



## Comune di Cogorno

STUDIO TECNICO ASSOCIATO

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### *interventi di mitigazione del rischio idraulico e messa in sicurezza del centro abitato di San Salvatore in comune di Cogorno tratti terminali fossato di San Salvatore e rio Pessa*

*(Piano di Bacino stralcio – D.L. 180/98 e ss.mm.ii. – ambito 16 fiume Entella)*

### **STUDIO DI FATTIBILITÀ TECNICA ED ECONOMICA**

**(D.Lgs. n° 50/2016 – art. 23 – c. 6)**

#### MODELLO IDRAULICO STATO ATTUALE

- tabelle riassuntive dati e risultati
- profili in asse ai corsi d'acqua
- sezioni trasversali ai corsi d'acqua

**TAV.16–B all02**

SCALA

STABS 0613

B	settembre 2017	aggiornamento/integrazioni	<u>il Responsabile del Procedimento</u>
A	febbraio 2016	aggiornamento per nota Regione Liguria prot. n° PG/2015/149922 del 26/08/2015	
	ottobre 2014	revisione n° 01	
REV.	data	motivazione	

HEC-RAS Plan: S\_salv\_att

River	Reach	River Sta	Profile	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)	
SSalvatore	monte	37	Q50	18.70	40.07	41.29	41.29	41.84	0.013062	3.31	5.66	5.04	1.00
SSalvatore	monte	37	Q200	29.40	40.07	41.72	41.72	42.43	0.012342	3.73	8.01	7.03	0.96
SSalvatore	monte	36	Q50	18.70	37.64	38.51	39.11	40.99	0.089842	7.03	2.84	5.75	2.70
SSalvatore	monte	36	Q200	29.40	37.64	38.78	39.51	41.63	0.069739	7.68	4.35	5.75	2.51
SSalvatore	monte	35	Q50	18.70	35.35	36.26	37.29	40.74	0.195626	9.38	1.99	2.31	3.22
SSalvatore	monte	35	Q200	29.40	35.35	36.72	38.00	41.40	0.152556	9.59	3.06	2.37	2.69
SSalvatore	monte	34	Q50	18.70	34.98	35.70	36.42	39.19	0.155548	8.44	2.41	4.72	3.52
SSalvatore	monte	34	Q200	29.40	34.98	35.91	36.85	40.25	0.139411	9.48	3.42	4.83	3.43
SSalvatore	monte	33	Q50	18.70	33.97	34.86	35.40	36.83	0.067584	6.36	3.25	5.04	2.27
SSalvatore	monte	33	Q200	29.40	33.97	35.07	35.82	37.84	0.075226	7.62	4.35	5.09	2.43
SSalvatore	monte	32	Q50	18.70	33.32	34.23	34.96	36.72	0.090705	6.99	2.68	3.27	2.47
SSalvatore	monte	32	Q200	29.40	33.32	34.54	35.39	37.74	0.089548	7.92	3.71	3.41	2.42
SSalvatore	monte	31	Q50	18.70	31.17	32.43	33.19	35.24	0.098668	7.43	2.52	2.94	2.56
SSalvatore	monte	31	Q200	29.40	31.17	32.77	33.75	36.29	0.096137	8.31	3.54	3.06	2.47
SSalvatore	monte	30	Q50	18.70	31.09	32.33	33.07	34.96	0.089020	7.19	2.60	2.73	2.35
SSalvatore	monte	30	Q200	29.40	31.09	32.71	33.66	36.00	0.088459	8.04	3.65	2.84	2.26
SSalvatore	monte	29	Q50	18.70	30.28	31.27	31.96	33.83	0.093192	7.08	2.64	3.34	2.54
SSalvatore	monte	29	Q200	29.40	30.28	31.57	32.66	34.90	0.093142	8.08	3.64	3.36	2.48
SSalvatore	monte	28	Q50	18.70	29.69	30.84	31.47	32.99	0.071618	6.51	2.87	2.88	2.08
SSalvatore	monte	28	Q200	29.40	29.69	31.21	32.20	34.01	0.073917	7.41	3.97	2.92	2.03
SSalvatore	monte	27	Q50	18.70	29.66	30.27	30.77	32.18	0.091192	6.13	3.05	5.43	2.61
SSalvatore	monte	27	Q200	29.40	29.66	30.44	31.16	33.22	0.099811	7.40	3.97	5.46	2.77
SSalvatore	monte	26	Q50	18.70	28.85	29.98	30.39	31.15	0.033028	4.79	3.90	3.83	1.52
SSalvatore	monte	26	Q200	29.40	28.85	30.31	30.90	31.95	0.039210	5.68	5.18	4.23	1.64
SSalvatore	monte	25	Q50	18.70	27.77	28.97	29.37	30.08	0.041218	4.66	4.01	5.39	1.73
SSalvatore	monte	25	Q200	29.40	27.77	29.22	29.65	30.63	0.049088	5.26	5.59	7.43	1.94
SSalvatore	monte	24	Q50	18.70	27.03	28.35	28.77	29.52	0.045200	4.79	3.91	5.14	1.75
SSalvatore	monte	24	Q200	29.40	27.03	28.64	29.05	29.99	0.047597	5.15	5.71	7.38	1.87

River	Reach	River Sta	Profile	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)	
SSalvatore	monte	23	Q50	18.70	26.19	27.51	27.94	28.73	0.035321	4.90	3.82	3.82	1.56
SSalvatore	monte	23	Q200	29.40	26.19	27.98	28.32	29.22	0.030682	4.93	5.96	5.34	1.49
SSalvatore	monte	22	Q50	18.70	26.16	27.00	27.43	28.25	0.043577	4.95	3.78	5.09	1.83
SSalvatore	monte	22	Q200	29.40	26.16	27.34	27.77	28.77	0.040137	5.31	5.54	6.08	1.78
SSalvatore	monte	21	Q50	18.70	24.60	25.35	25.79	26.83	0.059771	5.39	3.47	5.67	2.20
SSalvatore	monte	21	Q200	29.40	24.60	25.59	26.15	27.46	0.054159	6.06	4.86	5.96	2.14
SSalvatore	monte	20	Q50	18.70	23.97	24.85	25.17	25.72	0.027413	4.13	4.53	6.10	1.53
SSalvatore	monte	20	Q200	29.40	23.97	25.08	25.46	26.32	0.030547	4.94	5.95	6.45	1.64
SSalvatore	monte	19	Q50	18.70	23.15	24.35	24.68	25.40	0.039988	4.54	4.12	5.87	1.73
SSalvatore	monte	19	Q200	29.40	23.15	24.59	25.00	25.98	0.042993	5.22	5.63	6.83	1.84
SSalvatore	monte	18.5	Q50	18.70	22.52	23.21	23.67	24.92	0.077051	5.80	3.22	5.56	2.43
SSalvatore	monte	18.5	Q200	29.40	22.52	23.46	24.04	25.52	0.063114	6.36	4.62	5.59	2.23
SSalvatore	monte	18	Q50	18.70	22.38	24.00	23.40	24.18	0.002879	1.88	9.96	6.49	0.48
SSalvatore	monte	18	Q200	29.40	22.38	24.51	23.74	24.76	0.003146	2.22	13.26	6.58	0.50
SSalvatore	monte	17.75		Inl Struct									
SSalvatore	monte	17.5	Q50	18.70	21.59	23.04	22.70	23.33	0.005548	2.39	7.82	5.72	0.65
SSalvatore	monte	17.5	Q200	29.40	21.59	23.49	23.06	23.90	0.006036	2.82	10.43	5.74	0.67
SSalvatore	monte	17.01	Q50	18.70	20.18	23.19	21.17	23.24	0.000465	0.98	19.14	6.71	0.18
SSalvatore	monte	17.01	Q200	29.40	20.18	23.69	21.52	23.78	0.000742	1.30	22.53	6.83	0.23
SSalvatore	monte	17	Q50	18.70	21.70	22.70	22.70	23.19	0.009016	3.13	5.98	6.00	1.00
SSalvatore	monte	17	Q200	29.40	21.70	23.05	23.05	23.72	0.009107	3.64	8.08	6.00	1.00
SSalvatore	monte	16	Q50	18.70	21.25	22.02	22.31	23.01	0.024038	4.42	4.23	5.50	1.61
SSalvatore	monte	16	Q200	29.40	21.25	22.36	22.68	23.55	0.020021	4.83	6.08	5.50	1.47
SSalvatore	monte	15	Q50	18.70	19.80	20.53	20.93	21.87	0.035539	5.14	3.64	5.00	1.93
SSalvatore	monte	15	Q200	29.40	19.80	22.42	21.32	22.68	0.002270	2.25	13.09	5.00	0.44
SSalvatore	monte	14	Q50	18.70	18.70	19.35	19.82	21.03	0.049742	5.74	3.26	5.00	2.27
SSalvatore	monte	14	Q200	29.40	18.70	22.40	20.22	22.61	0.003028	2.06	14.25		0.34
SSalvatore	monte	13	Q50	18.70	16.98	17.72	18.11	19.01	0.033123	5.03	3.72	5.00	1.86

River	Reach	River Sta	Profile	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)	
SSalvatore	monte	13	Q200	29.40	16.98	22.15	18.50	22.43	0.004409	2.35	12.50		0.33
SSalvatore	monte	12	Q50	18.70	15.61	17.51	16.74	17.71	0.002260	1.99	9.38	4.95	0.46
SSalvatore	monte	12	Q200	29.40	15.61	22.04	17.14	22.26	0.003104	2.08	14.11		0.26
SSalvatore	monte	11.5	Q50	18.70	14.86	17.44	15.99	17.56	0.002008	1.56	12.00		0.31
SSalvatore	monte	11.5	Q200	29.40	14.86	21.73	16.38	22.03	0.004962	2.45	12.00		0.30
SSalvatore	monte	11	Q50	18.70	13.88	17.36	15.03	17.49	0.002162	1.61	11.64		0.28
SSalvatore	monte	11	Q200	29.40	13.88	21.52	15.43	21.84	0.005344	2.53	11.64		0.29
SSalvatore	monte	10	Q50	18.70	13.58	17.25	14.89	17.44	0.003480	1.95	9.60		0.32
SSalvatore	monte	10	Q200	29.40	13.58	21.26	15.35	21.73	0.008603	3.06	9.60		0.35
SSalvatore	monte	9	Q50	18.70	13.38	17.19	14.77	17.42	0.004381	2.13	8.76		0.35
SSalvatore	monte	9	Q200	29.40	13.38	21.10	15.26	21.67	0.010830	3.36	8.76		0.39
SSalvatore	monte	8.9	Q50	18.70	13.30	17.06	14.85	17.38	0.006650	2.51	7.44		0.41
SSalvatore	monte	8.9	Q200	29.40	13.30	20.78	15.39	21.58	0.016437	3.95	7.44		0.46
SSalvatore	monte	8.8	Q50	18.70	12.58	16.96	14.01	17.19	0.004350	2.14	8.75		0.33
SSalvatore	monte	8.8	Q200	29.40	12.58	20.54	14.51	21.11	0.010751	3.36	8.75		0.38
SSalvatore	monte	8.7	Q50	18.70	12.01	16.85	13.37	17.06	0.003862	2.04	9.19		0.30
SSalvatore	monte	8.7	Q200	29.40	12.01	20.28	13.85	20.80	0.009546	3.20	9.19		0.36
SSalvatore	monte	8.5	Q50	18.70	11.17	16.70	12.48	16.89	0.003480	1.95	9.60		0.26
SSalvatore	monte	8.5	Q200	29.40	11.17	19.89	12.93	20.37	0.008603	3.06	9.60		0.33
SSalvatore	monte	8.3	Q50	18.70	10.60	16.64	11.91	16.83	0.003480	1.95	9.60		0.25
SSalvatore	monte	8.3	Q200	29.40	10.60	19.75	12.37	20.23	0.008603	3.06	9.60		0.32
SSalvatore	monte	8.2	Q50	18.70	10.50	16.48	12.05	16.80	0.006650	2.51	7.44		0.33
SSalvatore	monte	8.2	Q200	29.40	10.50	19.36	12.59	20.16	0.016437	3.95	7.44		0.42
SSalvatore	monte	8	Q50	18.70	10.13	16.43	11.68	16.76	0.006650	2.51	7.44		0.32
SSalvatore	monte	8	Q200	29.40	10.13	19.24	12.22	20.04	0.016437	3.95	7.44		0.42
SSalvatore	monte	7.6	Q50	18.70	10.03	16.40	11.58	16.72	0.006650	2.51	7.44		0.32
SSalvatore	monte	7.6	Q200	29.40	10.03	19.15	12.12	19.94	0.016437	3.95	7.44		0.42
SSalvatore	monte	7.51	Q50	18.70	10.02	16.44	11.40	16.66	0.004233	2.11	8.88		0.27

River	Reach	River Sta	Profile	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)	
SSalvatore	monte	7.51	Q200	29.40	10.02	19.24	11.88	19.80	0.010464	3.31	8.88		0.35
SSalvatore	monte	7.5	Q50	18.70	10.02	16.36	11.40	16.65	0.006176	2.41	7.77		0.31
SSalvatore	monte	7.5	Q200	29.40	10.02	19.06	11.88	19.78	0.015267	3.78	7.77		0.40
SSalvatore	monte	7.41	Q50	18.70	10.01	16.33	11.39	16.62	0.006176	2.41	7.77		0.31
SSalvatore	monte	7.41	Q200	29.40	10.01	18.98	11.87	19.71	0.015267	3.78	7.77		0.40
SSalvatore	monte	7.4	Q50	18.70	10.01	16.39	11.39	16.60	0.003776	2.02	9.25		0.26
SSalvatore	monte	7.4	Q200	29.40	10.01	19.13	11.87	19.65	0.009333	3.18	9.25		0.34
SSalvatore	monte	7.2	Q50	18.70	10.00	16.42	11.24	16.57	0.002588	1.74	10.75		0.22
SSalvatore	monte	7.2	Q200	29.40	10.00	19.21	11.68	19.59	0.006396	2.73	10.75		0.29
SSalvatore	valle	7	Q50	35.55	9.95	15.89	11.87	16.48	0.010196	3.41	10.41		0.45
SSalvatore	valle	7	Q200	48.86	9.95	19.22	12.33	19.53	0.003233	2.46	19.86	4.25	0.26
SSalvatore	valle	6.5	Q50	35.55	9.45	15.46	11.39	16.09	0.011135	3.53	10.08		0.46
SSalvatore	valle	6.5	Q200	48.86	9.45	19.05	11.85	19.40	0.003878	2.61	18.70	4.20	0.27
SSalvatore	valle	6	Q50	35.55	9.25	14.50	11.15	15.51	0.021847	4.45	7.98		0.62
SSalvatore	valle	6	Q200	48.86	9.25	18.63	11.15	19.19	0.007737	3.29	14.84	4.20	0.34
SSalvatore	valle	5.61	Q50	35.55	9.20	14.43	11.10	15.44	0.021847	4.45	7.98		0.62
SSalvatore	valle	5.61	Q200	48.86	9.20	18.60	11.10	19.16	0.007998	3.32	14.69	4.20	0.35
SSalvatore	valle	5.6	Q50	35.55	9.20	14.07	10.85	15.41	0.033064	5.13	6.93		0.74
SSalvatore	valle	5.6	Q200	48.86	9.20	18.41	10.85	19.14	0.012041	3.81	12.84	4.20	0.40
SSalvatore	valle	5.31	Q50	35.55	9.15	13.80	10.75	15.22	0.036218	5.29	6.72		0.78
SSalvatore	valle	5.31	Q200	48.86	9.15	18.12	10.75	19.05	0.017650	4.28	11.42	4.20	0.46
SSalvatore	valle	5.3	Q50	35.55	9.15	14.05	11.00	15.12	0.023617	4.58	7.77		0.66
SSalvatore	valle	5.3	Q200	48.86	9.15	18.28	11.00	18.98	0.011524	3.72	13.14	4.20	0.39
SSalvatore	valle	5	Q50	35.55	8.72	13.47	10.57	14.49	0.022318	4.47	7.95		0.65
SSalvatore	valle	5	Q200	48.86	8.72	16.41	10.57	18.33	0.042157	6.14	7.95		0.71
SSalvatore	valle	4.6	Q50	35.55	8.55	13.24	10.38	14.11	0.018398	4.13	8.60		0.61
SSalvatore	valle	4.6	Q200	48.86	8.55	15.98	10.42	17.62	0.034752	5.68	8.60		0.67
SSalvatore	valle	4.4	Q50	35.55	8.48	12.40	10.38	13.83	0.033393	5.30	6.71		0.85

## HEC-RAS Plan: S\_salv\_att (Continued)

River	Reach	River Sta	Profile	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)	
SSalvatore	valle	4.4	Q200	48.86	8.48	14.38	10.38	17.08	0.063078	7.29	6.71		0.96
SSalvatore	valle	4.2	Q50	35.55	8.15	12.23	10.17	13.12	0.017749	4.19	8.49		0.66
SSalvatore	valle	4.2	Q200	48.86	8.15	14.06	10.30	15.75	0.033527	5.75	8.49		0.76
SSalvatore	valle	4.01	Q50	35.55	7.77	12.17	9.72	12.79	0.010696	3.48	10.21		0.53
SSalvatore	valle	4.01	Q200	48.86	7.77	13.96	10.19	15.12	0.020204	4.79	10.21		0.61
SSalvatore	valle	4	Q50	35.55	7.77	11.22	9.44	12.71	0.035429	5.40	6.58		0.93
SSalvatore	valle	4	Q200	48.86	7.77	12.15	9.58	14.96	0.066924	7.42	6.58		1.13
SSalvatore	valle	3	Q50	35.55	7.77	10.97	9.44	12.46	0.035429	5.40	6.58		0.96
SSalvatore	valle	3	Q200	48.86	7.77	11.69	9.58	14.49	0.066924	7.42	6.58		1.20
SSalvatore	valle	2.99	Q50	35.55	7.43	11.68	9.39	12.16	0.007429	3.06	11.62		0.47
SSalvatore	valle	2.99	Q200	48.86	7.43	13.02	9.85	13.92	0.014032	4.20	11.62		0.57
SSalvatore	valle	2.6	Q50	35.55	7.36	11.23	9.59	11.97	0.013022	3.80	9.35		0.62
SSalvatore	valle	2.6	Q200	48.86	7.36	12.18	10.11	13.57	0.024598	5.23	9.35		0.76
SSalvatore	valle	2.31	Q50	35.55	6.97	9.85	9.12	11.12	0.027808	5.01	7.10		0.94
SSalvatore	valle	2.31	Q200	48.86	6.97	9.56	9.12	11.97	0.052527	6.89	7.10		1.37
SSalvatore	valle	2.3	Q50	35.55	6.97	9.51	8.90	11.09	0.037724	5.58	6.37		1.12
SSalvatore	valle	2.3	Q200	48.86	6.97	8.92	8.90	11.92	0.071257	7.67	6.37		1.75
SSalvatore	valle	2	Q50	35.55	6.90	10.06	10.06	10.51	0.014342	3.51	14.60	12.90	0.54
SSalvatore	valle	2	Q200	48.86	6.90	10.30	10.30	10.82	0.018002	3.93	17.71	12.90	0.56
SSalvatore	valle	1.99	Q50	35.55	6.90	8.78	9.17	10.40	0.022868	5.64	6.31	3.47	1.33
SSalvatore	valle	1.99	Q200	48.86	6.90	9.75	10.06	10.77	0.011135	4.64	13.73	16.45	0.89
SSalvatore	valle	1.5	Q50	35.55	5.71	7.98	7.98	9.03	0.018103	4.53	7.85	3.76	1.00
SSalvatore	valle	1.5	Q200	48.86	5.71	9.12	8.57	9.39	0.003613	2.66	26.38	15.00	0.47
SSalvatore	valle	1.2	Q50	35.55	4.60	6.79	6.79	7.84	0.018491	4.54	7.83	3.73	1.00
SSalvatore	valle	1.2	Q200	48.86	4.60	7.30	7.30	8.58	0.019826	5.01	9.75	3.80	1.00
SSalvatore	valle	1	Q50	35.55	4.46	5.58	6.18	7.60	0.049292	6.29	5.65	5.10	1.91
SSalvatore	valle	1	Q200	48.86	4.46	5.85	6.59	8.31	0.049400	6.95	7.03	5.14	1.90
SSalvatore	valle	0.8		Bridge									

River	Reach	River Sta	Profile	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)	
SSalvatore	valle	0.5	Q50	35.55	4.45	5.79	6.18	7.22	0.029911	5.31	6.70	5.10	1.48
SSalvatore	valle	0.5	Q200	48.86	4.45	6.06	6.59	7.93	0.033351	6.06	8.06	5.14	1.54
SSalvatore	valle	0.4	Q50	35.55	2.45	3.30	4.19	6.95	0.117842	8.46	4.20	4.99	2.94
SSalvatore	valle	0.4	Q200	48.86	2.45	3.55	4.60	7.65	0.103155	8.97	5.45	5.01	2.75
Pessa	unico	200	Q50	17.70	31.10	32.79	32.59	33.28	0.010166	3.11	5.69	3.89	0.82
Pessa	unico	200	Q200	27.90	31.10	33.34	33.07	33.98	0.010512	3.53	7.90	4.00	0.80
Pessa	unico	116	Q50	17.70	29.90	31.50	31.50	32.11	0.013278	3.46	5.11	4.18	1.00
Pessa	unico	116	Q200	27.90	29.90	31.94	31.94	32.75	0.014060	3.99	6.99	4.30	1.00
Pessa	unico	115.5	Q50	17.70	28.90	30.04	30.50	31.51	0.044269	5.36	3.30	3.54	1.77
Pessa	unico	115.5	Q200	27.90	28.90	30.45	31.22	32.16	0.038781	5.78	4.83	3.93	1.66
Pessa	unico	115		Bridge									
Pessa	unico	114.8	Q50	17.70	28.75	29.99	30.36	31.22	0.034836	4.93	3.59	3.54	1.56
Pessa	unico	114.8	Q200	27.90	28.75	31.17	31.17	31.53	0.005582	2.87	14.10	21.93	0.65
Pessa	unico	114.5	Q50	17.70	28.57	29.48	29.93	31.04	0.058986	5.53	3.20	5.07	2.22
Pessa	unico	114.5	Q200	27.90	28.57	29.84	30.31	31.38	0.038046	5.50	5.07	5.40	1.81
Pessa	unico	114.2	Q50	17.70	27.36	28.45	28.88	29.98	0.063699	5.48	3.23	5.47	2.27
Pessa	unico	114.2	Q200	27.90	27.36	28.68	29.24	30.54	0.059258	6.04	4.62	6.33	2.25
Pessa	unico	114	Q50	17.70	26.61	27.86	28.25	29.16	0.037368	5.06	3.50	3.56	1.63
Pessa	unico	114	Q200	27.90	26.61	28.32	28.74	29.76	0.030826	5.31	5.25	3.93	1.47
Pessa	unico	113.7	Q50	17.70	26.18	27.45	27.77	28.48	0.029059	4.50	3.93	4.62	1.56
Pessa	unico	113.7	Q200	27.90	26.18	27.71	28.22	29.17	0.033661	5.37	5.20	5.15	1.71
Pessa	unico	113.5	Q50	17.70	25.90	26.84	27.22	28.11	0.043877	4.99	3.55	4.98	1.89
Pessa	unico	113.5	Q200	27.90	25.90	28.32	27.64	28.54	0.002393	2.16	17.31	18.79	0.48
Pessa	unico	113		Bridge									
Pessa	unico	112.5	Q50	17.70	25.53	26.42	26.72	27.45	0.044272	4.50	3.94	6.78	1.88
Pessa	unico	112.5	Q200	27.90	25.53	26.64	27.04	27.97	0.040280	5.13	5.44	6.88	1.84
Pessa	unico	112.2	Q50	17.70	24.81	26.25	26.25	26.89	0.014705	3.55	4.99	3.89	1.00

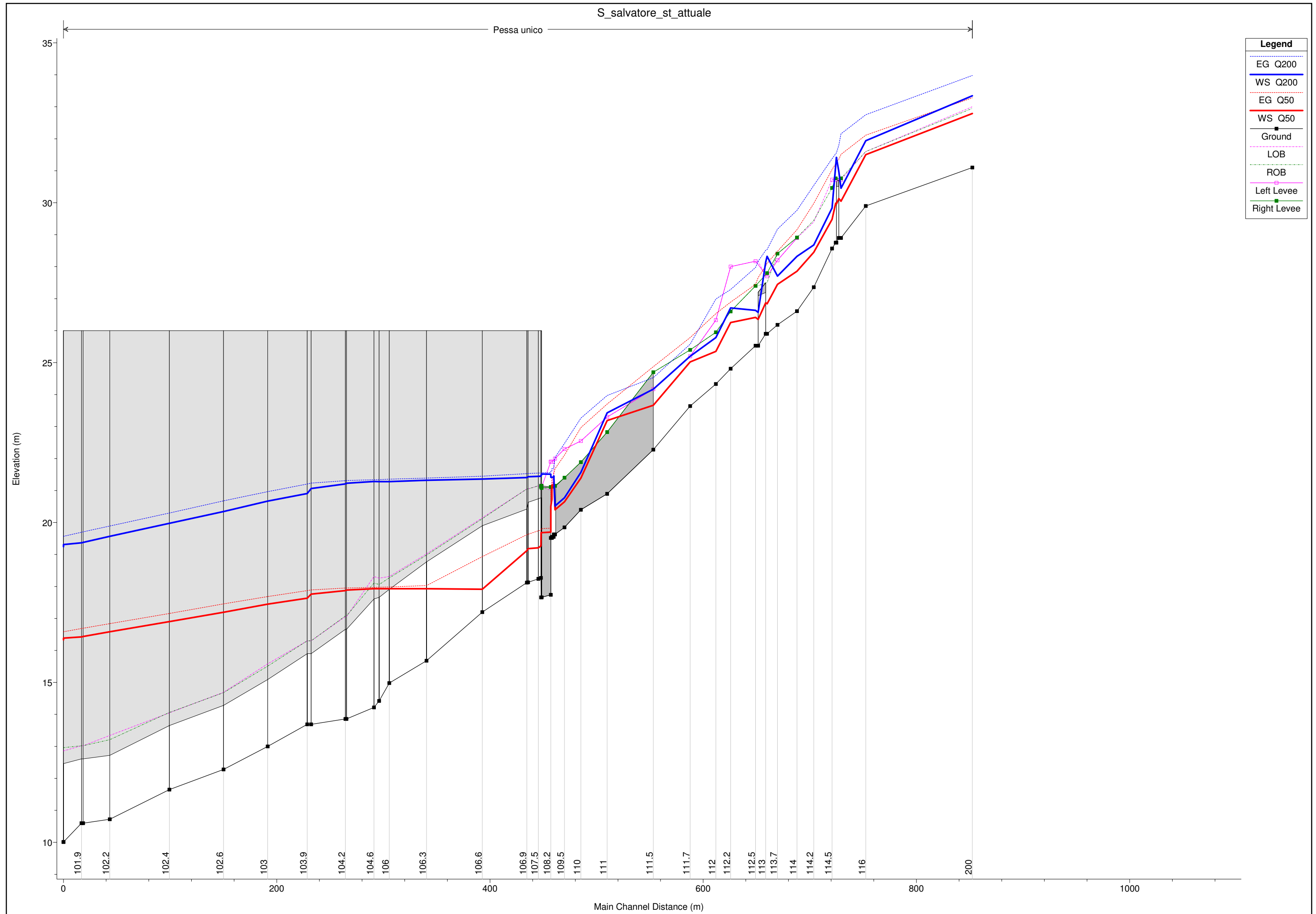
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Pessa	unico	112.2	Q200	27.90	24.81	26.71	26.87	27.29	0.011754	3.58	10.65	17.71	0.88
Pessa	unico	112	Q50	17.70	24.33	25.35	25.72	26.53	0.037147	4.81	3.68	4.47	1.70
Pessa	unico	112	Q200	27.90	24.33	25.78	26.22	26.99	0.026548	4.86	5.74	5.04	1.45
Pessa	unico	111.7	Q50	17.70	23.64	25.02	25.18	25.78	0.019071	3.86	4.58	4.40	1.21
Pessa	unico	111.7	Q200	27.90	23.64	25.20	25.20	25.57	0.011170	3.13	11.21	8.83	0.93
Pessa	unico	111.5	Q50	17.70	22.28	23.67	24.05	24.87	0.034147	4.87	3.64	3.51	1.53
Pessa	unico	111.5	Q200	27.90	22.28	24.17	24.17	24.53	0.010728	3.09	11.65	9.40	0.87
Pessa	unico	111.4		Lat Struct									
Pessa	unico	111	Q50	16.62	20.90	23.19	23.29	23.71	0.015329	3.43	6.23	8.13	0.81
Pessa	unico	111	Q200	23.13	20.90	23.43	23.50	23.97	0.015199	3.66	8.62	9.15	0.82
Pessa	unico	110	Q50	15.65	20.40	21.39	22.02	22.97	0.053542	5.57	2.81	3.43	1.96
Pessa	unico	110	Q200	19.83	20.40	21.57	22.19	23.26	0.049059	5.77	3.44	3.59	1.88
Pessa	unico	109.5	Q50	15.65	19.85	20.65	21.09	22.11	0.053916	5.36	2.92	3.98	2.00
Pessa	unico	109.5	Q200	19.83	19.85	20.78	21.29	22.47	0.054031	5.77	3.44	4.08	2.01
Pessa	unico	109	Q50	15.65	19.63	20.40	20.78	21.68	0.033777	5.02	3.12	4.25	1.87
Pessa	unico	109	Q200	19.83	19.63	20.52	20.97	22.04	0.034631	5.46	3.63	4.29	1.89
Pessa	unico	108.9		Inl Struct									
Pessa	unico	108.5	Q50	15.65	19.55	21.17	20.66	21.42	0.003154	2.19	7.20	6.34	0.56
Pessa	unico	108.5	Q200	19.83	19.55	21.41	20.85	21.69	0.003045	2.35	9.48	10.60	0.56
Pessa	unico	108.4		Inl Struct									
Pessa	unico	108.3	Q50	15.65	19.52	20.50	20.50	20.99	0.009323	3.09	5.07	5.22	1.00
Pessa	unico	108.3	Q200	19.83	19.52	21.41	20.67	21.61	0.001901	1.97	11.24	10.85	0.46
Pessa	unico	108.29		Lat Struct									
Pessa	unico	108.2	Q50	15.65	17.74	19.70	18.72	19.82	0.001276	1.54	10.15	5.22	0.35
Pessa	unico	108.2	Q200	19.81	17.74	21.51	18.89	21.56	0.000310	0.99	21.62	10.85	0.16
Pessa	unico	108.11	Q50	15.65	17.66	19.68	18.69	19.81	0.001355	1.58	9.91	4.97	0.36
Pessa	unico	108.11	Q200	17.66	17.66	21.52	18.77	21.56	0.000264	0.90	22.66	15.29	0.15

