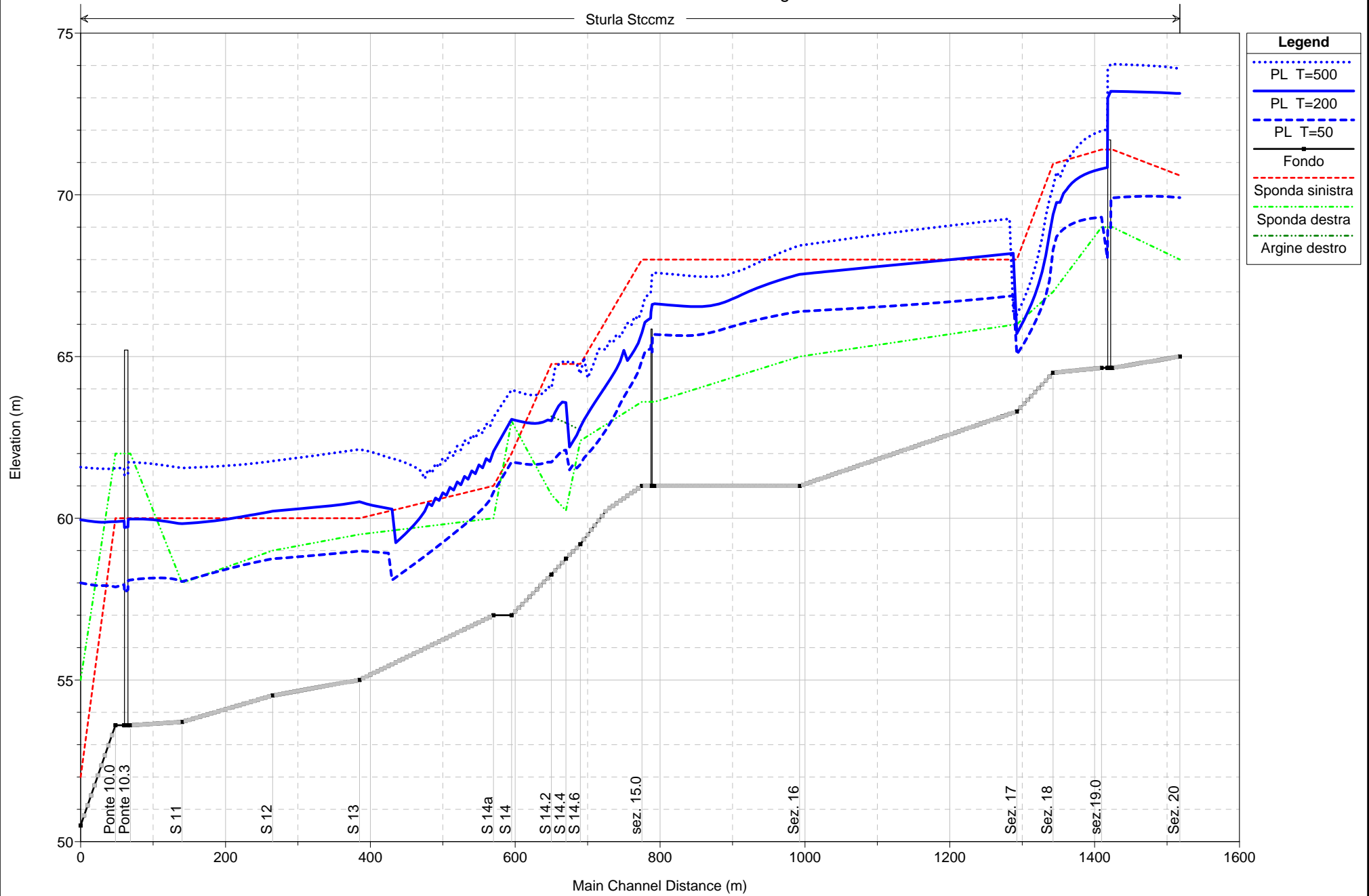


Torrente Sturla
Tra le confluenze con i
Torrenti Cicana e Mezzanego

VERIFICHE IDRAULICHE

Sturla da Cicana a Mezzanego

Sturla Stccmz



HEC-RAS Plan: Cicana-Mezza River: Sturla Reach: Stccmz

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
Stccmz	20	Sez. 20	T=50	398.00	65.00	69.91	70.60	0.69	68.00	-1.91	68.83	70.64	0.003248	3.83	113.08	41.72	0.62
Stccmz	20	Sez. 20	T=200	705.00	65.00	73.14	70.60	-2.54	68.00	-5.14	70.44	73.58	0.001156	3.16	265.10	51.14	0.38
Stccmz	20	Sez. 20	T=500	1028.00	65.00	73.92	70.60	-3.32	68.00	-5.92	71.45	74.63	0.001686	4.04	305.84	53.10	0.46
Stccmz	19.3	sez. 19.3	T=50	398.00	64.65	69.91	71.40	1.49	69.00	-0.91	68.72	70.31	0.002343	2.83	141.29	48.37	0.52
Stccmz	19.3	sez. 19.3	T=200	705.00	64.65	73.20	71.40	-1.80	69.00	-4.20	69.74	73.45	0.000590	2.27	341.25	73.07	0.29
Stccmz	19.3	sez. 19.3	T=500	1028.00	64.65	74.05	71.40	-2.65	69.00	-5.05	70.61	74.44	0.000788	2.85	404.73	77.77	0.34
Stccmz	19.2	sez. 19.2	T=50	398.00	64.65	69.90	71.40	1.50	69.00	-0.90	68.72	70.31	0.002360	2.84	140.97	48.34	0.52
Stccmz	19.2	sez. 19.2	T=200	705.00	64.65	73.20	71.40	-1.80	69.00	-4.20	69.74	73.45	0.000590	2.27	341.16	73.07	0.29
Stccmz	19.2	sez. 19.2	T=500	1028.00	64.65	74.04	71.40	-2.64	69.00	-5.04	70.61	74.44	0.000789	2.85	404.59	77.76	0.34
Stccmz	19.11	Ponte		Bridge													
Stccmz	19.1	sez. 19.1	T=50	398.00	64.65	68.03	71.40	3.37	69.00	0.97	68.72	70.13	0.022033	6.41	62.05	32.26	1.48
Stccmz	19.1	sez. 19.1	T=200	705.00	64.65	70.85	71.40	0.55	69.00	-1.85	69.74	71.58	0.003067	3.80	188.86	52.88	0.62
Stccmz	19.1	sez. 19.1	T=500	1028.00	64.65	72.02	71.40	-0.62	69.00	-3.02	70.61	72.90	0.002676	4.19	258.58	66.81	0.60
Stccmz	19	sez. 19.0	T=50	398.00	64.65	69.31	71.40	2.09	69.00	-0.31	68.72	69.94	0.004682	3.52	113.19	46.04	0.71
Stccmz	19	sez. 19.0	T=200	705.00	64.65	70.80	71.40	0.60	69.00	-1.80	69.74	71.55	0.003182	3.85	186.51	52.67	0.63
Stccmz	19	sez. 19.0	T=500	1028.00	64.65	71.98	71.40	-0.58	69.00	-2.98	70.61	72.88	0.002751	4.23	255.97	66.53	0.61
Stccmz	18	Sez. 18	T=50	398.00	64.50	68.30	70.96	2.66	67.00	-1.30	68.30	69.59	0.007562	5.12	85.73	40.34	0.91
