85.43	32.27	0.61
A	354	Max WS	200h1.5Pesa	214.15	177.63	181.44		181.83	0.002899	3.21	81.48	31.73	0.57
A	354	Max WS	200h1Pesa	177.34	177.63	181.12		181.47	0.002954	3.02	71.59	31.03	0.57
A	354	Max WS	200h0.5Pesa	122.70	177.63	180.65		180.91	0.002835	2.63	57.17	29.71	0.54
A	353.513	Max WS	200h6Pesa	319.86	177.72	182.25	180.69	182.55	0.001477	2.50	139.50	44.65	0.42
A	353.513	Max WS	200h5.5Pesa	318.53	177.72	182.24	180.69	182.54	0.001480	2.49	139.04	44.64	0.42
A	353.513	Max WS	200h5Pesa	315.26	177.72	182.21	180.68	182.51	0.001487	2.49	137.88	44.64	0.42
A	353.513	Max WS	200h3.5Pesa	292.90	177.72	182.04	180.59	182.32	0.001496	2.41	130.16	43.60	0.42
A	353.513	Max WS	200h3Pesa	280.00	177.72	181.93	180.53	182.21	0.001517	2.38	125.67	43.54	0.42
A	353.513	Max WS	200h2Pesa	241.28	177.72	181.61	180.36	181.86	0.001596	2.28	112.56	40.34	0.42
A	353.513	Max WS	200h1.5Pesa	214.18	177.72	181.47	180.23	181.69	0.001477	2.13	107.01	40.31	0.40
A	353.513	Max WS	200h1Pesa	177.35	177.72	181.13	180.06	181.33	0.001573	2.02	93.12	40.25	0.40
A	353.513	Max WS	200h0.5Pesa	122.73	177.72	180.61	179.73	180.76	0.001667	1.78	72.30	39.64	0.40
A	353.512			Bridge									
A	353.511	Max WS	200h6Pesa	319.86	177.40	181.50		181.94	0.002997	2.99	110.77	42.32	0.57
A	353.511	Max WS	200h5.5Pesa	318.53	177.40	181.49		181.93	0.002993	2.98	110.52	42.31	0.57
A	353.511	Max WS	200h5Pesa	315.26	177.40	181.48		181.92	0.002985	2.97	109.90	42.29	0.57
A	353.511	Max WS	200h3.5Pesa	292.88	177.40	181.37		181.78	0.002926	2.87	105.59	42.12	0.56
A	353.511	Max WS	200h3Pesa	279.99	177.40	181.31		181.71	0.002890	2.81	103.06	42.02	0.56
A	353.511	Max WS	200h2Pesa	241.28	177.40	181.12		181.46	0.002794	2.62	94.91	41.81	0.54
A	353.511	Max WS	200h1.5Pesa	214.18	177.40	180.97		181.28	0.002713	2.48	88.89	41.45	0.53
A	353.511	Max WS	200h1Pesa	177.34	177.40	180.76		181.02	0.002605	2.27	80.04	41.25	0.51
A	353.511	Max WS	200h0.5Pesa	122.73	177.40	180.40		180.58	0.002413	1.92	65.18	40.91	0.47

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	352	Max WS	200h6Pesa	319.94	177.45	181.45		181.72	0.001361	2.36	146.13	50.01	0.41
A	352	Max WS	200h5.5Pesa	318.61	177.45	181.44		181.71	0.001357	2.36	145.83	49.87	0.41
A	352	Max WS	200h5Pesa	315.34	177.45	181.43		181.69	0.001347	2.34	145.09	49.53	0.41
A	352	Max WS	200h3.5Pesa	292.97	177.45	181.32		181.57	0.001290	2.24	140.04	48.64	0.39
A	352	Max WS	200h3Pesa	280.07	177.45	181.26		181.49	0.001260	2.19	137.03	48.45	0.39
A	352	Max WS	200h2Pesa	241.36	177.45	181.06		181.26	0.001170	2.02	127.44	47.84	0.37
A	352	Max WS	200h1.5Pesa	214.26	177.45	180.91		181.09	0.001099	1.89	120.34	47.38	0.36
A	352	Max WS	200h1Pesa	177.42	177.45	180.70		180.84	0.000990	1.71	110.16	46.71	0.33
A	352	Max WS	200h0.5Pesa	122.82	177.45	180.34		180.43	0.000790	1.38	93.42	45.64	0.29
A	351.523	Max WS	200h6Pesa	319.97	178.73	181.31	180.52	181.66	0.002621	2.69	123.71	55.97	0.54
A	351.523	Max WS	200h5.5Pesa	318.64	178.73	181.30	180.51	181.66	0.002622	2.68	123.37	55.77	0.54
A	351.523	Max WS	200h5Pesa	315.36	178.73	181.29	180.50	181.64	0.002624	2.67	122.53	55.27	0.54
A	351.523	Max WS	200h3.5Pesa	292.99	178.73	181.18	180.42	181.52	0.002638	2.60	116.69	54.08	0.54
A	351.523	Max WS	200h3Pesa	280.09	178.73	181.12	180.37	181.44	0.002646	2.56	113.30	53.98	0.54
A	351.523	Max WS	200h2Pesa	241.38	178.73	180.92	180.23	181.21	0.002690	2.43	102.55	53.62	0.54
A	351.523	Max WS	200h1.5Pesa	214.28	178.73	180.77	180.12	181.04	0.002726	2.33	94.64	53.16	0.53
A	351.523	Max WS	200h1Pesa	177.45	178.73	180.56	179.96	180.79	0.002784	2.18	83.36	52.48	0.53
A	351.523	Max WS	200h0.5Pesa	122.84	178.73	180.20	179.72	180.39	0.002887	1.91	65.41	48.90	0.52
A	351.522			Int Struct									
A	351.521	Max WS	200h6Pesa	319.96	174.29	177.54		178.01	0.003269	3.34	109.88	43.56	0.62
A	351.521	Max WS	200h5.5Pesa	318.63	174.29	177.53		178.00	0.003275	3.34	109.54	43.55	0.62
A	351.521	Max WS	200h5Pesa	315.36	174.29	177.51		177.98	0.003287	3.33	108.70	43.55	0.62
A	351.521	Max WS	200h3.5Pesa	292.99	174.29	177.38		177.84	0.003355	3.27	103.13	43.52	0.62
A	351.521	Max WS	200h3Pesa	280.09	174.29	177.30		177.75	0.003415	3.24	99.69	43.50	0.63
A	351.521	Max WS	200h2Pesa	241.39	174.29	177.07		177.49	0.003549	3.11	89.66	43.44	0.63
A	351.521	Max WS	200h1.5Pesa	214.28	174.29	176.91		177.30	0.003626	3.00	82.57	43.40	0.63