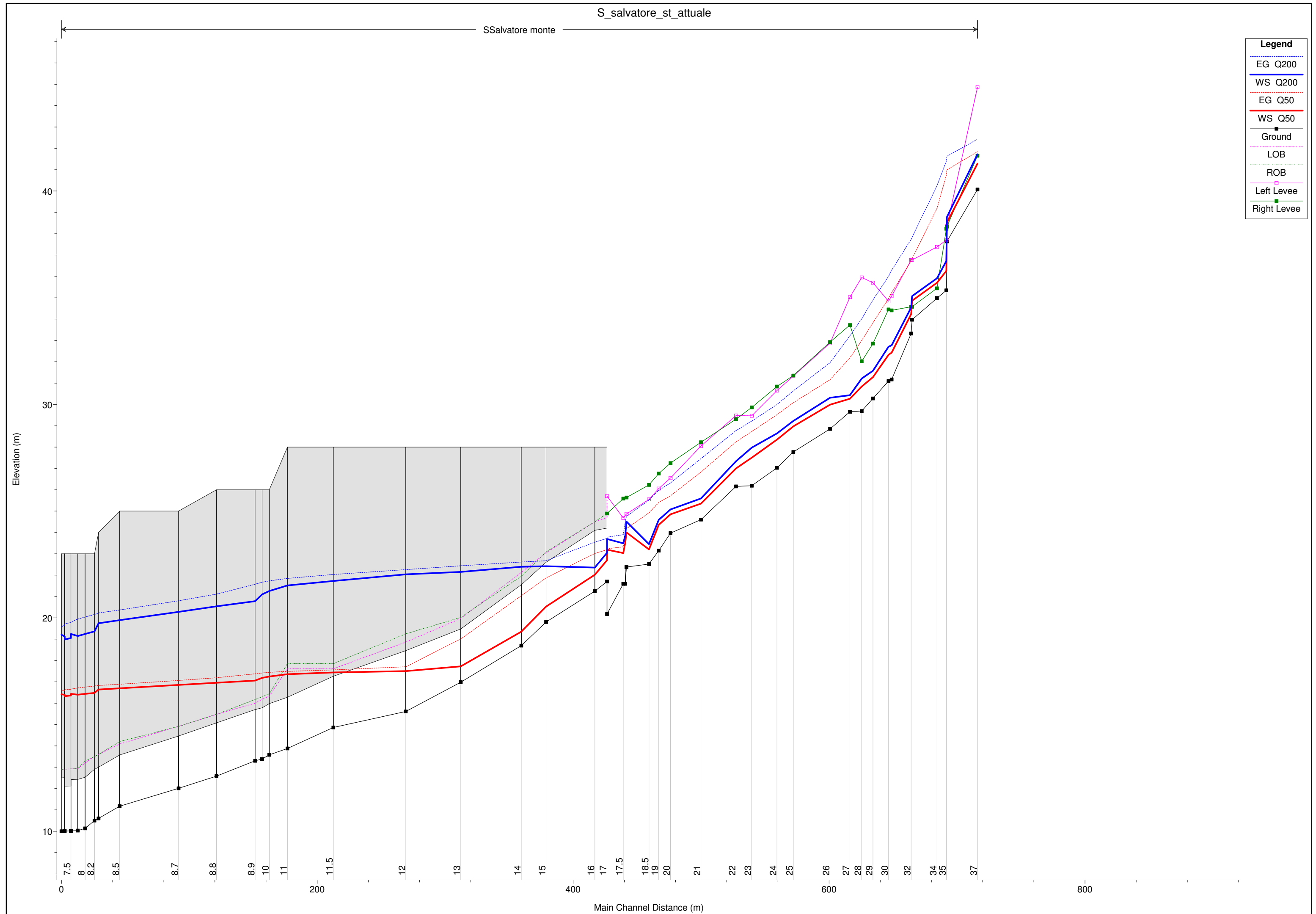


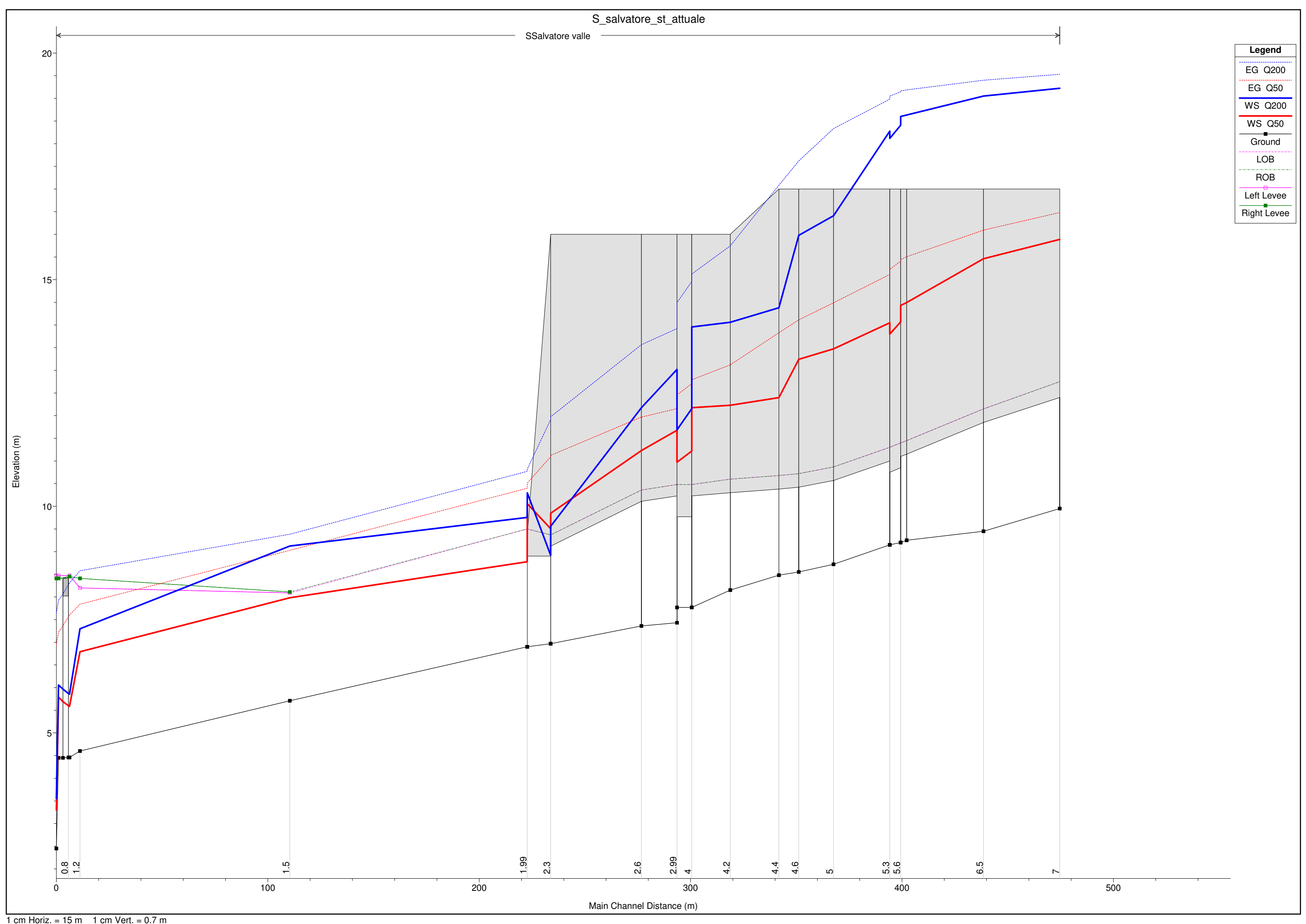
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Pessa	unico	108.1	Q50	15.65	17.66	19.69	18.66	19.81	0.001283	1.54	10.13	5.00	0.35
Pessa	unico	108.1	Q200	17.66	17.66	21.49	18.75	21.55	0.000852	1.14	15.55		0.19
Pessa	unico	108	Q50	15.65	17.66	19.69	18.66	19.81	0.001284	1.54	10.13	5.00	0.35
Pessa	unico	108	Q200	17.66	17.66	21.49	18.75	21.55	0.000852	1.14	15.55		0.19
Pessa	unico	107.9	Q50	15.65	18.27	19.27	19.27	19.77	0.009631	3.13	4.99	5.00	1.00
Pessa	unico	107.9	Q200	17.66	18.27	21.45	19.35	21.55	0.001590	1.41	12.50		0.25
Pessa	unico	107.5	Q50	15.65	18.24	19.21	19.24	19.74	0.010527	3.23	4.84	5.00	1.05
Pessa	unico	107.5	Q200	17.66	18.24	21.44	19.32	21.55	0.001590	1.41	12.50		0.25
Pessa	unico	107	Q50	15.65	18.13	19.18	19.13	19.63	0.008250	2.97	5.26	5.00	0.93
Pessa	unico	107	Q200	17.66	18.13	21.43	19.21	21.53	0.001590	1.41	12.50		0.25
Pessa	unico	106.9	Q50	15.65	18.12	19.12	19.12	19.62	0.009636	3.13	4.99	5.00	1.00
Pessa	unico	106.9	Q200	17.66	18.12	21.41	19.20	21.53	0.002025	1.54	11.50		0.27
Pessa	unico	106.6	Q50	15.65	17.20	17.91	18.21	18.93	0.027529	4.47	3.50	4.90	1.69
Pessa	unico	106.6	Q200	17.66	17.20	21.36	18.30	21.45	0.001339	1.33	13.23		0.21
Pessa	unico	106.3	Q50	15.65	15.68	17.93	16.68	18.03	0.000964	1.39	11.25	5.00	0.30
Pessa	unico	106.3	Q200	17.66	15.68	21.32	16.76	21.39	0.000868	1.14	15.45		0.15
Pessa	unico	106	Q50	15.65	14.98	17.93	15.98	17.99	0.000793	1.07	14.65		0.20
Pessa	unico	106	Q200	17.66	14.98	21.28	16.06	21.35	0.001009	1.21	14.65		0.15
Pessa	unico	105	Q50	15.65	14.42	17.93	15.42	17.98	0.000597	0.97	16.20		0.16
Pessa	unico	105	Q200	17.66	14.42	21.28	15.50	21.34	0.000760	1.09	16.20		0.13
Pessa	unico	104.6	Q50	15.65	14.22	17.93	15.22	17.97	0.000526	0.92	16.95		0.15
Pessa	unico	104.6	Q200	17.66	14.22	21.28	15.30	21.34	0.000669	1.04	16.95		0.13
Pessa	unico	104.3	Q50	15.65	13.86	17.89	14.87	17.95	0.000948	1.14	13.72		0.18
Pessa	unico	104.3	Q200	17.66	13.86	21.23	14.96	21.31	0.001207	1.29	13.72		0.15
Pessa	unico	104.2	Q50	15.65	13.86	17.87	14.94	17.95	0.001206	1.26	12.46		0.20
Pessa	unico	104.2	Q200	17.66	13.86	21.21	15.03	21.31	0.001536	1.42	12.46		0.17
Pessa	unico	104	Q50	15.65	13.69	17.76	14.78	17.89	0.002438	1.61	9.72		0.25
Pessa	unico	104	Q200	17.66	13.69	21.07	14.87	21.23	0.003104	1.82	9.72		0.21

## HEC-RAS Plan: S\_salv\_att (Continued)

River	Reach	River Sta	Profile	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)	
Pessa	unico	103.9	Q50	15.65	13.69	17.63	15.01	17.87	0.004990	2.15	7.29		0.34
Pessa	unico	103.9	Q200	17.66	13.69	20.91	15.12	21.20	0.006353	2.42	7.29		0.29
Pessa	unico	103	Q50	15.65	13.00	17.45	14.27	17.68	0.005035	2.14	7.32		0.32
Pessa	unico	103	Q200	17.66	13.00	20.67	14.37	20.97	0.006410	2.41	7.32		0.28
Pessa	unico	102.6	Q50	15.65	12.28	17.19	13.56	17.45	0.005915	2.27	6.90		0.33
Pessa	unico	102.6	Q200	17.66	12.28	20.34	13.67	20.68	0.007531	2.56	6.90		0.29
Pessa	unico	102.4	Q50	15.65	11.65	16.90	12.92	17.16	0.005707	2.24	7.00		0.31
Pessa	unico	102.4	Q200	17.66	11.65	19.97	13.02	20.30	0.007266	2.52	7.00		0.28
Pessa	unico	102.2	Q50	15.65	10.72	16.58	11.99	16.84	0.005707	2.24	7.00		0.29
Pessa	unico	102.2	Q200	17.66	10.72	19.57	12.09	19.89	0.007266	2.52	7.00		0.27
Pessa	unico	102	Q50	15.65	10.60	16.43	11.88	16.69	0.005831	2.26	6.93		0.30
Pessa	unico	102	Q200	17.66	10.60	19.38	11.99	19.71	0.007424	2.55	6.93		0.27
Pessa	unico	101.9	Q50	15.65	10.60	16.43	11.88	16.68	0.005831	2.26	6.93		0.30
Pessa	unico	101.9	Q200	17.66	10.60	19.37	11.99	19.70	0.007424	2.55	6.93		0.27
Pessa	unico	101	Q50	15.65	10.01	16.38	11.36	16.59	0.004053	2.00	7.84		0.25
Pessa	unico	101	Q200	17.66	10.01	19.31	11.47	19.57	0.005160	2.25	7.84		0.24
Pessa	unico	100.9	Q50	15.65	10.01	16.33	11.35	16.58	0.005462	2.22	7.04		0.28
Pessa	unico	100.9	Q200	17.66	10.01	19.24	11.47	19.56	0.006954	2.51	7.04		0.26

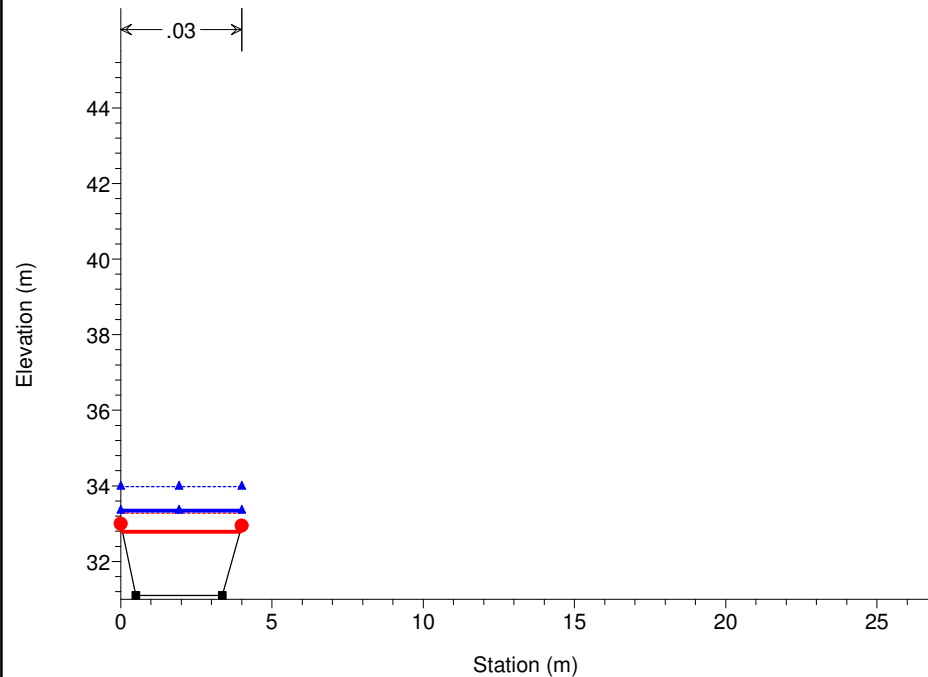






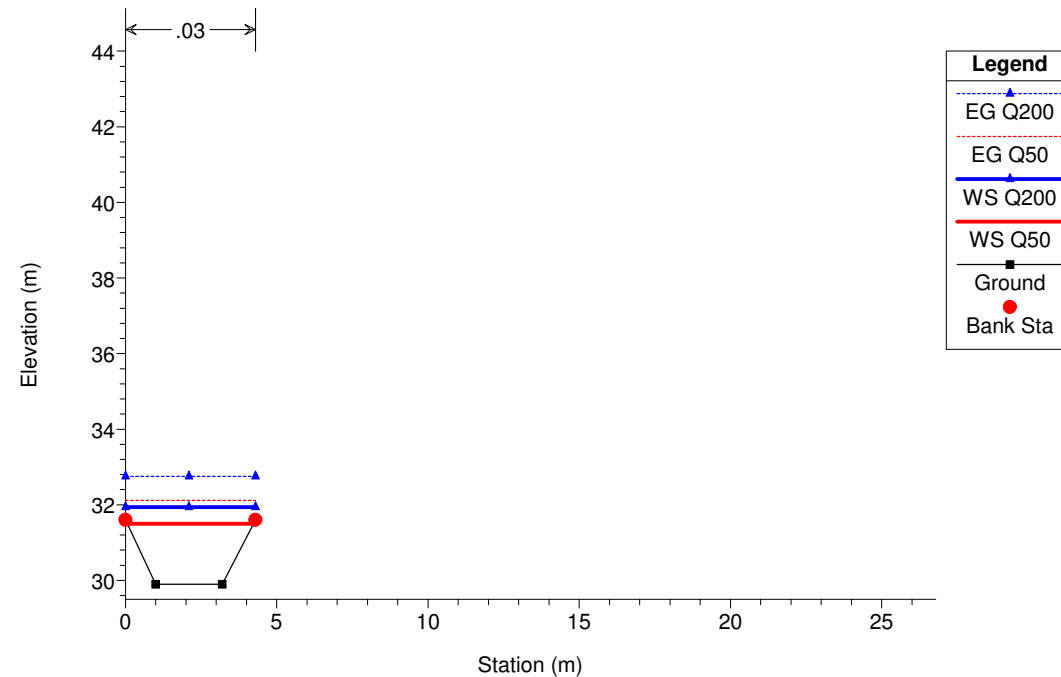
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 200 fittizia



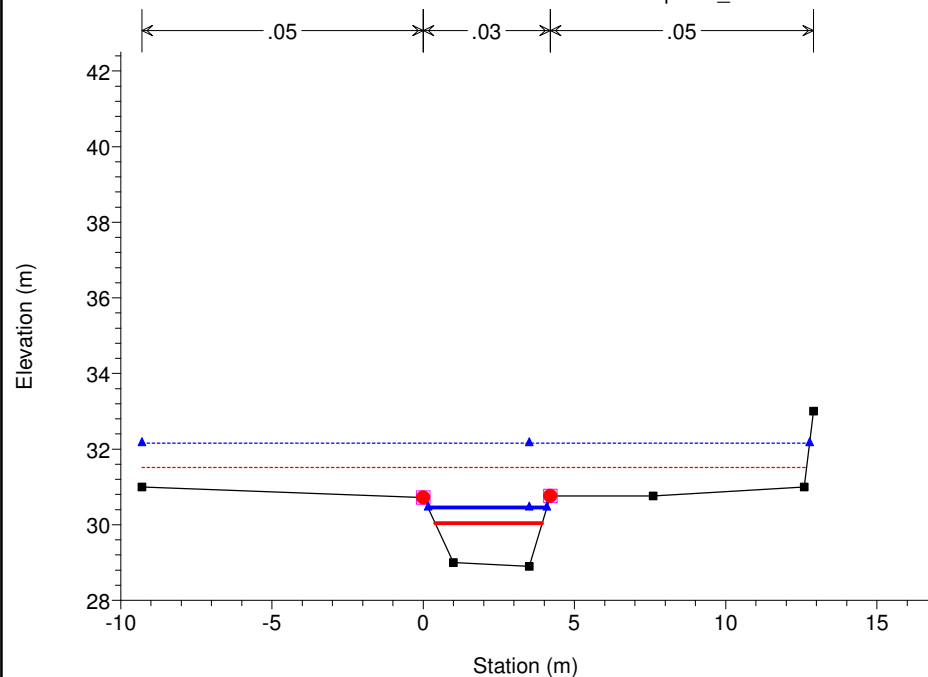
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River = Pessa Reach = unico RS = 116



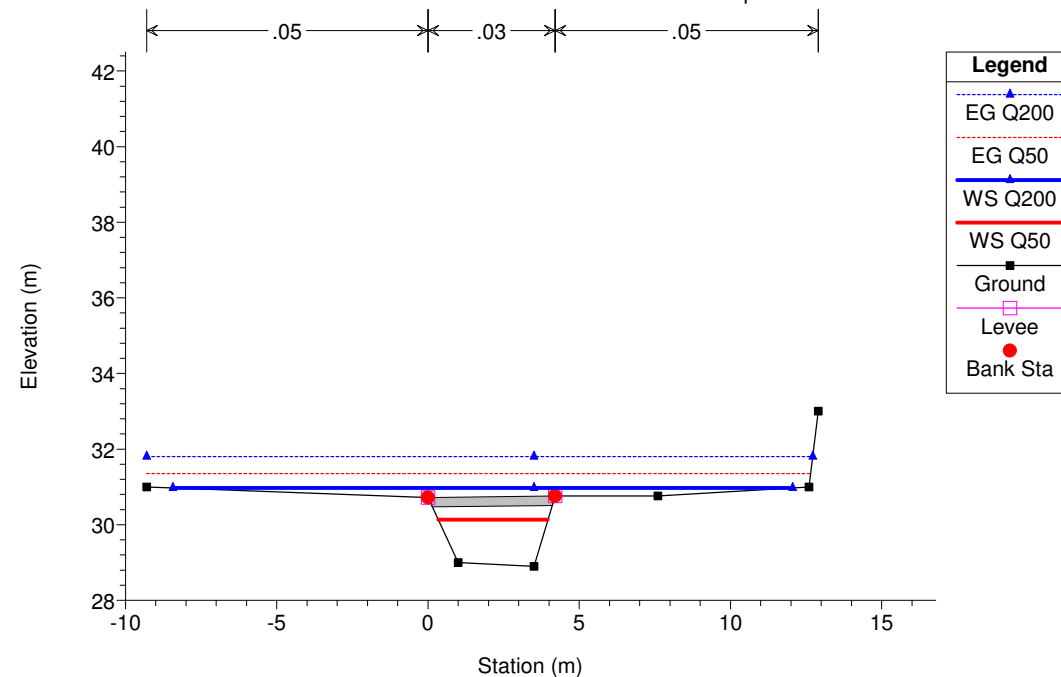
### S\_salvatore\_st\_attuale

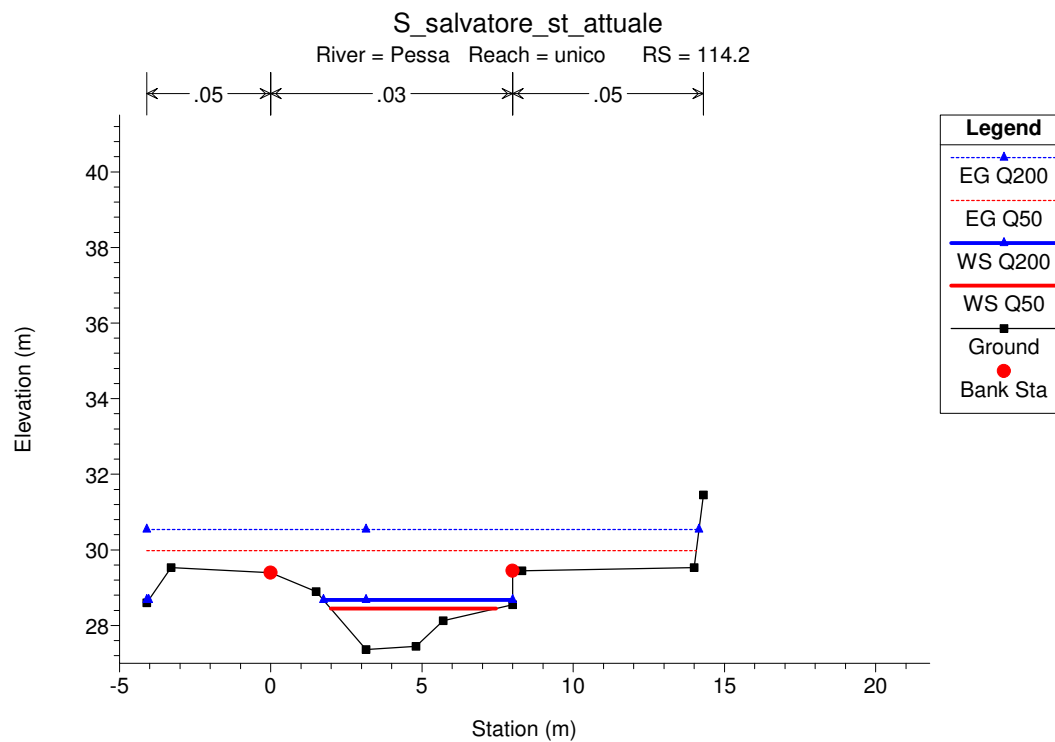
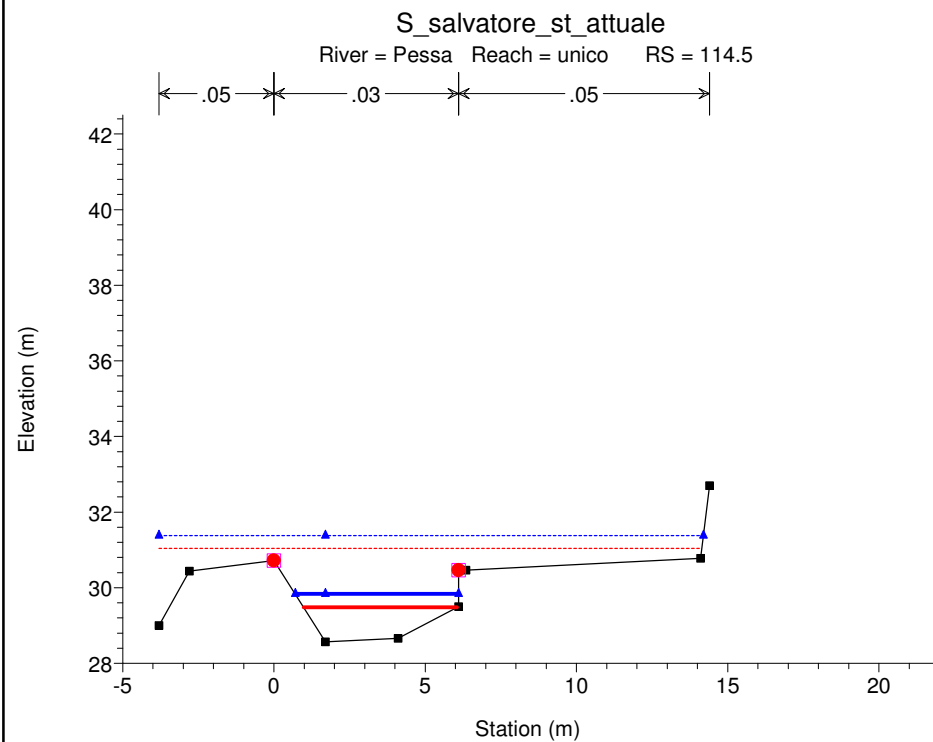
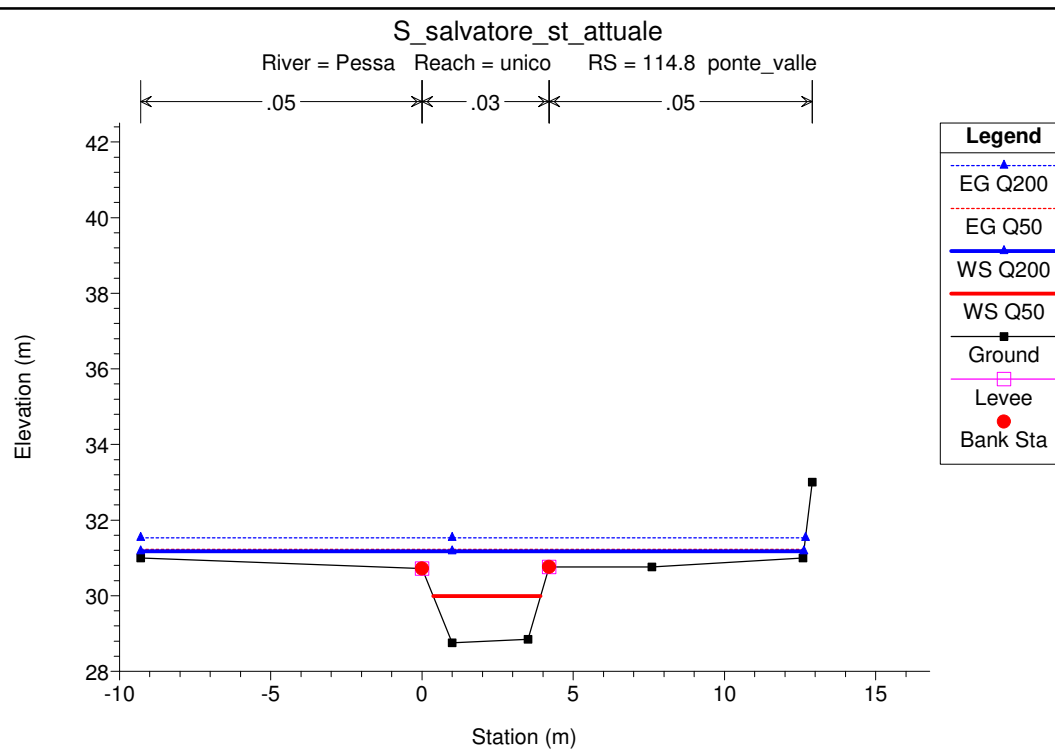
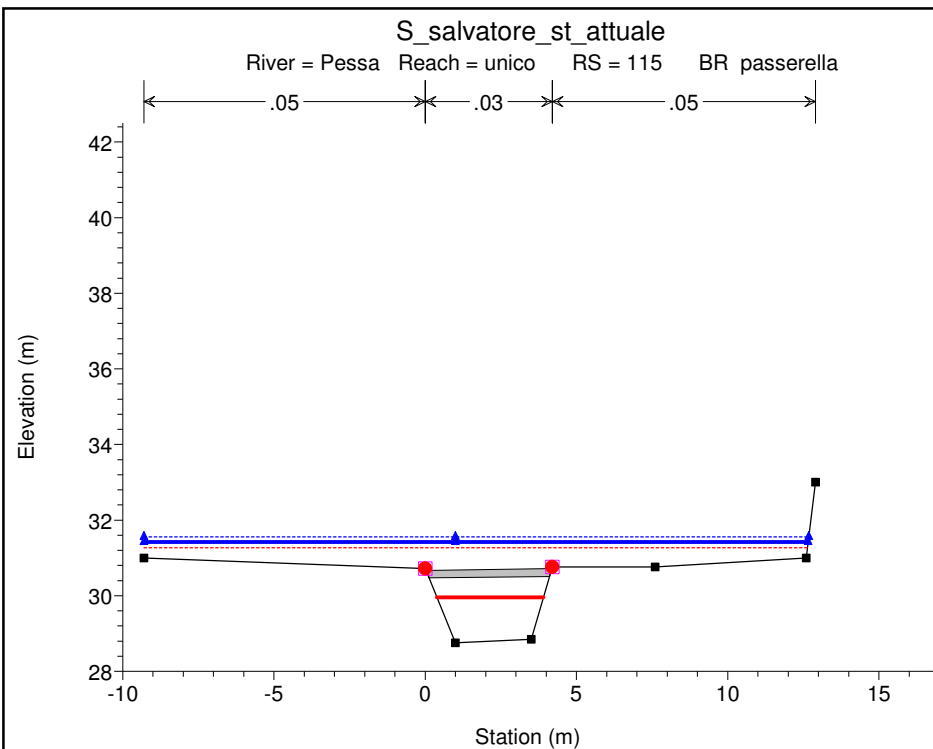
River = Pessa Reach = unico RS = 115.5 ponte\_monte PES15



### S\_salvatore\_st\_attuale

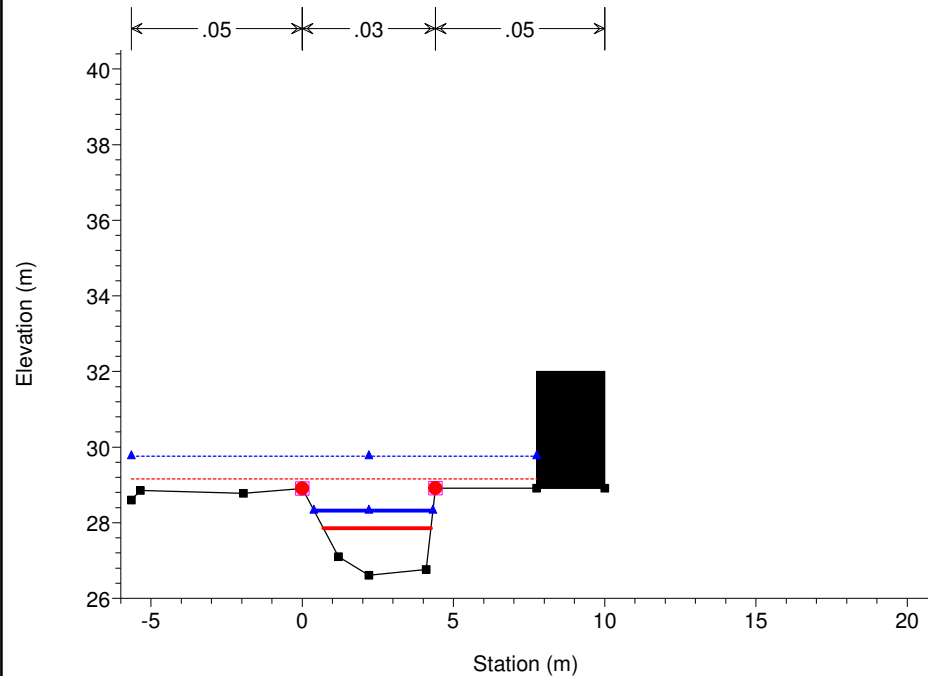
River = Pessa Reach = unico RS = 115 BR passerella





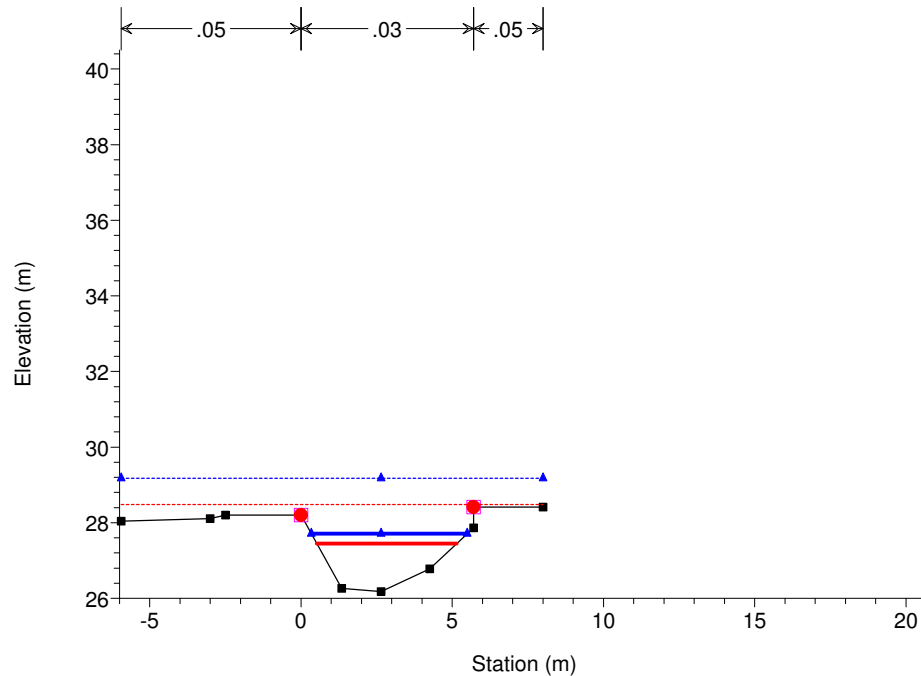
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 114 PES 14



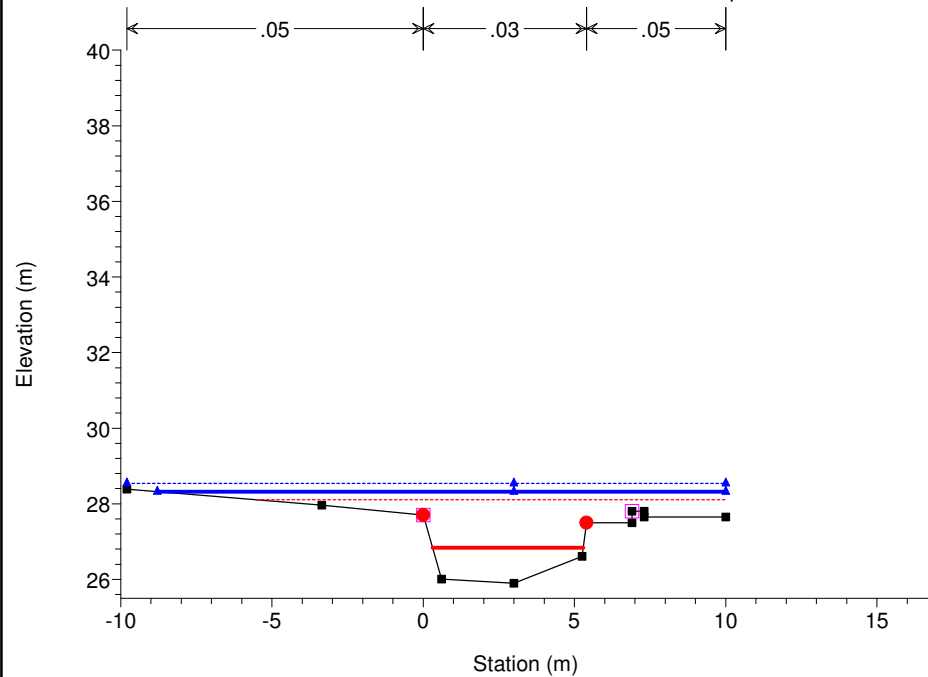
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 113.7



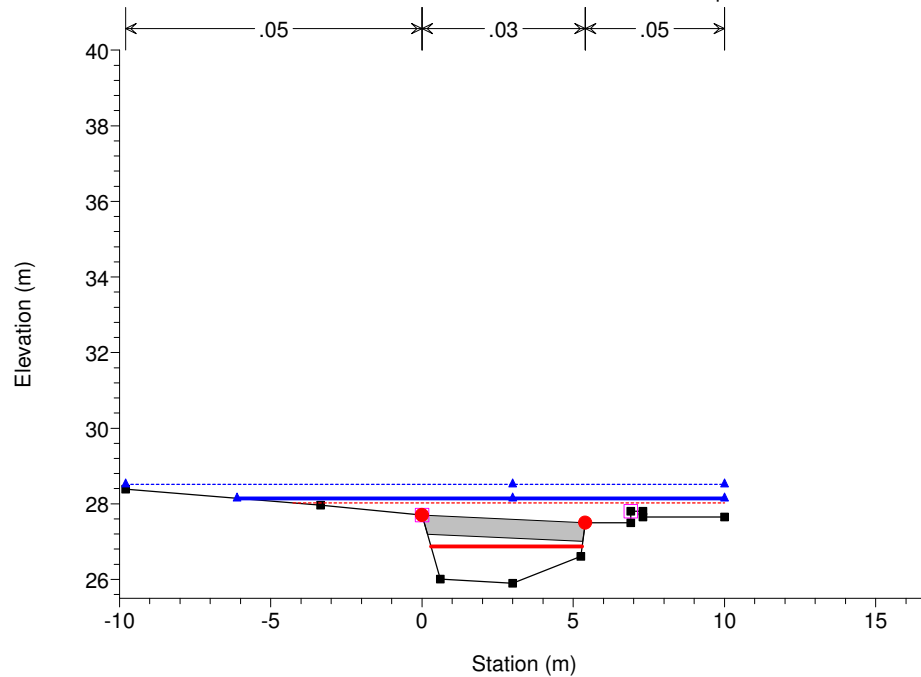
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 113.5 monte ponte PES 13



### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 113 BR ponte carrabile

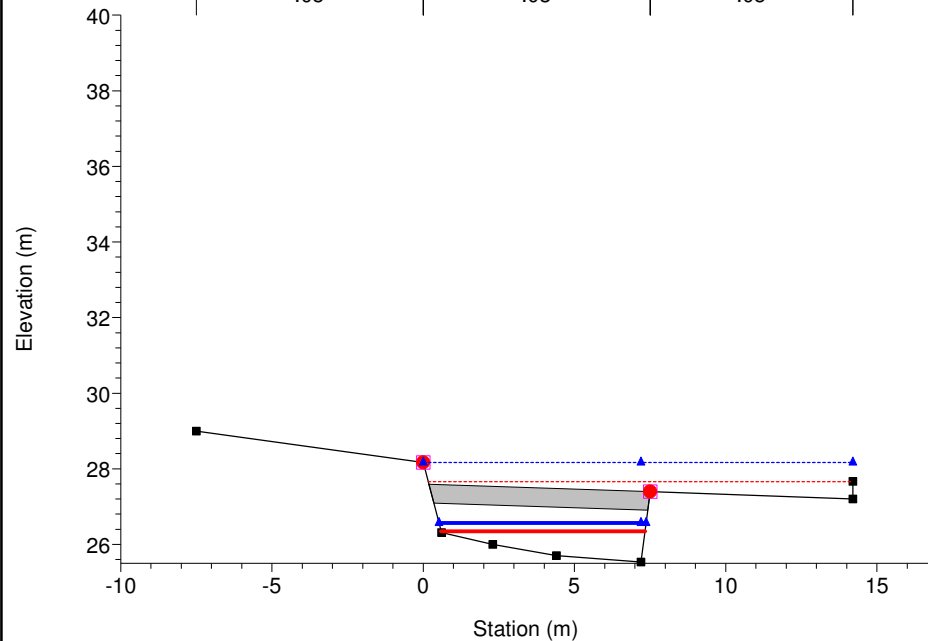




S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 113 BR ponte carrabile

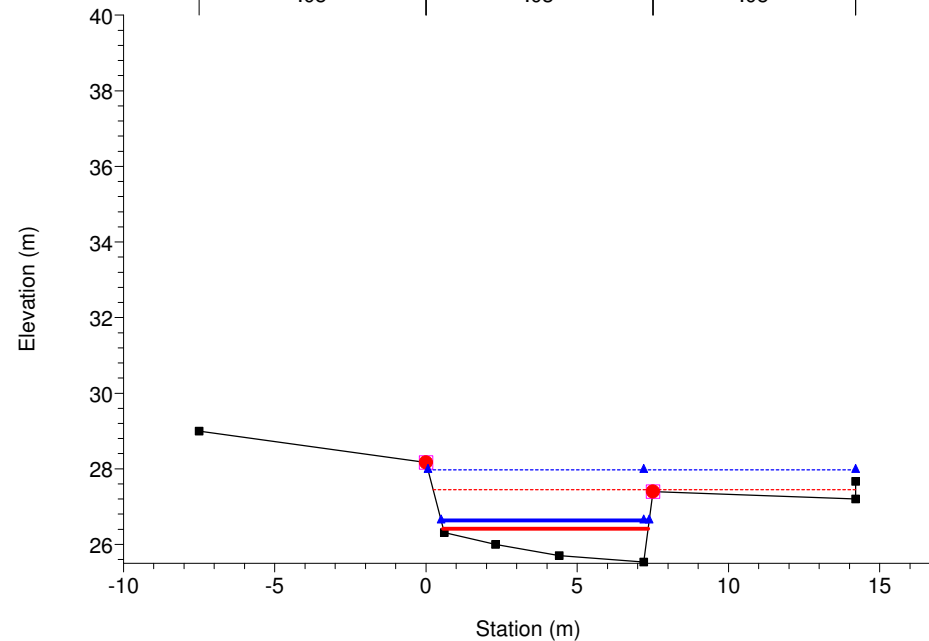
← .05 → .03 → .05 →



S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 112.5 valle ponte

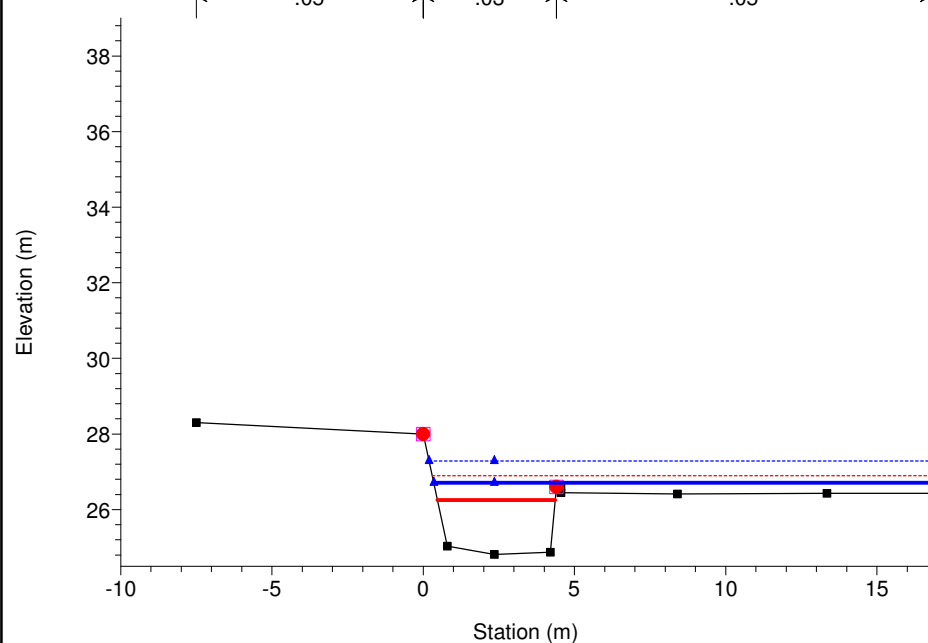
← .05 → .03 → .05 →



S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 112.2

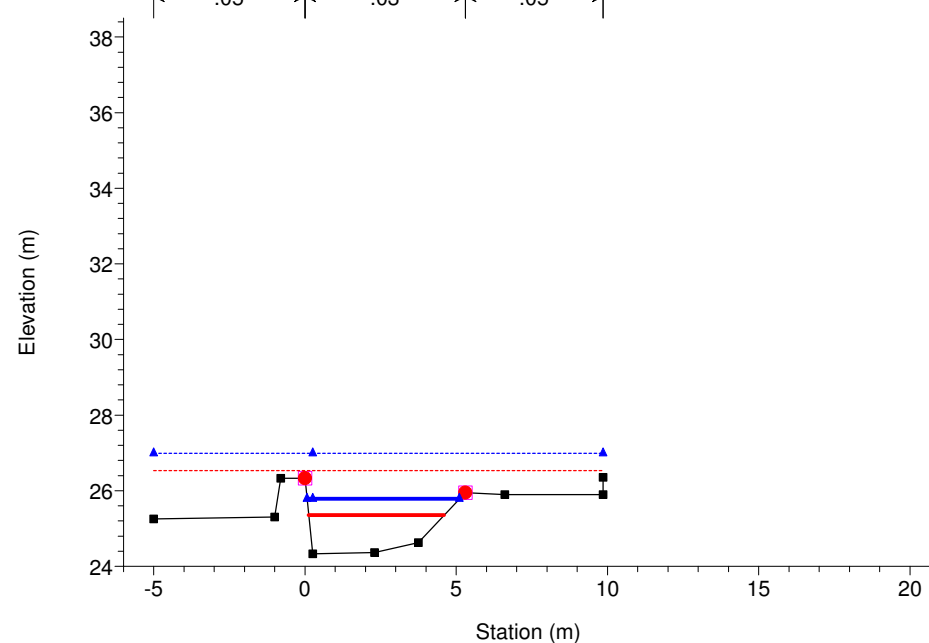
← .05 → .03 → .05 →



S\_salvatore\_st\_attuale

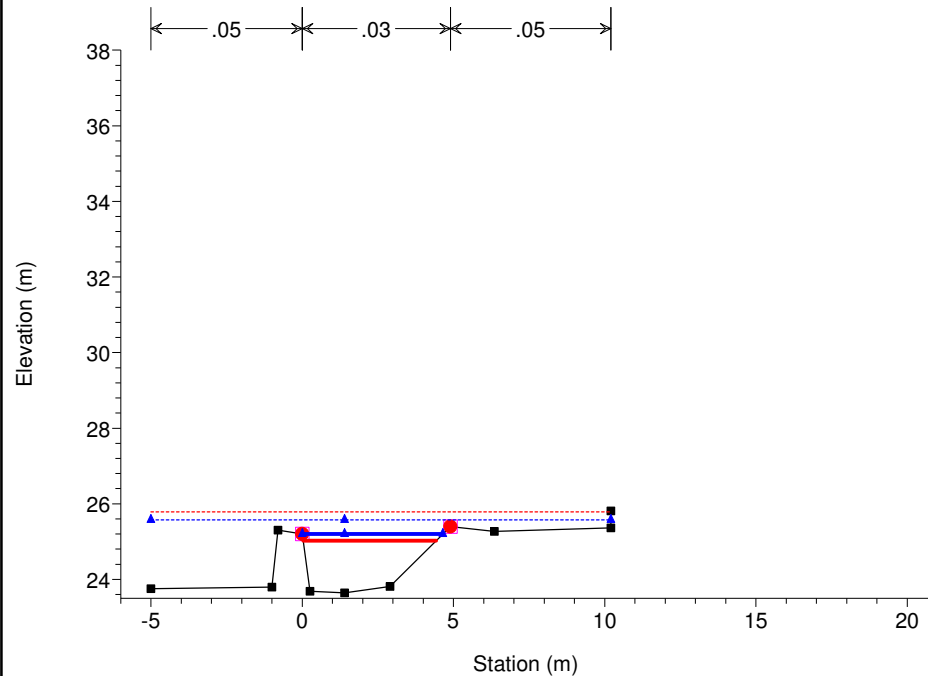
River = Pessa Reach = unico RS = 112 PES 12

← .05 → .03 → .05 →



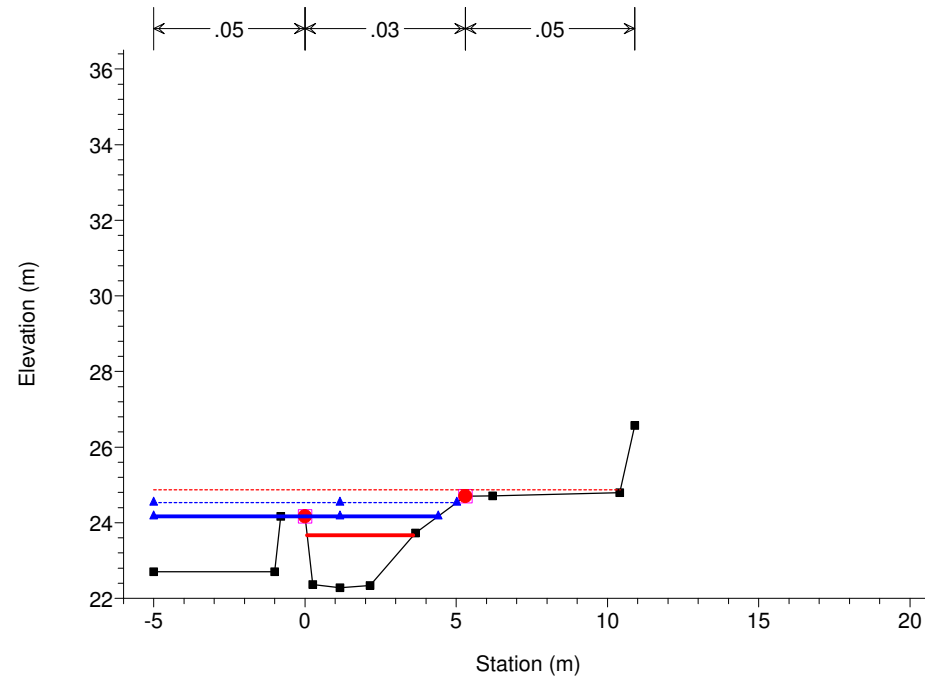
# S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 111.7



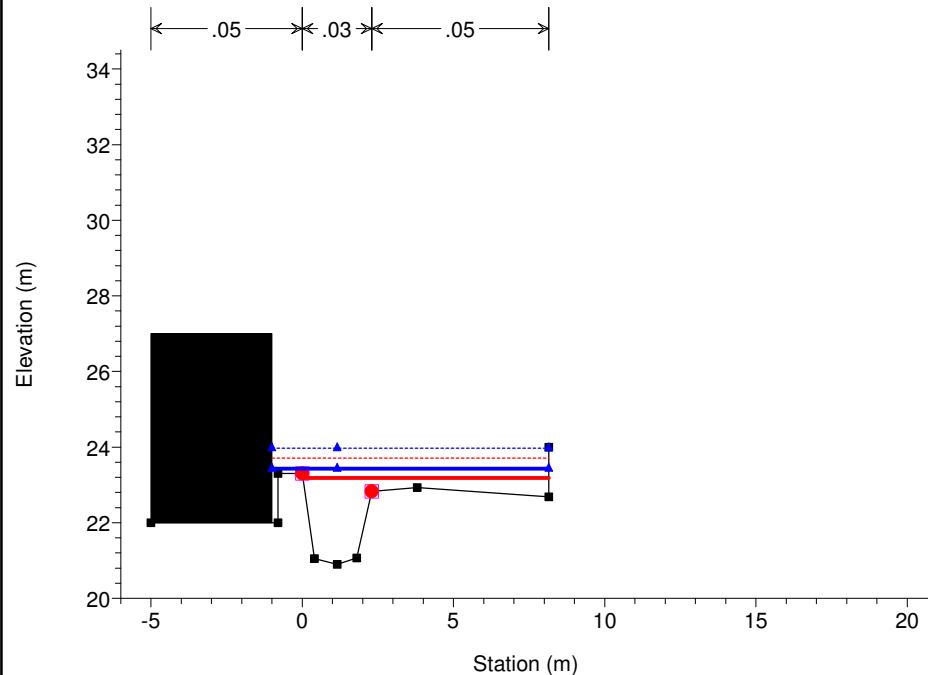
# S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 111.5



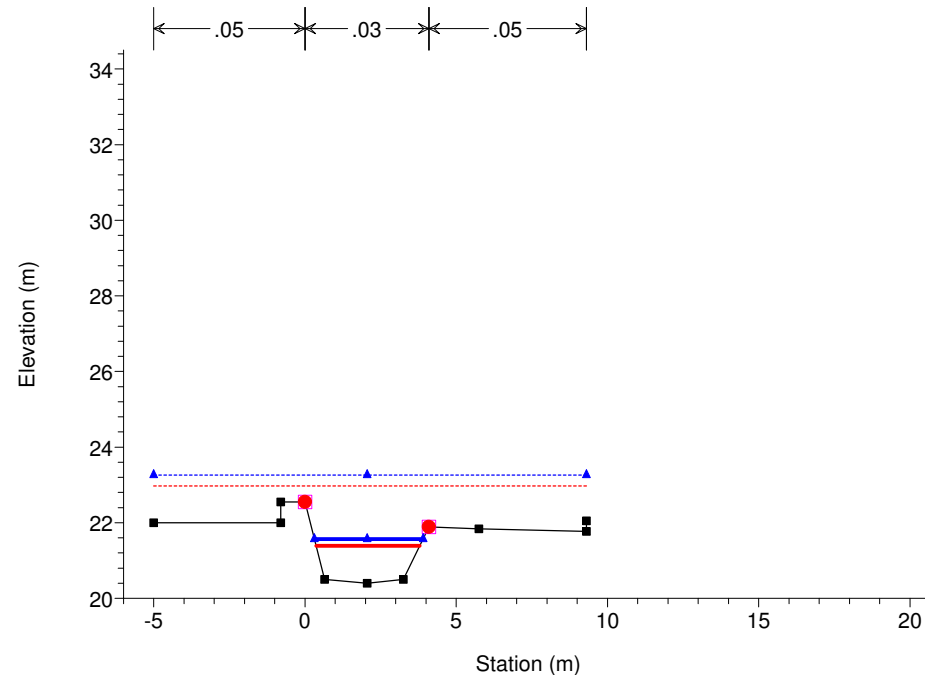
# S\_salvatore\_st\_attuale

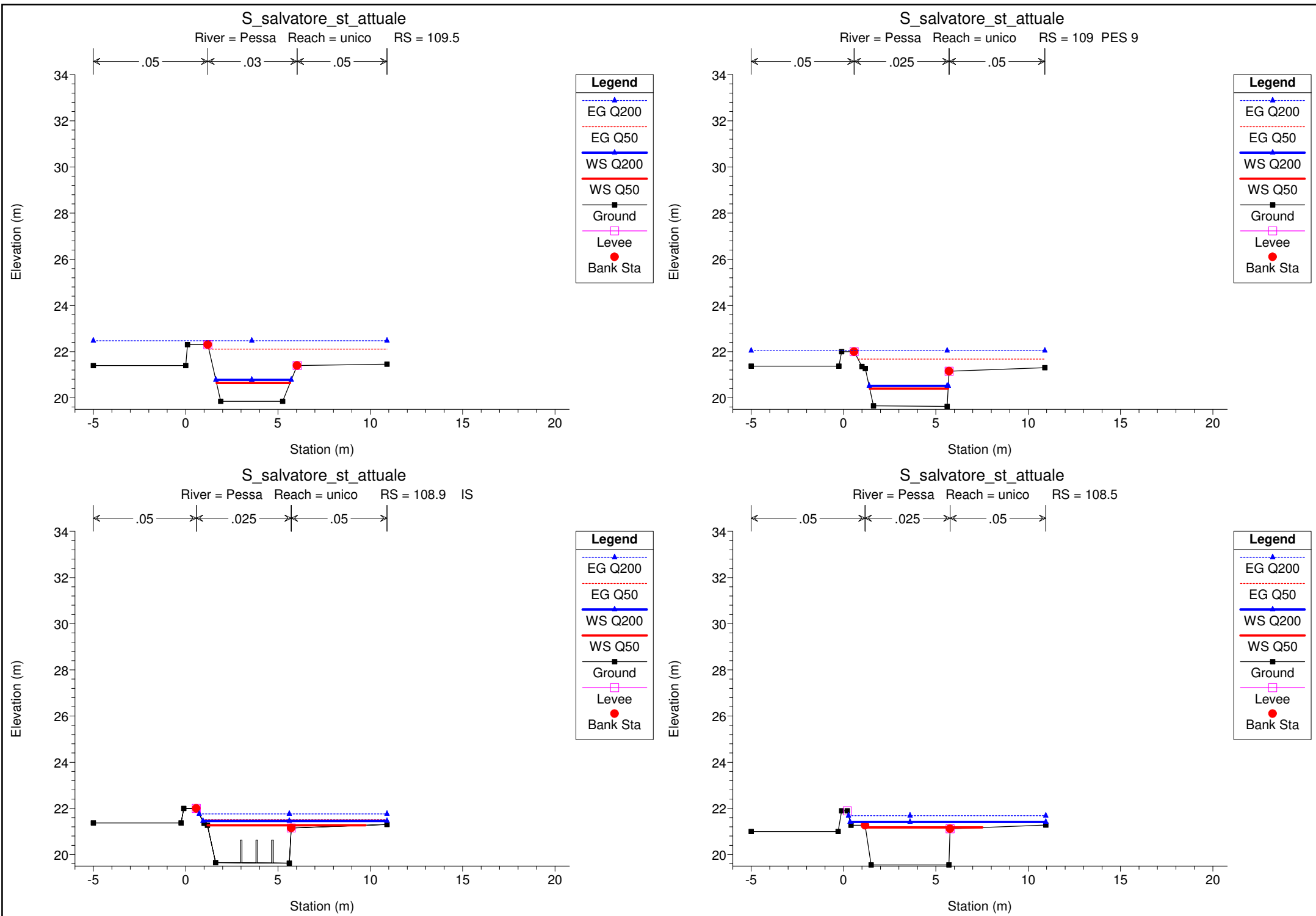
River = Pessa Reach = unico RS = 111 PES 11



# S\_salvatore\_st\_attuale

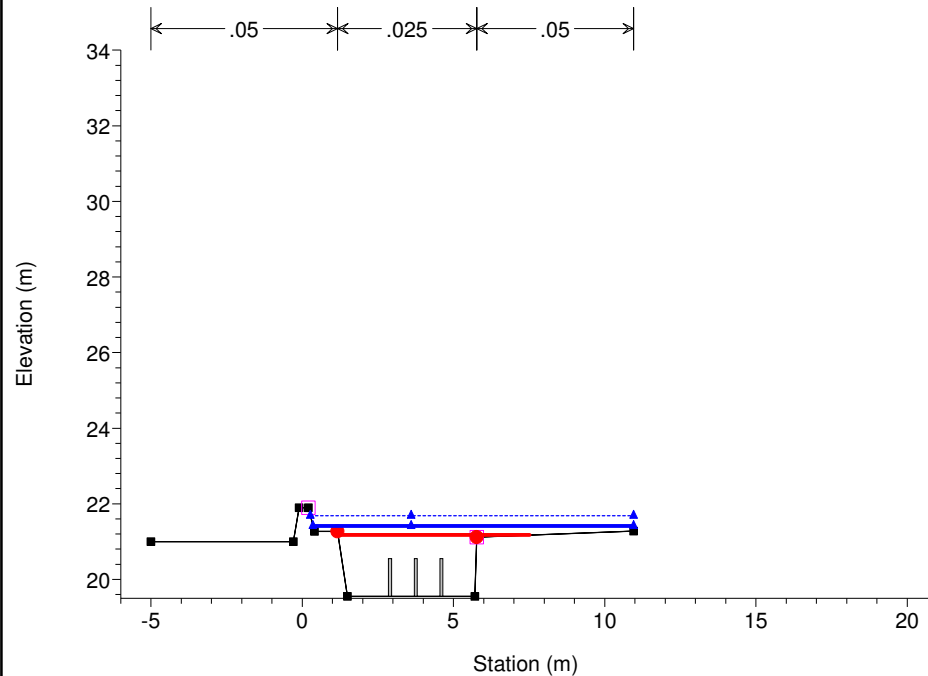
River = Pessa Reach = unico RS = 110 PES 10





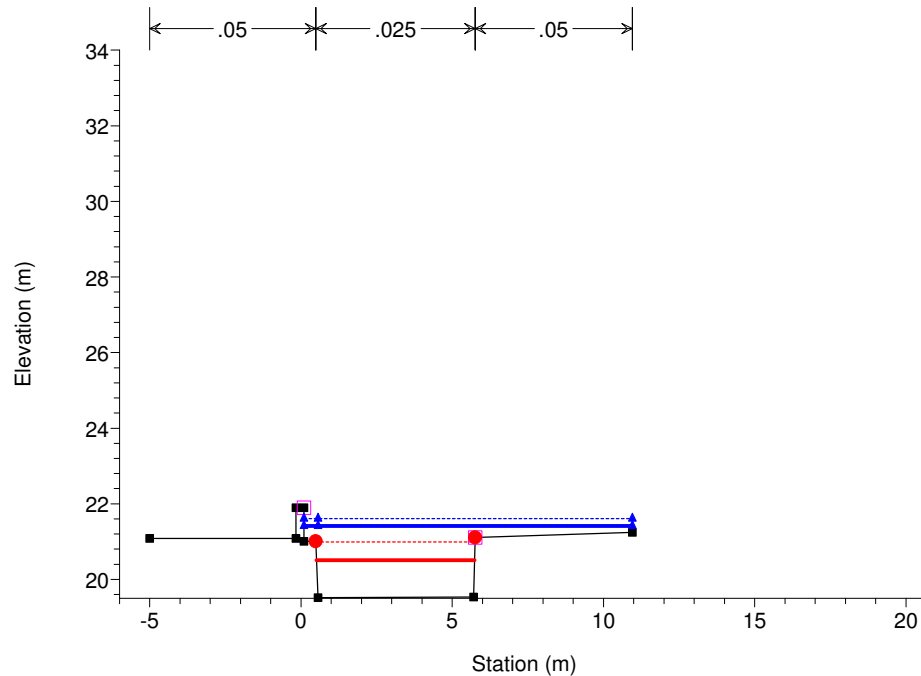
# S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 108.4 IS



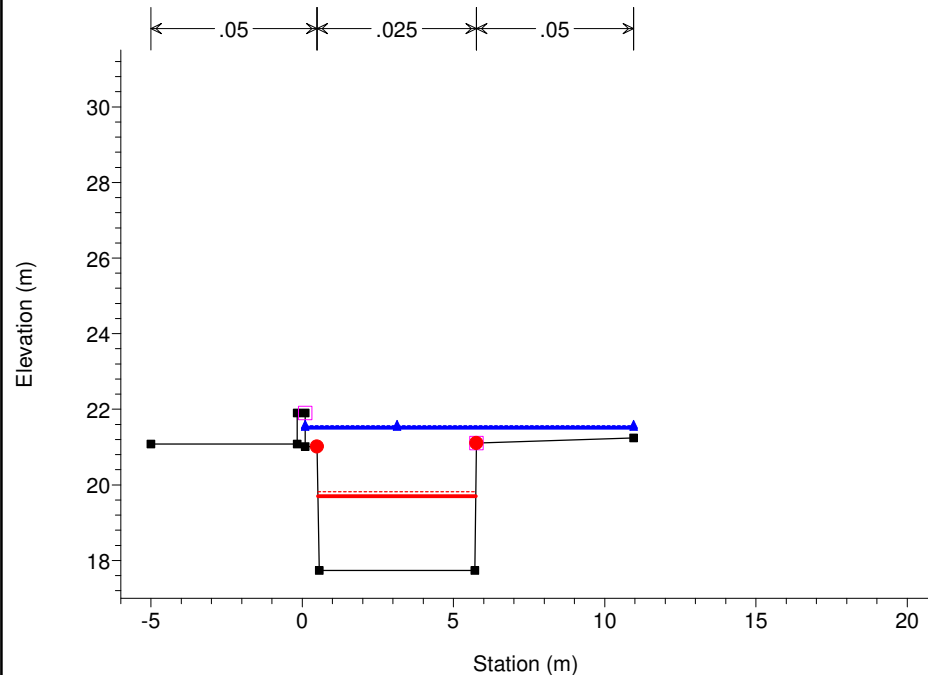
# S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 108.3



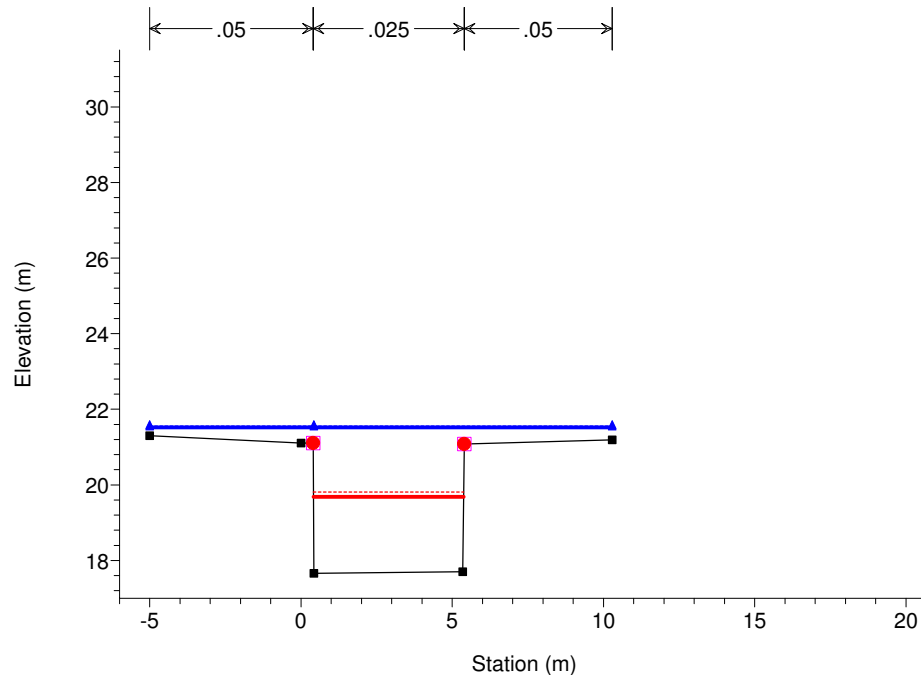
# S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 108.2

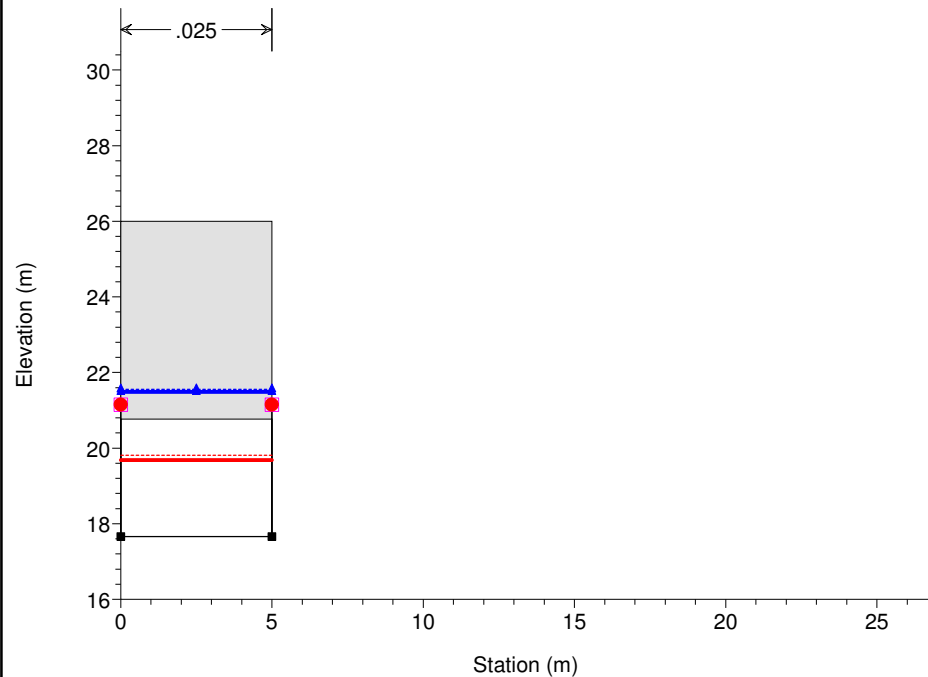


# S\_salvatore\_st\_attuale

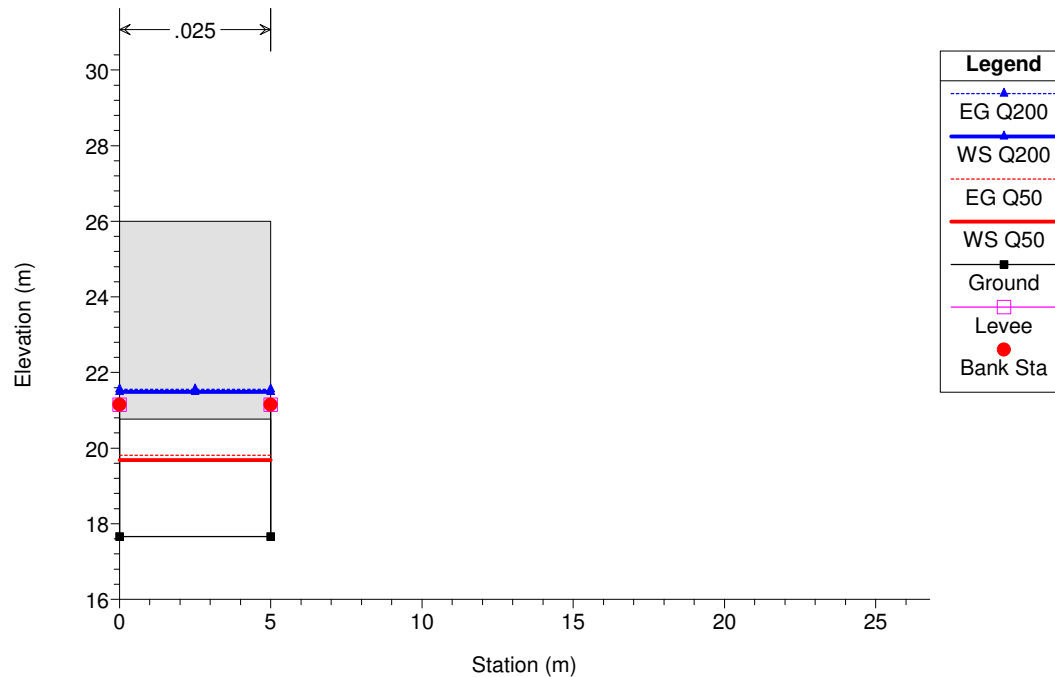
River = Pessa Reach = unico RS = 108.11



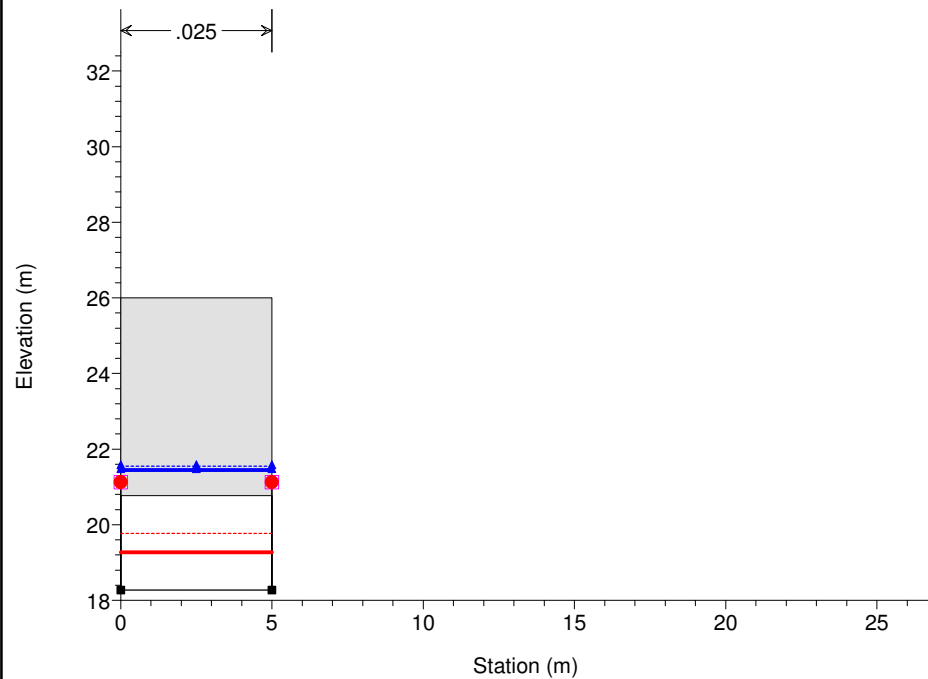
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 108.1



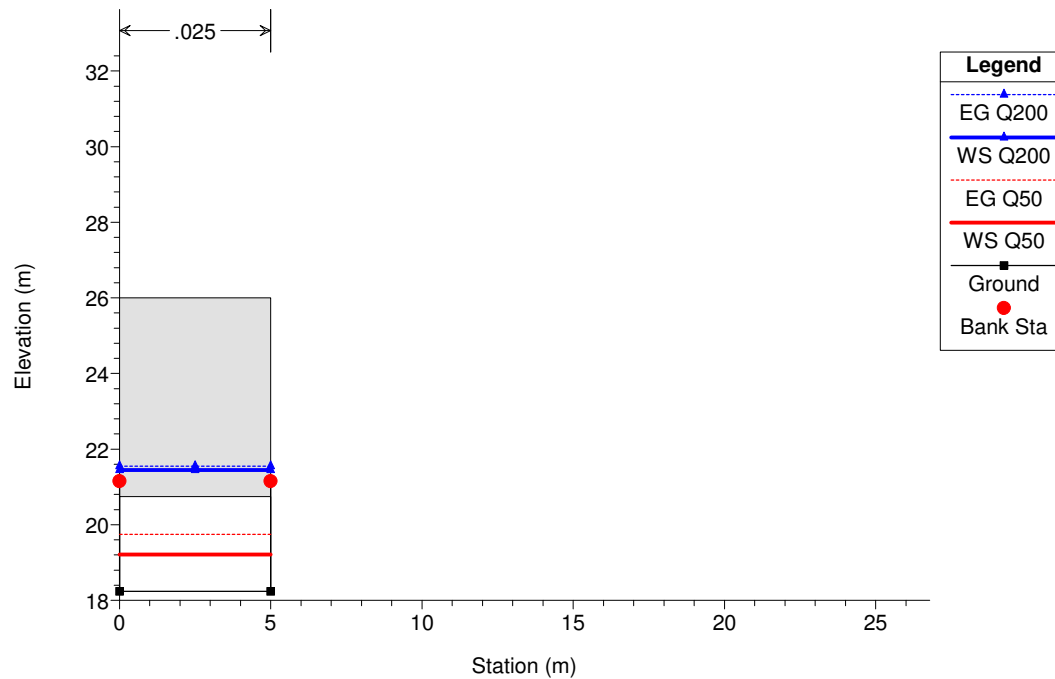
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 108 PES 8