Stccmz	18	Sez. 18	T=200	705.00	64.50	69.39	70.96	1.57	67.00	-2.39	69.69	71.16	0.008026	6.22	138.63	53.44	0.96
Stccmz	18	Sez. 18	T=500	1028.00	64.50	70.24	70.96	0.72	67.00	-3.24	70.58	72.35	0.008271	6.97	185.66	56.55	0.99
Stccmz	17	Sez. 17	T=50	398.00	63.30	65.07	68.00	2.93	66.00	0.93	65.91	67.78	0.042875	7.29	54.56	38.78	1.96
Stccmz	17	Sez. 17	T=200	705.00	63.30	65.71	68.00	2.29	66.00	0.29	66.88	69.57	0.042344	8.71	80.95	43.47	2.04
Stccmz	17	Sez. 17	T=500	1028.00	63.30	66.29	68.00	1.71	66.00	-0.29	67.72	70.96	0.038523	9.57	107.48	47.11	2.01
Stccmz	16	Sez. 16	T=50	398.00	61.00	66.39	68.00	1.61	65.00	-1.39	64.25	66.73	0.001292	2.58	156.43	40.85	0.40
Stccmz	16	Sez. 16	T=200	705.00	61.00	67.54	68.00	0.46	65.00	-2.54	65.47	68.18	0.001874	3.56	208.70	50.57	0.49
Stccmz	16	Sez. 16	T=500	1028.00	61.00	68.43	68.00	-0.43	65.00	-3.43	66.53	69.37	0.002338	4.37	257.17	57.52	0.56
Stccmz	15.3	sez. 15.3	T=50	398.00	61.00	65.68	68.00	2.32	63.60	-2.08	64.88	66.08	0.002417	3.11	167.49	67.74	0.51
Stccmz	15.3	sez. 15.3	T=200	705.00	61.00	66.63	68.00	1.37	63.60	-3.03	65.74	67.24	0.003022	3.95	232.80	69.78	0.58
Stccmz	15.3	sez. 15.3	T=500	1028.00	61.00	67.59	68.00	0.41	63.60	-3.99	66.46	68.33	0.003071	4.42	300.38	71.33	0.60
Stccmz	15.2	sez. 15.2	T=50	398.00	61.00	65.67	68.00	2.33	63.60	-2.07	64.88	66.07	0.002448	3.13	166.70	67.70	0.51
Stccmz	15.2	sez. 15.2	T=200	705.00	61.00	66.61	68.00	1.39	63.60	-3.01	65.74	67.23	0.003069	3.98	231.56	69.75	0.59
Stccmz	15.2	sez. 15.2	T=500	1028.00	61.00	67.57	68.00	0.43	63.60	-3.97	66.46	68.32	0.003109	4.44	299.12	71.31	0.60
Stccmz	15.11	Ponte		Bridge													
Stccmz	15.1	sez. 15.1	T=50	398.00	61.00	65.24	68.00	2.76	63.60	-1.64	64.88	65.84	0.004051	3.75	137.94	66.32	0.65
Stccmz	15.1	sez. 15.1	T=200	705.00	61.00	66.19	68.00	1.81	63.60	-2.59	65.74	67.01	0.004529	4.58	201.94	69.06	0.71
Stccmz	15.1	sez. 15.1	T=500	1028.00	61.00	66.96	68.00	1.04	63.60	-3.36	66.46	68.01	0.004895	5.23	255.89	70.32	0.75
Stccmz	15	sez. 15.0	T=50	398.00	61.00	64.88	68.00	3.12	63.60	-1.28	64.88	65.76	0.006530	4.46	114.31	65.16	0.82
Stccmz	15	sez. 15.0	T=200	705.00	61.00	65.74	68.00	2.26	63.60	-2.14	65.74	66.92	0.007126	5.39	171.38	67.92	0.88

