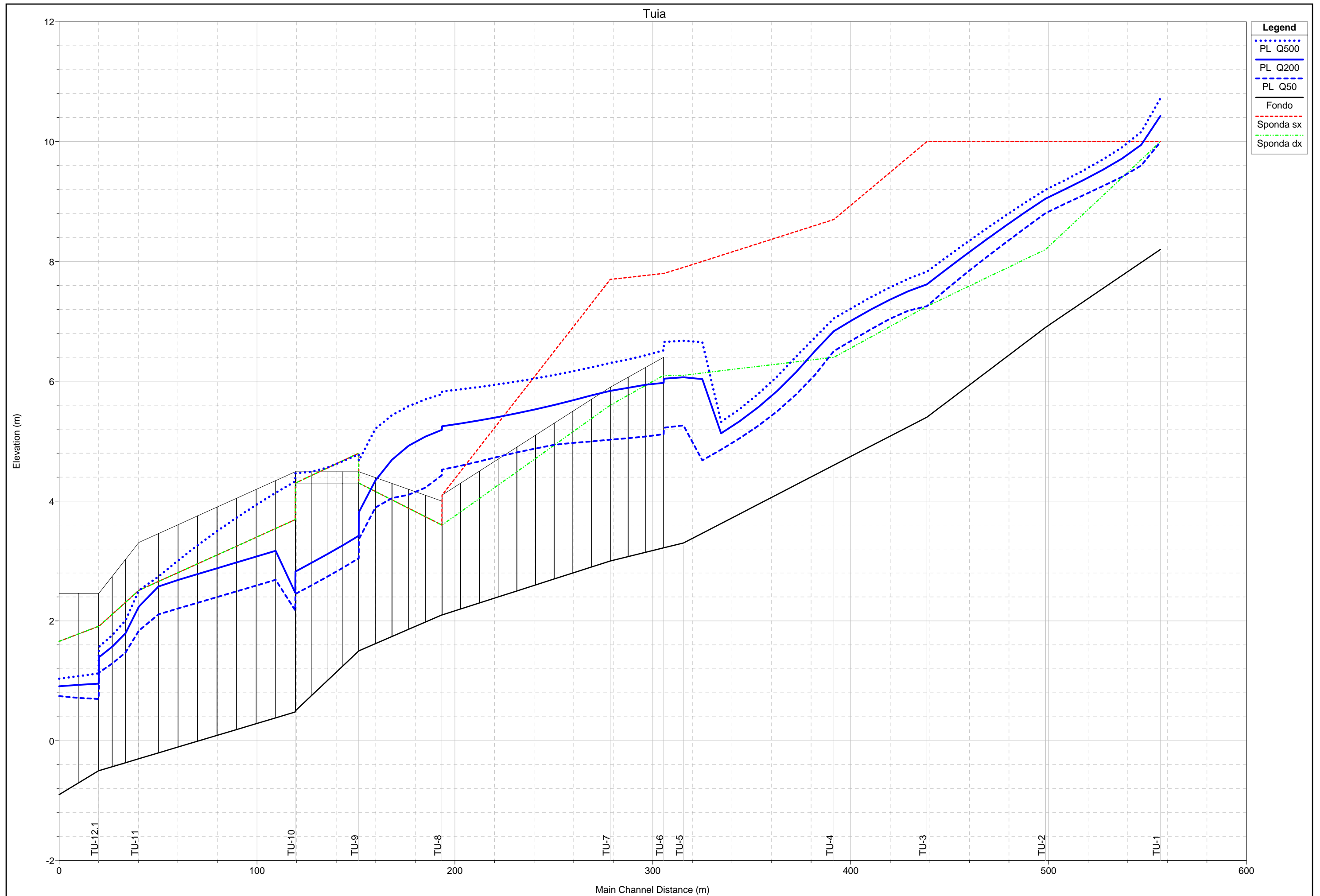


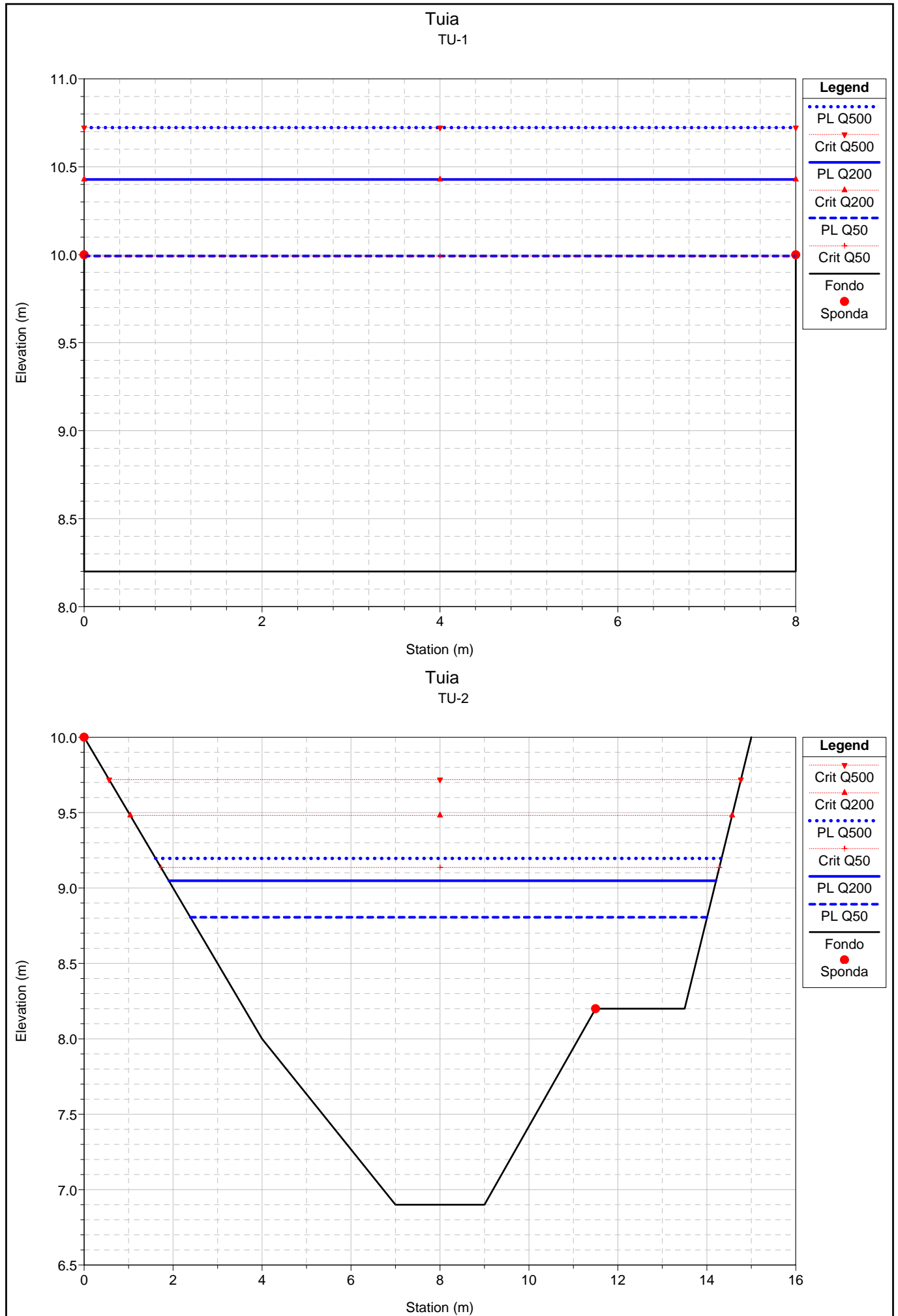
# **Torrente Tuia**

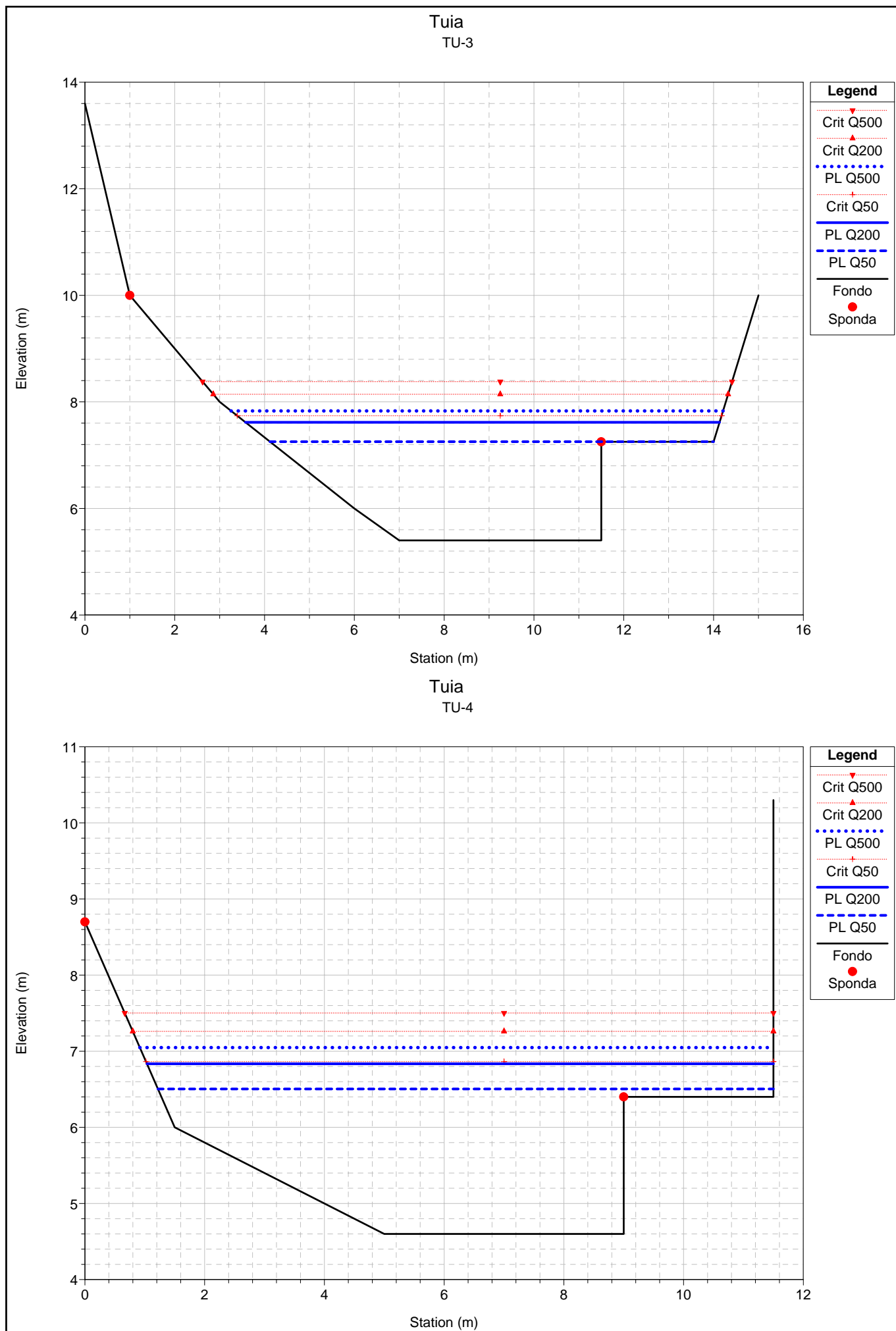
## **Rapallo**

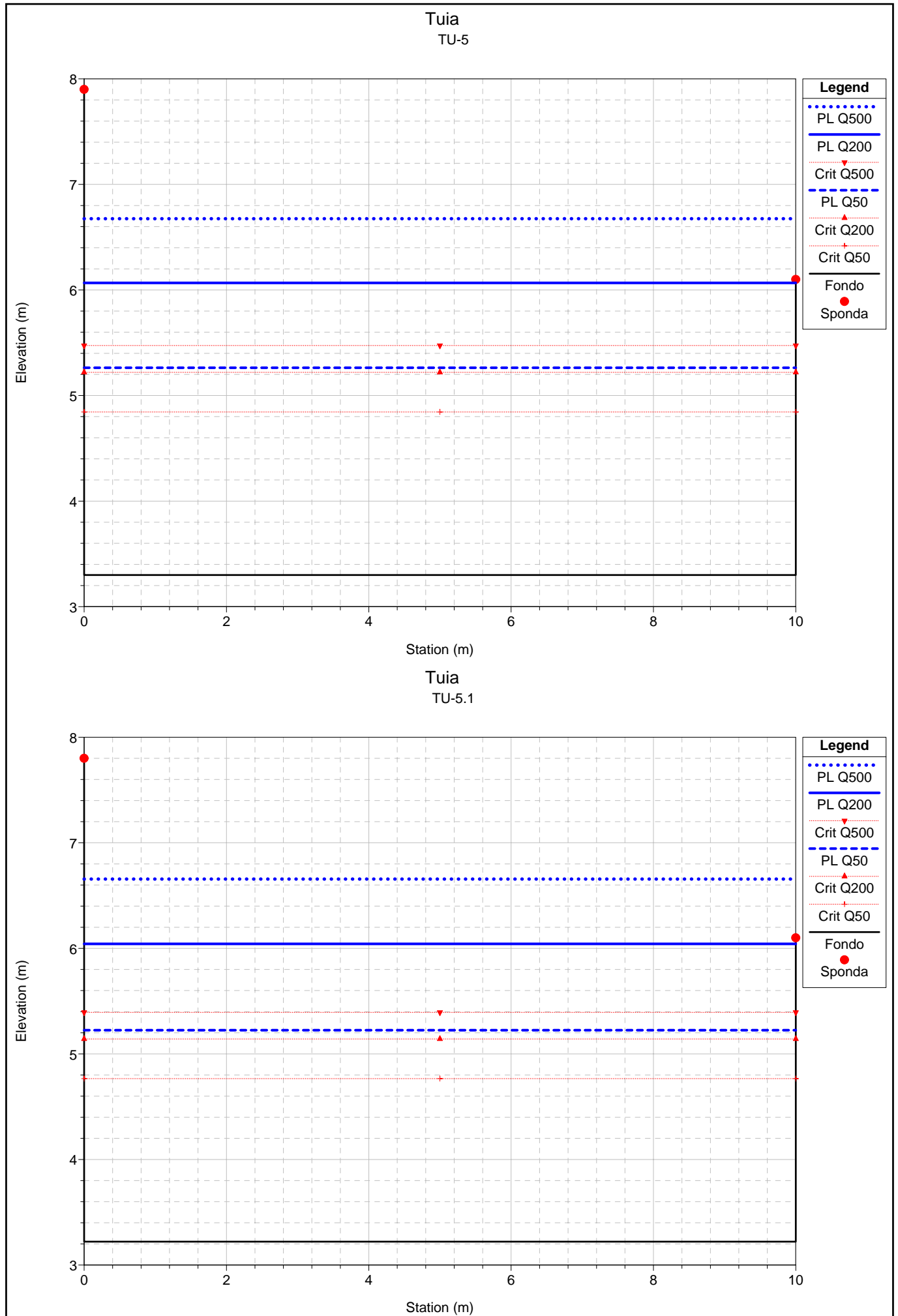
dalla sezione TU-S1 alla TU-S13

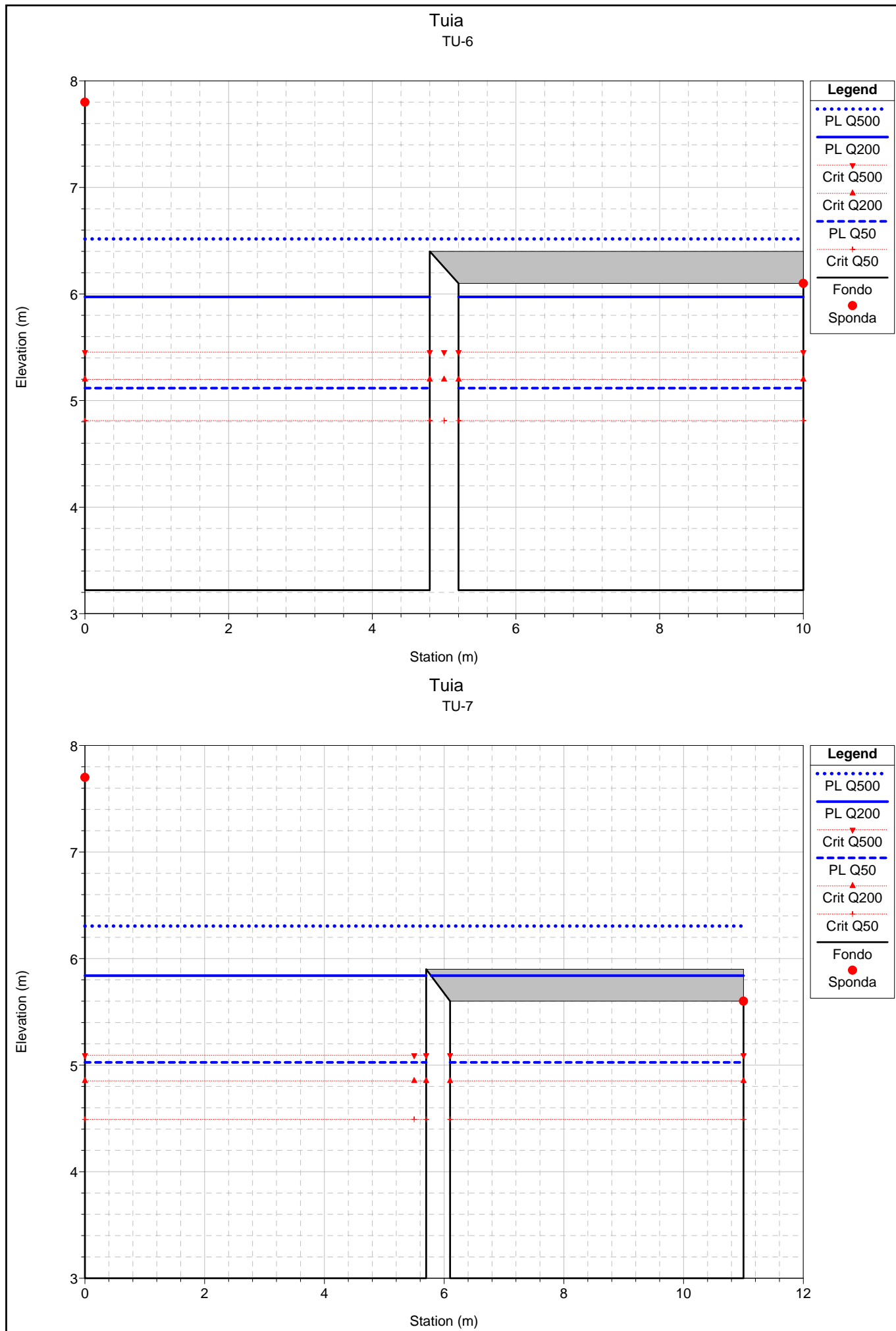
- Profili di corrente
- Sezioni idrauliche
- Tabelle dei risultati

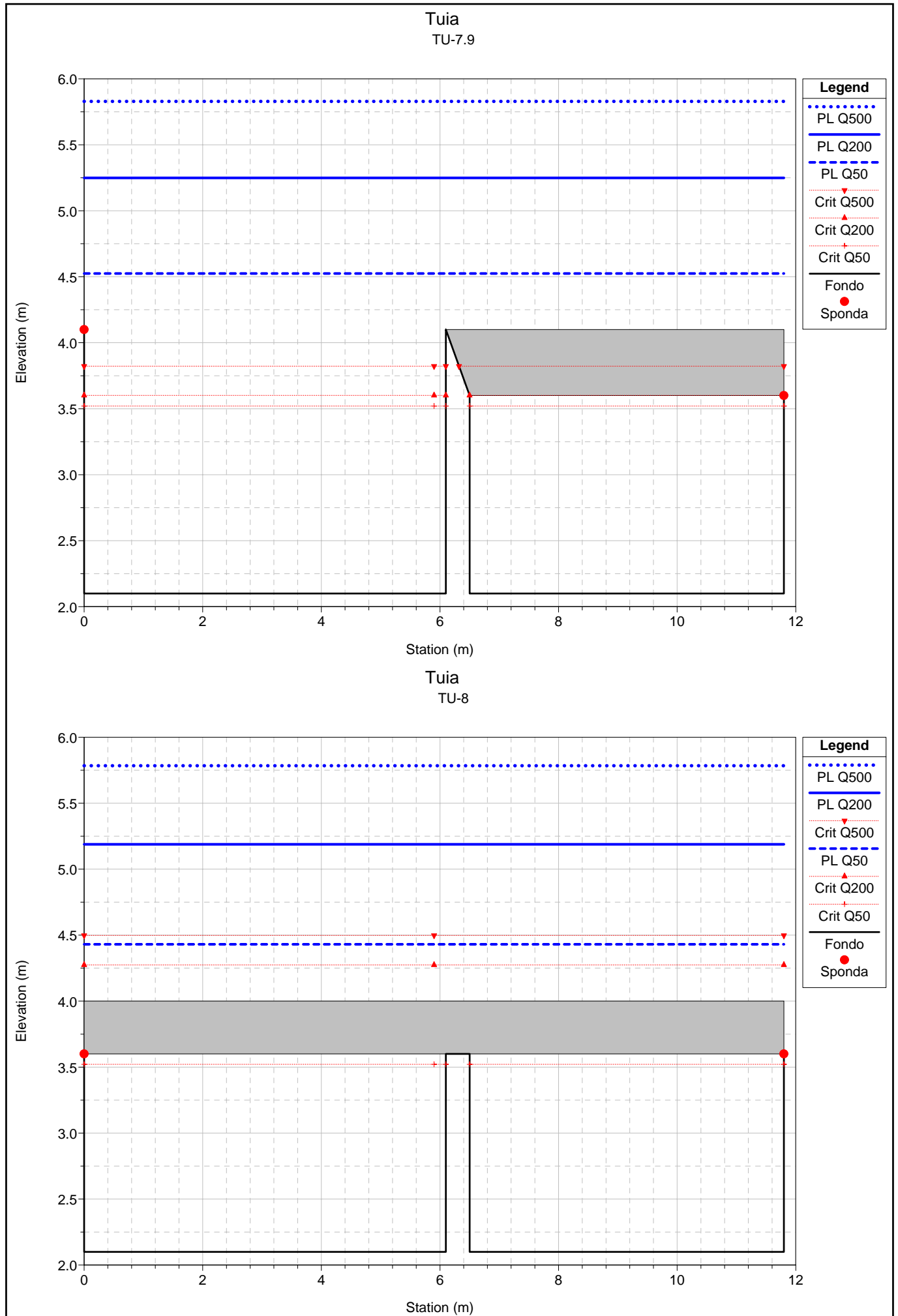


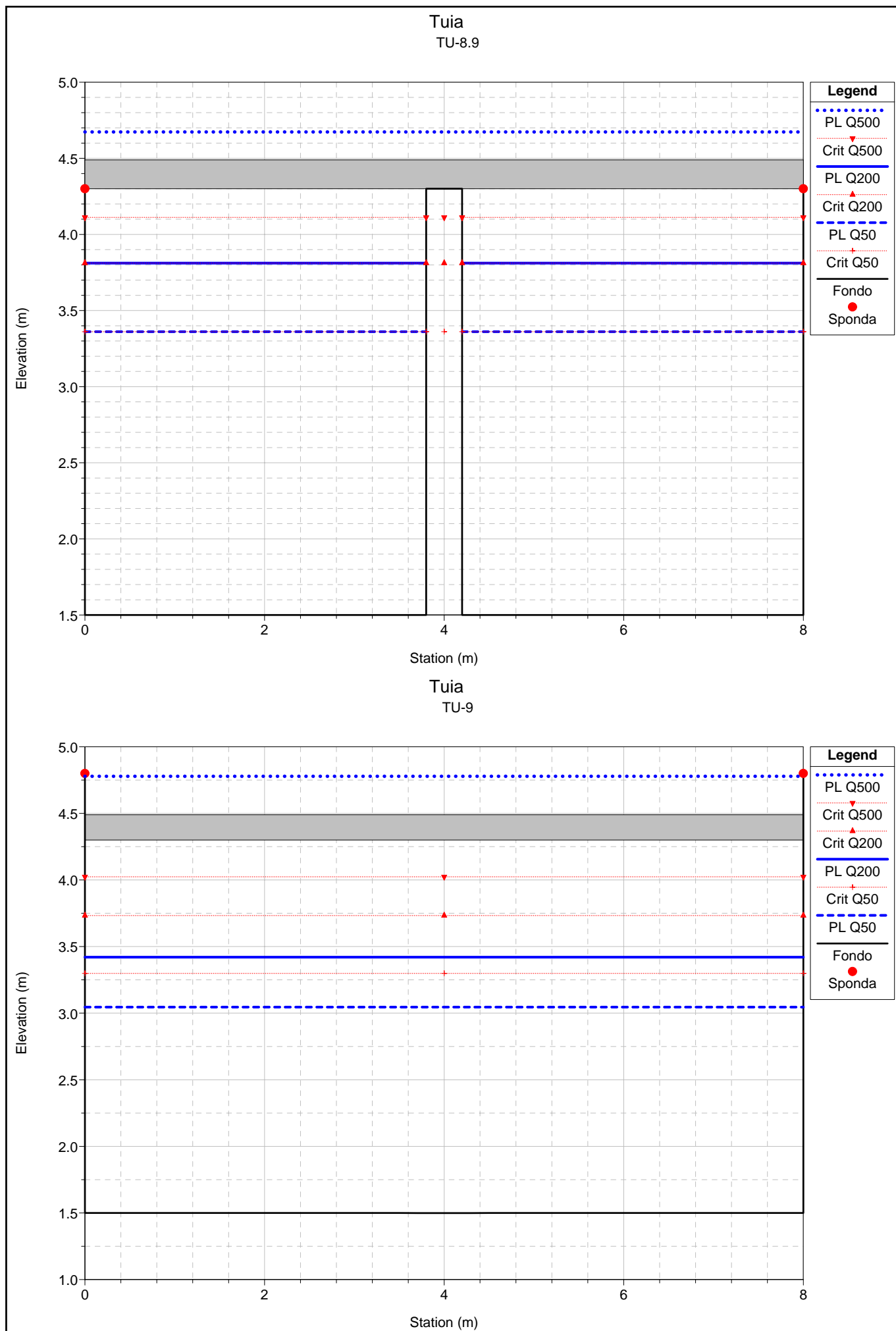




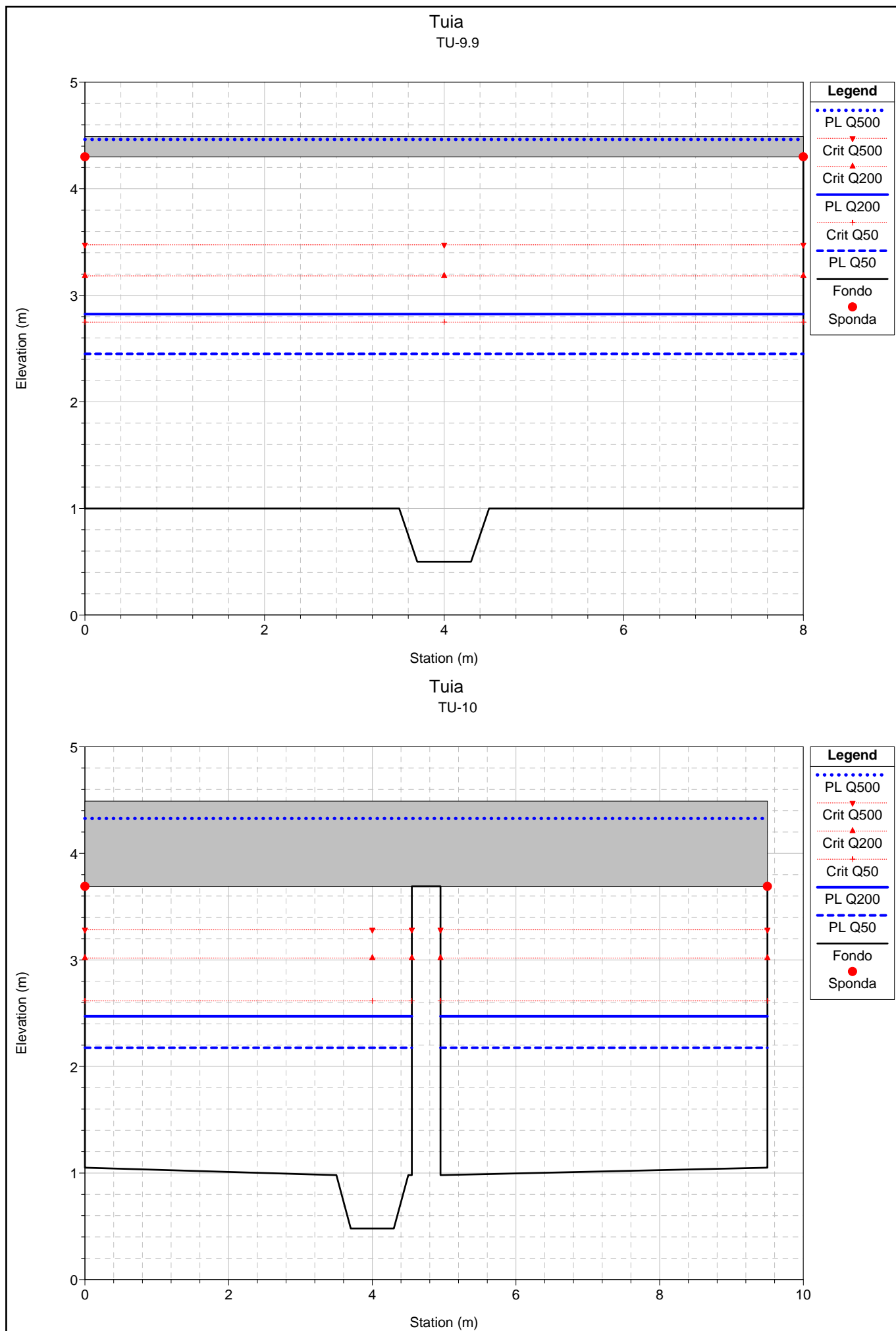


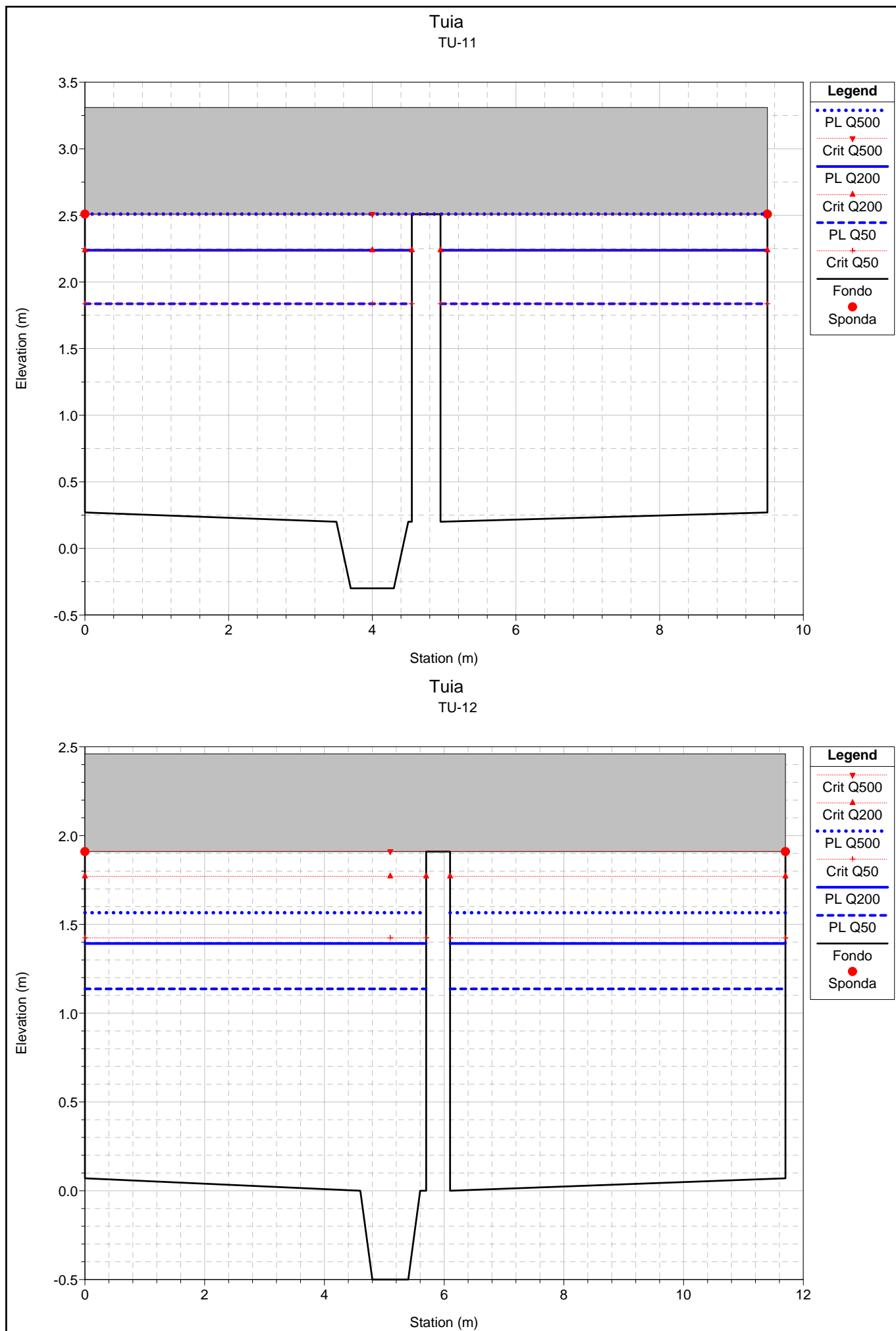


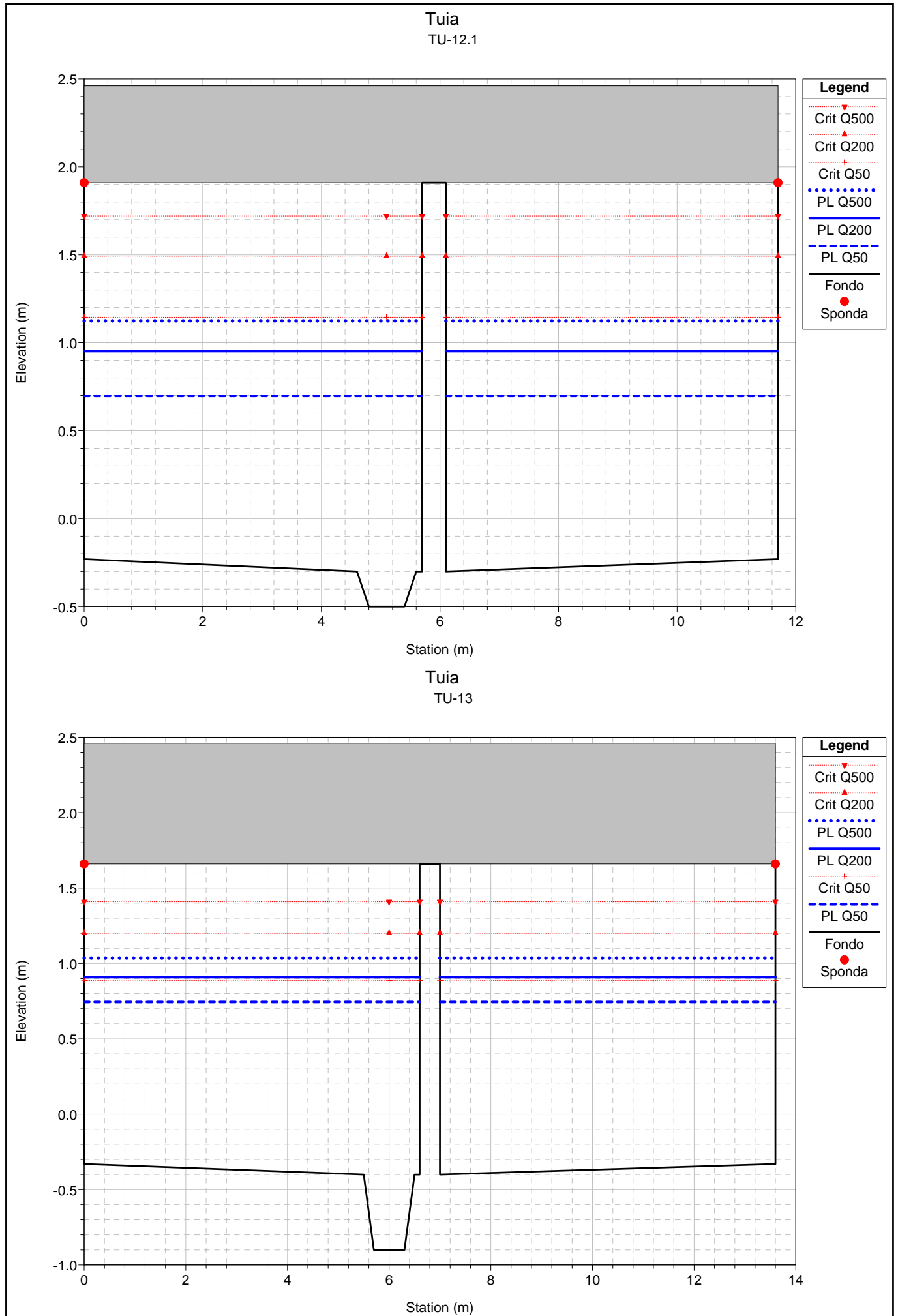












HEC-RAS Plan: Tuia River: Tuia Reach: Rapallo

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (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	
Rapallo	300	TU-1	Q50	60.40	8.20	9.99	10.00	0.01	10.00	0.01	9.99	10.90	0.012005	4.21	14.34	8.00	1.00