S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 107.9 PES 8

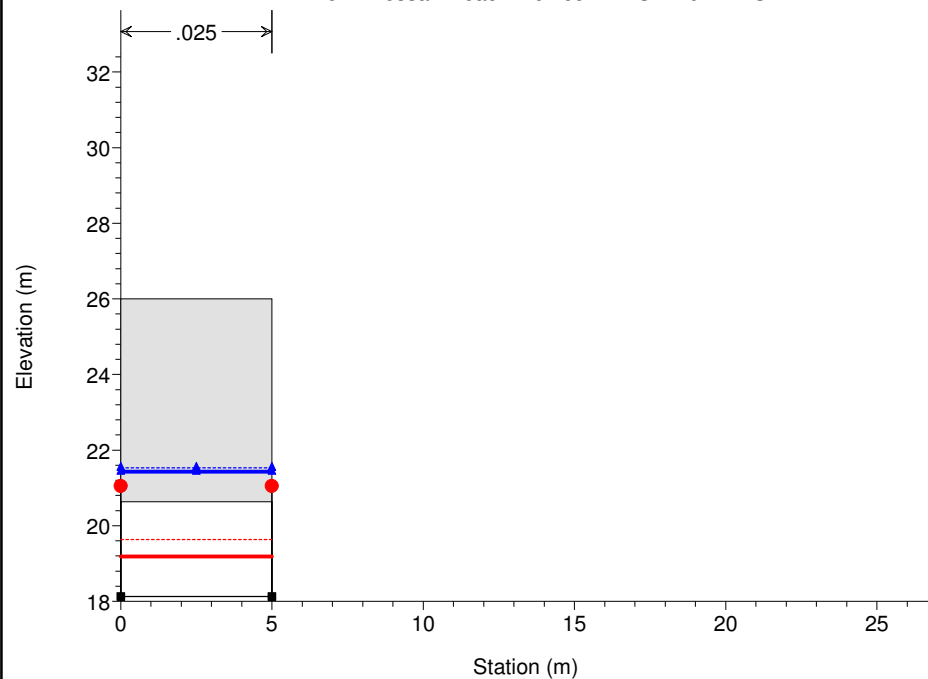


S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 107.5



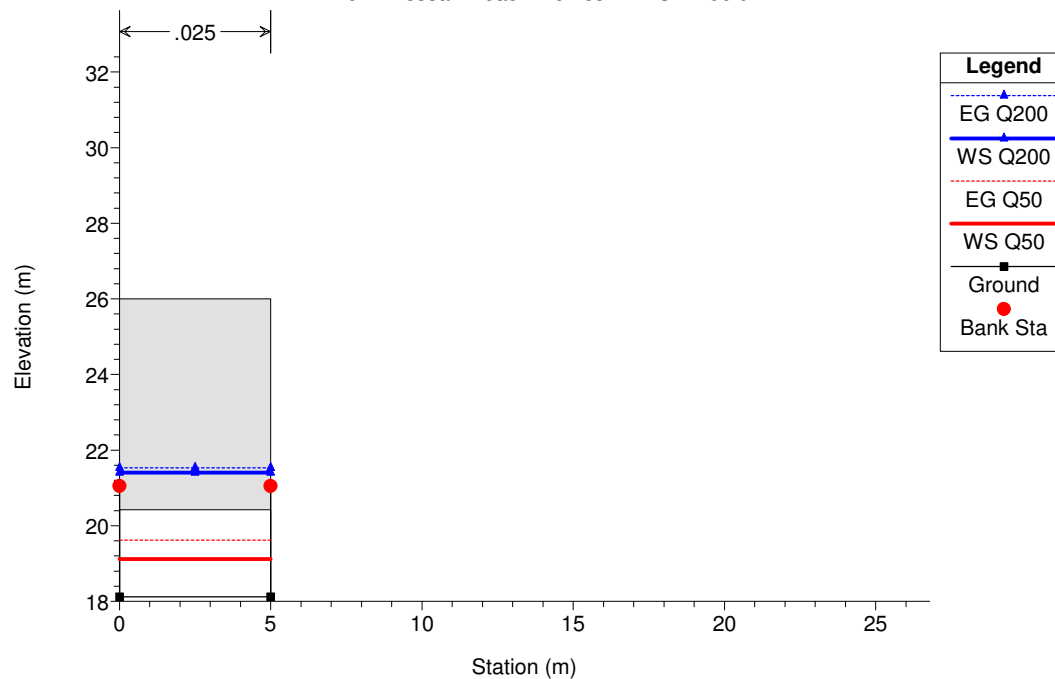
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 107 PES 7



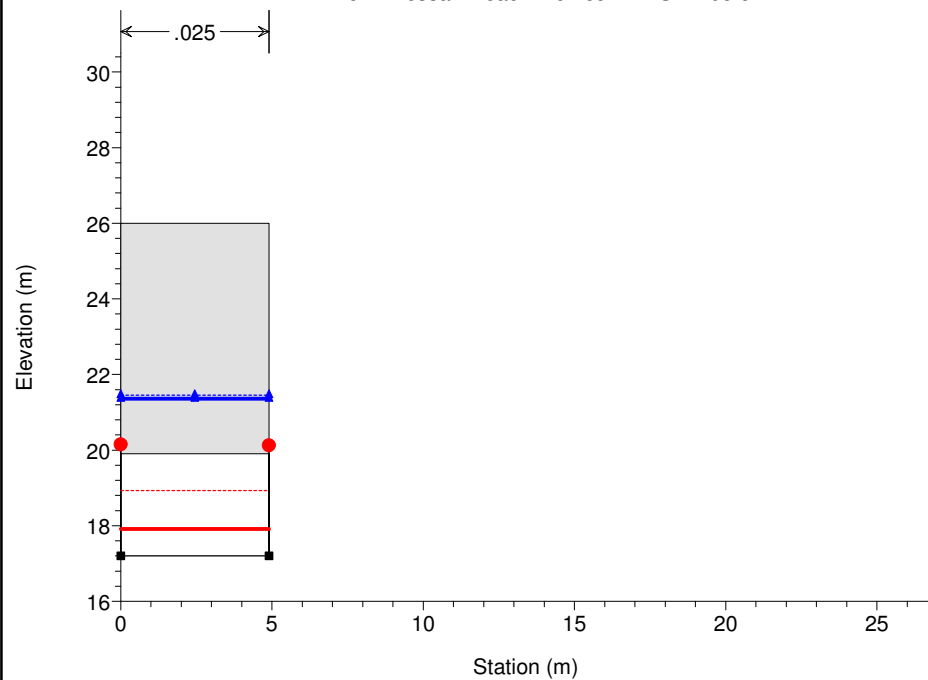
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 106.9



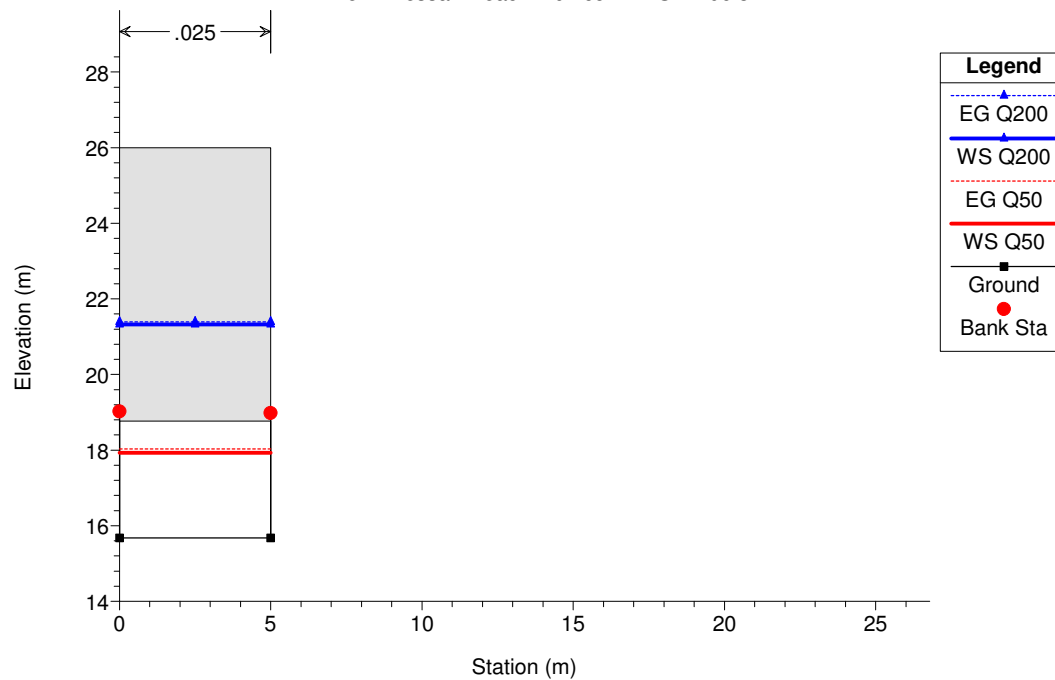
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 106.6



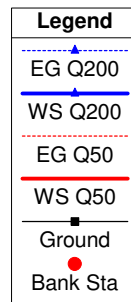
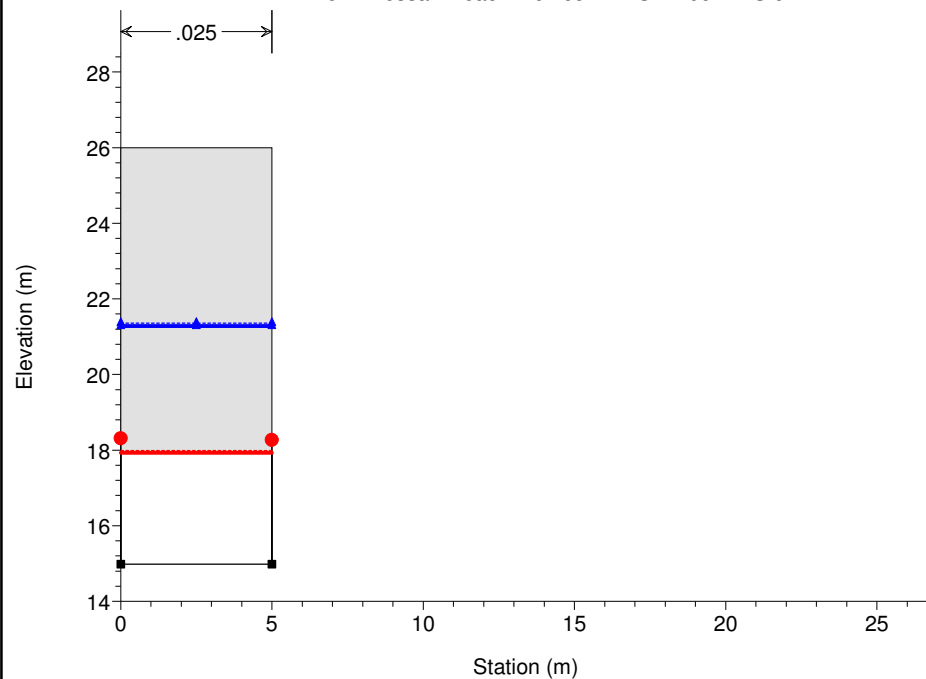
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 106.3



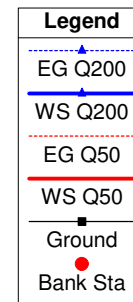
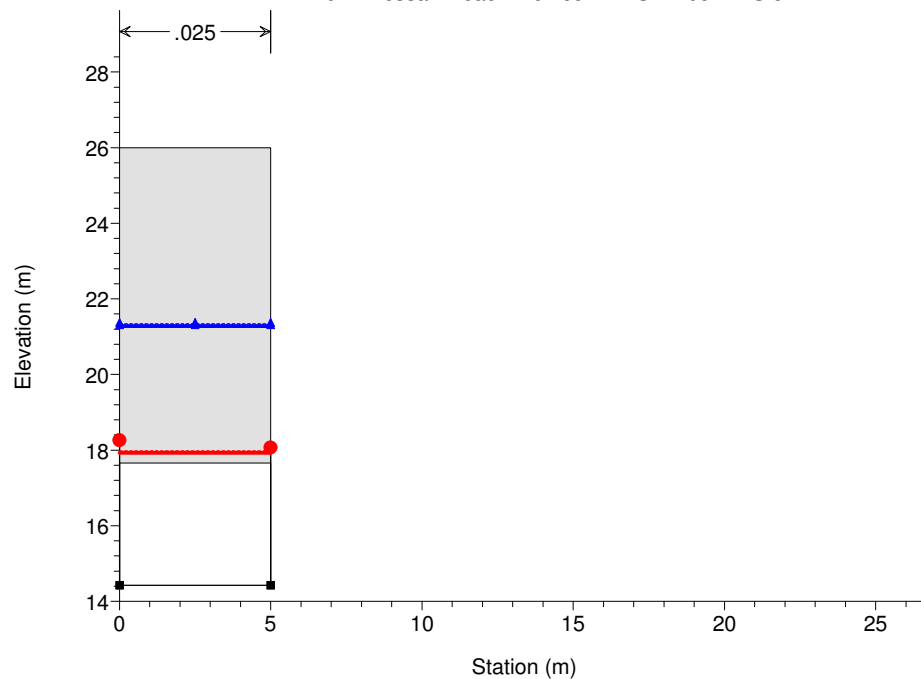
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 106 PES 6



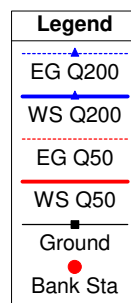
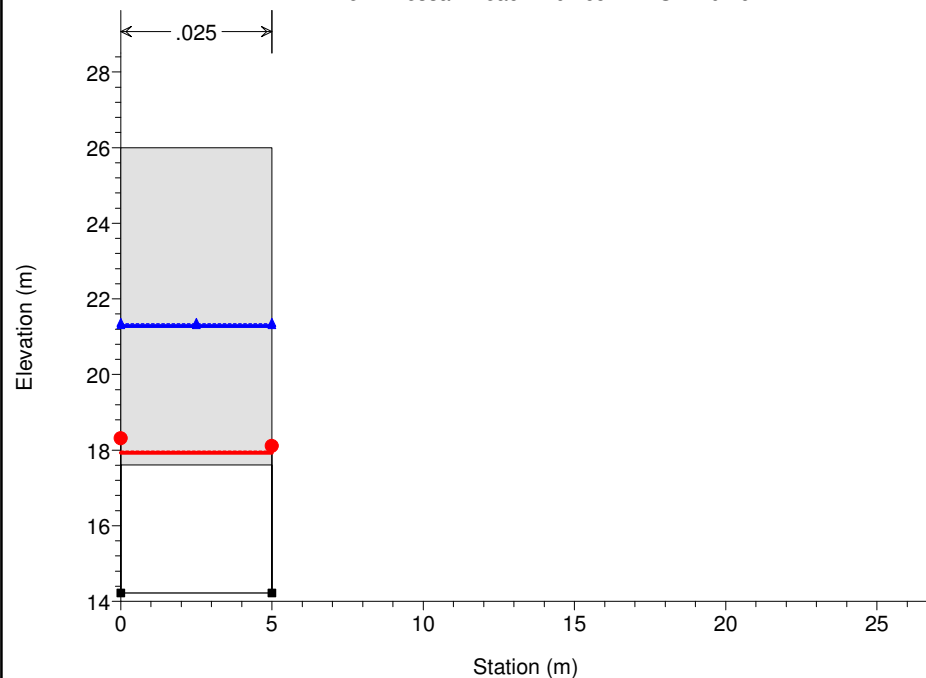
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 105 PES 5



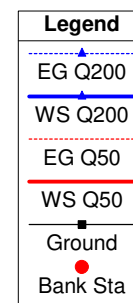
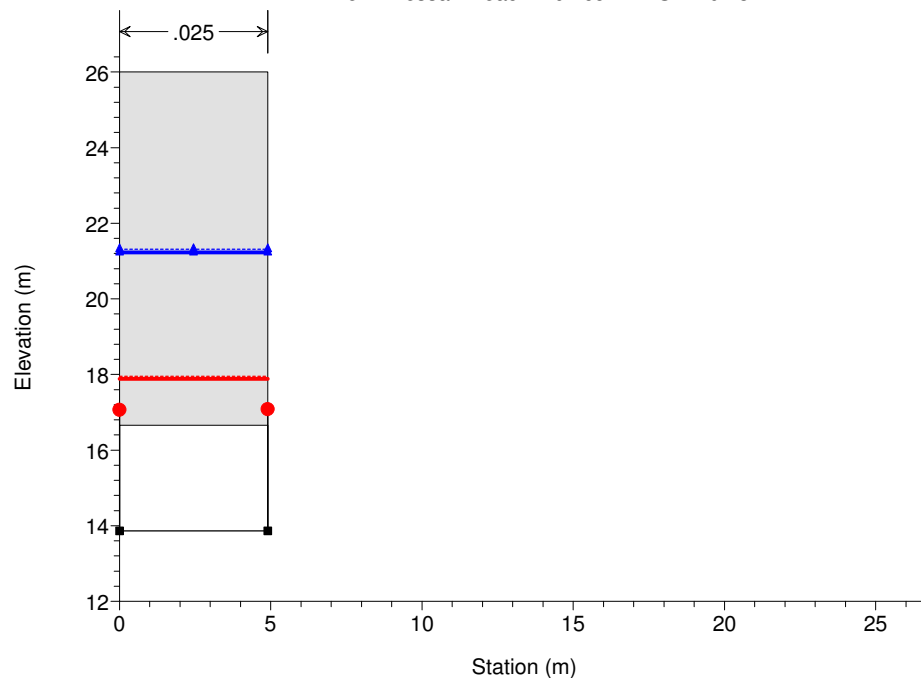
### S\_salvatore\_st\_attuale

River = Pessa Reach = unico RS = 104.6

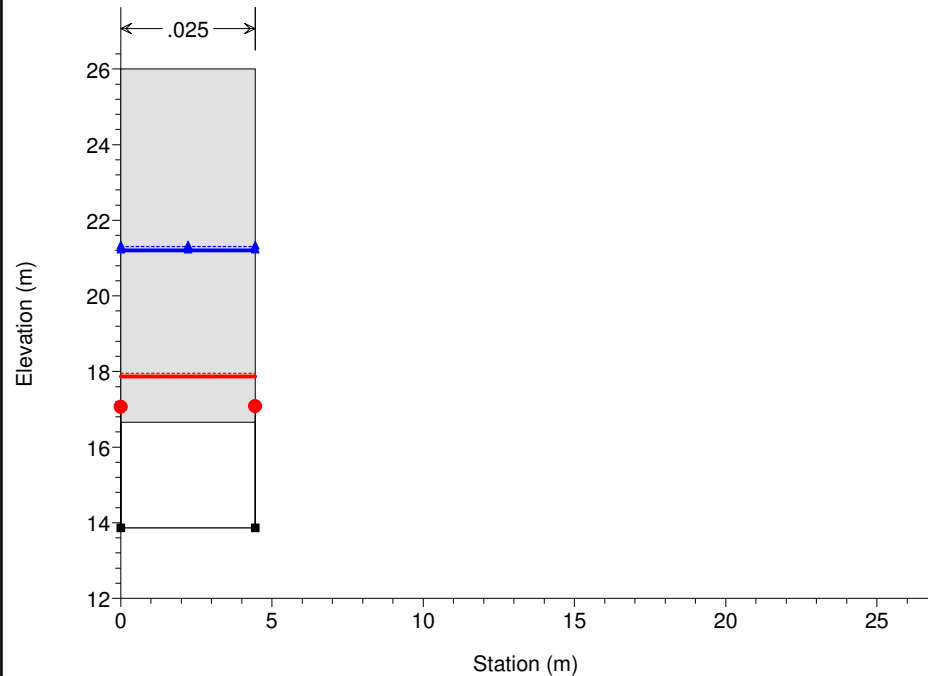


### S\_salvatore\_st\_attuale

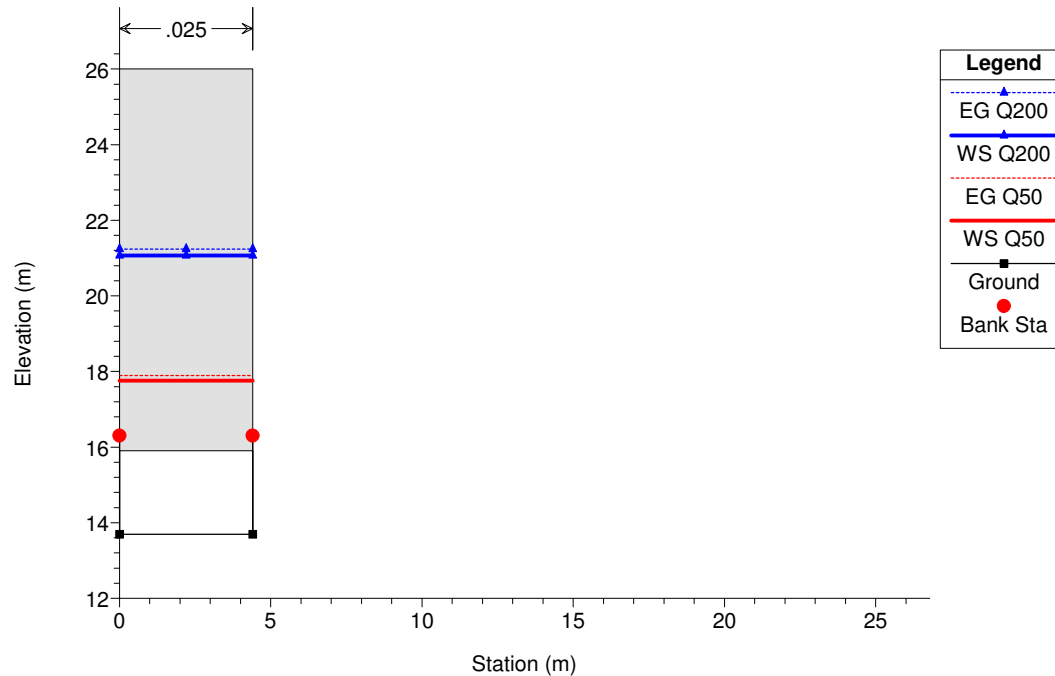
River = Pessa Reach = unico RS = 104.3



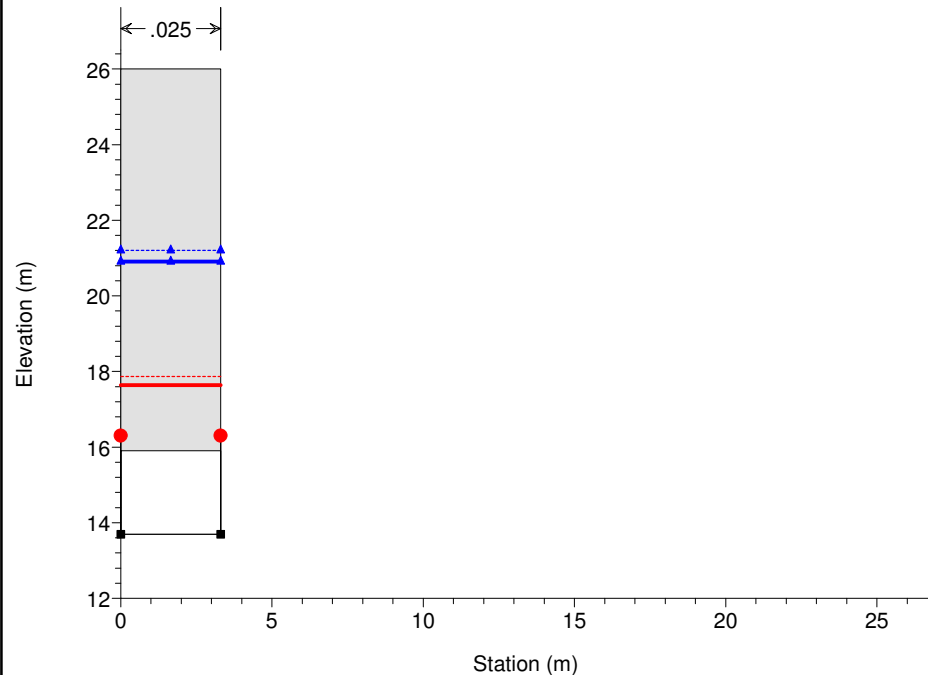
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 104.2



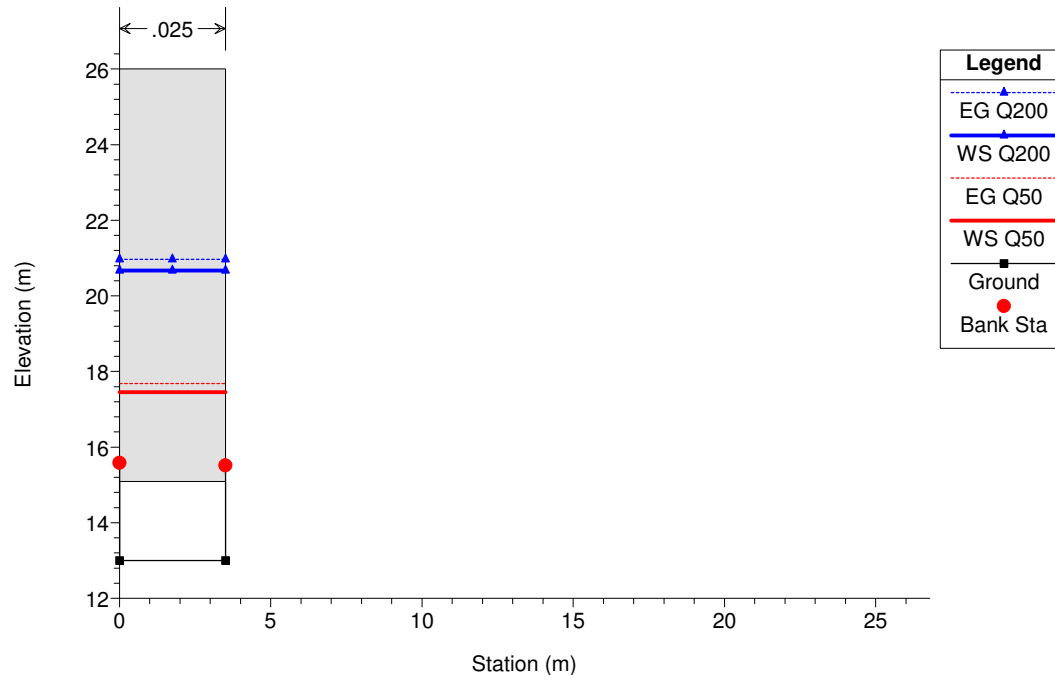
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 104 PES 4



S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 103.9 PES 4

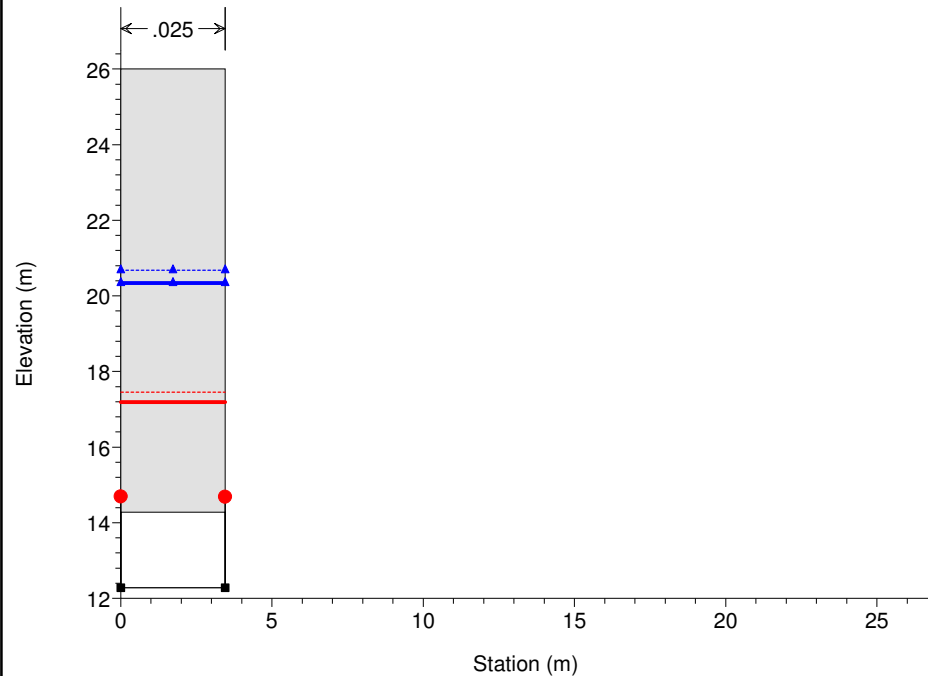


S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 103 PES 3

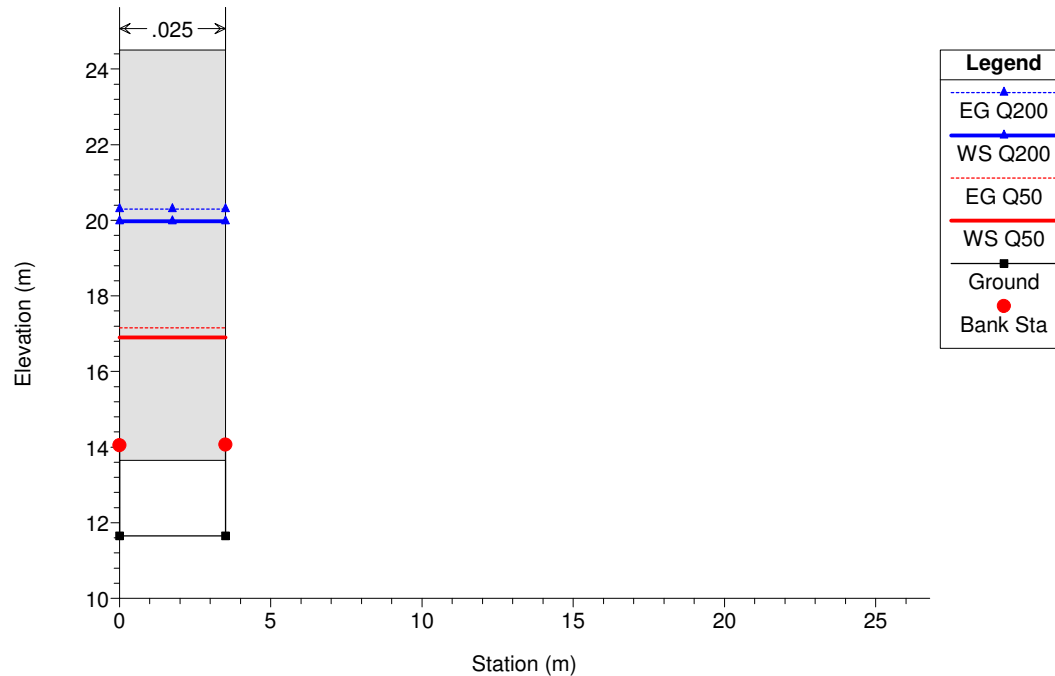




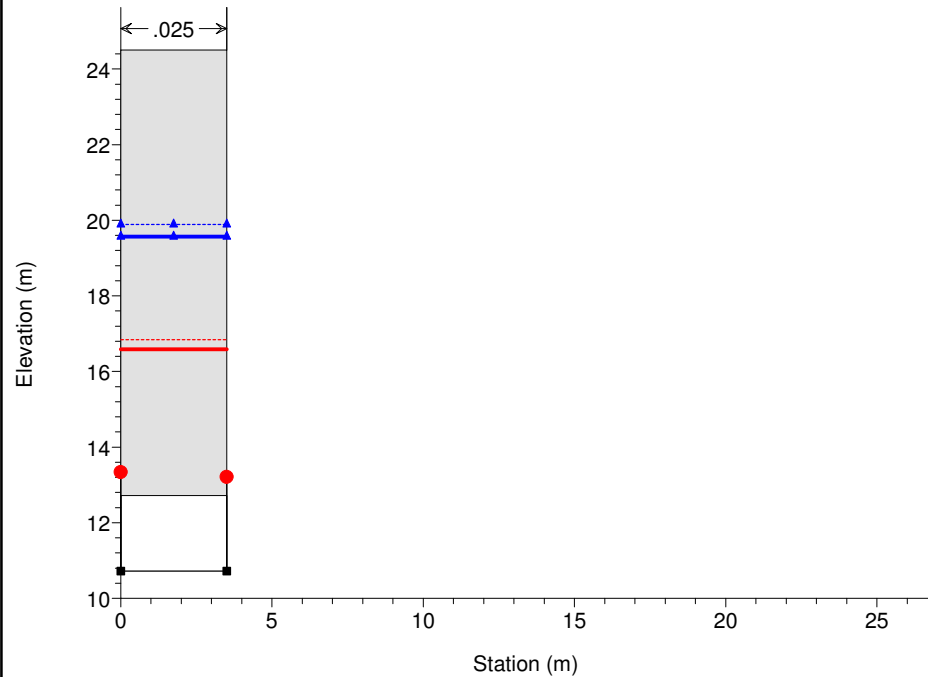
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 102.6



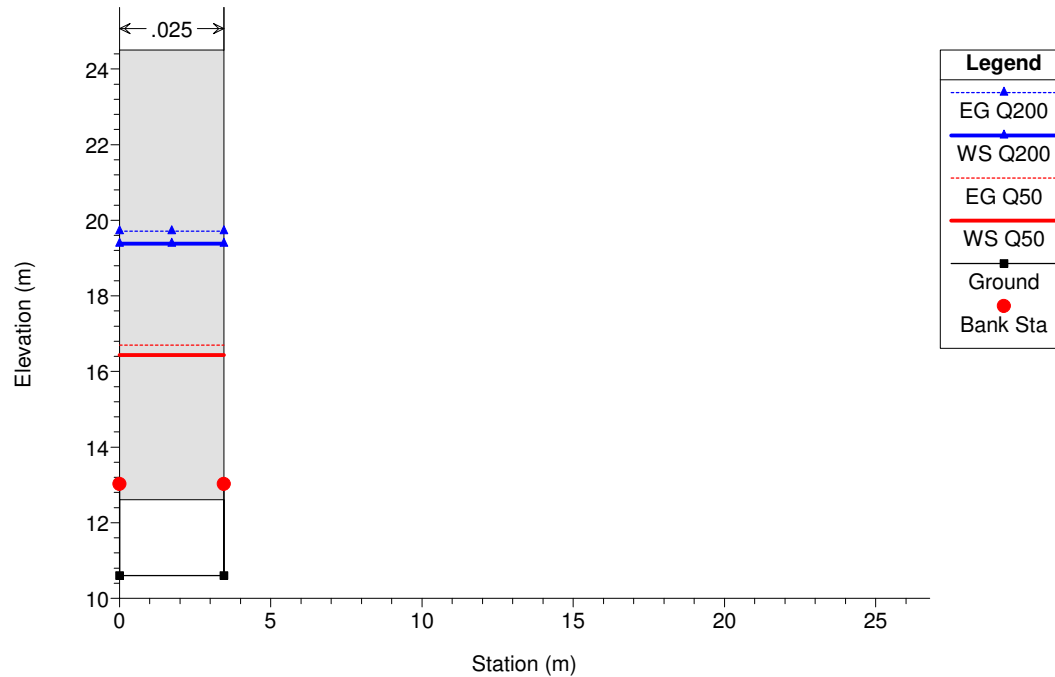
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 102.4