A	351.521	Max WS	200h1Pesa	177.44	174.29	176.67		177.02	0.003809	2.86	72.04	43.34	0.63
A	351.521	Max WS	200h0.5Pesa	122.84	174.29	176.27		176.57	0.004222	2.62	54.77	43.06	0.64
A	350	Max WS	200h6Pesa	320.07	172.36	177.08		177.58	0.003202	4.00	111.12	42.68	0.63
A	350	Max WS	200h5.5Pesa	318.74	172.36	177.07		177.58	0.003208	3.99	110.73	42.65	0.63
A	350	Max WS	200h5Pesa	315.47	172.36	177.05		177.55	0.003224	3.99	109.76	42.59	0.63
A	350	Max WS	200h3.5Pesa	293.10	172.36	176.90		177.39	0.003288	3.93	103.62	42.21	0.63
A	350	Max WS	200h3Pesa	278.57	172.36	176.81		177.29	0.003310	3.88	99.68	41.66	0.63
A	350	Max WS	200h2Pesa	241.49	172.36	176.54		177.00	0.003423	3.77	88.92	39.96	0.64
A	350	Max WS	200h1.5Pesa	214.39	172.36	176.37		176.79	0.003381	3.62	82.04	38.84	0.63
A	350	Max WS	200h1Pesa	177.56	172.36	176.09		176.47	0.003413	3.43	71.35	36.98	0.62
A	350	Max WS	200h0.5Pesa	122.96	172.36	175.59		175.92	0.003570	3.13	53.78	33.74	0.62
A	349	Max WS	200h6Pesa	320.19	171.84	175.69	175.59	176.92	0.007186	5.06	68.92	26.79	0.91
A	349	Max WS	200h5.5Pesa	318.86	171.84	175.69	175.59	176.91	0.007176	5.05	68.75	26.78	0.91
A	349	Max WS	200h5Pesa	315.58	171.84	175.67	175.57	176.89	0.007153	5.03	68.35	26.73	0.91
A	349	Max WS	200h3.5Pesa	293.22	171.84	175.57	175.43	176.70	0.006987	4.86	65.53	26.44	0.89
A	349	Max WS	200h3Pesa	280.32	171.84	175.50	175.36	176.59	0.006893	4.76	63.85	26.27	0.88
A	349	Max WS	200h2Pesa	241.61	171.84	175.29		176.26	0.006646	4.45	58.45	25.70	0.86
A	349	Max WS	200h1.5Pesa	214.51	171.84	175.14		176.00	0.006474	4.22	54.42	25.27	0.84
A	349	Max WS	200h1Pesa	177.68	171.84	174.91		175.65	0.006107	3.86	48.89	24.67	0.80
A	349	Max WS	200h0.5Pesa	123.07	171.84	174.54		175.06	0.005361	3.22	39.92	23.45	0.73
A	348.513	Max WS	200h6Pesa	320.21	171.37	175.63	175.28	176.63	0.006447	4.89	77.77	28.61	0.86
A	348.513	Max WS	200h5.5Pesa	318.88	171.37	175.62	175.27	176.62	0.006430	4.88	77.62	28.59	0.86
A	348.513	Max WS	200h5Pesa	315.59	171.37	175.61	175.25	176.60	0.006391	4.85	77.24	28.55	0.86
A	348.513	Max WS	200h3.5Pesa	293.24	171.37	175.52	175.15	176.43	0.006120	4.66	74.57	28.24	0.83
A	348.513	Max WS	200h3Pesa	280.34	171.37	175.46	175.08	176.33	0.005975	4.55	72.93	28.05	0.82
A	348.513	Max WS	200h2Pesa	241.63	171.37	175.26	174.85	176.01	0.005564	4.21	67.58	27.43	0.78
A	348.513	Max WS	200h1.5Pesa	214.53	171.37	175.11	174.69	175.78	0.005346	3.97	63.30	27.18	0.76
A	348.513	Max WS	200h1Pesa	177.69	171.37	174.87	174.45	175.44	0.005057	3.64	56.94	26.83	0.73
A	348.513	Max WS	200h0.5Pesa	123.09	171.37	174.47	174.06	174.88	0.004554	3.08	46.29	26.23	0.67
A	348.512			Bridge									
A	348.511	Max WS	200h6Pesa	320.21	171.81	175.89		176.61	0.004118	4.31	92.90	32.15	0.72
A	348.511	Max WS	200h5.5Pesa	318.88	171.81	175.88		176.60	0.004113	4.30	92.67	32.13	0.72
A	348.511	Max WS	200h5Pesa	315.60	171.81	175.87		176.57	0.004101	4.28	92.10	32.07	0.72
A	348.511	Max WS	200h3.5Pesa	293.24	171.81	175.74		176.41	0.004019	4.14	88.20	31.69	0.70
A	348.511	Max WS	200h3Pesa	280.34	171.81	175.67		176.31	0.003976	4.06	85.84	31.46	0.70
A	348.511	Max WS	200h2Pesa	241.62	171.81	175.43		176.00	0.003839	3.81	78.50	30.74	0.68
A	348.511	Max WS	200h1.5Pesa	214.53	171.81	175.25		175.77	0.003752	3.62	72.98	30.18	0.66
A	348.511	Max WS	200h1Pesa	177.69	171.81	174.99		175.43	0.003628	3.35	65.07	29.62	0.64
A	348.511	Max WS	200h0.5Pesa	123.09	171.81	174.53		174.87	0.003470	2.91	51.71	28.89	0.61
A	347	Max WS	200h6Pesa	321.31	171.14	175.40		176.02	0.003323	4.06	100.93	34.79	0.65
A	347	Max WS	200h5.5Pesa	319.98	171.14	175.40		176.01	0.003318	4.05	100.70	34.77	0.65
A	347	Max WS	200h5Pesa	316.71	171.14	175.38		175.98	0.003305	4.04	100.13	34.72	0.64
A	347	Max WS	200h3.5Pesa	294.34	171.14	175.26		175.83	0.003219	3.90	96.08	34.39	0.63
A	347	Max WS	200h3Pesa	281.44	171.14	175.20		175.74	0.003164	3.83	93.73	34.19	0.63
A	347	Max WS	200h2Pesa	242.72	171.14	174.97		175.45	0.003015	3.59	86.10	33.54	0.60
A	347	Max WS	200h1.5Pesa	215.63	171.14	174.80		175.24	0.002913	3.41	80.35	33.04	0.59
A	347	Max WS	200h1Pesa	178.79	171.14	174.54		174.92	0.002762	3.15	71.99	32.30	0.57
A	347	Max WS	200h0.5Pesa	124.20	171.14	174.09		174.38	0.002530	2.72	57.82	30.97	0.53
A	346	Max WS	200h6Pesa	321.60	170.72	175.31		175.64	0.001662	3.08	141.20	47.65	0.47