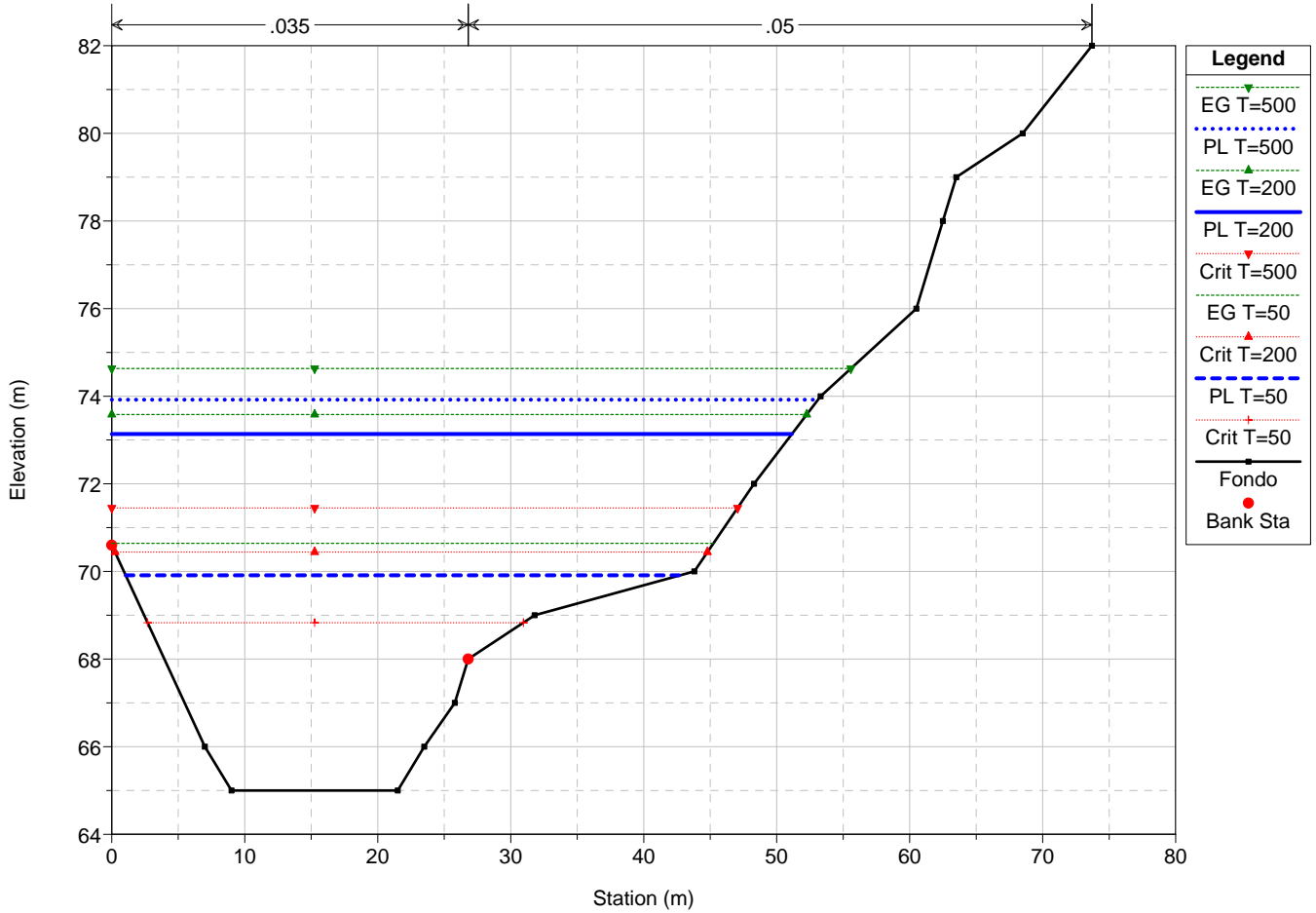
HEC-RAS Plan: Cicana-Mezza River: Sturla Reach: Stccmz (Continued)