Rapallo	300	TU-1	Q200	83.70	8.20	10.43	10.00	-0.43	10.00	-0.43	10.43	11.55	0.012302	4.70	17.83	8.00	1.00
Rapallo	300	TU-1	Q500	100.50	8.20	10.72	10.00	-0.72	10.00	-0.72	10.72	11.99	0.012472	4.98	20.18	8.00	1.00
Rapallo	290	TU-2	Q50	60.40	6.90	8.81	10.00	1.19	8.20	-0.61	9.14	9.96	0.016871	4.86	13.04	11.62	1.37
Rapallo	290	TU-2	Q200	83.70	6.90	9.05	10.00	0.95	8.20	-0.85	9.48	10.52	0.018463	5.52	15.94	12.30	1.46
Rapallo	290	TU-2	Q500	100.50	6.90	9.20	10.00	0.80	8.20	-1.00	9.72	10.90	0.019567	5.94	17.79	12.72	1.52
Rapallo	280	TU-3	Q50	60.40	5.40	7.25	10.00	2.75	7.25	0.00	7.74	8.77	0.022702	5.46	11.08	9.88	1.42
Rapallo	280	TU-3	Q200	83.70	5.40	7.62	10.00	2.38	7.25	-0.37	8.14	9.34	0.021332	5.88	14.80	10.56	1.42