A	346	Max WS	200h5.5Pesa	320.28	170.72	175.30		175.63	0.001661	3.07	140.85	47.64	0.47
A	346	Max WS	200h5Pesa	317.00	170.72	175.28		175.61	0.001657	3.06	139.97	47.62	0.47
A	346	Max WS	200h3.5Pesa	294.63	170.72	175.15		175.46	0.001636	2.98	133.77	47.44	0.46
A	346	Max WS	200h3Pesa	281.72	170.72	175.07		175.37	0.001624	2.93	130.08	47.33	0.46
A	346	Max WS	200h2Pesa	243.00	170.72	174.82		175.10	0.001594	2.79	118.30	46.94	0.45
A	346	Max WS	200h1.5Pesa	215.91	170.72	174.63		174.89	0.001586	2.69	109.23	46.63	0.44
A	346	Max WS	200h1Pesa	179.09	170.72	174.34		174.58	0.001577	2.54	96.05	46.19	0.44

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	346	Max WS	200h0.5Pesa	124.49	170.72	173.86		174.06	0.001586	2.30	73.75	45.42	0.43
A	345.526	Max WS	200h6Pesa	321.88	170.55	175.10	173.90	175.45	0.002229	3.26	134.81	50.45	0.52
A	345.526	Max WS	200h5.5Pesa	320.55	170.55	175.09	173.89	175.44	0.002227	3.26	134.44	50.38	0.52
A	345.526	Max WS	200h5Pesa	317.27	170.55	175.07	173.88	175.42	0.002222	3.24	133.54	50.21	0.51
A	345.526	Max WS	200h3.5Pesa	294.90	170.55	174.94	173.78	175.27	0.002184	3.15	127.26	49.01	0.51
A	345.526	Max WS	200h3Pesa	281.99	170.55	174.87	173.73	175.19	0.002159	3.09	123.60	48.29	0.50
A	345.526	Max WS	200h2Pesa	243.27	170.55	174.63	173.57	174.92	0.002082	2.91	112.27	46.06	0.49
A	345.526	Max WS	200h1.5Pesa	216.18	170.55	174.45	173.45	174.70	0.001932	2.71	104.23	42.50	0.47
A	345.526	Max WS	200h1Pesa	179.36	170.55	174.17	173.27	174.39	0.001870	2.52	92.77	41.64	0.45
A	345.526	Max WS	200h0.5Pesa	124.77	170.55	173.69	172.84	173.87	0.001845	2.24	73.10	40.69	0.44
A	345.524			Inl Struct									
A	345.521	Max WS	200h6Pesa	321.88	165.80	171.57		171.77	0.000592	2.06	170.31	36.71	0.29
A	345.521	Max WS	200h5.5Pesa	320.55	165.80	171.56		171.76	0.000592	2.06	169.92	36.65	0.29
A	345.521	Max WS	200h5Pesa	317.27	165.80	171.53		171.73	0.000592	2.05	168.79	36.47	0.29
A	345.521	Max WS	200h3.5Pesa	294.90	165.80	171.36		171.54	0.000575	1.98	162.53	36.19	0.28
A	345.521	Max WS	200h3Pesa	281.99	165.80	171.24		171.42	0.000569	1.94	158.46	36.14	0.28
A	345.521	Max WS	200h2Pesa	243.28	165.80	170.90		171.05	0.000548	1.81	145.92	36.02	0.27
A	345.521	Max WS	200h1.5Pesa	216.19	165.80	170.62		170.76	0.000535	1.71	136.07	35.52	0.27
A	345.521	Max WS	200h1Pesa	179.36	165.80	170.23		170.35	0.000517	1.58	122.07	35.39	0.26
A	345.521	Max WS	200h0.5Pesa	124.76	165.80	169.55		169.64	0.000492	1.35	98.15	34.61	0.24
A	344	Max WS	200h6Pesa	322.00	165.71	170.30	170.23	171.88	0.007694	6.38	64.83	20.49	0.99
A	344	Max WS	200h5.5Pesa	320.67	165.71	170.29	170.23	171.87	0.007687	6.37	64.67	20.47	0.99
A	344	Max WS	200h5Pesa	317.39	165.71	170.26	170.20	171.84	0.007694	6.35	64.17	20.41	0.99
A	344	Max WS	200h3.5Pesa	295.02	165.71	170.11	170.03	171.60	0.007616	6.17	61.15	20.04	0.98
A	344	Max WS	200h3Pesa	282.11	165.71	170.03	169.92	171.47	0.007527	6.05	59.49	19.83	0.97
A	344	Max WS	200h2Pesa	243.40	165.71	169.76	169.59	171.04	0.007310	5.68	54.17	19.15	0.95
A	344	Max WS	200h1.5Pesa	216.30	165.71	169.56		170.72	0.007121	5.40	50.33	18.64	0.92
A	344	Max WS	200h1Pesa	179.48	165.71	169.25		170.26	0.006866	4.99	44.79	18.08	0.89
A	344	Max WS	200h0.5Pesa	124.89	165.71	168.74		169.50	0.006473	4.31	35.63	17.40	0.84
A	343	Max WS	200h6Pesa	322.10	164.39	169.69		170.78	0.005281	5.36	78.38	26.28	0.78
A	343	Max WS	200h5.5Pesa	320.78	164.39	169.68		170.77	0.005277	5.35	78.16	26.25	0.78
A	343	Max WS	200h5Pesa	317.49	164.39	169.66		170.75	0.005269	5.33	77.60	26.17	0.78
A	343	Max WS	200h3.5Pesa	295.12	164.39	169.51		170.55	0.005204	5.19	73.79	25.62	0.77
A	343	Max WS	200h3Pesa	282.22	164.39	169.42		170.43	0.005182	5.11	71.47	25.27	0.77
A	343	Max WS	200h2Pesa	243.50	164.39	169.14		170.06	0.005063	4.84	64.53	24.22	0.75
A	343	Max WS	200h1.5Pesa	216.41	164.39	168.93		169.78	0.004954	4.63	59.55	23.44	0.74
A	343	Max WS	200h1Pesa	179.59	164.39	168.62		169.38	0.004774	4.31	52.50	22.28	0.71
A	343	Max WS	200h0.5Pesa	73.97	164.39	168.28		168.45	0.001221	2.04	45.00	20.95	0.36
A	342.5	Max WS	200h6Pesa	322.10	164.67	169.57		170.59	0.004619	5.07	80.99	26.93	0.77
A	342.5	Max WS	200h5.5Pesa	320.78	164.67	169.57		170.58	0.004617	5.06	80.76	26.90	0.77
A	342.5	Max WS	200h5Pesa	317.49	164.67	169.54		170.55	0.004611	5.04	80.19	26.82	0.77