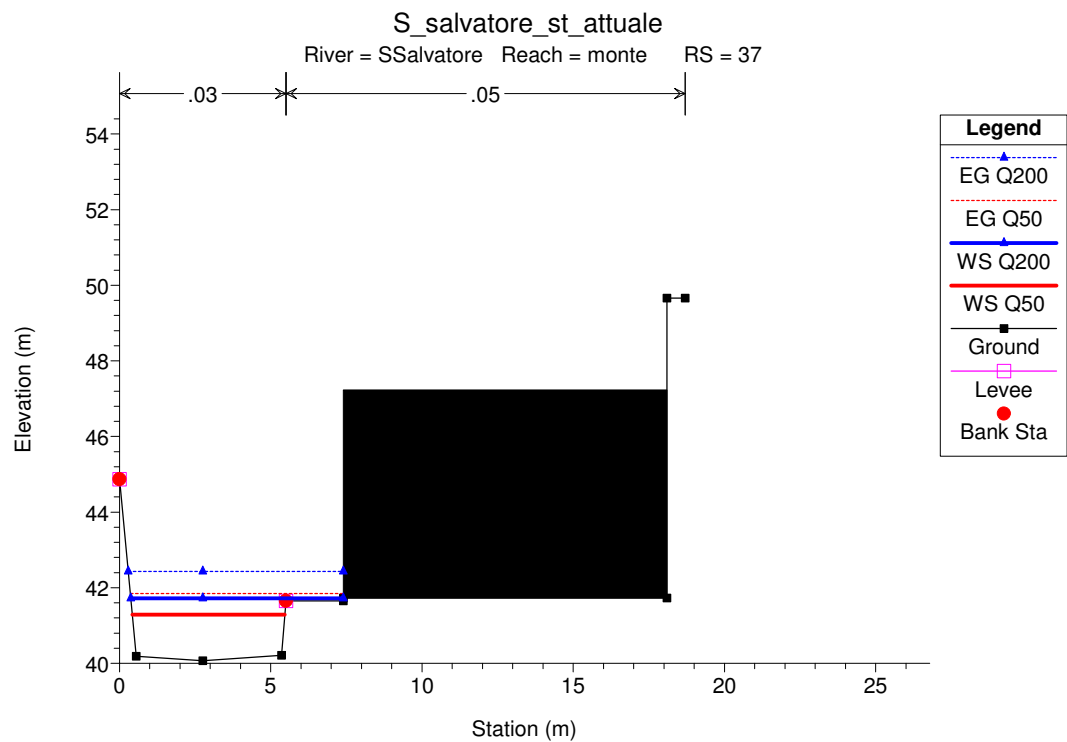
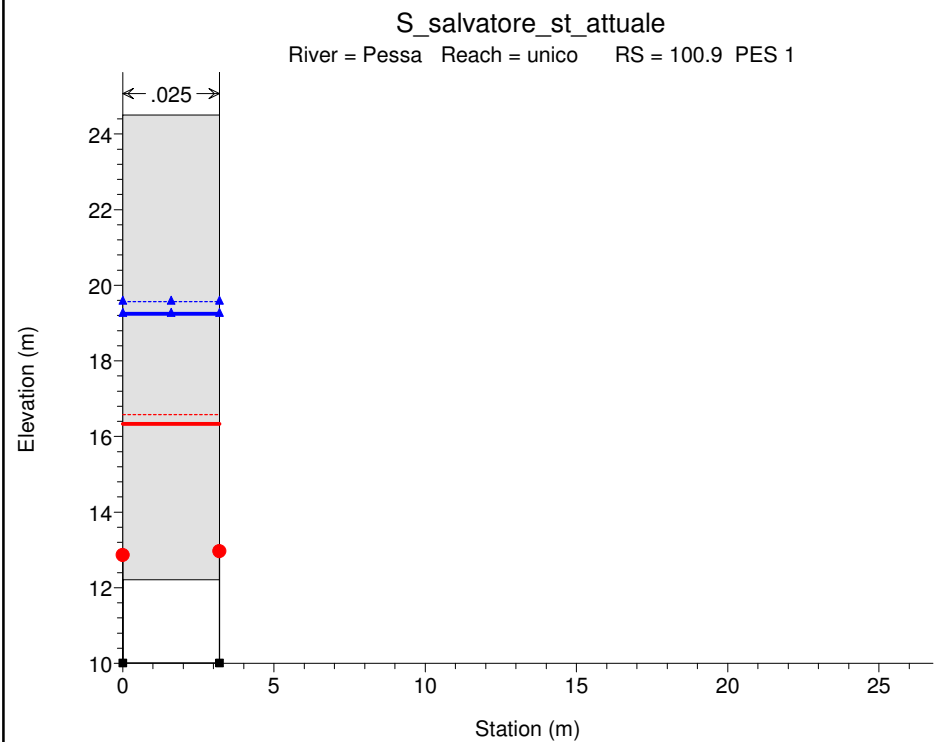
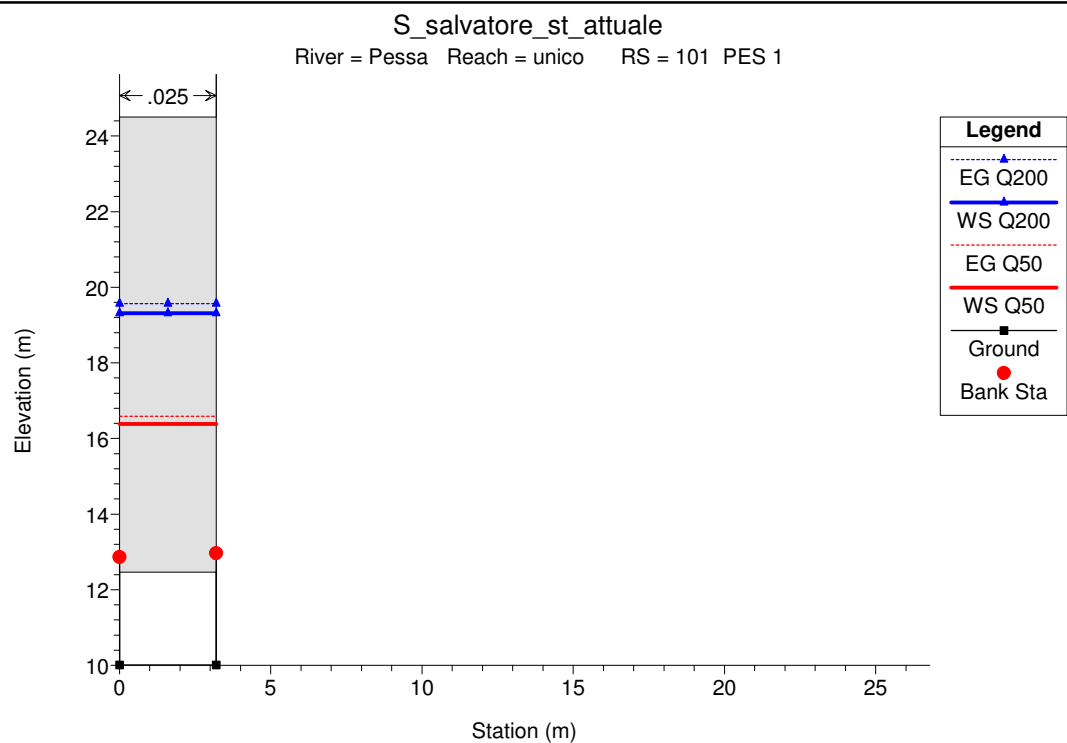
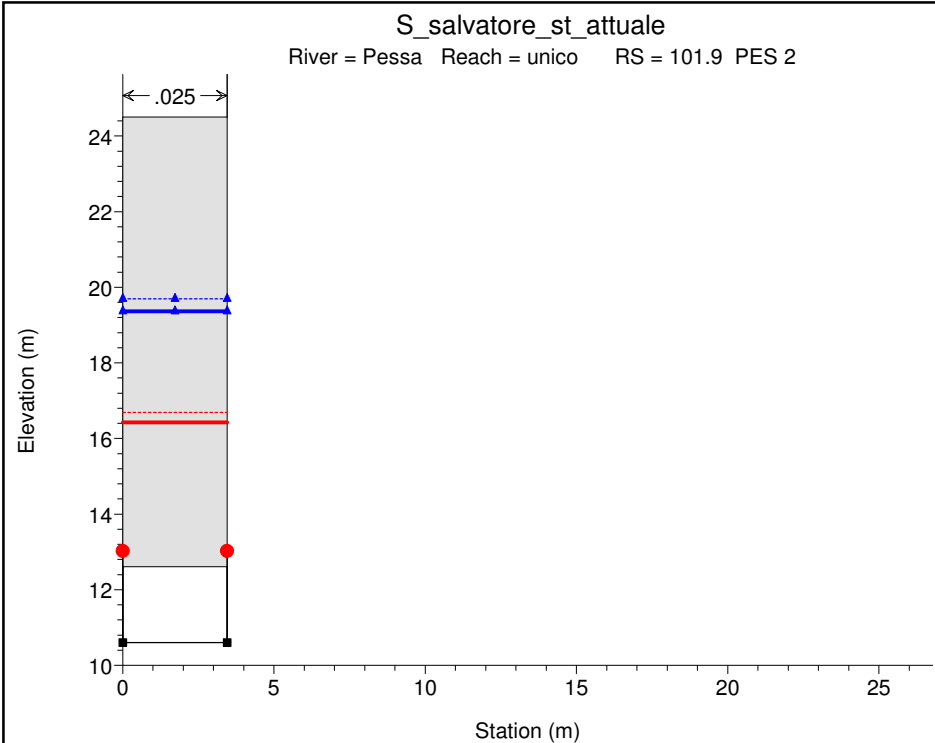


S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 102.2



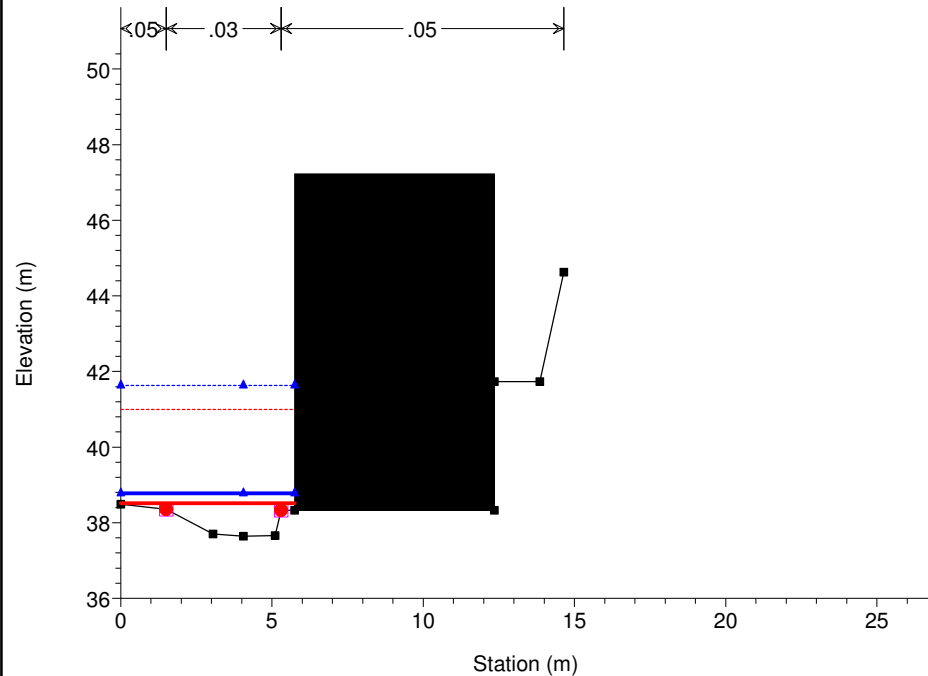
S\_salvatore\_st\_attuale  
River = Pessa Reach = unico RS = 102 PES 2





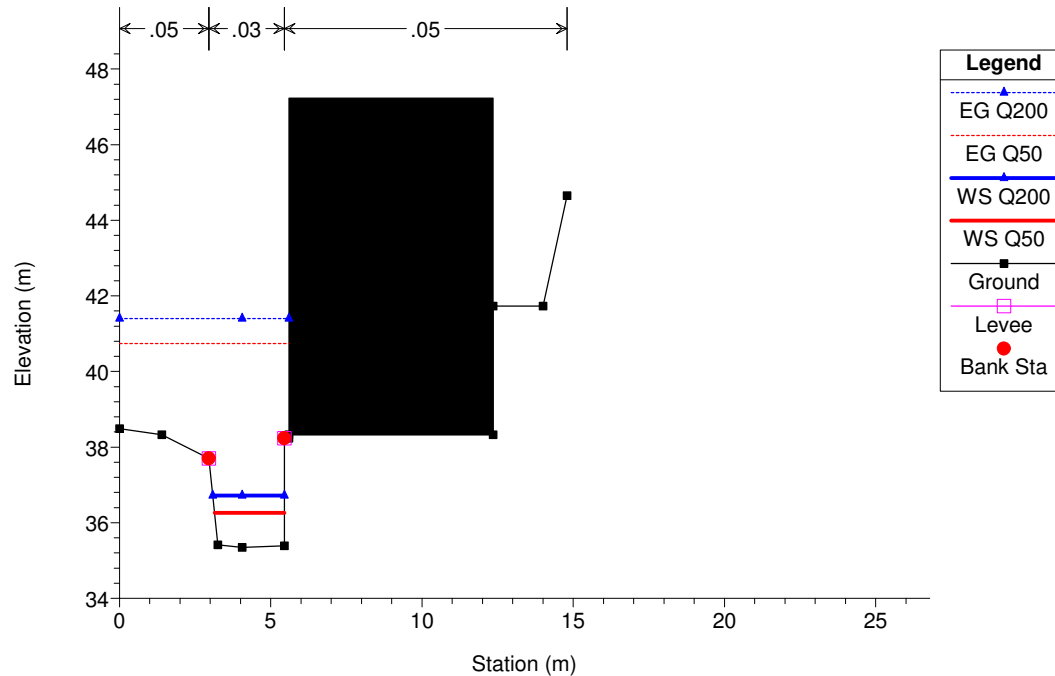
# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 36



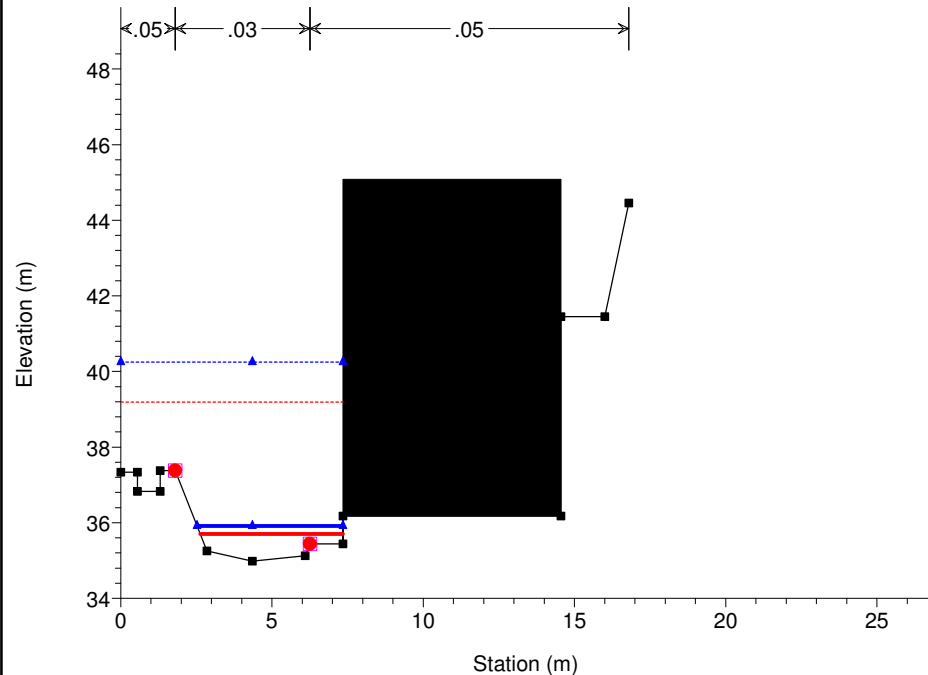
# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 35



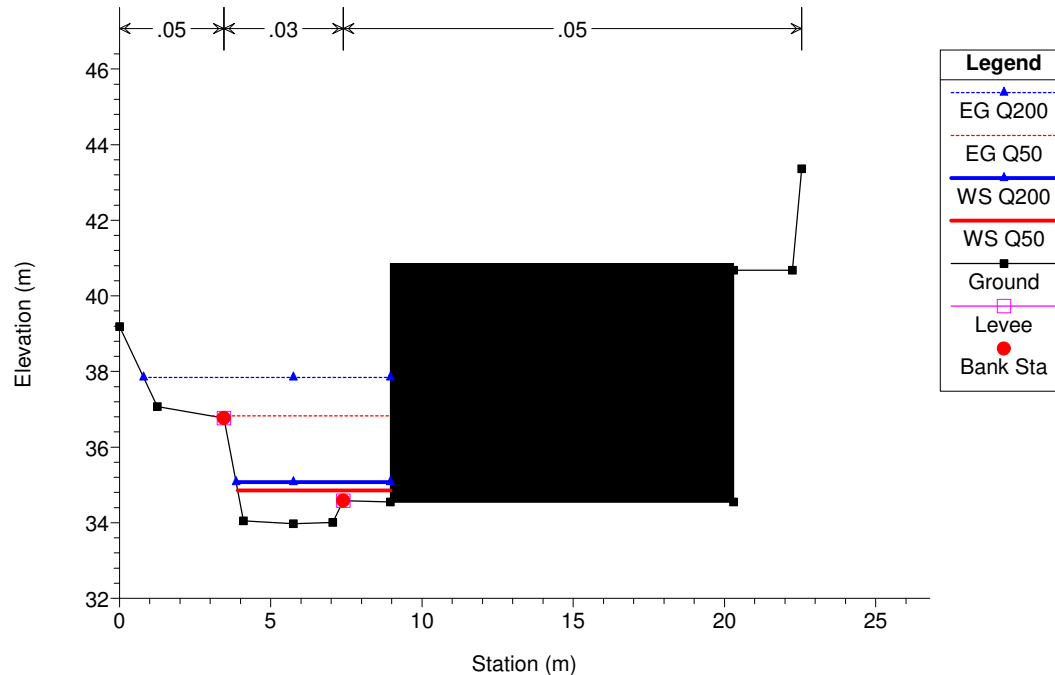
# S\_salvatore\_st\_attuale

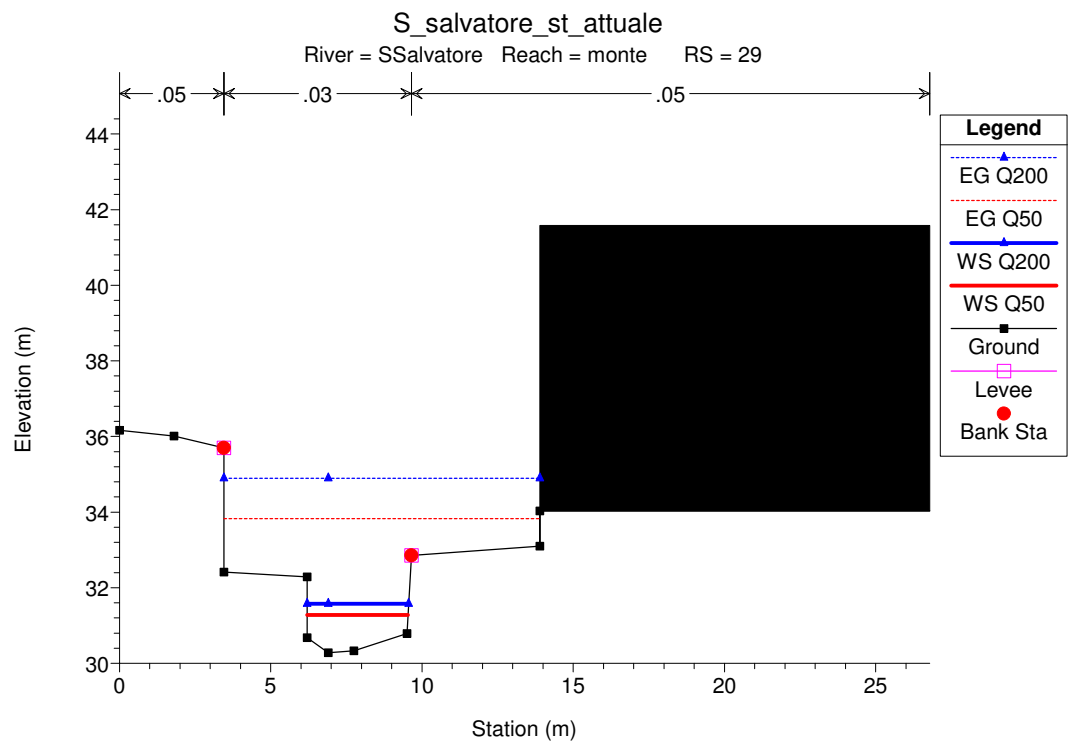
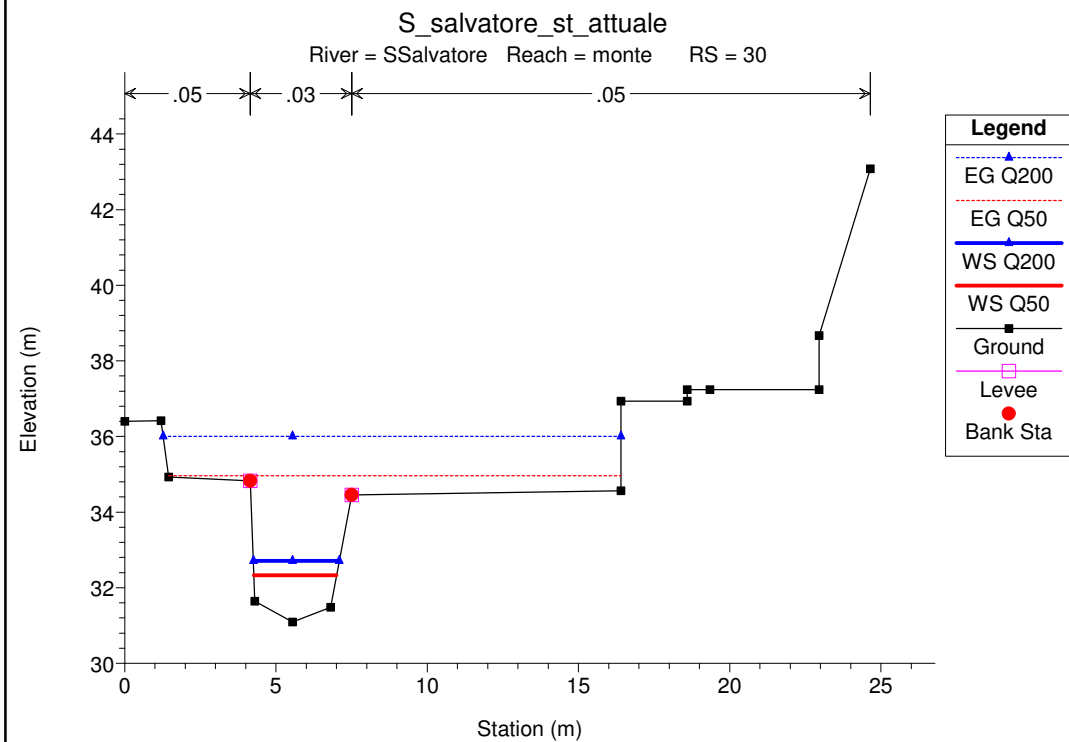
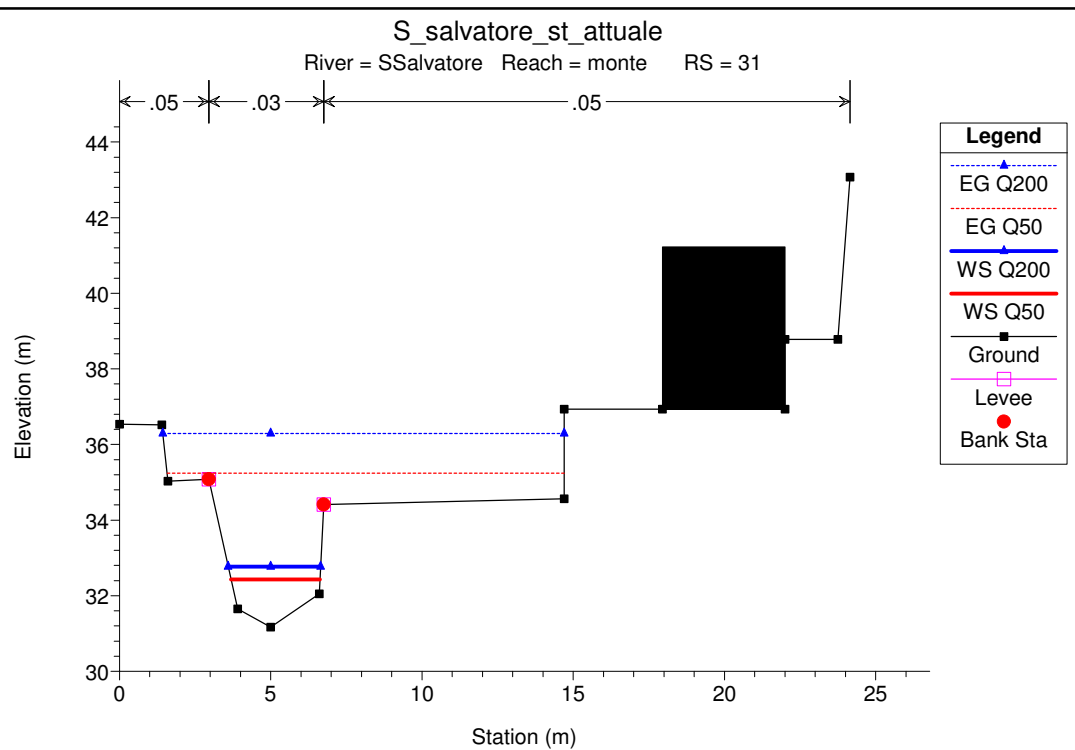
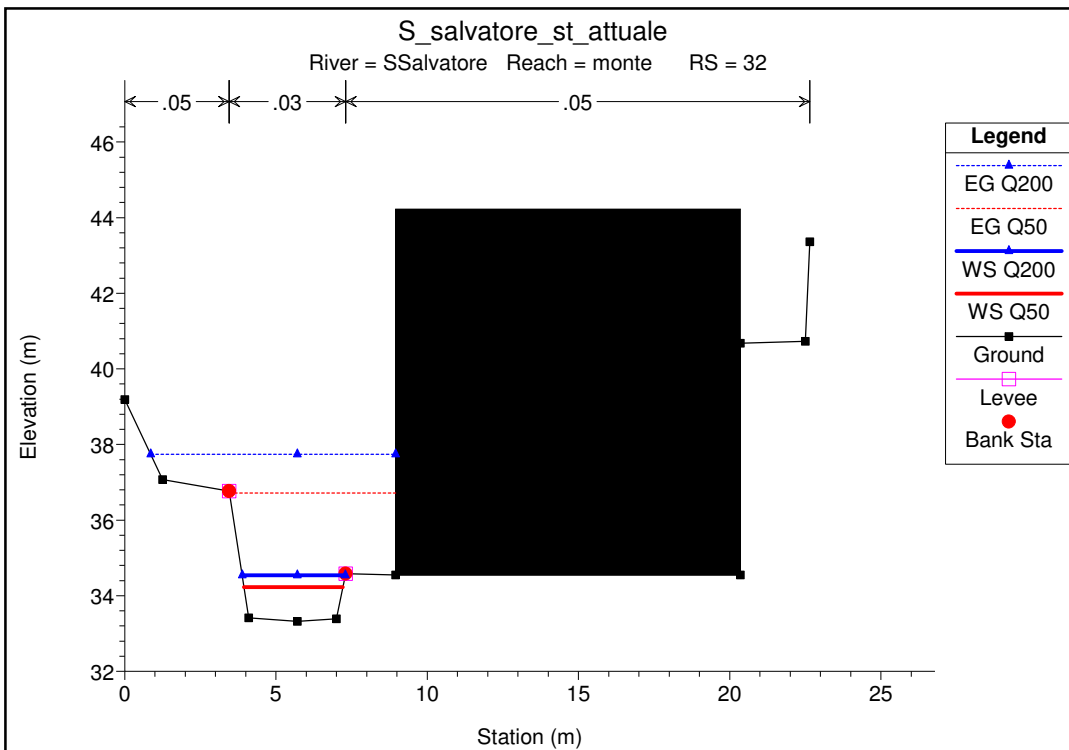
River = SSalvatore Reach = monte RS = 34

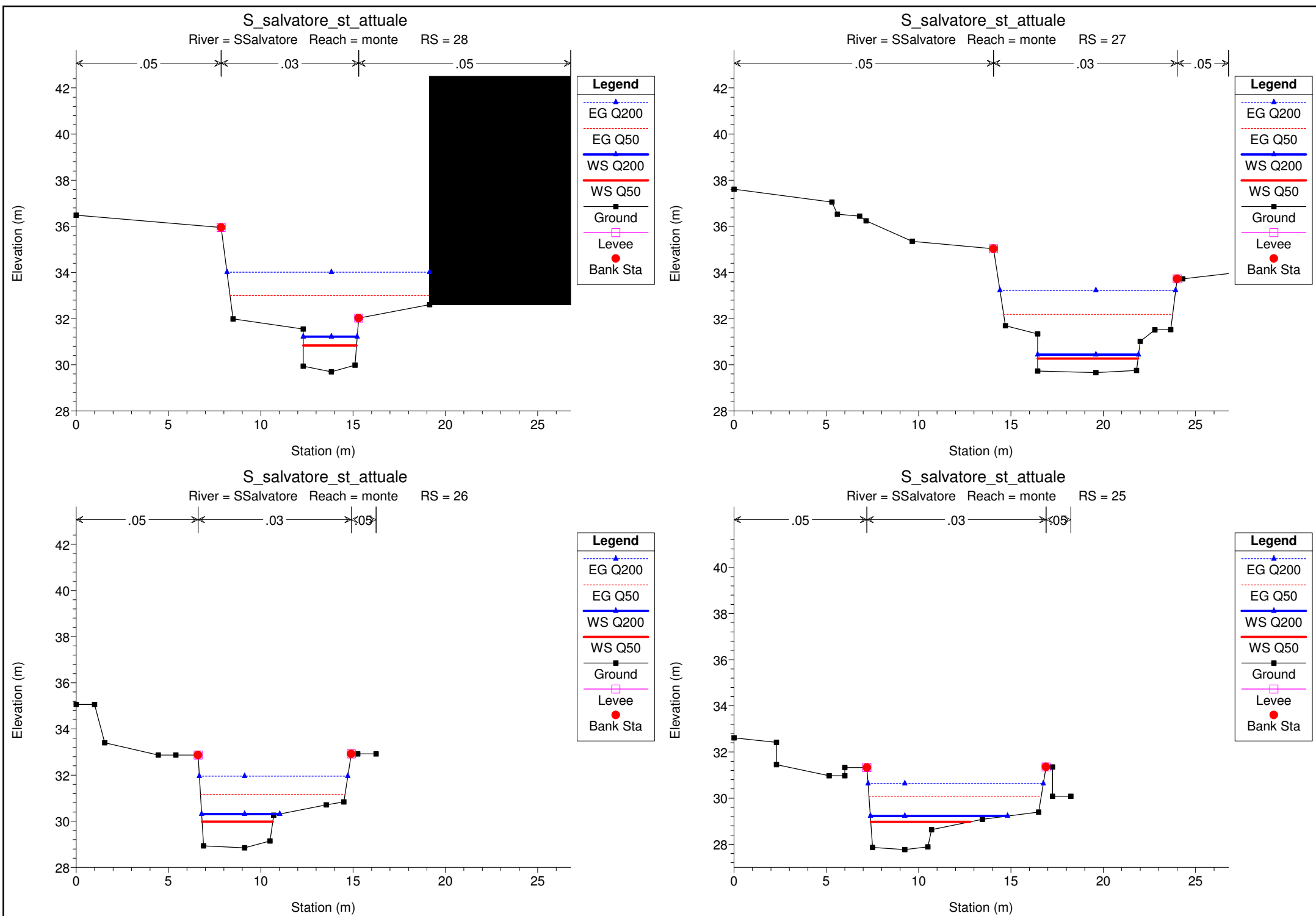


# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 33

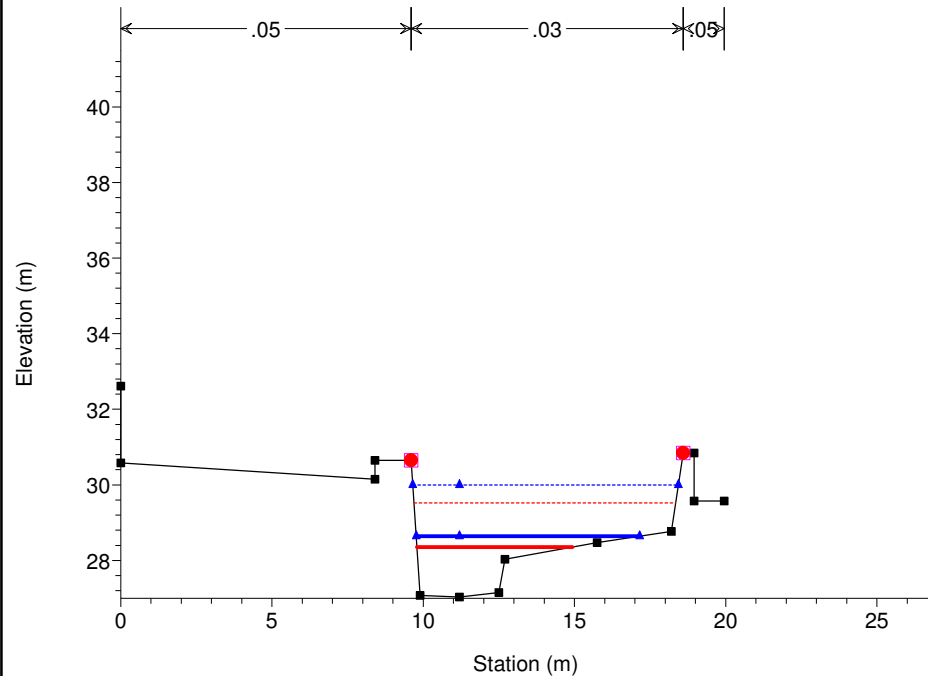






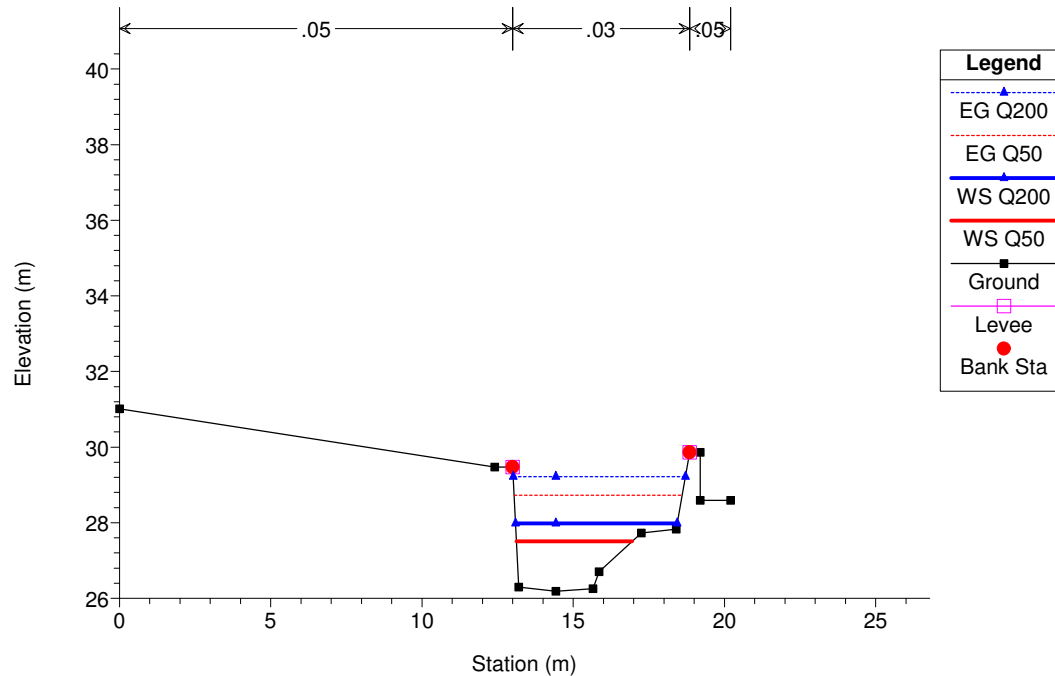
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 24