Rapallo	280	TU-3	Q500	100.50	5.40	7.83	10.00	2.17	7.25	-0.58	8.38	9.70	0.021001	6.16	17.09	10.96	1.43
Rapallo	270	TU-4	Q50	60.40	4.60	6.50	8.70	2.20	6.40	-0.10	6.86	7.80	0.018607	5.06	12.16	10.28	1.31
Rapallo	270	TU-4	Q200	83.70	4.60	6.84	8.70	1.86	6.40	-0.44	7.26	8.39	0.018351	5.59	15.60	10.46	1.32
Rapallo	270	TU-4	Q500	100.50	4.60	7.05	8.70	1.65	6.40	-0.65	7.50	8.76	0.018194	5.91	17.84	10.58	1.33
Rapallo	260	TU-5	Q50	60.40	3.30	5.26	7.90	2.64	6.10	0.84	4.84	5.75	0.005394	3.08	19.63	10.00	0.70
Rapallo	260	TU-5	Q200	83.70	3.30	6.07	7.90	1.83	6.10	0.03	5.22	6.53	0.003815	3.03	27.67	10.00	0.58
Rapallo	260	TU-5	Q500	100.50	3.30	6.68	7.90	1.22	6.10	-0.58	5.47	7.13	0.003135	2.98	33.75	10.00	0.52
Rapallo	251	TU-5.1	Q50	60.40	3.22	5.22	7.80	2.58	6.10	0.88	4.77	5.69	0.005077	3.02	20.03	10.00	0.68