A	342.5	Max WS	200h3.5Pesa	295.12	164.67	169.40		170.36	0.004571	4.91	76.24	26.30	0.76
A	342.5	Max WS	200h3Pesa	282.22	164.67	169.31		170.24	0.004537	4.82	73.98	25.99	0.75
A	342.5	Max WS	200h2Pesa	243.50	164.67	169.03		169.88	0.004444	4.56	66.89	25.02	0.74
A	342.5	Max WS	200h1.5Pesa	216.41	164.67	168.82		169.60	0.004369	4.36	61.75	24.28	0.72
A	342.5	Max WS	200h1Pesa	179.59	164.67	168.52		169.20	0.004243	4.05	54.47	23.21	0.70
A	342.5	Max WS	200h0.5Pesa	73.85	164.67	168.26		168.41	0.000977	1.85	48.67	22.28	0.33
A	342	Max WS	200h6Pesa	323.10	164.96	169.45		170.41	0.004407	4.83	82.64	27.30	0.76
A	342	Max WS	200h5.5Pesa	321.78	164.96	169.45		170.40	0.004407	4.83	82.40	27.28	0.76
A	342	Max WS	200h5Pesa	318.49	164.96	169.42		170.37	0.004407	4.81	81.80	27.21	0.76
A	342	Max WS	200h3.5Pesa	296.12	164.96	169.28		170.18	0.004381	4.68	77.83	26.79	0.75
A	342	Max WS	200h3Pesa	283.22	164.96	169.19		170.06	0.004372	4.60	75.45	26.51	0.75
A	342	Max WS	200h2Pesa	244.50	164.96	168.91		169.70	0.004342	4.36	68.13	25.61	0.74
A	342	Max WS	200h1.5Pesa	217.41	164.96	168.69		169.43	0.004330	4.18	62.75	24.94	0.73
A	342	Max WS	200h1Pesa	180.59	164.96	168.38		169.04	0.004319	3.92	55.10	23.94	0.71
A	342	Max WS	200h0.5Pesa	89.78	164.96	168.07		168.29	0.001588	2.21	47.92	22.92	0.43
A	341	Max WS	200h6Pesa	324.10	163.81	168.46		169.68	0.006370	5.77	73.96	25.51	0.89
A	341	Max WS	200h5.5Pesa	322.77	163.81	168.45		169.66	0.006364	5.76	73.77	25.48	0.89
A	341	Max WS	200h5Pesa	319.49	163.81	168.43		169.64	0.006355	5.74	73.26	25.43	0.88
A	341	Max WS	200h3.5Pesa	297.12	163.81	168.30		169.44	0.006263	5.58	69.90	25.05	0.87
A	341	Max WS	200h3Pesa	284.21	163.81	168.21		169.33	0.006246	5.49	67.77	24.81	0.87
A	341	Max WS	200h2Pesa	245.49	163.81	167.94		168.97	0.006204	5.23	61.15	24.05	0.86
A	341	Max WS	200h1.5Pesa	218.40	163.81	167.74		168.70	0.006196	5.04	56.26	23.47	0.85
A	341	Max WS	200h1Pesa	181.58	163.81	167.42		168.30	0.006333	4.79	48.89	22.57	0.84
A	341	Max WS	200h0.5Pesa	127.99	163.81	166.88		167.64	0.006762	4.39	37.11	20.94	0.85
A	340	Max WS	200h6Pesa	324.10	162.96	167.60		168.72	0.004921	5.24	80.23	30.23	0.80
A	340	Max WS	200h5.5Pesa	322.76	162.96	167.60		168.71	0.004923	5.23	79.96	30.20	0.80
A	340	Max WS	200h5Pesa	319.48	162.96	167.57		168.68	0.004959	5.23	79.12	30.11	0.80
A	340	Max WS	200h3.5Pesa	297.11	162.96	167.42		168.50	0.004959	5.11	74.82	29.63	0.80
A	340	Max WS	200h3Pesa	284.21	162.96	167.35		168.40	0.004895	5.02	72.65	29.39	0.79
A	340	Max WS	200h2Pesa	245.49	162.96	167.09		168.03	0.004693	4.71	65.41	26.47	0.76
A	340	Max WS	200h1.5Pesa	218.40	162.96	166.90		167.74	0.004439	4.43	60.68	24.15	0.74
A	340	Max WS	200h1Pesa	181.58	162.96	166.62		167.33	0.004162	4.06	54.04	22.40	0.70
A	340	Max WS	200h0.5Pesa	127.99	162.96	166.07		166.63	0.004062	3.57	42.30	20.34	0.68
A	339	Max WS	200h6Pesa	324.09	162.25	166.49	166.66	168.04	0.007429	5.84	66.70	28.47	0.97
A	339	Max WS	200h5.5Pesa	322.76	162.25	166.48	166.65	168.03	0.007428	5.83	66.49	28.44	0.97
A	339	Max WS	200h5Pesa	319.48	162.25	166.45	166.64	168.01	0.007487	5.83	65.76	28.35	0.97
A	339	Max WS	200h3.5Pesa	297.11	162.25	166.33	166.54	167.82	0.007436	5.68	62.31	27.93	0.96
A	339	Max WS	200h3Pesa	284.21	162.25	166.26	166.47	167.71	0.007402	5.59	60.29	27.68	0.96
A	339	Max WS	200h2Pesa	245.49	162.25	166.02	166.19	167.36	0.007362	5.31	53.77	26.84	0.94
A	339	Max WS	200h1.5Pesa	218.40	162.25	165.83	165.53	167.09	0.007351	5.10	48.90	25.85	0.93
A	339	Max WS	200h1Pesa	181.58	162.25	165.53	165.45	166.60	0.007193	4.71	42.22	18.91	0.91
A	339	Max WS	200h0.5Pesa	127.99	162.25	165.01	164.89	165.86	0.007440	4.17	32.85	17.40	0.89

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	338	Max WS	200h6Pesa	323.36	161.35	165.60		166.64	0.004995	4.88	81.20	32.45	0.80
A	338	Max WS	200h5.5Pesa	322.46	161.35	165.59		166.63	0.005026	4.89	80.85	32.41	0.80
A	338	Max WS	200h5Pesa	319.48	161.35	165.57		166.61	0.005040	4.88	80.21	32.35	0.80
A	338	Max WS	200h3.5Pesa	297.10	161.35	165.44		166.44	0.005053	4.77	75.89	31.89	0.80
A	338	Max WS	200h3Pesa	284.20	161.35	165.36		166.34	0.005056	4.70	73.38	31.63	0.79
A	338	Max WS	200h2Pesa	245.47	161.35	165.10		166.02	0.005105	4.50	65.41	30.77	0.79
A	338	Max WS	200h1.5Pesa	218.39	161.35	164.91		165.78	0.005171	4.35	59.47	30.11	0.78