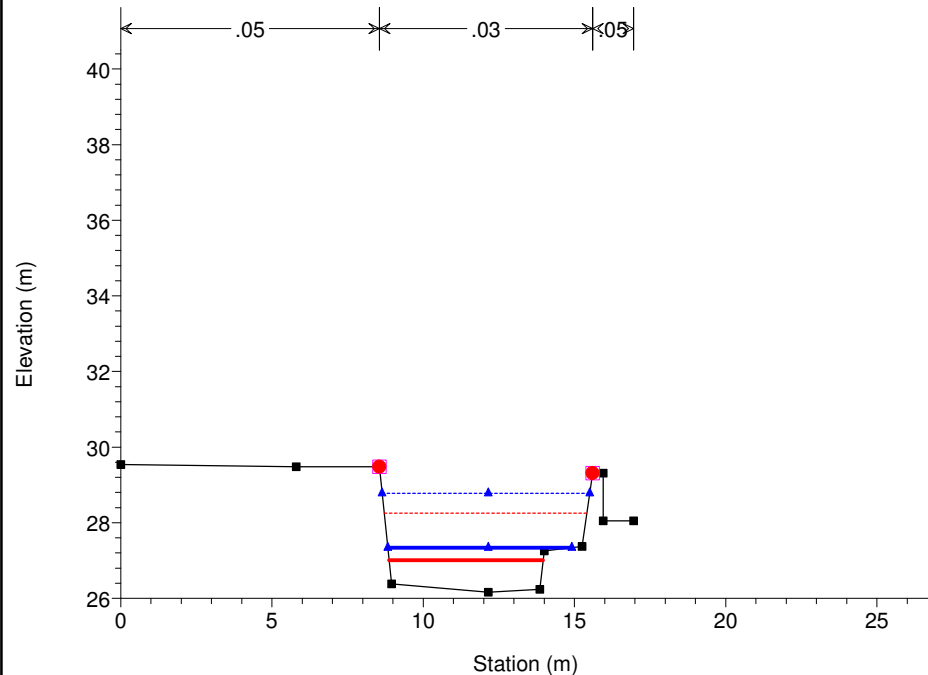
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 23



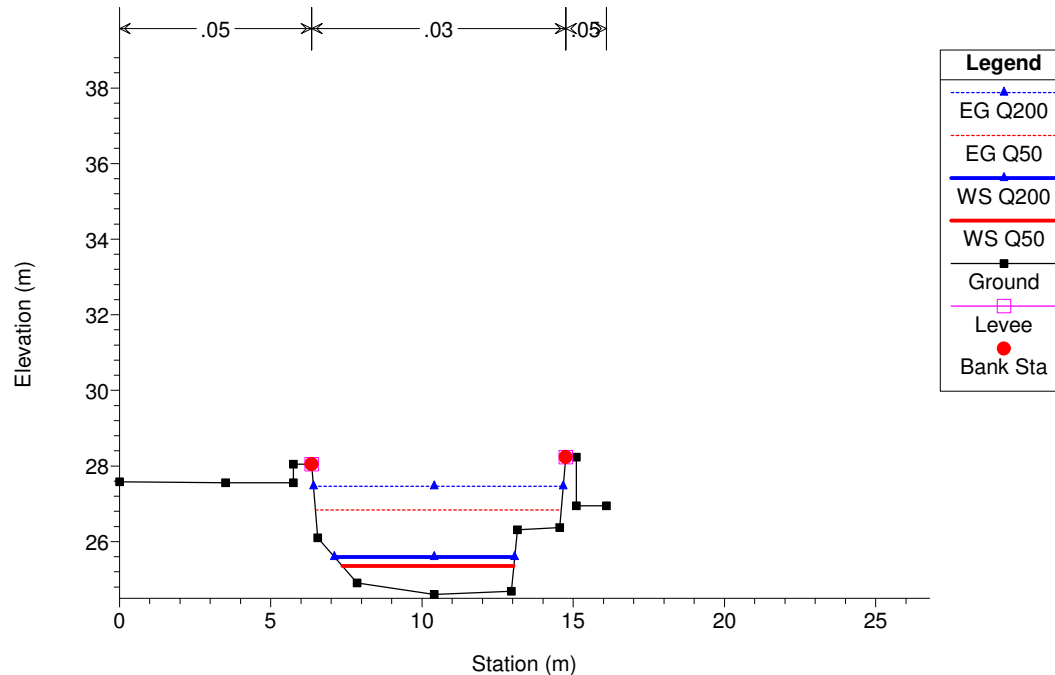
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 22



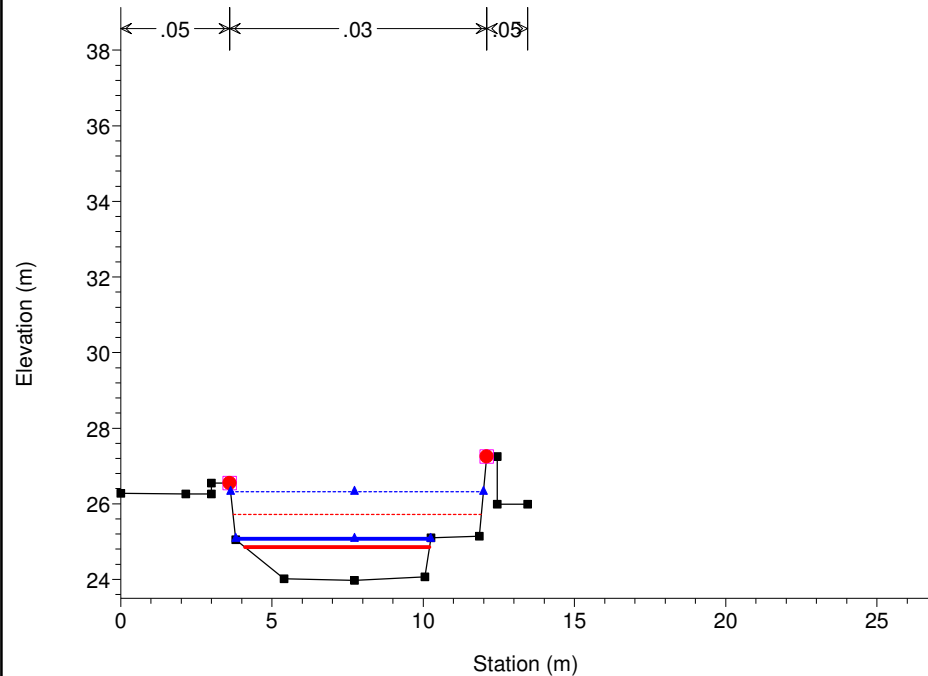
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 21



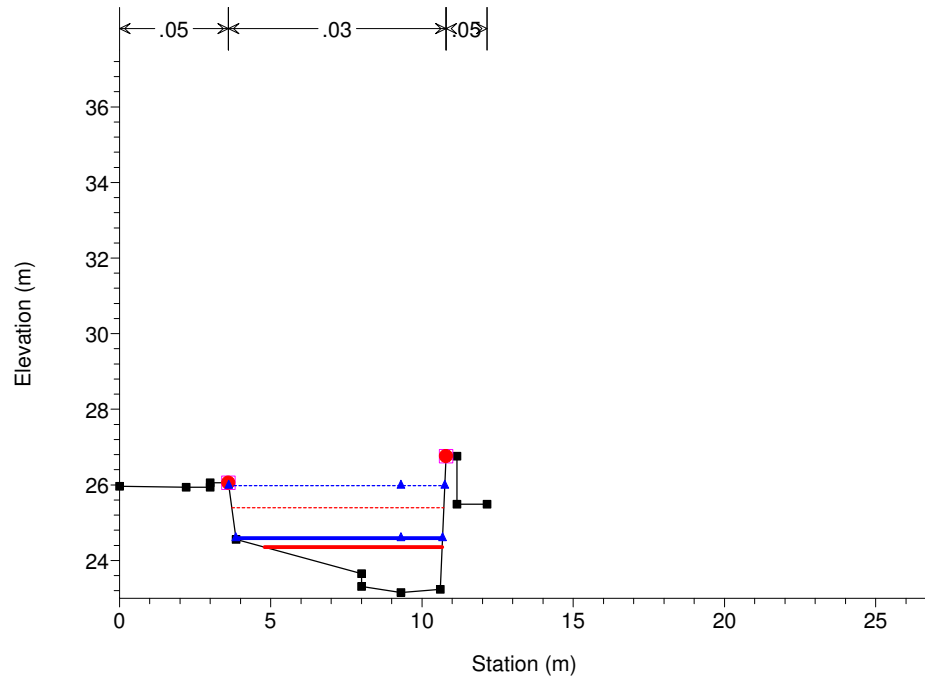
# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 20



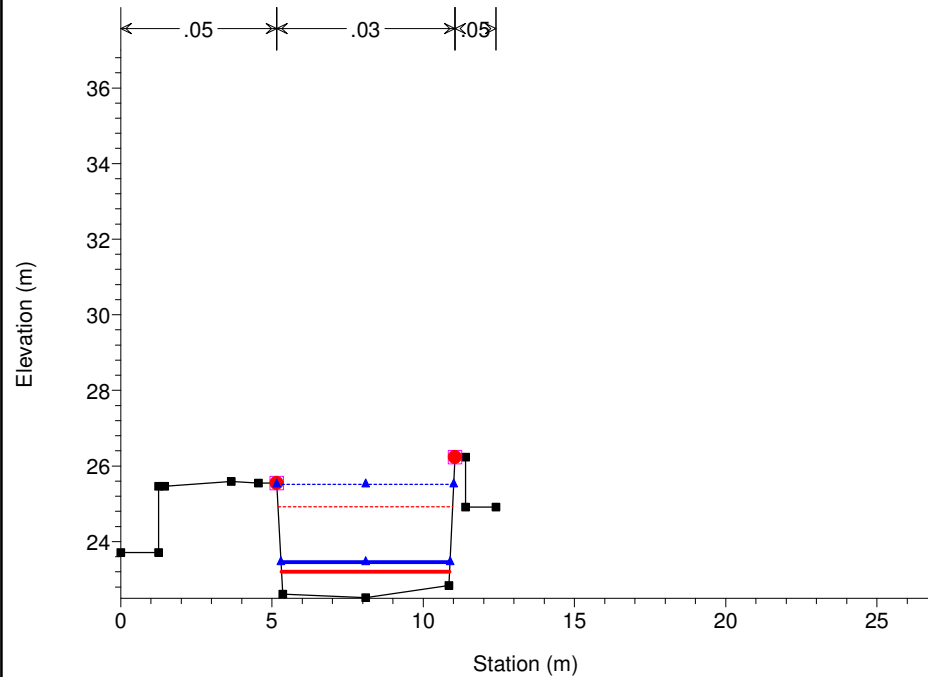
# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 19



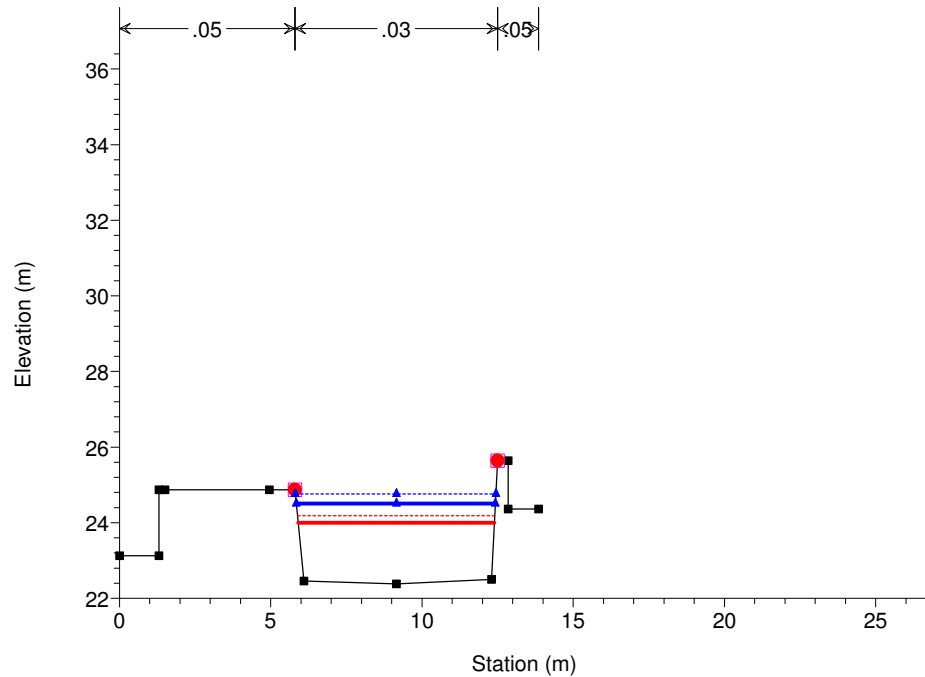
# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 18.5



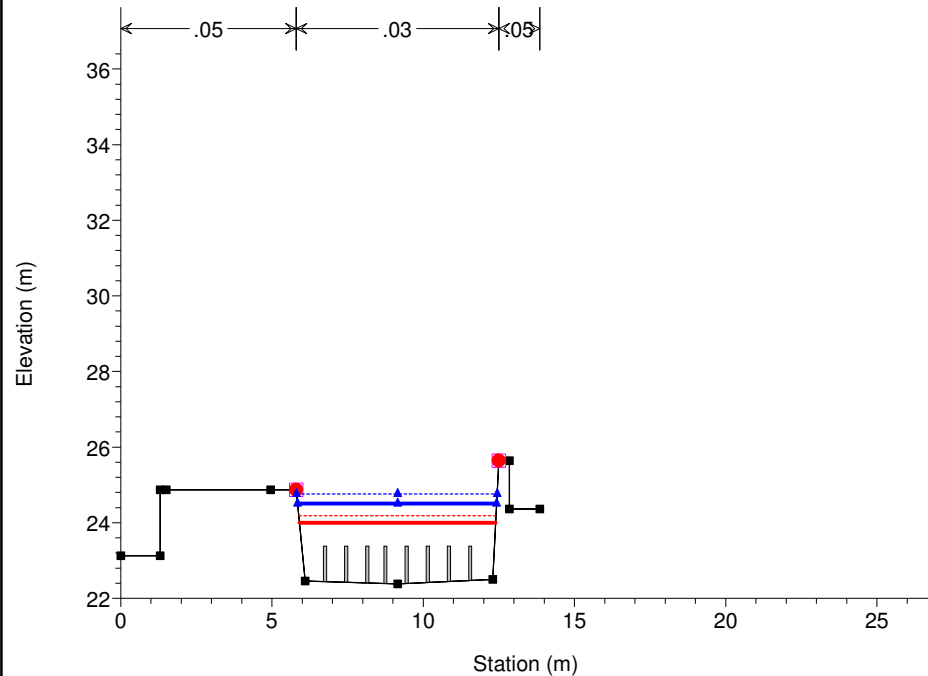
# S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 18



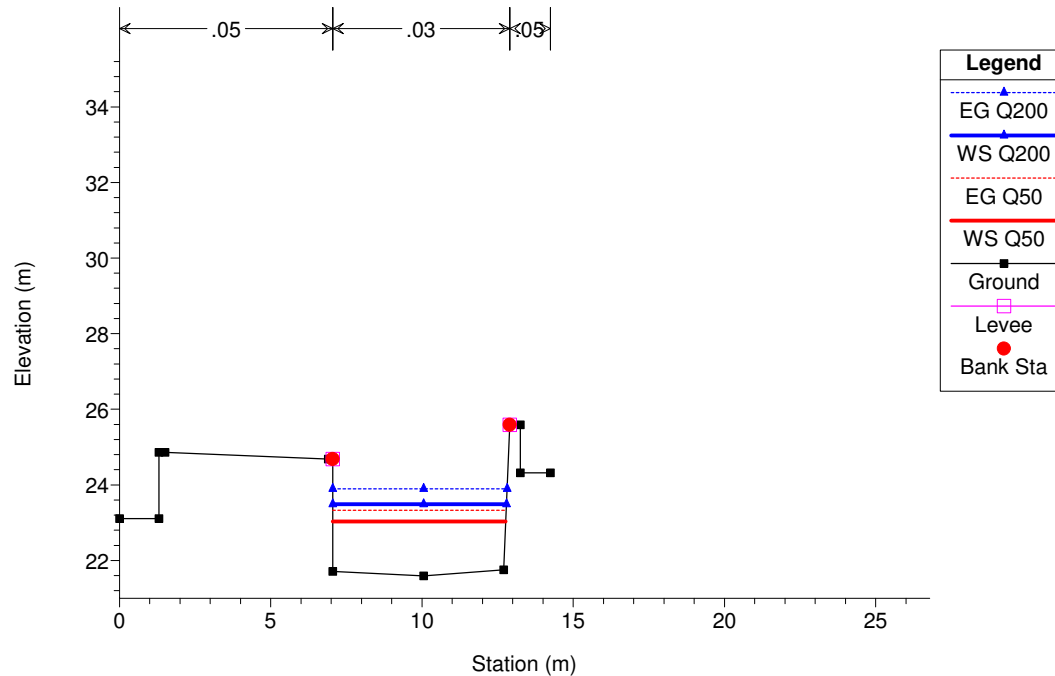
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 17.75 IS



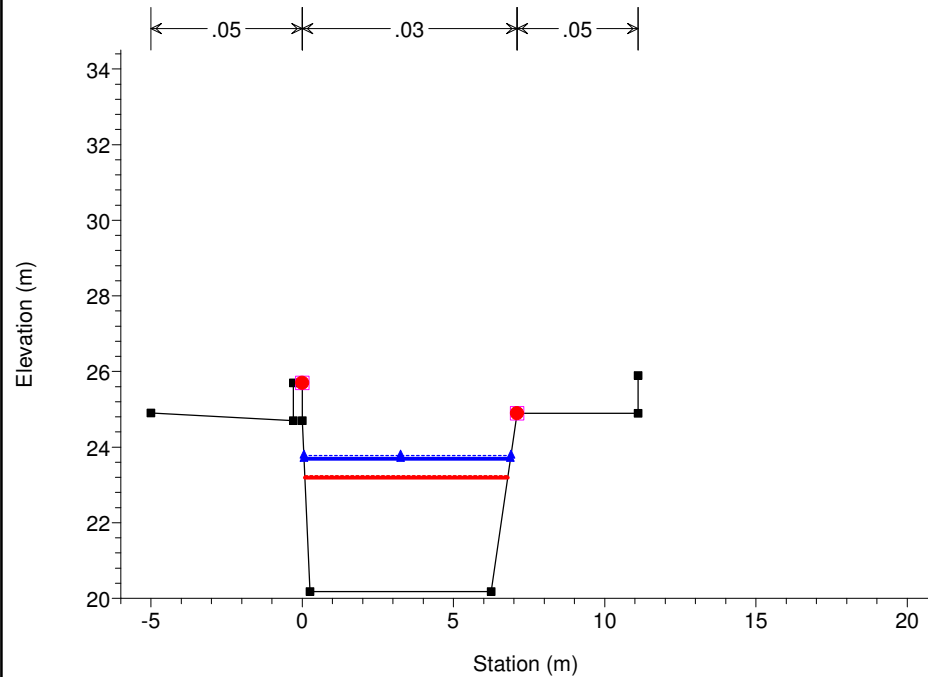
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 17.5



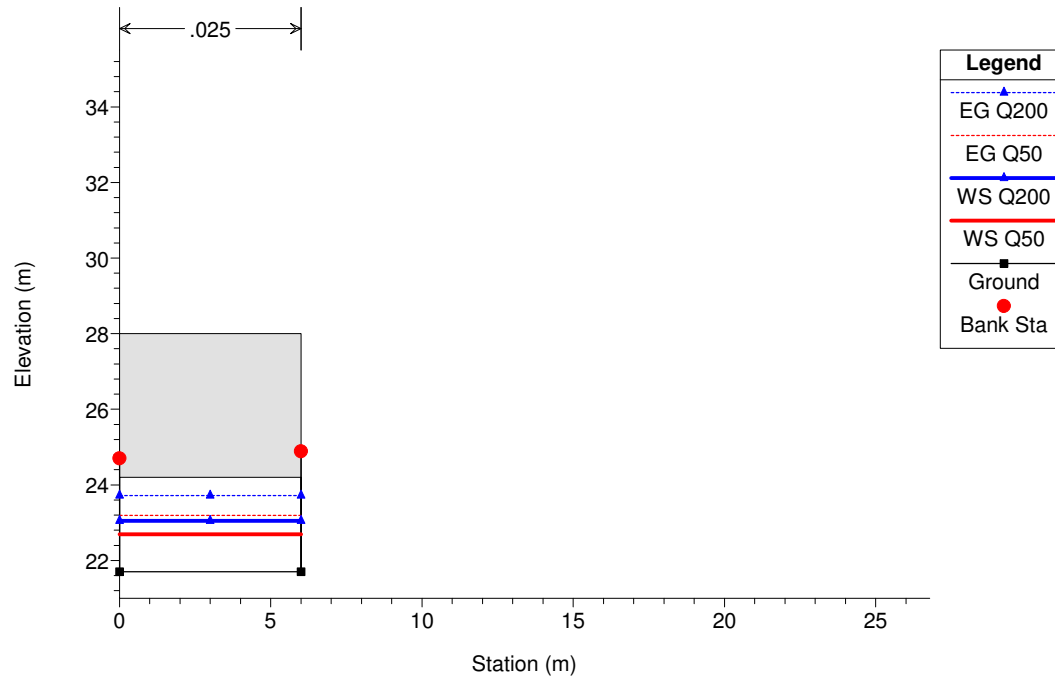
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 17.01



### S\_salvatore\_st\_attuale

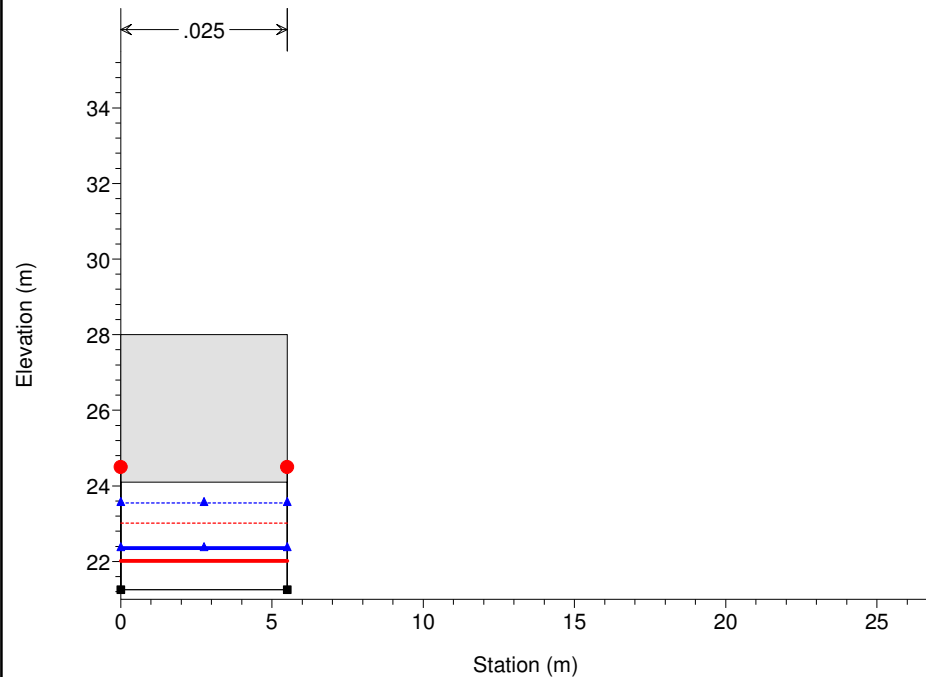
River = SSalvatore Reach = monte RS = 17





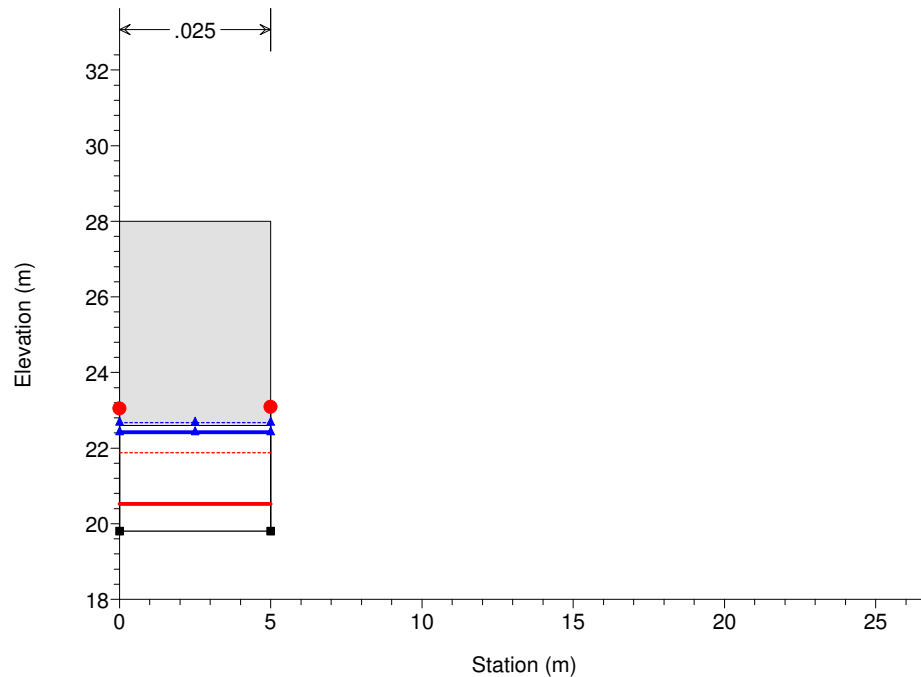
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 16



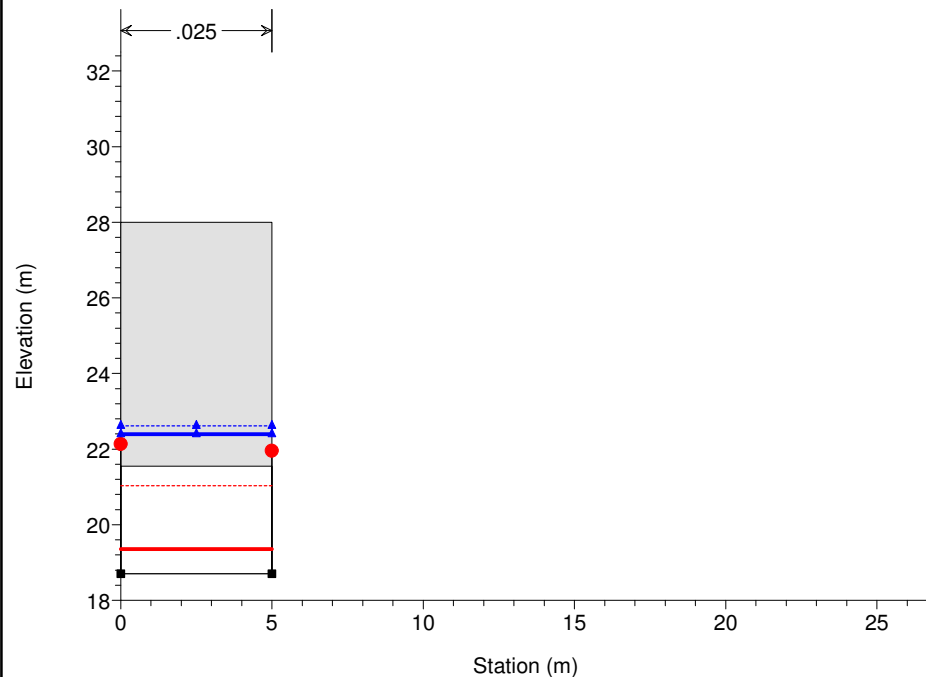
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 15



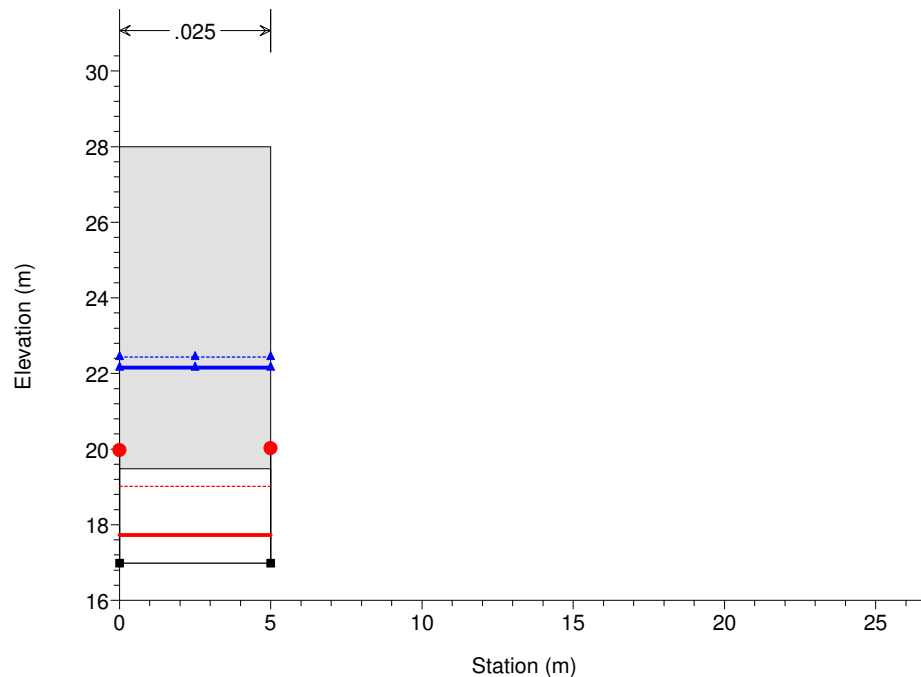
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 14



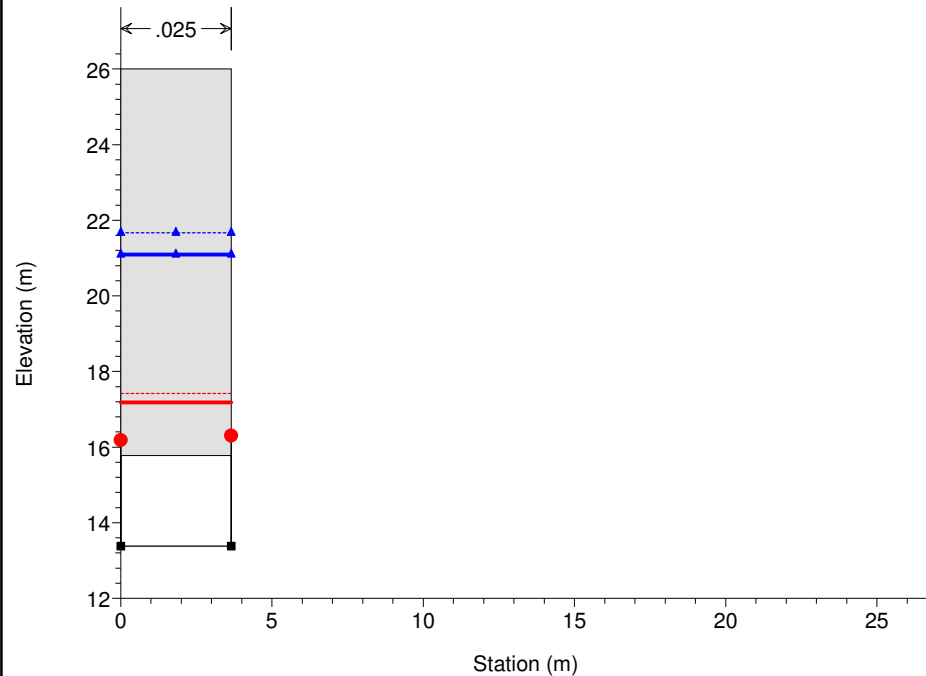
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 13