Rapallo	251	TU-5.1	Q200	83.70	3.22	6.04	7.80	1.76	6.10	0.06	5.14	6.49	0.003608	2.97	28.21	10.00	0.56
Rapallo	251	TU-5.1	Q500	100.50	3.22	6.66	7.80	1.14	6.10	-0.56	5.39	7.09	0.002986	2.93	34.35	10.00	0.50
Rapallo	250	TU-6	Q50	60.40	3.22	5.12	3.22	-1.90	6.10	0.98	4.81	5.68	0.009166	3.32	18.21	9.60	0.77
Rapallo	250	TU-6	Q200	83.70	3.22	5.97	3.22	-2.75	6.10	0.13	5.20	6.48	0.006480	3.17	26.43	9.60	0.61
Rapallo	250	TU-6	Q500	100.50	3.22	6.52	3.22	-3.30	6.10	-0.42	5.45	7.08	0.012585	3.32	30.25	10.00	0.61
Rapallo	240	TU-7	Q50	60.40	3.00	5.03	3.00	-2.03	5.60	0.57	4.49	5.43	0.005923	2.81	21.47	10.60	0.63
Rapallo	240	TU-7	Q200	83.70	3.00	5.84	3.00	-2.84	5.60	-0.24	4.85	6.27	0.006936	2.89	28.92	5.70	0.57
Rapallo	240	TU-7	Q500	100.50	3.00	6.31	3.00	-3.31	5.60	-0.71	5.09	6.76	0.008880	2.98	33.73	11.00	0.54