A	338	Max WS	200h1Pesa	118.44	161.35	164.71		165.02	0.001963	2.57	53.72	28.70	0.48
A	338	Max WS	200h0.5Pesa	116.27	161.35	164.60		164.93	0.002212	2.65	50.46	27.72	0.50
A	337	Max WS	200h6Pesa	296.46	160.79	165.41		165.89	0.002177	3.26	104.53	32.71	0.51
A	337	Max WS	200h5.5Pesa	287.29	160.79	165.37		165.83	0.002116	3.19	103.32	32.66	0.50
A	337	Max WS	200h5Pesa	266.47	160.79	165.31		165.72	0.001932	3.02	101.23	32.57	0.48
A	337	Max WS	200h3.5Pesa	297.10	160.79	165.09		165.68	0.002959	3.60	94.23	32.27	0.59
A	337	Max WS	200h3Pesa	284.20	160.79	165.02		165.58	0.002929	3.54	91.72	32.17	0.58
A	337	Max WS	200h2Pesa	245.43	160.79	164.75		165.27	0.002881	3.34	83.35	31.81	0.57
A	337	Max WS	200h1.5Pesa	120.15	160.79	164.66		164.79	0.000766	1.69	80.37	31.68	0.29
A	337	Max WS	200h1Pesa	118.23	160.79	164.67		164.80	0.000733	1.66	80.71	31.69	0.29
A	337	Max WS	200h0.5Pesa	116.21	160.79	164.55		164.68	0.000818	1.71	76.73	31.40	0.30
A	336.666	Max WS	200h6Pesa	327.46	160.46	164.98		165.80	0.003919	4.32	92.38	37.70	0.69
A	336.666	Max WS	200h5.5Pesa	325.51	160.46	164.97		165.79	0.003916	4.31	91.98	37.63	0.69
A	336.666	Max WS	200h5Pesa	321.97	160.46	164.95		165.77	0.003908	4.29	91.27	37.51	0.68
A	336.666	Max WS	200h3.5Pesa	299.60	160.46	164.83		165.57	0.003660	4.07	87.23	33.29	0.66
A	336.666	Max WS	200h3Pesa	286.70	160.46	164.77		165.47	0.003541	3.96	85.11	32.14	0.65
A	336.666	Max WS	200h2Pesa	247.93	160.46	164.53		165.16	0.003411	3.73	77.66	31.43	0.63
A	336.666	Max WS	200h1.5Pesa	220.88	160.46	164.28		164.90	0.003605	3.65	69.95	30.69	0.64
A	336.666	Max WS	200h1Pesa	184.22	160.46	164.00		164.55	0.003576	3.43	61.33	29.68	0.63
A	336.666	Max WS	200h0.5Pesa	173.21	160.46	163.91		164.44	0.003535	3.34	58.81	29.34	0.62
A	336	Max WS	200h6Pesa	327.45	159.79	164.49	164.48	165.56	0.005127	5.11	84.94	38.06	0.80
A	336	Max WS	200h5.5Pesa	325.50	159.79	164.47	164.47	165.55	0.005140	5.10	84.46	38.01	0.80
A	336	Max WS	200h5Pesa	321.97	159.79	164.45	164.45	165.52	0.005162	5.09	83.59	37.94	0.80
A	336	Max WS	200h3.5Pesa	299.59	159.79	164.30	164.33	165.37	0.005304	5.04	78.06	37.46	0.81
A	336	Max WS	200h3Pesa	286.69	159.79	164.22	164.27	165.28	0.005365	5.00	74.97	37.19	0.81
A	336	Max WS	200h2Pesa	248.04	159.79	163.95	164.04	165.00	0.005675	4.89	64.84	36.29	0.82
A	336	Max WS	200h1.5Pesa	220.88	159.79	163.74	163.86	164.79	0.005935	4.81	57.34	35.61	0.83
A	336	Max WS	200h1Pesa	183.32	159.79	163.46	163.27	164.38	0.005698	4.45	48.53	26.17	0.81
A	336	Max WS	200h0.5Pesa	173.01	159.79	163.38	163.13	164.26	0.005650	4.35	46.37	25.05	0.80
A	335	Max WS	200h6Pesa	327.45	158.78	163.35	163.46	164.73	0.006971	5.78	72.55	29.42	0.90
A	335	Max WS	200h5.5Pesa	325.47	158.78	163.34	163.45	164.71	0.006961	5.76	72.25	29.39	0.90
A	335	Max WS	200h5Pesa	321.97	158.78	163.32	163.43	164.68	0.006941	5.74	71.73	29.34	0.90
A	335	Max WS	200h3.5Pesa	299.59	158.78	163.20	163.30	164.50	0.006846	5.59	68.23	28.96	0.89
A	335	Max WS	200h3Pesa	286.68	158.78	163.14	163.22	164.40	0.006735	5.48	66.31	28.58	0.88
A	335	Max WS	200h2Pesa	248.04	158.78	162.92	162.89	164.05	0.006382	5.14	60.36	27.24	0.85
A	335	Max WS	200h1.5Pesa	220.07	158.78	162.77	162.67	163.78	0.006012	4.85	56.18	26.26	0.82
A	335	Max WS	200h1Pesa	182.51	158.78	162.55		163.40	0.005404	4.41	50.51	24.94	0.77
A	335	Max WS	200h0.5Pesa	170.11	158.78	162.50		163.28	0.004977	4.19	49.37	24.76	0.73
A	334	Max WS	200h6Pesa	321.50	158.23	162.19		163.12	0.006646	5.23	85.40	39.16	0.88
A	334	Max WS	200h5.5Pesa	325.43	158.23	162.18		163.14	0.006915	5.32	84.94	39.11	0.89
A	334	Max WS	200h5Pesa	321.96	158.23	162.17		163.12	0.006892	5.30	84.39	39.04	0.89
A	334	Max WS	200h3.5Pesa	299.59	158.23	162.09		162.98	0.006655	5.12	81.18	38.67	0.87
A	334	Max WS	200h3Pesa	286.68	158.23	162.04		162.90	0.006494	5.02	79.36	38.45	0.86
A	334	Max WS	200h2Pesa	243.48	158.23	161.90		162.62	0.005718	4.58	73.91	37.80	0.80
A	334	Max WS	200h1.5Pesa	220.85	158.23	161.77		162.45	0.005687	4.45	69.03	37.17	0.79
A	334	Max WS	200h1Pesa	177.13	158.23	161.71		162.18	0.003921	3.65	67.07	36.39	0.66
A	334	Max WS	200h0.5Pesa	169.51	158.23	161.62		162.09	0.004029	3.63	63.93	35.12	0.66
A	333	Max WS	200h6Pesa	320.66	158.01	161.76	162.08	162.63	0.005078	4.75	109.53	101.72	0.79