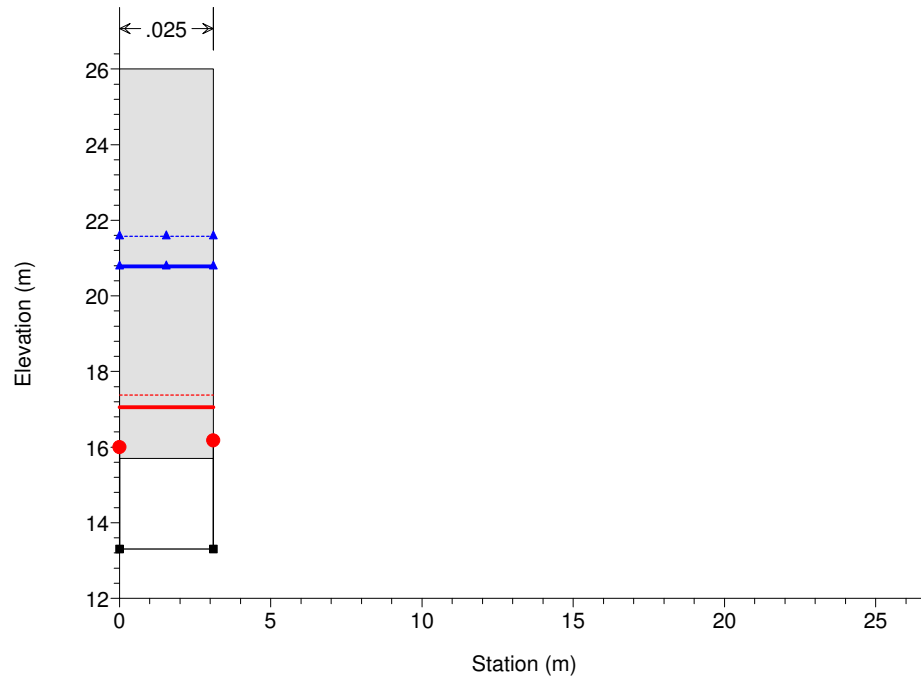




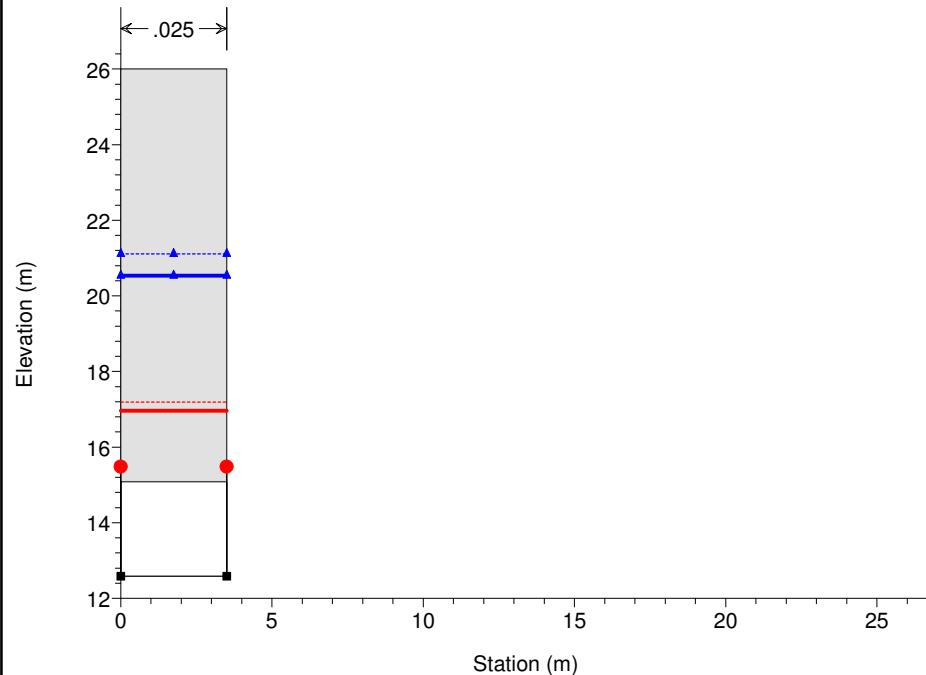
S\_salvatore\_st\_attuale  
River = SSalvatore Reach = monte RS = 9



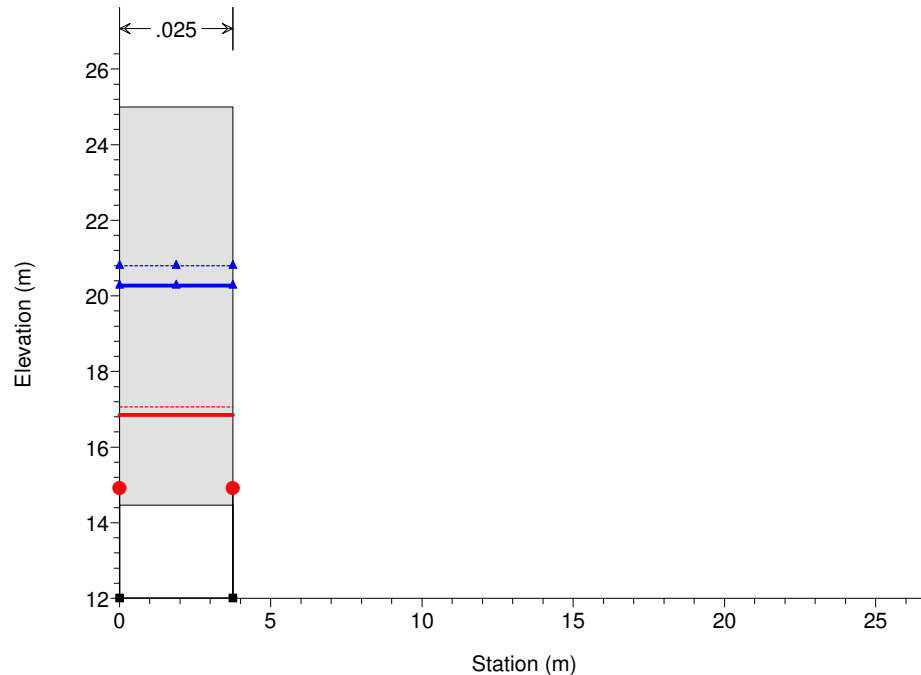
S\_salvatore\_st\_attuale  
River = SSalvatore Reach = monte RS = 8.9



S\_salvatore\_st\_attuale  
River = SSalvatore Reach = monte RS = 8.8

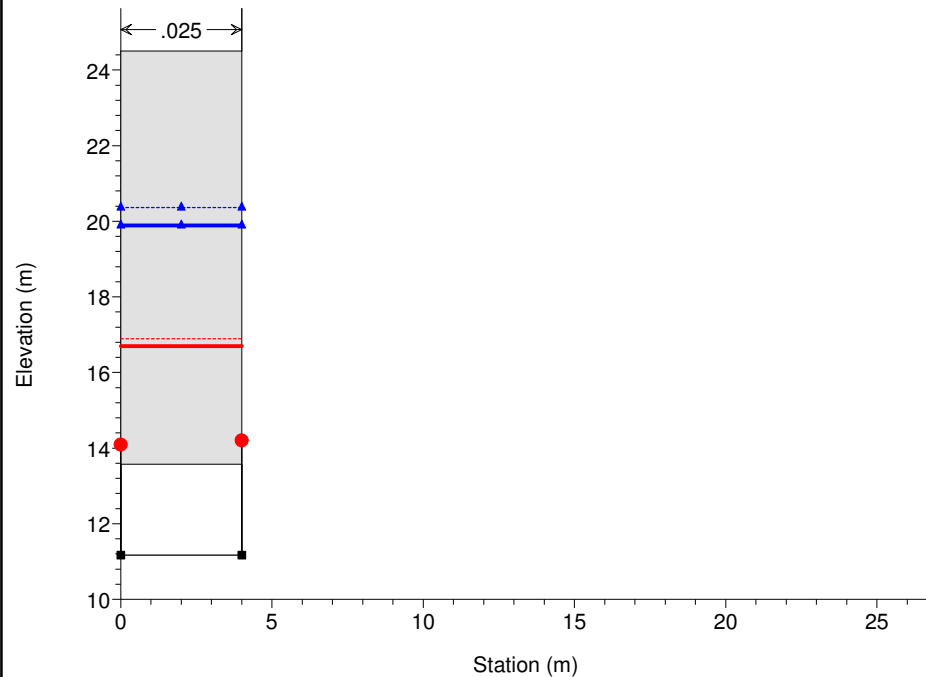


S\_salvatore\_st\_attuale  
River = SSalvatore Reach = monte RS = 8.7



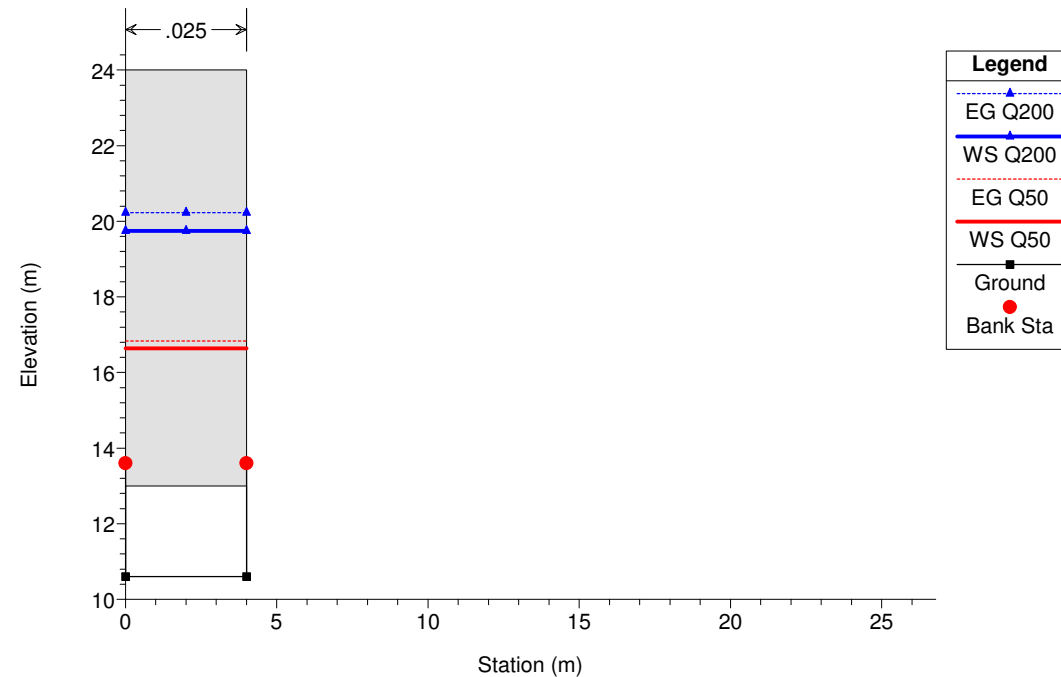
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 8.5



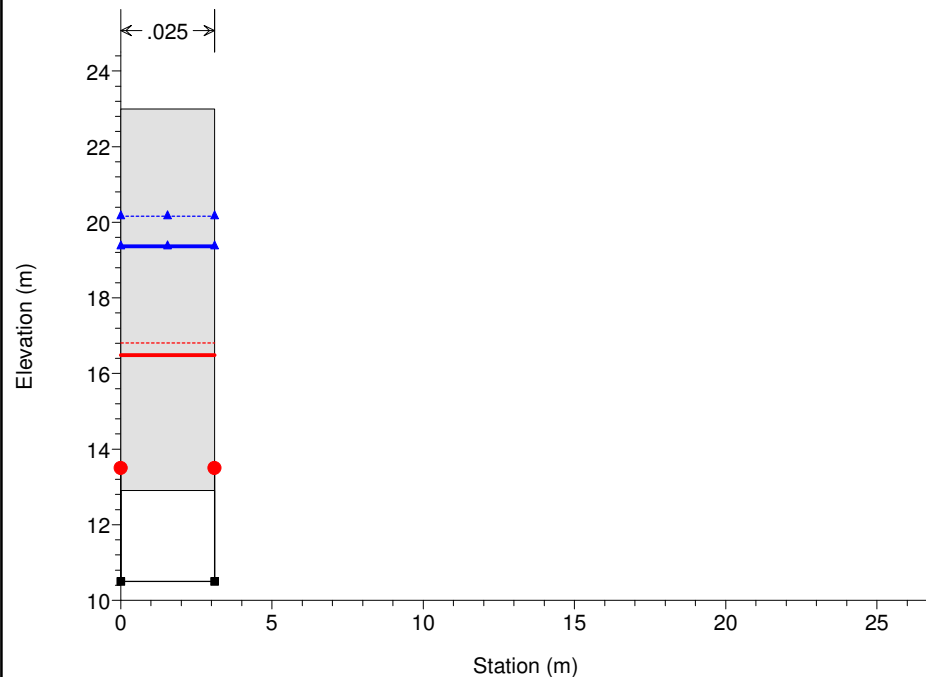
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 8.3



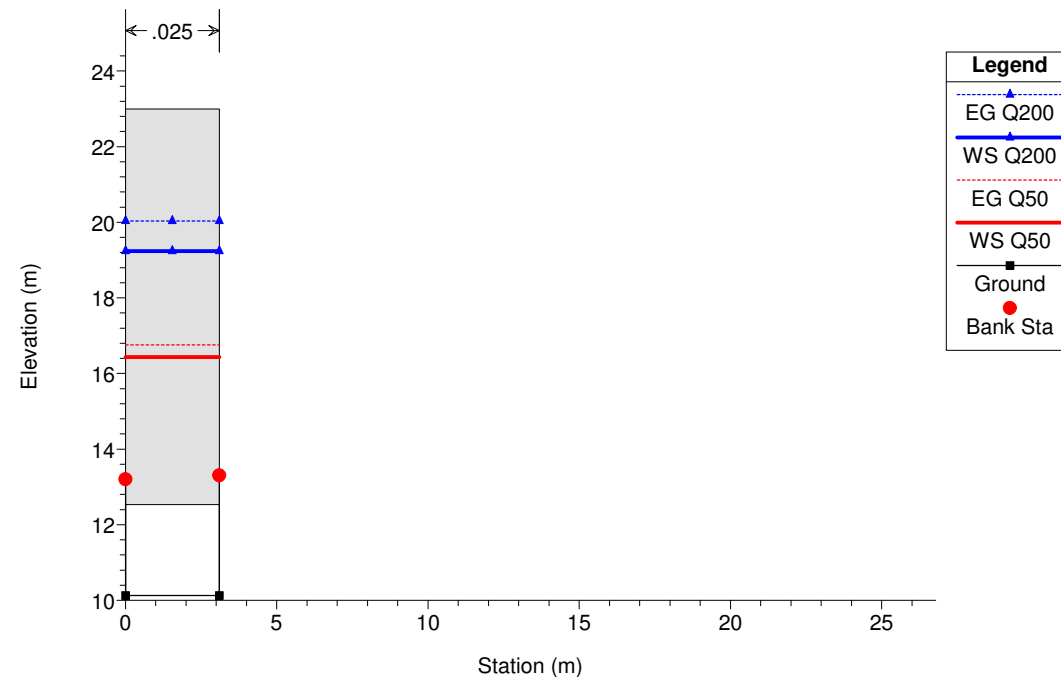
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 8.2



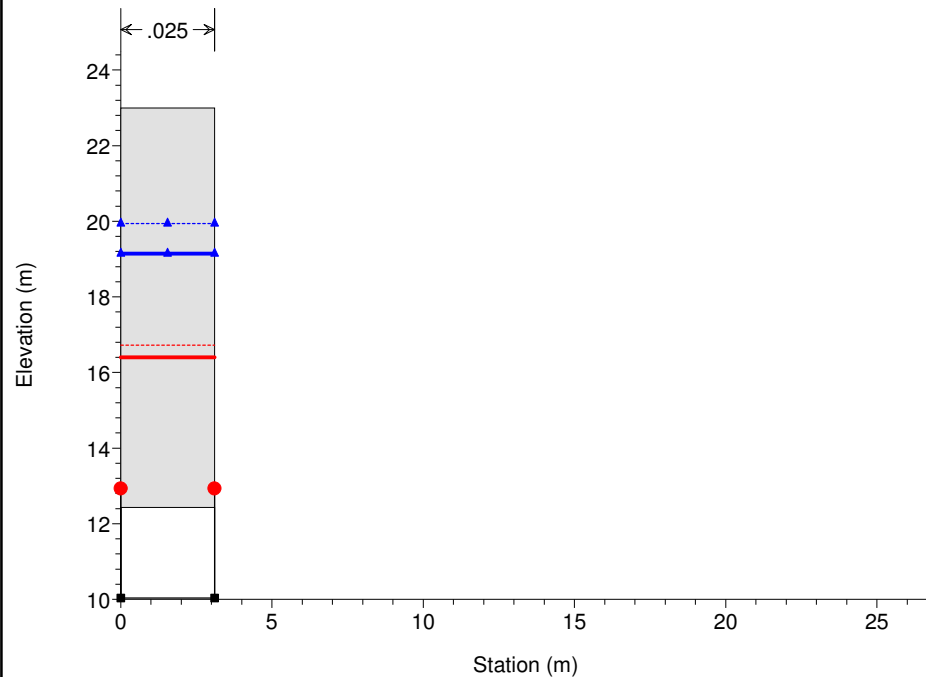
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 8



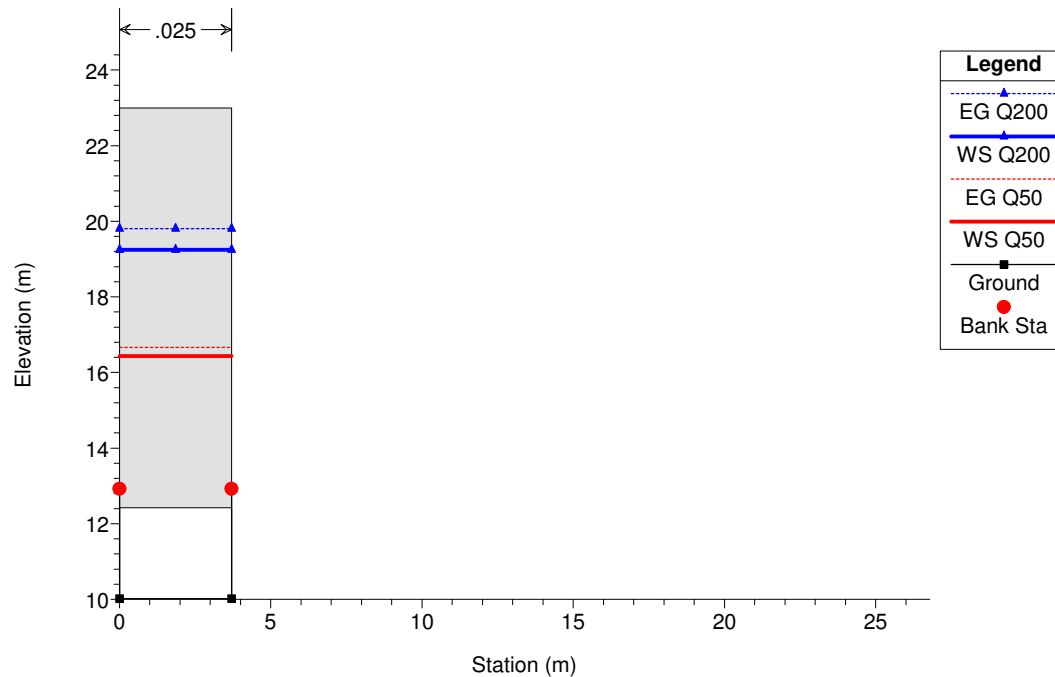
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 7.6



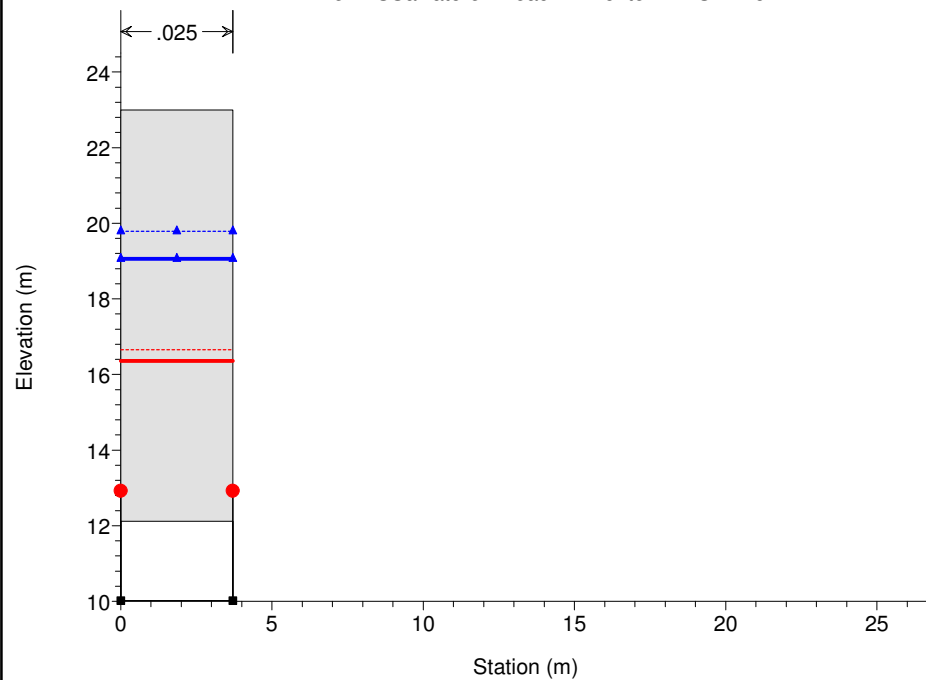
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 7.51



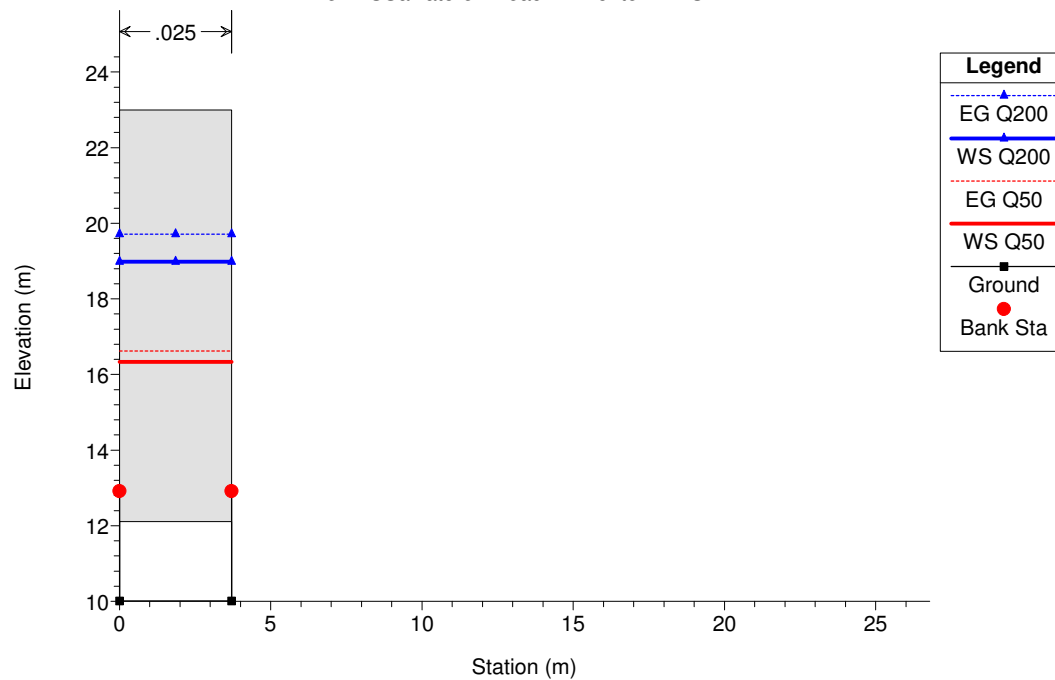
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 7.5



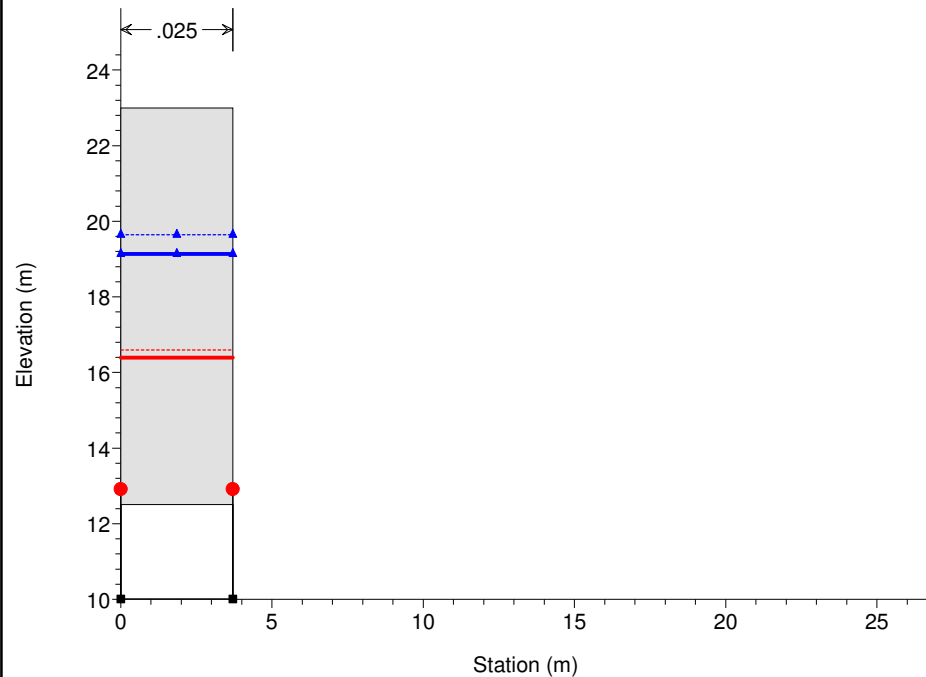
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 7.41



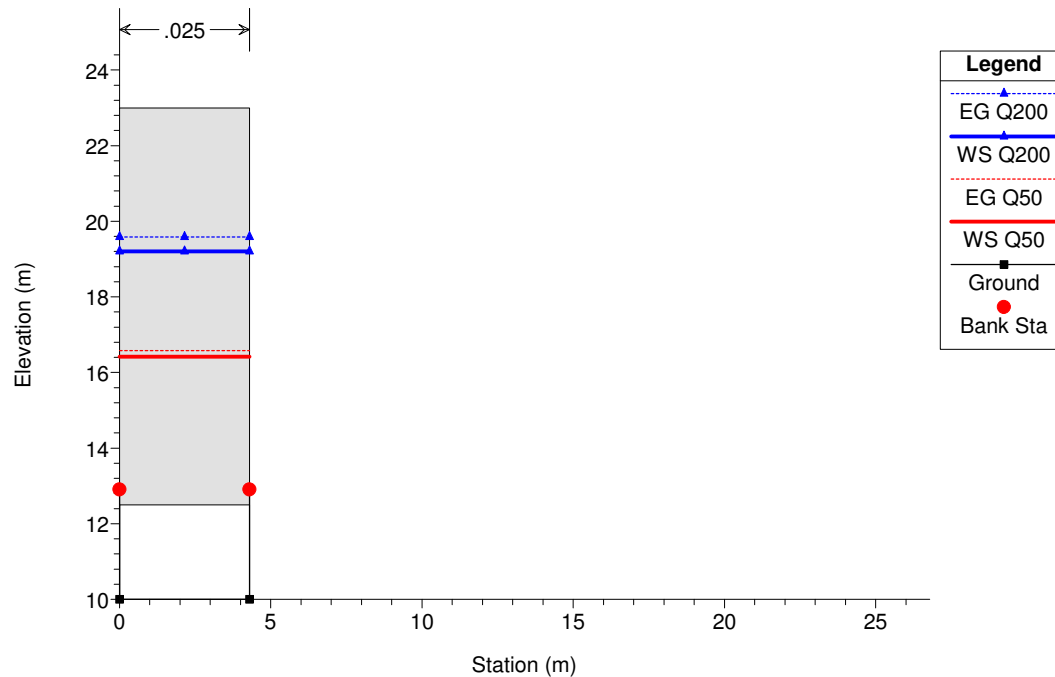
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 7.4



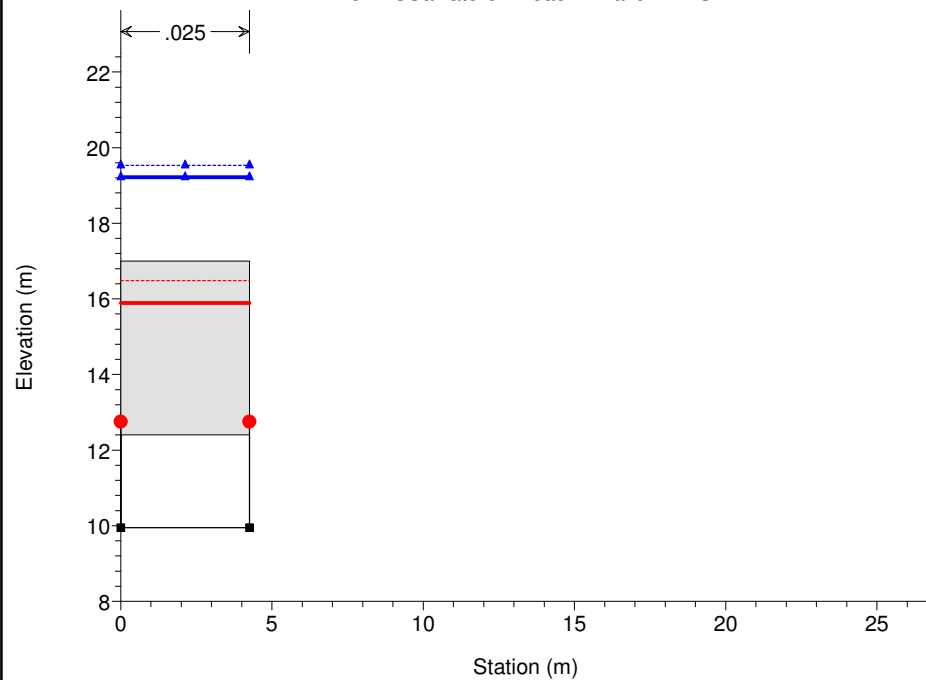
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = monte RS = 7.2



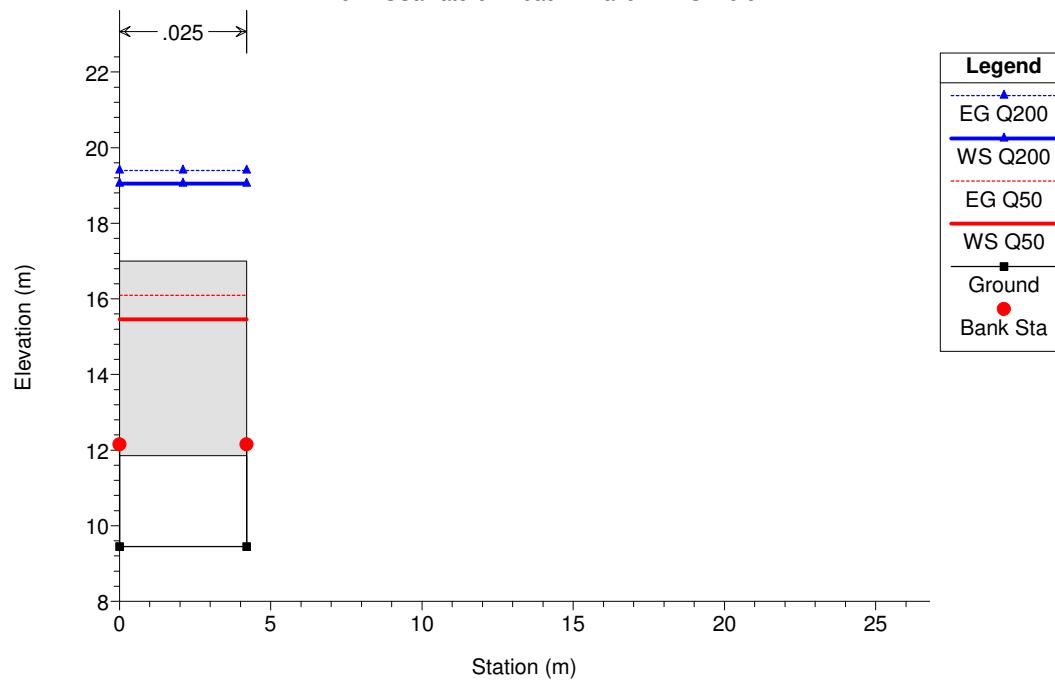
### S\_salvatore\_st\_attuale

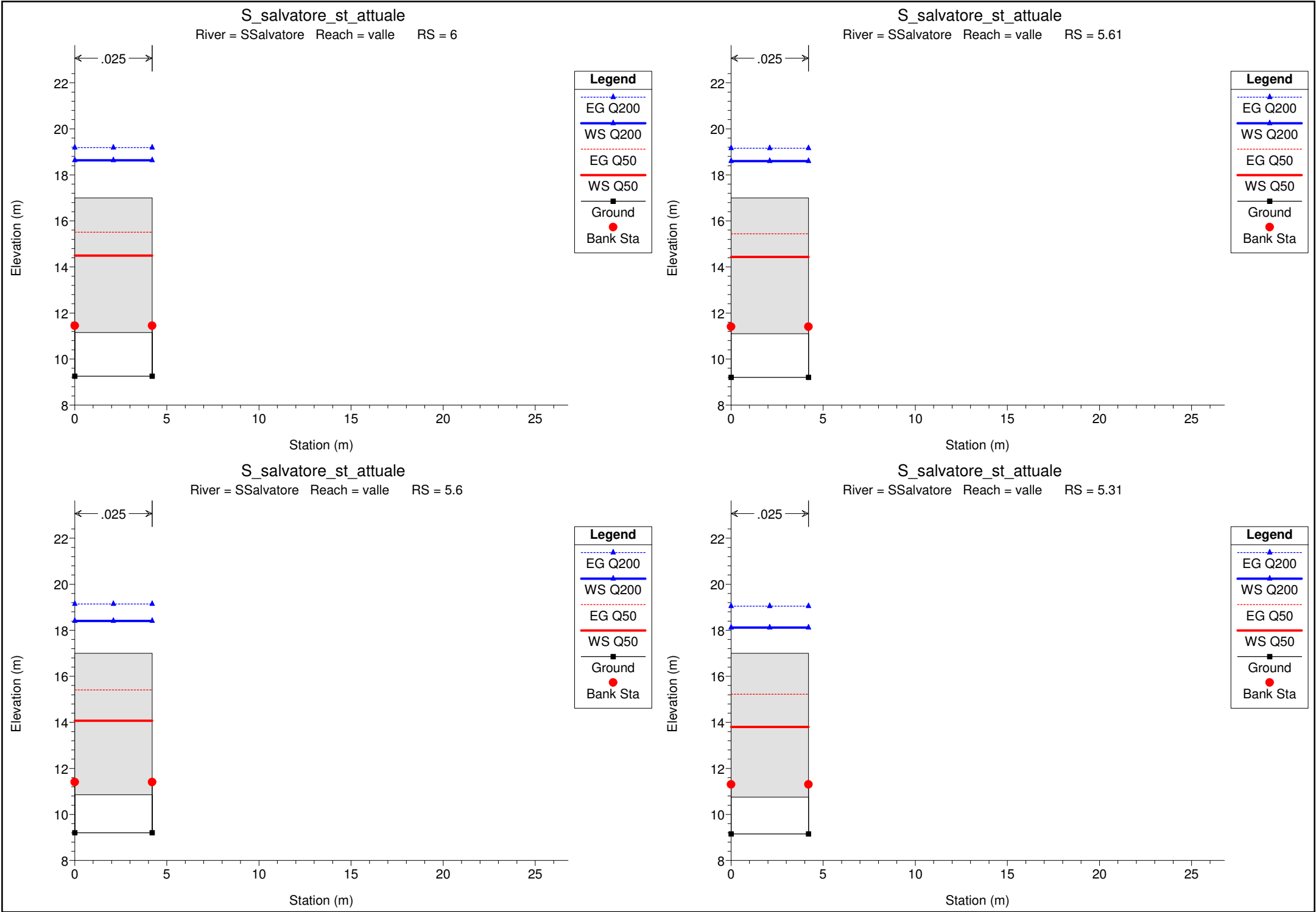
River = SSalvatore Reach = valle RS = 7



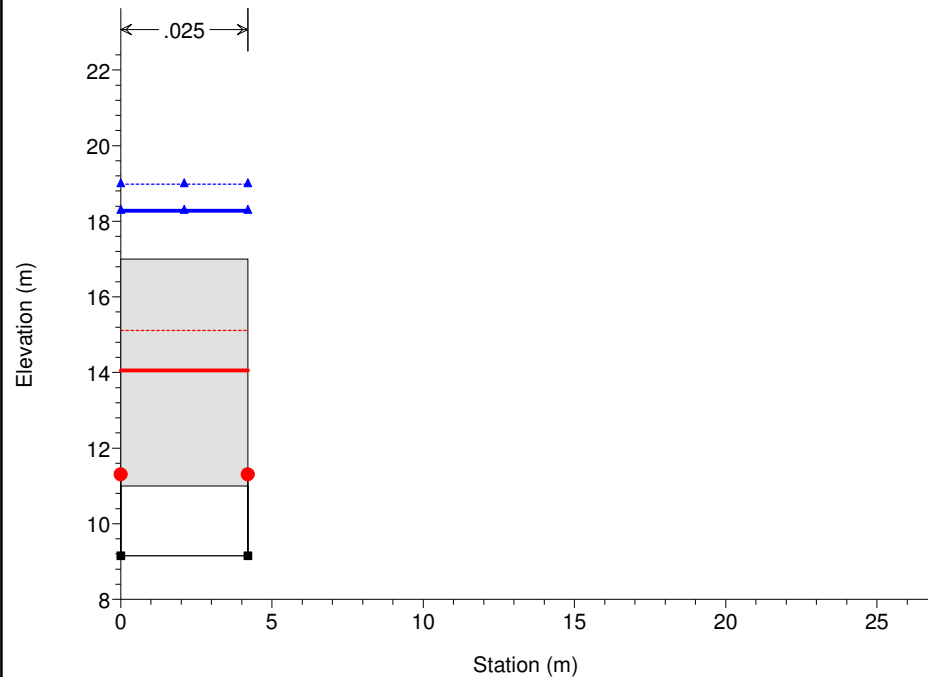
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 6.5