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
Stccmz	15 sez. 15.0	T=500	1028.00	61.00	66.46	68.00	1.54	63.60	-2.86	66.46	67.91	0.007489	6.09	220.67	69.50	0.92
Stccmz	14.9	T=50	398.00	59.20	61.66	64.77	3.11	62.40	0.74	62.14	63.57	0.018503	6.11	65.09	30.75	1.34
Stccmz	14.9	T=200	705.00	59.20	62.82	64.77	1.95	62.40	-0.42	63.47	65.26	0.014403	6.92	103.80	46.57	1.24
Stccmz	14.9	T=500	1028.00	59.20	64.46	64.77	0.31	62.40	-2.06	64.42	66.36	0.007160	6.26	180.62	46.98	0.92
Stccmz	14.8	T=50	398.00	58.75	62.11	64.77	2.66	60.24	-1.87	61.66	62.90	0.005239	4.00	104.14	40.73	0.75
Stccmz	14.8	T=200	705.00	58.75	63.58	64.77	1.19	60.24	-3.34	62.76	64.58	0.004105	4.54	169.89	48.47	0.70
Stccmz	14.8	T=500	1028.00	58.75	64.79	64.77	-0.02	60.24	-4.55	62.95	65.97	0.003710	4.99	228.90	48.50	0.68
Stccmz	14.7	T=50	398.00	58.26	61.73	64.77	3.04	60.73	-1.00	61.40	62.69	0.006360	4.34	93.62	36.03	0.81
Stccmz	14.7	T=200	705.00	58.26	63.01	64.77	1.76	60.73	-2.28	62.59	64.37	0.005924	5.22	142.62	40.53	0.82
Stccmz	14.7	T=500	1028.00	58.26	64.02	64.77	0.75	60.73	-3.29	63.15	65.74	0.006098	5.95	188.87	47.30	0.85
Stccmz	14 S 14	T=50	398.00	57.00	61.74	62.00	0.26	63.00	1.26	60.21	62.21	0.002139	3.02	131.75	35.44	0.50
Stccmz	14 S 14	T=200	705.00	57.00	63.06	62.00	-1.06	63.00	-0.06	61.43	63.84	0.002556	3.92	181.25	44.95	0.57
Stccmz	14 S 14	T=500	1028.00	57.00	63.97	62.00	-1.97	63.00	-0.97	62.46	65.12	0.003008	4.77	224.52	49.66	0.63
Stccmz	13.5 S 14a	T=50	398.00	57.00	60.81	61.00	0.19	60.00	-0.81	60.81	62.03	0.009309	4.90	81.45	33.66	1.00
Stccmz	13.5 S 14a	T=200	705.00	57.00	62.07	61.00	-1.07	60.00	-2.07	62.07	63.66	0.007212	5.63	132.54	48.97	0.94
Stccmz	13.5 S 14a	T=500	1028.00	57.00	63.12	61.00	-2.12	60.00	-3.12	63.12	64.95	0.006122	6.14	189.74	59.15	0.90
Stccmz	13 S 13	T=50	398.00	55.00	58.99	60.00	1.01	59.50	0.51	57.80	59.47	0.002738	3.08	129.19	40.39	0.55
Stccmz	13 S 13	T=200	705.00	55.00	60.51	60.00	-0.51	59.50	-1.01	58.92	61.07	0.002173	3.42	240.50	90.42	0.52
Stccmz	13 S 13	T=500	1028.00	55.00	62.13	60.00	-2.13	59.50	-2.63	60.24	62.60	0.001318	3.27	389.57	93.66	0.42
Stccmz	12 S 12	T=50	398.00	54.52	58.75	60.00	1.25	59.00	0.25	57.27	59.16	0.002102	2.84	140.15	40.21	0.49
Stccmz	12 S 12	T=200	705.00	54.52	60.22	60.00	-0.22	59.00	-1.22	58.38	60.80	0.002050	3.41	219.39	58.23	0.50
Stccmz	12 S 12	T=500	1028.00	54.52	61.77	60.00	-1.77	59.00	-2.77	59.50	62.40	0.001568	3.61	311.87	61.07	0.46
Stccmz	11 S 11	T=50	398.00	53.70	58.04	60.00	1.96	58.00	-0.04	57.36	58.73	0.004330	3.67	109.25	57.75	0.69
Stccmz	11 S 11	T=200	705.00	53.70	59.83	60.00	0.17	58.00	-1.83	58.63	60.48	0.002481	3.68	214.78	59.99	0.55
Stccmz	11 S 11	T=500	1028.00	53.70	61.55	60.00	-1.55	58.00	-3.55	59.49	62.18	0.001626	3.69	318.89	60.98	0.47
Stccmz	10.3 Ponte 10.3	T=50	398.00	53.60	58.09	60.00	1.91	62.00	3.91	56.56	58.41	0.002809	2.49	159.94	71.81	0.53
Stccmz	10.3 Ponte 10.3	T=200	705.00	53.60	59.98	60.00	0.02	62.00	2.02	58.00	60.25	0.001237	2.31	305.00	82.18	0.38
Stccmz	10.3 Ponte 10.3	T=500	1028.00	53.60	61.73	60.00	-1.73	62.00	0.27	58.65	62.00	0.000744	2.27	454.17	90.44	0.31
Stccmz	10.2 Ponte 10.2	T=50	398.00	53.60	58.08	60.00	1.92	62.00	3.92	56.56	58.40	0.002857	2.50	159.07	71.75	0.54
Stccmz	10.2 Ponte 10.2	T=200	705.00	53.60	59.97	60.00	0.03	62.00	2.03	58.00	60.25	0.001242	2.31	304.62	82.15	0.38
Stccmz	10.2 Ponte 10.2	T=500	1028.00	53.60	61.73	60.00	-1.73	62.00	0.27	58.65	61.99	0.000746	2.27	453.93	90.37	0.31
Stccmz	10.11 Ponte		Bridge													
Stccmz	10.1 Ponte 10.1	T=50	398.00	53.60	57.95	60.00	2.05	62.00	4.05	56.56	58.31	0.003455	2.66	149.51	70.90	0.59
Stccmz	10.1 Ponte 10.1	T=200	705.00	53.60	59.91	60.00	0.09	62.00	2.09	58.00	60.20	0.001303	2.35	299.74	81.82	0.39
Stccmz	10.1 Ponte 10.1	T=500	1028.00	53.60	61.56	60.00	-1.56	62.00	0.44	58.65	61.84	0.000829	2.35	438.66	86.97	0.33
Stccmz	10 Ponte 10.0	T=50	398.00	53.60	57.88	60.00	2.12	62.00	4.12	56.56	58.26	0.003838	2.76	144.41	70.34	0.61
Stccmz	10 Ponte 10.0	T=200	705.00	53.60	59.89	60.00	0.11	62.00	2.11	58.00	60.18	0.001323	2.36	298.21	81.72	0.40