Rapallo	231	TU-7.9	Q50	60.40	2.10	4.52	2.10	-2.42	3.60	-0.92	3.52	4.82	0.007605	2.40	25.16	11.80	0.51
Rapallo	231	TU-7.9	Q200	83.70	2.10	5.25	2.10	-3.15	3.60	-1.65	3.60	5.56	0.005829	2.48	33.71	11.80	0.46
Rapallo	231	TU-7.9	Q500	100.50	2.10	5.83	2.10	-3.73	3.60	-2.23	3.82	6.14	0.004738	2.48	40.56	11.80	0.42
Rapallo	230	TU-8	Q50	60.40	2.10	4.43	3.60	-0.83	3.60	-0.83	3.52	4.81	0.012137	2.72	22.19	11.80	0.57
Rapallo	230	TU-8	Q200	83.70	2.10	5.19	3.60	-1.59	3.60	-1.59	4.27	5.56	0.007539	2.69	31.13	11.80	0.49
Rapallo	230	TU-8	Q500	100.50	2.10	5.78	3.60	-2.18	3.60	-2.18	4.50	6.14	0.005515	2.63	38.15	11.80	0.44
Rapallo	221	TU-8.9	Q50	60.40	1.50	3.36	4.30	0.94	4.30	0.94	3.36	4.29	0.014112	4.27	14.15	7.60	1.00
Rapallo	221	TU-8.9	Q200	83.70	1.50	3.81	4.30	0.49	4.30	0.49	3.81	4.97	0.015301	4.76	17.57	7.60	1.00