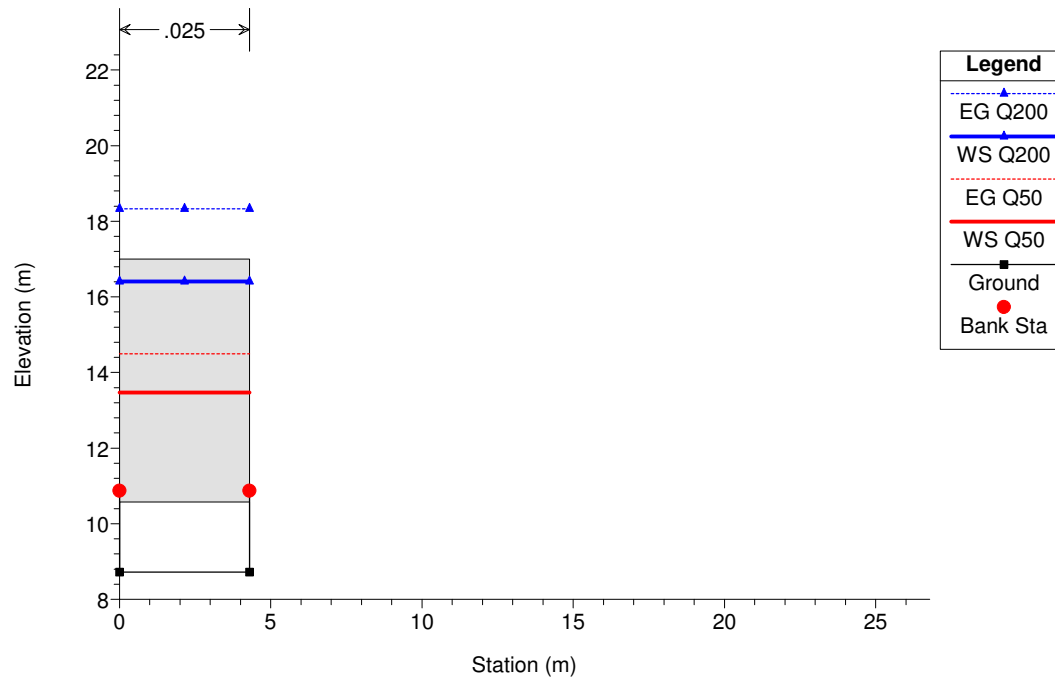




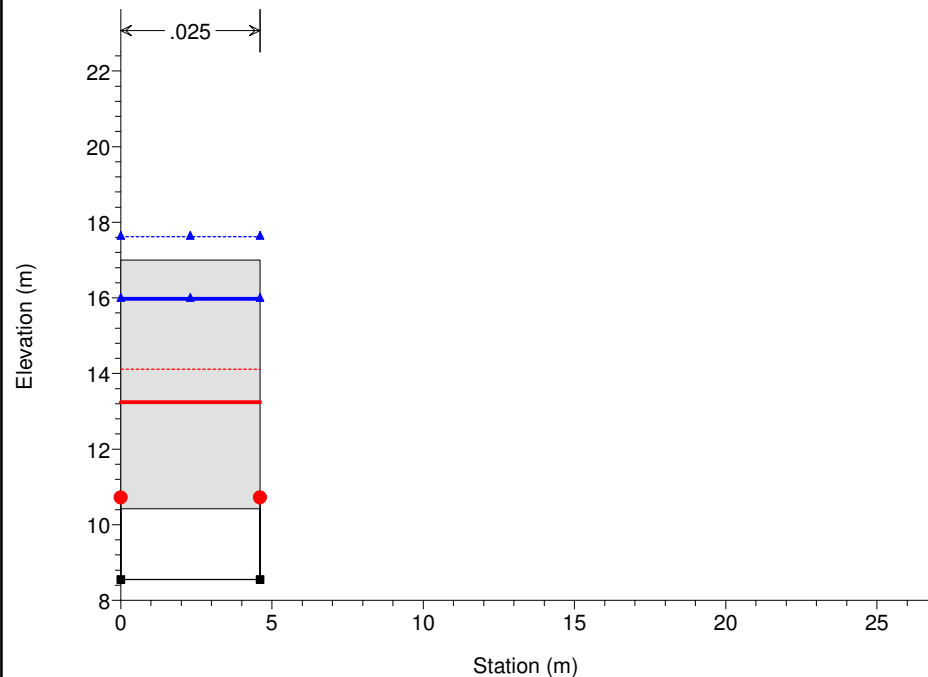
S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 5.3



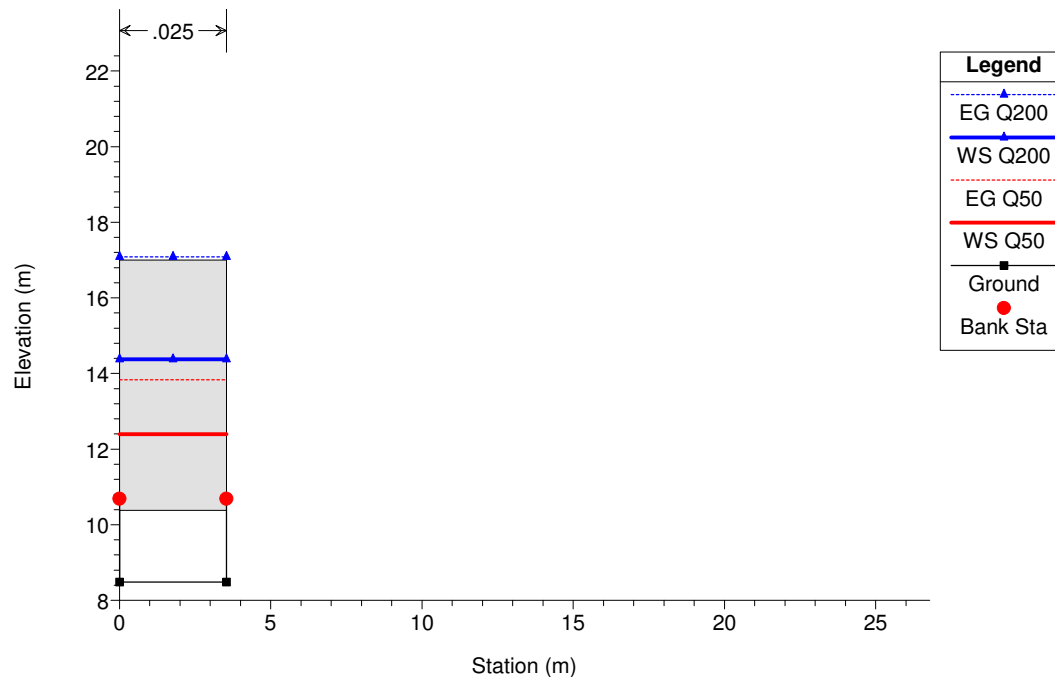
S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 5



S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 4.6

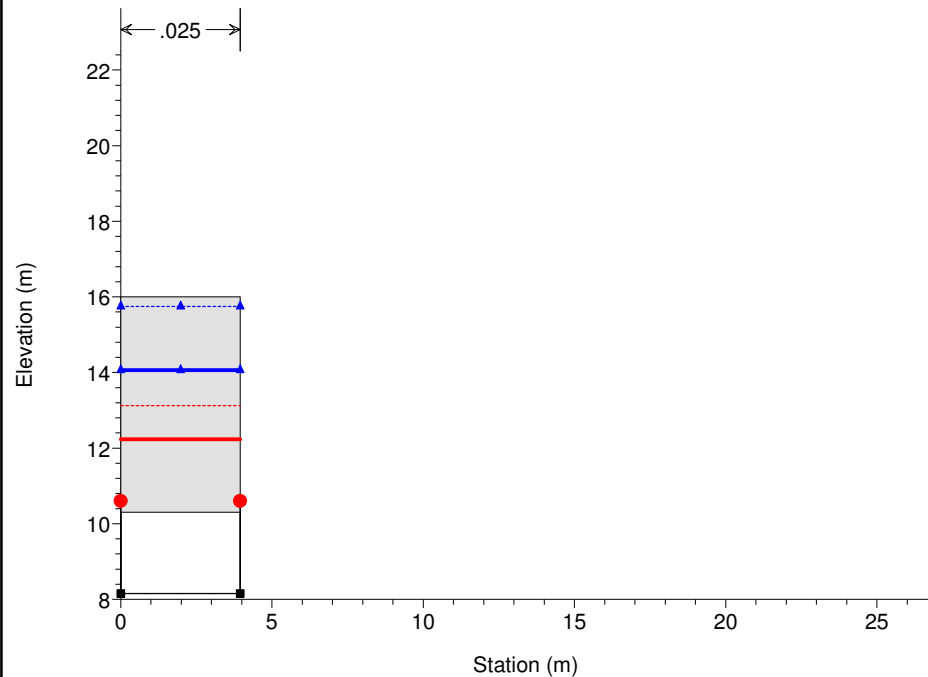


S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 4.4

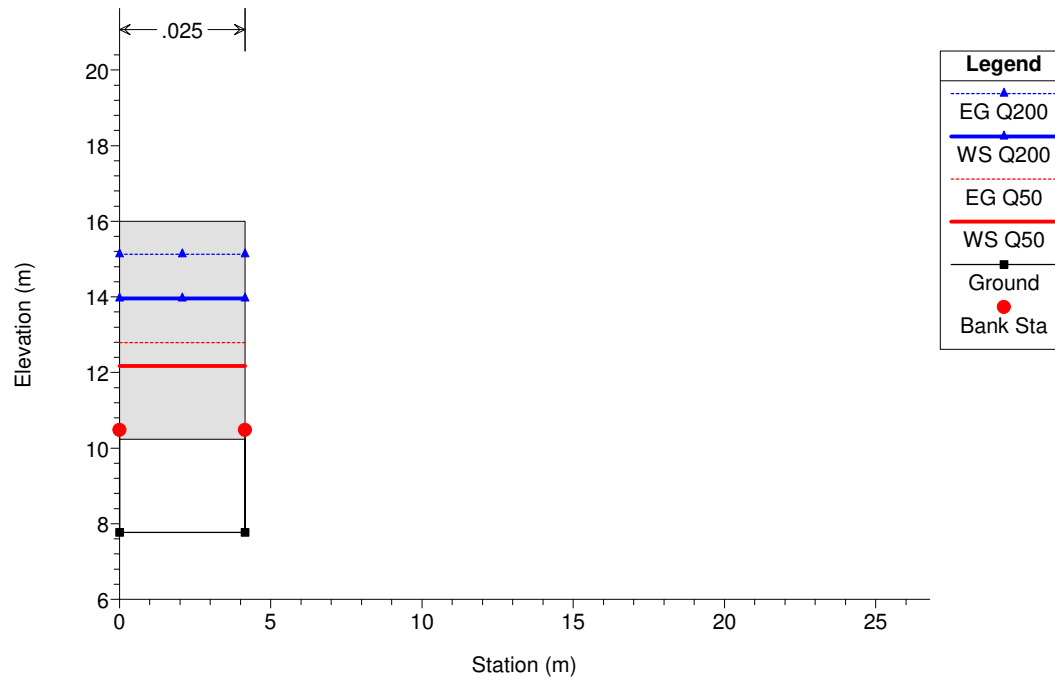




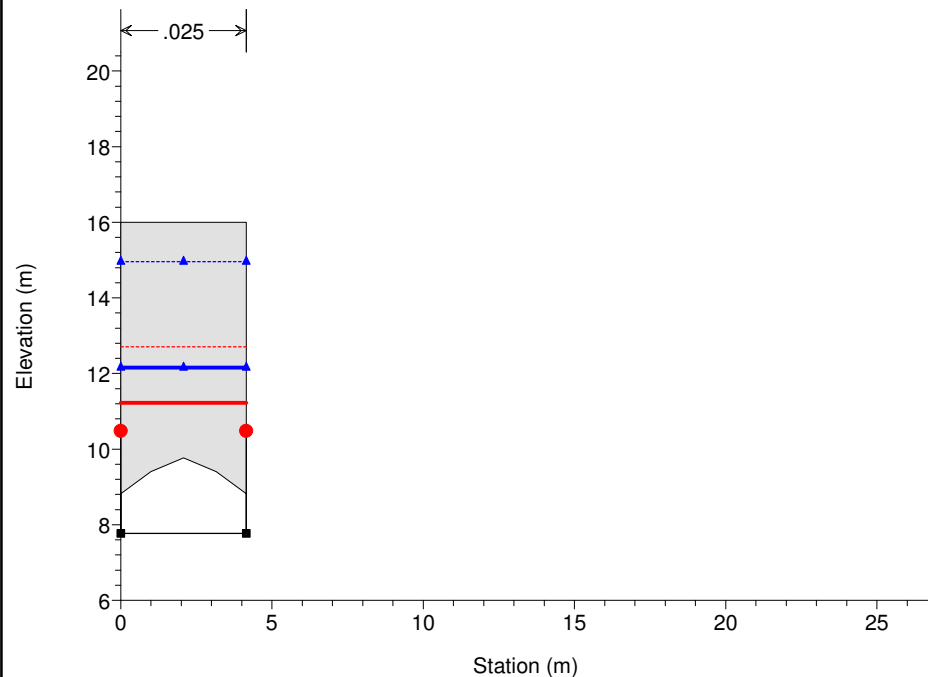
S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 4.2



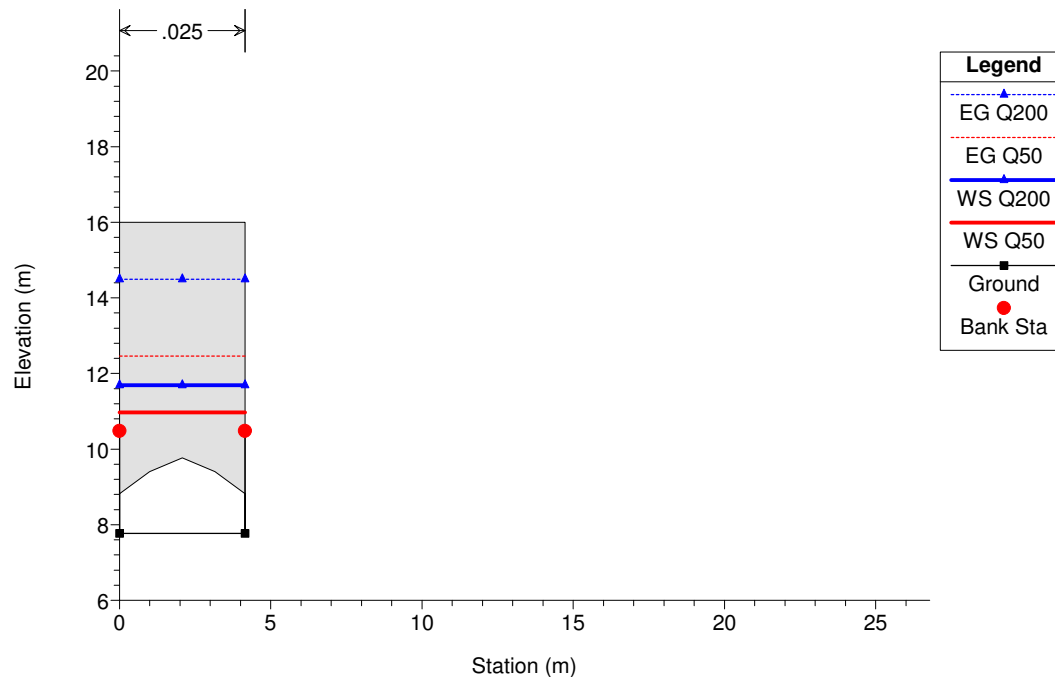
S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 4.01



S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 4

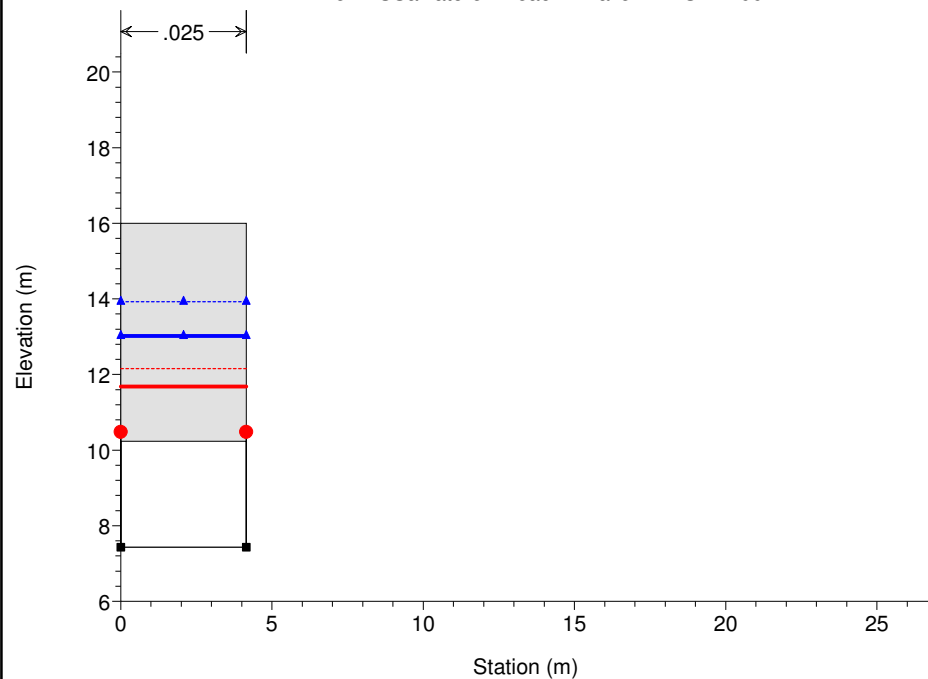


S\_salvatore\_st\_attuale  
River = SSalvatore Reach = valle RS = 3



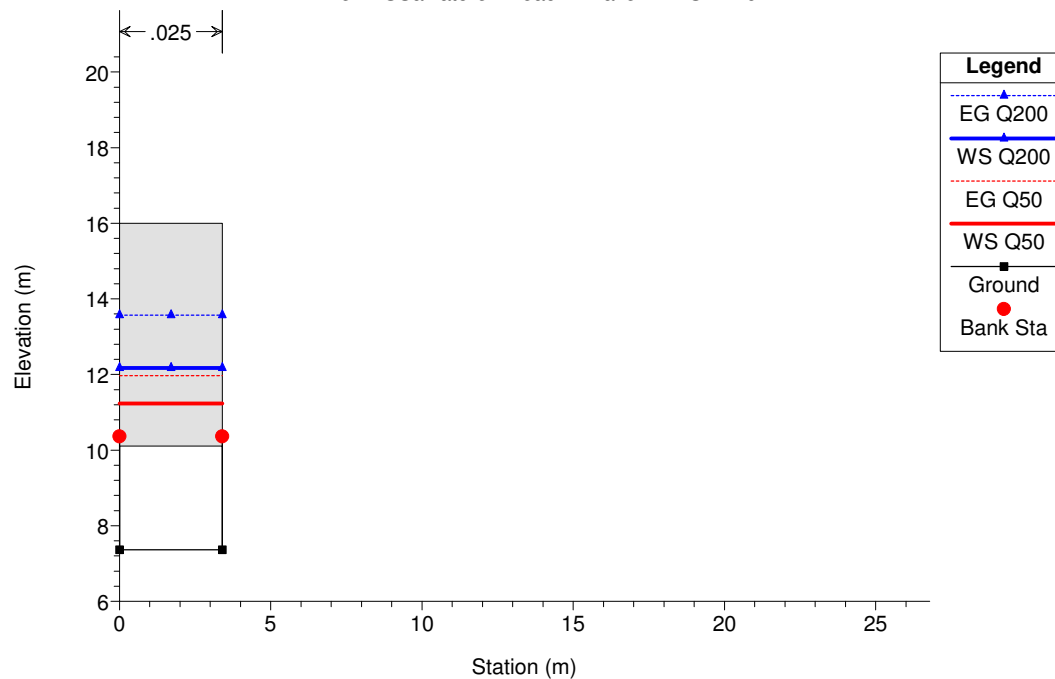
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 2.99



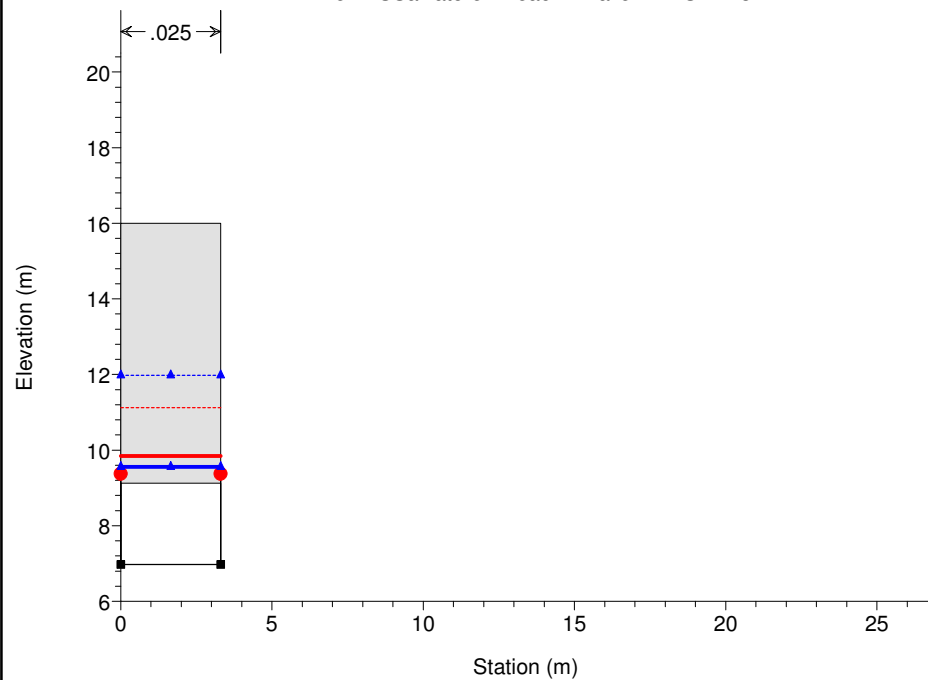
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 2.6



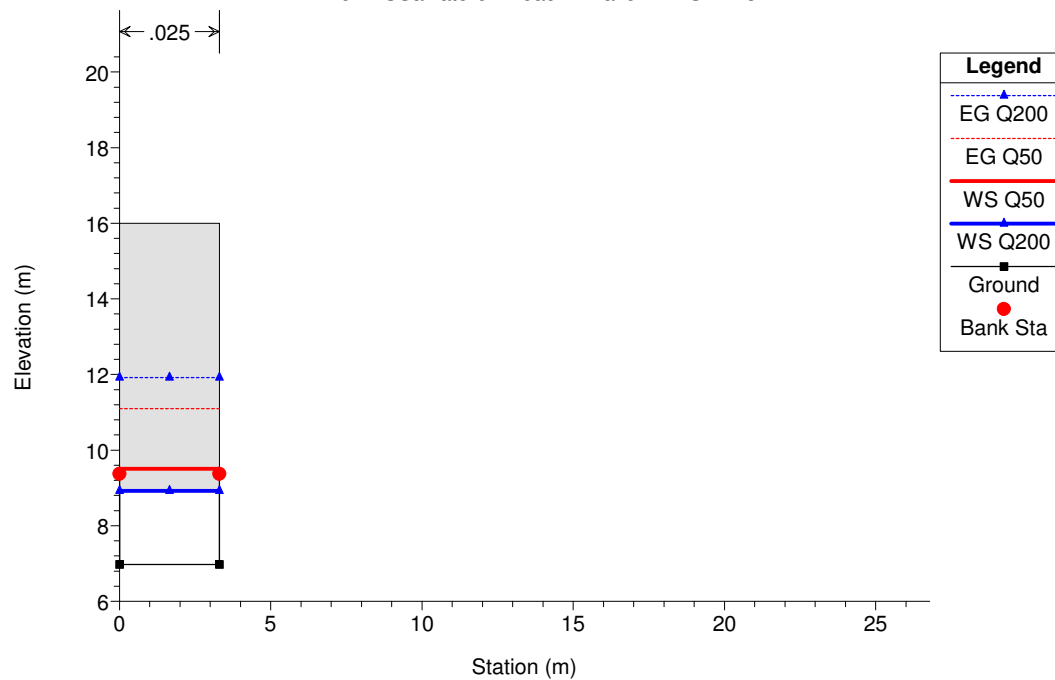
### S\_salvatore\_st\_attuale

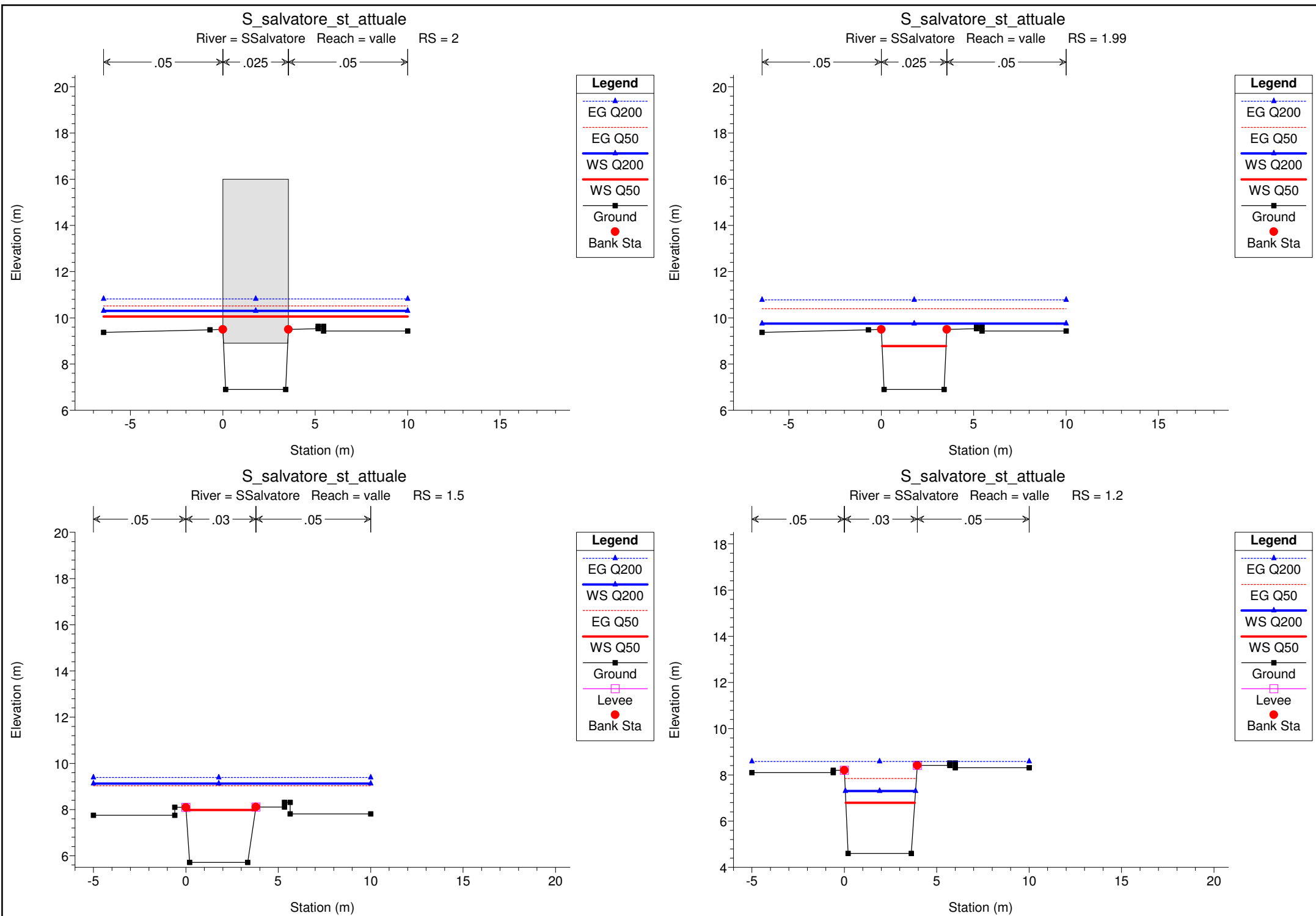
River = SSalvatore Reach = valle RS = 2.31



### S\_salvatore\_st\_attuale

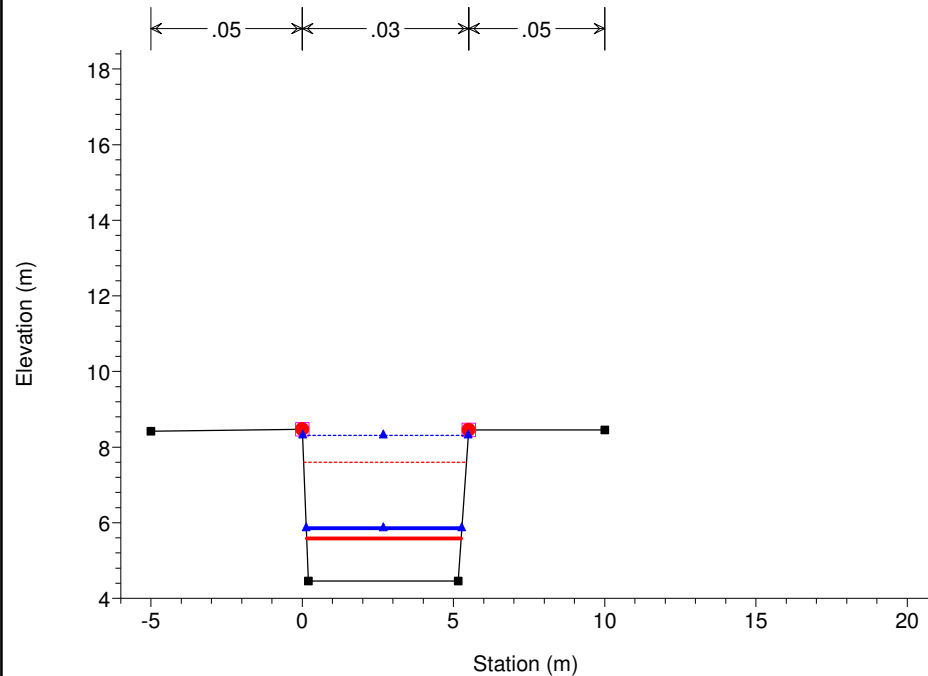
River = SSalvatore Reach = valle RS = 2.3





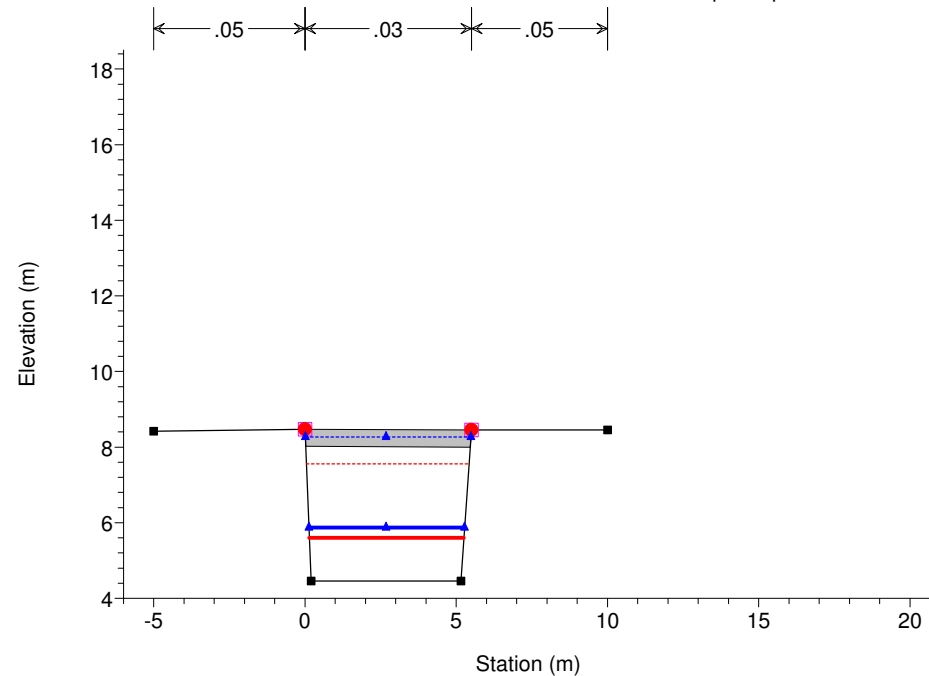
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 1



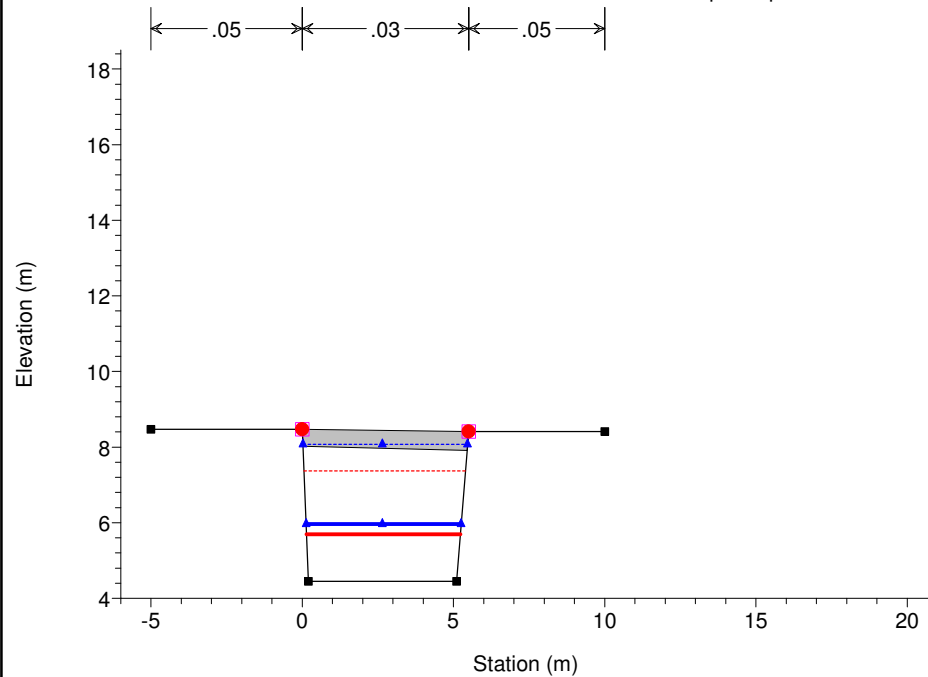
### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 0.8 BR ponte pista ciclabile



### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 0.8 BR ponte pista ciclabile



### S\_salvatore\_st\_attuale

River = SSalvatore Reach = valle RS = 0.5