A	333	Max WS	200h5.5Pesa	325.42	158.01	161.73	162.09	162.66	0.005502	4.91	106.16	97.91	0.82
A	333	Max WS	200h5Pesa	321.94	158.01	161.71	162.08	162.65	0.005524	4.90	104.50	95.99	0.82
A	333	Max WS	200h3.5Pesa	299.57	158.01	161.57	161.86	162.54	0.005863	4.92	92.00	80.02	0.84
A	333	Max WS	200h3Pesa	286.66	158.01	161.49	161.24	162.46	0.005955	4.88	86.14	71.31	0.85
A	333	Max WS	200h2Pesa	247.99	158.01	161.25	161.21	162.14	0.005984	4.65	71.85	47.89	0.84
A	333	Max WS	200h1.5Pesa	220.83	158.01	161.04	160.97	161.94	0.006355	4.58	62.47	41.09	0.85
A	333	Max WS	200h1Pesa	180.59	158.01	161.10		161.67	0.003952	3.67	65.14	45.73	0.68
A	333	Max WS	200h0.5Pesa	170.05	158.01	161.01		161.56	0.003906	3.57	61.40	40.07	0.67
A	332	Max WS	200h6Pesa	329.50	155.90	160.71	160.78	162.02	0.006130	5.61	76.77	31.87	0.85
A	332	Max WS	200h5.5Pesa	326.40	155.90	160.70	160.76	161.99	0.006063	5.57	76.53	31.83	0.84
A	332	Max WS	200h5Pesa	322.93	155.90	160.69	160.74	161.96	0.006038	5.55	76.00	31.73	0.84
A	332	Max WS	200h3.5Pesa	300.56	155.90	160.56	160.60	161.79	0.005956	5.40	72.09	31.04	0.83
A	332	Max WS	200h3Pesa	287.64	155.90	160.49	160.51	161.69	0.005860	5.30	70.02	30.67	0.82
A	332	Max WS	200h2Pesa	248.98	155.90	160.27	160.09	161.36	0.005585	5.00	63.43	29.45	0.80
A	332	Max WS	200h1.5Pesa	219.70	155.90	160.12		161.03	0.004899	4.56	58.94	24.54	0.74
A	332	Max WS	200h1Pesa	214.36	155.90	160.05		160.97	0.005059	4.58	57.15	24.32	0.75
A	332	Max WS	200h0.5Pesa	204.27	155.90	159.98		160.86	0.004968	4.48	55.47	24.10	0.74
A	331	Max WS	200h6Pesa	329.48	155.39	159.88		160.64	0.005709	4.90	94.91	41.35	0.76
A	331	Max WS	200h5.5Pesa	326.40	155.39	159.86		160.62	0.005731	4.90	94.15	41.28	0.76
A	331	Max WS	200h5Pesa	322.93	155.39	159.84		160.60	0.005755	4.89	93.31	41.20	0.76
A	331	Max WS	200h3.5Pesa	300.56	155.39	159.71		160.46	0.005855	4.83	88.00	40.42	0.77
A	331	Max WS	200h3Pesa	287.27	155.39	159.64		160.37	0.005869	4.78	85.02	39.88	0.76
A	331	Max WS	200h2Pesa	248.98	155.39	159.41		160.10	0.005968	4.63	75.94	38.18	0.76
A	331	Max WS	200h1.5Pesa	221.84	155.39	159.24		159.89	0.005885	4.46	69.63	36.24	0.75
A	331	Max WS	200h1Pesa	211.94	155.39	159.17		159.81	0.005846	4.39	67.28	35.45	0.75
A	331	Max WS	200h0.5Pesa	203.28	155.39	159.12		159.74	0.005781	4.32	65.33	34.79	0.74
A	330	Max WS	200h6Pesa	329.47	154.66	158.80		159.75	0.005852	5.20	84.62	33.14	0.84
A	330	Max WS	200h5.5Pesa	326.40	154.66	158.78		159.72	0.005864	5.19	84.00	33.06	0.84

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	330	Max WS	200h5Pesa	322.93	154.66	158.76		159.70	0.005847	5.17	83.46	32.99	0.84
A	330	Max WS	200h3.5Pesa	300.55	154.66	158.64		159.54	0.005823	5.05	79.48	32.47	0.83
A	330	Max WS	200h3Pesa	287.64	154.66	158.57		159.44	0.005804	4.97	77.16	32.17	0.83
A	330	Max WS	200h2Pesa	248.97	154.66	158.35		159.15	0.005719	4.74	70.16	31.39	0.82
A	330	Max WS	200h1.5Pesa	221.82	154.66	158.18		158.93	0.005697	4.57	64.88	30.96	0.81
A	330	Max WS	200h1Pesa	211.84	154.66	158.13		158.85	0.005580	4.48	63.28	30.78	0.80
A	330	Max WS	200h0.5Pesa	202.95	154.66	158.07		158.77	0.005565	4.41	61.46	30.57	0.79
A	329	Max WS	200h6Pesa	328.20	153.45	157.59	157.75	158.81	0.007398	5.69	78.63	36.63	0.91
A	329	Max WS	200h5.5Pesa	315.43	153.45	157.54	157.69	158.73	0.007226	5.58	77.01	36.47	0.90
A	329	Max WS	200h5Pesa	322.92	153.45	157.50	157.72	158.80	0.008004	5.83	75.42	36.30	0.95
A	329	Max WS	200h3.5Pesa	300.55	153.45	157.40	157.62	158.65	0.007919	5.70	71.72	35.92	0.94
A	329	Max WS	200h3Pesa	287.63	153.45	157.34	157.56	158.56	0.007852	5.62	69.58	35.70	0.93
A	329	Max WS	200h2Pesa	248.97	153.45	157.14	156.88	158.29	0.007723	5.37	62.64	34.97	0.91
A	329	Max WS	200h1.5Pesa	201.84	153.45	157.19		157.90	0.004755	4.25	64.25	35.14	0.72
A	329	Max WS	200h1Pesa	208.57	153.45	157.25		157.96	0.004661	4.26	66.42	35.37	0.71
A	329	Max WS	200h0.5Pesa	199.47	153.45	157.20		157.89	0.004548	4.17	64.77	35.20	0.70
A	328	Max WS	200h6Pesa	336.15	152.61	156.91		157.59	0.004089	4.22	105.16	45.77	0.70
A	328	Max WS	200h5.5Pesa	327.39	152.61	156.88		157.54	0.004028	4.16	103.78	45.69	0.70
A	328	Max WS	200h5Pesa	323.92	152.61	156.87		157.52	0.004002	4.14	103.23	45.66	0.70
A	328	Max WS	200h3.5Pesa	301.55	152.61	156.79		157.40	0.003823	3.99	99.76	45.45	0.68
A	328	Max WS	200h3Pesa	288.63	152.61	156.75		157.33	0.003702	3.89	97.81	45.27	0.67