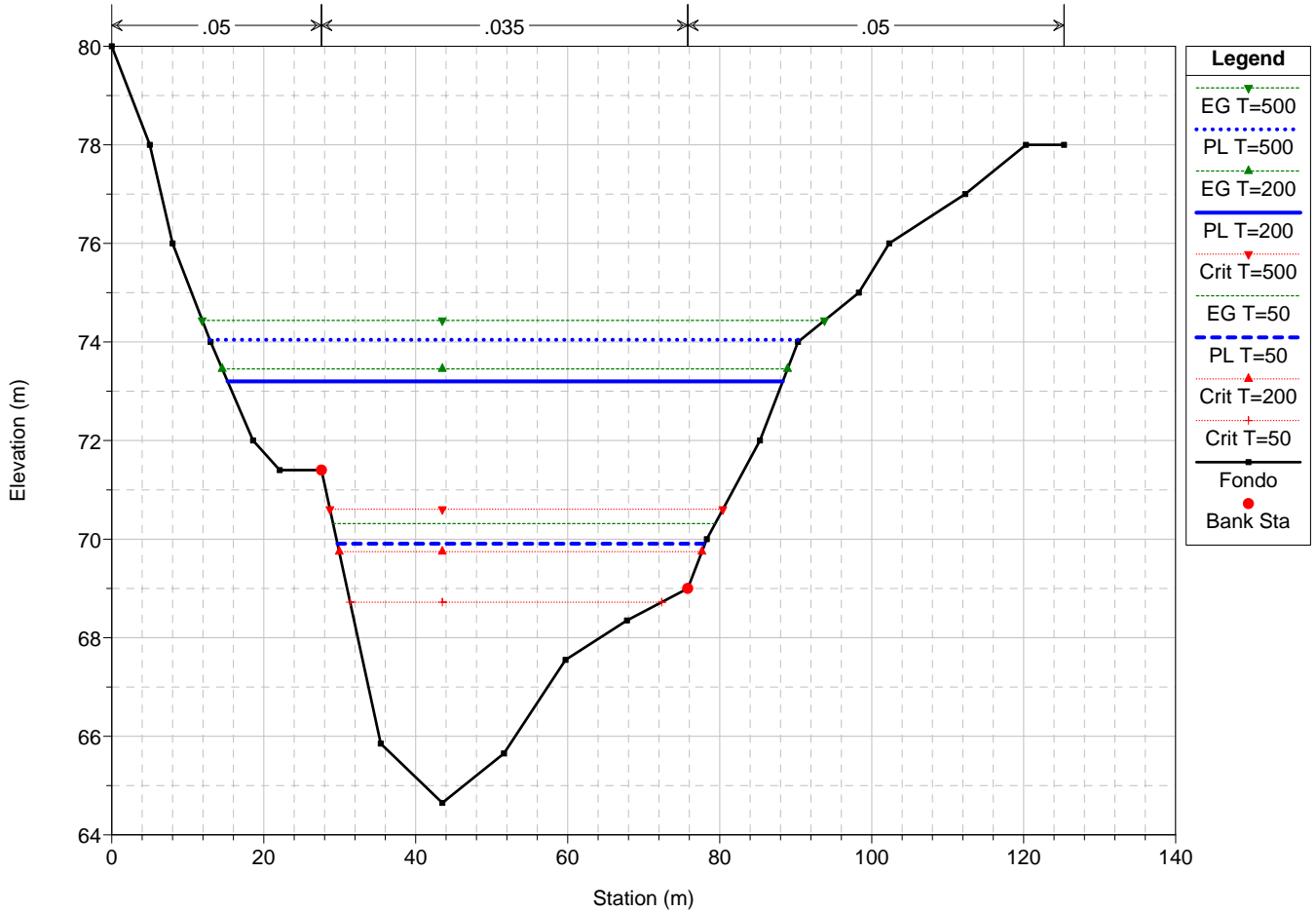
HEC-RAS Plan: Cicana-Mezza River: Sturla Reach: Stccmz (Continued)