Rapallo	221	TU-8.9	Q500	100.50	1.50	4.67	4.30	-0.37	4.30	-0.37	4.11	5.67	0.024903	4.42	22.75	8.00	0.79
Rapallo	220	TU-9	Q50	60.40	1.50	3.05	4.30	1.25	4.30	1.25	3.30	4.26	0.014712	4.88	12.37	8.00	1.25
Rapallo	220	TU-9	Q200	83.70	1.50	3.42	4.30	0.88	4.30	0.88	3.73	4.93	0.014939	5.45	15.37	8.00	1.25
Rapallo	220	TU-9	Q500	100.50	1.50	4.78	4.30	-0.48	4.30	-0.48	4.02	5.62	0.015391	4.07	24.71	8.00	0.72
Rapallo	211	TU-9.9	Q50	60.40	0.50	2.45	4.30	1.85	4.30	1.85	2.75	3.74	0.017186	5.03	12.01	8.00	1.31
Rapallo	211	TU-9.9	Q200	83.70	0.50	2.82	4.30	1.48	4.30	1.48	3.18	4.41	0.017117	5.58	14.99	8.00	1.30
Rapallo	211	TU-9.9	Q500	100.50	0.50	4.46	4.30	-0.16	4.30	-0.16	3.47	5.18	0.008307	3.75	26.80		0.64
Rapallo	210	TU-10	Q50	60.40	0.48	2.18	3.69	1.51	3.69	1.51	2.62	3.71	0.030870	5.49	11.00	9.10	1.59