A	328	Max WS	200h2Pesa	249.96	152.61	156.62		157.11	0.003282	3.57	91.87	43.83	0.62
A	328	Max WS	200h1.5Pesa	225.71	152.61	156.53		156.97	0.003029	3.37	87.86	43.42	0.59
A	328	Max WS	200h1Pesa	235.74	152.61	156.56		157.03	0.003135	3.45	89.50	43.48	0.61
A	328	Max WS	200h0.5Pesa	225.67	152.61	156.53		156.97	0.003028	3.37	87.86	43.42	0.59
A	327.513	Max WS	200h6Pesa	336.15	152.69	157.11	156.39	157.48	0.002629	3.46	145.41	71.03	0.55
A	327.513	Max WS	200h5.5Pesa	327.39	152.69	157.07	156.36	157.44	0.002637	3.45	142.58	70.87	0.55
A	327.513	Max WS	200h5Pesa	323.92	152.69	157.05	156.35	157.42	0.002640	3.44	141.46	70.81	0.55
A	327.513	Max WS	200h3.5Pesa	301.55	152.69	156.95	156.26	157.31	0.002652	3.39	134.27	70.39	0.55
A	327.513	Max WS	200h3Pesa	288.63	152.69	156.89	156.07	157.25	0.002652	3.35	130.13	70.15	0.55
A	327.513	Max WS	200h2Pesa	249.97	152.69	156.72	155.99	157.05	0.002592	3.21	117.85	68.49	0.54
A	327.513	Max WS	200h1.5Pesa	225.71	152.69	156.61	155.87	156.92	0.002509	3.10	110.35	67.22	0.53
A	327.513	Max WS	200h1Pesa	235.71	152.69	156.65	155.92	156.97	0.002547	3.15	113.43	67.74	0.53
A	327.513	Max WS	200h0.5Pesa	225.68	152.69	156.61	155.87	156.92	0.002509	3.10	110.33	67.21	0.53
A	327.512			Bridge									
A	327.511	Max WS	200h6Pesa	336.15	152.60	156.27	156.44	157.26	0.009151	5.43	89.03	53.91	0.94
A	327.511	Max WS	200h5.5Pesa	327.39	152.60	156.24	156.41	157.22	0.009087	5.38	87.50	53.69	0.94
A	327.511	Max WS	200h5Pesa	323.92	152.60	156.23	156.39	157.20	0.009064	5.36	86.88	53.60	0.94
A	327.511	Max WS	200h3.5Pesa	301.55	152.60	156.16	156.31	157.09	0.008892	5.23	82.89	53.02	0.93
A	327.511	Max WS	200h3Pesa	288.63	152.60	156.10	156.26	157.03	0.008929	5.18	80.02	52.58	0.92
A	327.511	Max WS	200h2Pesa	249.96	152.60	155.95	155.98	156.80	0.008574	4.92	72.19	48.41	0.90
A	327.511	Max WS	200h1.5Pesa	225.71	152.60	155.85	155.96	156.65	0.008399	4.76	67.29	47.68	0.88
A	327.511	Max WS	200h1Pesa	235.69	152.60	155.89	155.98	156.71	0.008491	4.83	69.28	47.98	0.89
A	327.511	Max WS	200h0.5Pesa	225.68	152.60	155.85	155.96	156.65	0.008402	4.76	67.28	47.68	0.88
A	326	Max WS	200h6Pesa	336.15	152.07	155.70	155.85	156.63	0.007484	5.34	99.28	67.48	0.94
A	326	Max WS	200h5.5Pesa	327.39	152.07	155.67	155.81	156.59	0.007428	5.29	97.28	66.43	0.93
A	326	Max WS	200h5Pesa	323.92	152.07	155.66	155.80	156.57	0.007410	5.27	96.45	65.99	0.93
A	326	Max WS	200h3.5Pesa	301.55	152.07	155.58	155.67	156.45	0.007257	5.13	91.26	63.15	0.92
A	326	Max WS	200h3Pesa	288.63	152.07	155.51	155.60	156.39	0.007333	5.09	87.29	60.90	0.92
A	326	Max WS	200h2Pesa	249.96	152.07	155.37	155.49	156.19	0.007127	4.86	78.79	59.30	0.90
A	326	Max WS	200h1.5Pesa	225.69	152.07	155.27	155.43	156.07	0.007148	4.75	72.61	58.60	0.90
A	326	Max WS	200h1Pesa	235.59	152.07	155.31	155.47	156.12	0.007146	4.80	75.13	58.89	0.90
A	326	Max WS	200h0.5Pesa	225.64	152.07	155.27	155.43	156.07	0.007149	4.75	72.59	58.60	0.90
A	325	Max WS	200h6Pesa	336.14	151.92	154.78	154.85	155.56	0.009180	4.98	96.47	65.66	1.00
A	325	Max WS	200h5.5Pesa	327.39	151.92	154.75	154.83	155.53	0.009106	4.93	94.99	65.50	0.99
A	325	Max WS	200h5Pesa	323.92	151.92	154.75	154.82	155.51	0.009073	4.91	94.41	65.44	0.99
A	325	Max WS	200h3.5Pesa	301.54	151.92	154.69	154.75	155.41	0.008794	4.76	90.81	65.04	0.97
A	325	Max WS	200h3Pesa	288.63	151.92	154.66	154.71	155.36	0.008649	4.67	88.59	64.80	0.96
A	325	Max WS	200h2Pesa	249.96	151.92	154.54	154.58	155.18	0.008429	4.46	80.82	63.94	0.94
A	325	Max WS	200h1.5Pesa	225.67	151.92	154.46	154.50	155.06	0.008232	4.30	75.82	63.37	0.93
A	325	Max WS	200h1Pesa	235.55	151.92	154.49	154.53	155.11	0.008335	4.37	77.81	63.60	0.93
A	325	Max WS	200h0.5Pesa	225.58	151.92	154.46	154.50	155.06	0.008231	4.30	75.80	63.37	0.93
A	324	Max WS	200h6Pesa	336.12	150.83	153.96		154.44	0.005797	4.25	136.70	114.59	0.81
A	324	Max WS	200h5.5Pesa	327.39	150.83	153.94		154.41	0.005724	4.21	134.78	114.46	0.81
A	324	Max WS	200h5Pesa	323.92	150.83	153.93		154.40	0.005720	4.20	133.80	114.39	0.80
A	324	Max WS	200h3.5Pesa	301.54	150.83	153.88		154.34	0.005677	4.12	127.50	113.96	0.80
A	324	Max WS	200h3Pesa	288.62	150.83	153.84		154.30	0.005644	4.08	123.82	113.71	0.79
A	324	Max WS	200h2Pesa	249.96	150.83	153.75		154.18	0.005429	3.91	113.12	112.96	0.77
A	324	Max WS	200h1.5Pesa	225.65	150.83	153.69		154.10	0.005227	3.77	106.35	112.49	0.76
A	324	Max WS	200h1Pesa	235.48	150.83	153.71		154.13	0.005315	3.83	109.09	112.68	0.76
A	324	Max WS	200h0.5Pesa	225.33	150.83	153.69		154.10	0.005203	3.77	106.42	112.50	0.76
A	323	Max WS	200h6Pesa	335.91	150.29	153.58		153.85	0.003771	3.45	176.43	150.15	0.65
A	323	Max WS	200h5.5Pesa	327.36	150.29	153.55		153.83	0.003861	3.46	171.95	149.98	0.65
A	323	Max WS	200h5Pesa	323.89	150.29	153.54		153.82	0.003918	3.48	169.84	149.90	0.66
A	323	Max WS	200h3.5Pesa	301.50	150.29	153.43		153.74	0.004335	3.57	151.80	134.50	0.69
A	323	Max WS	200h3Pesa	288.60	150.29	153.38		153.69	0.004502	3.59	144.88	132.61	0.70
A	323	Max WS	200h2Pesa	249.93	150.29	153.23		153.56	0.005056	3.66	124.51	126.90	0.73
A	323	Max WS	200h1.5Pesa	225.49	150.29	153.13		153.47	0.005438	3.69	112.01	123.27	0.76
A	323	Max WS	200h1Pesa	235.32	150.29	153.16		153.51	0.005297	3.68	116.88	124.70	0.75
A	323	Max WS	200h0.5Pesa	224.18	150.29	153.12		153.47	0.005455	3.69	111.37	123.08	0.76
A	322	Max WS	200h6Pesa	335.79	149.24	153.30		153.44	0.001409	2.45	239.42	150.39	0.41
A	322	Max WS	200h5.5Pesa	327.33	149.24	153.26		153.40	0.001441	2.46	233.20	149.52	0.41
A	322	Max WS	200h5Pesa	323.86	149.24	153.23		153.38	0.001469	2.47	229.84	149.05	0.42

HEC-RAS River: Pesa Reach: A Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
A	322	Max WS	200h3.5Pesa	301.44	149.24	153.08		153.24	0.001684	2.58	207.81	145.93	0.44
A	322	Max WS	200h3Pesa	288.53	149.24	153.00		153.17	0.001804	2.63	196.31	144.28	0.46
A	322	Max WS	200h2Pesa	249.86	149.24	152.74		152.91	0.001524	2.29	147.65	69.12	0.41
A	322	Max WS	200h1.5Pesa	225.35	149.24	152.59		152.75	0.001527	2.22	137.47	67.82	0.41
A	322	Max WS	200h1Pesa	234.78	149.24	152.66		152.82	0.001497	2.23	142.30	68.35	0.41
A	322	Max WS	200h0.5Pesa	223.94	149.24	152.58		152.73	0.001540	2.22	136.54	67.76	0.41
A	321	Max WS	200h6Pesa	332.35	148.73	152.60		153.35	0.003883	4.22	99.16	41.96	0.70
A	321	Max WS	200h5.5Pesa	327.33	148.73	152.57		153.31	0.003924	4.22	97.62	41.65	0.70
A	321	Max WS	200h5Pesa	323.85	148.73	152.55		153.29	0.003928	4.20	96.78	41.48	0.70
A	321	Max WS	200h3.5Pesa	301.44	148.73	152.41		153.13	0.003965	4.12	91.28	40.33	0.70
A	321	Max WS	200h3Pesa	288.53	148.73	152.35		153.04	0.003920	4.04	88.66	39.78	0.70
A	321	Max WS	200h2Pesa	249.85	148.73	152.13		152.76	0.003838	3.83	80.06	37.90	0.68
A	321	Max WS	200h1.5Pesa	221.06	148.73	152.00		152.56	0.003508	3.57	75.50	36.95	0.65
A	321	Max WS	200h1Pesa	233.95	148.73	152.08		152.66	0.003555	3.65	78.41	37.53	0.65
A	321	Max WS	200h0.5Pesa	223.57	148.73	151.99		152.56	0.003665	3.63	74.91	36.86	0.66
A	320	Max WS	200h6Pesa	336.78	148.23	151.49	151.49	152.80	0.008307	5.38	69.98	28.35	0.99
A	320	Max WS	200h5.5Pesa	328.33	148.23	151.45	151.44	152.73	0.008272	5.32	68.88	28.29	0.98
A	320	Max WS	200h5Pesa	324.84	148.23	151.44	151.42	152.70	0.008256	5.30	68.42	28.26	0.98
A	320	Max WS	200h3.5Pesa	302.44	148.23	151.33	151.29	152.53	0.008156	5.14	65.42	28.10	0.97
A	320	Max WS	200h3Pesa	289.52	148.23	151.26	151.21	152.42	0.008126	5.05	63.57	28.00	0.96
A	320	Max WS	200h2Pesa	250.85	148.23	151.05	150.98	152.09	0.008069	4.78	57.96	25.66	0.95
A	320	Max WS	200h1.5Pesa	228.60	148.23	150.92	150.84	151.89	0.008059	4.61	54.63	25.51	0.94
A	320	Max WS	200h1Pesa	238.53	148.23	150.98	150.90	151.98	0.008111	4.70	56.03	25.57	0.95
A	320	Max WS	200h0.5Pesa	226.80	148.23	150.91	150.83	151.88	0.008045	4.60	54.39	25.49	0.94
A	318	Max WS	200h6Pesa	336.77	146.96	149.97	149.53	150.52	0.005016	3.94	108.42	50.58	0.76
A	318	Max WS	200h5.5Pesa	328.33	146.96	149.93	149.51	150.47	0.005014	3.91	106.64	50.47	0.75
A	318	Max WS	200h5Pesa	324.84	146.96	149.92	149.48	150.45	0.005011	3.89	105.92	50.42	0.75
A	318	Max WS	200h3.5Pesa	302.43	146.96	149.82	149.41	150.33	0.005011	3.80	101.06	50.13	0.75
A	318	Max WS	200h3Pesa	289.52	146.96	149.76	149.32	150.26	0.005022	3.75	98.13	49.94	0.75
A	318	Max WS	200h2Pesa	250.84	146.96	149.58	149.13	150.04	0.005010	3.57	89.34	49.32	0.74
A	318	Max WS	200h1.5Pesa	228.58	146.96	149.47	149.02	149.90	0.005031	3.47	83.89	48.88	0.73
A	318	Max WS	200h1Pesa	238.51	146.96	149.52	149.07	149.96	0.005027	3.52	86.31	49.08	0.73
A	318	Max WS	200h0.5Pesa	226.76	146.96	149.46	149.01	149.89	0.005032	3.46	83.44	48.85	0.73