HEC-RAS Plan: Tuia River: Tuia Reach: Rapallo (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (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
Rapallo	210 TU-10	Q200	83.70	0.48	2.47	3.69	1.22	3.69	1.22	3.02	4.38	0.031758	6.12	13.69	9.10	1.59
Rapallo	210 TU-10	Q500	100.50	0.48	4.33	3.69	-0.64	3.69	-0.64	3.28	5.17	0.015387	4.06	24.78		0.71
Rapallo	200 TU-11	Q50	60.40	-0.30	1.84	2.51	0.67	2.51	0.67	1.84	2.66	0.012756	4.02	15.01	9.10	1.00
Rapallo	200 TU-11	Q200	83.70	-0.30	2.24	2.51	0.27	2.51	0.27	2.24	3.26	0.013438	4.48	18.67	9.10	1.00
Rapallo	200 TU-11	Q500	100.50	-0.30	2.51	2.51	0.00	2.51	0.00	2.51	3.66	0.014236	4.75	21.15	9.50	1.02
Rapallo	190 TU-12	Q50	60.40	-0.50	1.14	1.91	0.77	1.91	0.77	1.42	2.26	0.021561	4.69	12.89	11.30	1.40
Rapallo	190 TU-12	Q200	83.70	-0.50	1.39	1.91	0.52	1.91	0.52	1.77	2.83	0.022881	5.31	15.78	11.30	1.43
Rapallo	190 TU-12	Q500	100.50	-0.50	1.57	1.91	0.34	1.91	0.34	1.91	3.20	0.023538	5.67	17.73	11.30	1.44
Rapallo	189 TU-12.1	Q50	60.40	-0.50	0.70	1.91	1.21	1.91	1.21	1.15	2.21	0.032674	5.45	11.07	11.30	1.76
Rapallo	189 TU-12.1	Q200	83.70	-0.50	0.95	1.91	0.96	1.91	0.96	1.49	2.78	0.031584	5.99	13.96	11.30	1.72
Rapallo	189 TU-12.1	Q500	100.50	-0.50	1.12	1.91	0.79	1.91	0.79	1.72	3.16	0.031185	6.32	15.90	11.30	1.70
Rapallo	180 TU-13	Q50	60.40	-0.90	0.75	1.66	0.91	1.66	0.91	0.89	1.56	0.014784	4.00	15.09	13.20	1.19
Rapallo	180 TU-13	Q200	83.70	-0.90	0.91	1.66	0.75	1.66	0.75	1.20	2.11	0.019009	4.85	17.26	13.20	1.35
Rapallo	180 TU-13	Q500	100.50	-0.90	1.04	1.66	0.62	1.66	0.62	1.41	2.47	0.020901	5.31	18.92	13.20	1.42