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
Stccmz	10	Ponte 10.0	T=500	1028.00	53.60	61.55	60.00	-1.55	62.00	0.45	58.65	61.83	0.000835	2.36	437.69	86.94	0.33
Stccmz	9	S 9	T=50	398.00	50.50	58.00	52.00	-6.00	55.00	-3.00	54.44	58.11	0.000388	1.81	331.63	80.20	0.22
Stccmz	9	S 9	T=200	705.00	50.50	59.95	52.00	-7.95	55.00	-4.95	56.00	60.10	0.000407	2.18	488.01	80.20	0.23
Stccmz	9	S 9	T=500	1028.00	50.50	61.58	52.00	-9.58	55.00	-6.58	56.85	61.77	0.000430	2.50	618.74	80.20	0.24

Sturla da Cicana a Mezzanego
Sez. 20

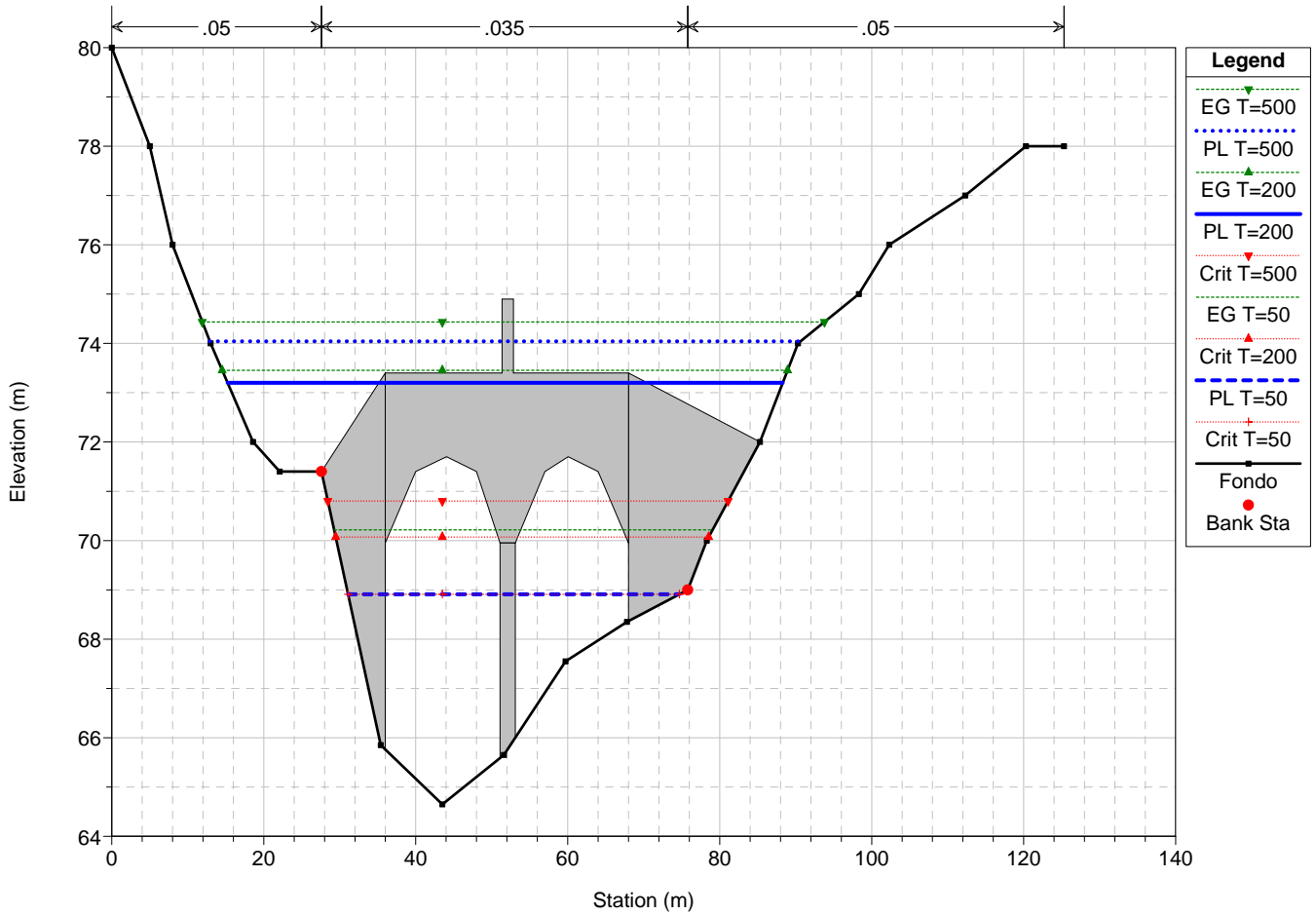


Sturla da Cicana a Mezzanego
sez. 19.3



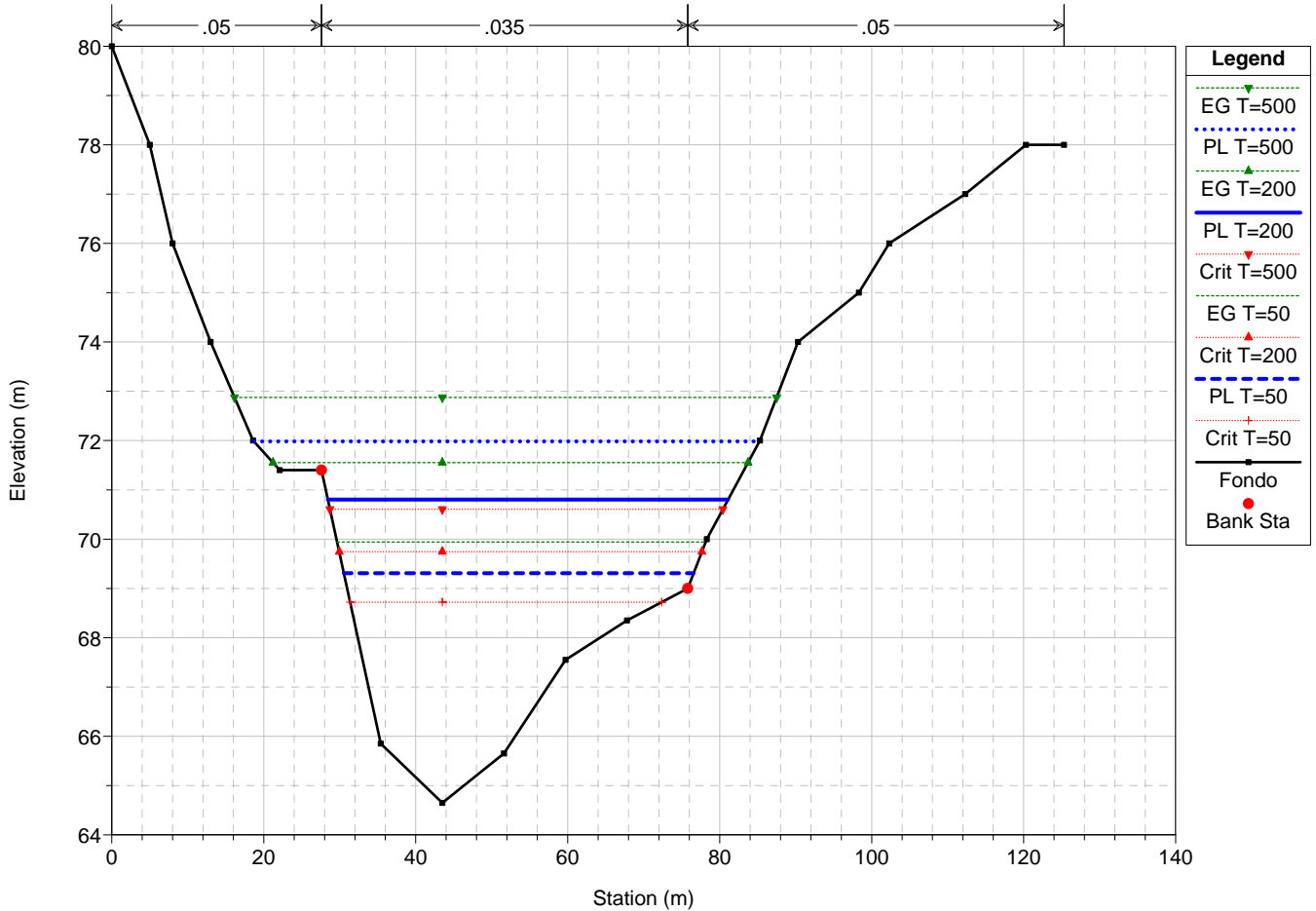
Sturla da Cicana a Mezzanego

Ponte



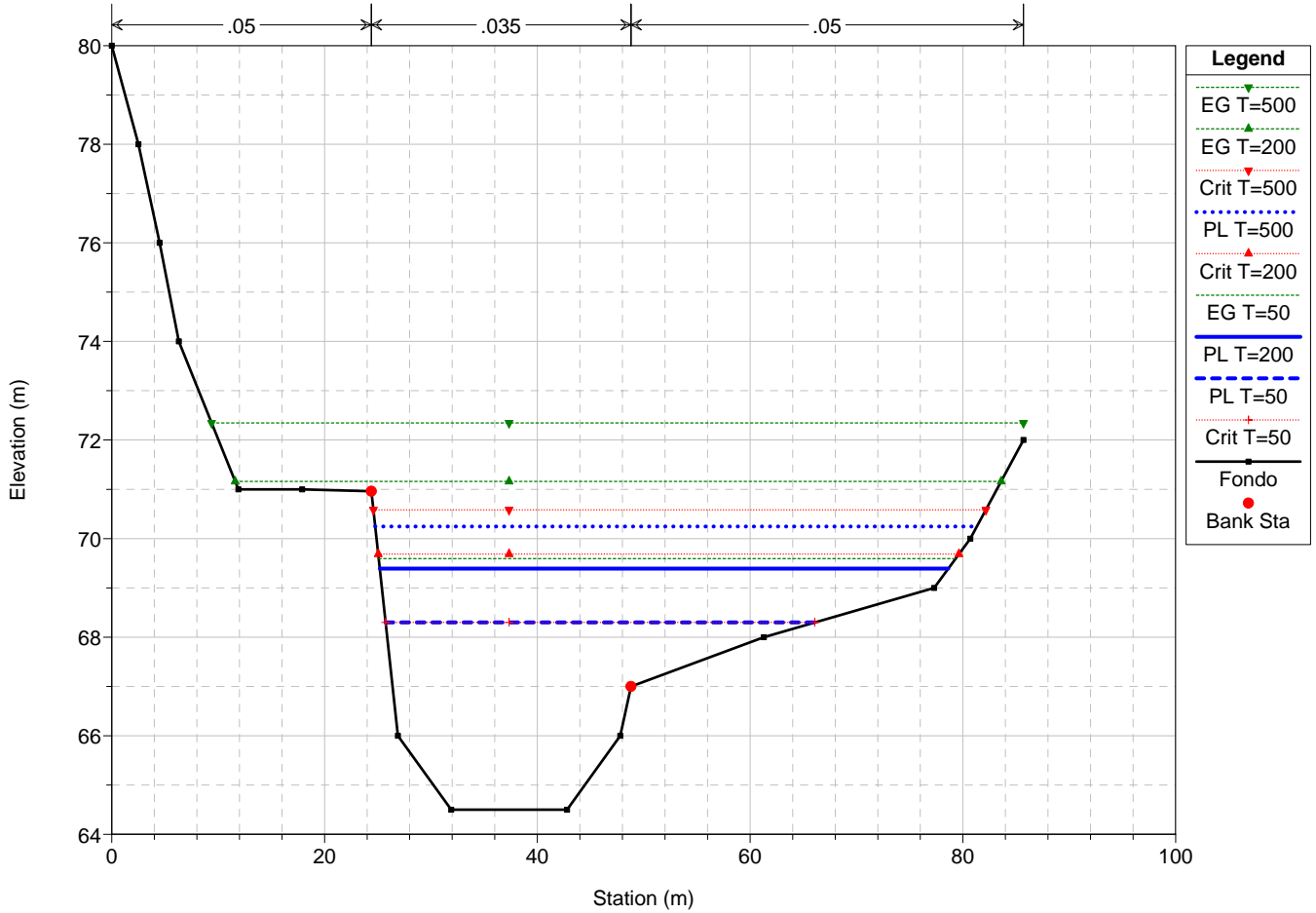
Sturla da Cicana a Mezzanego

sez.19.0



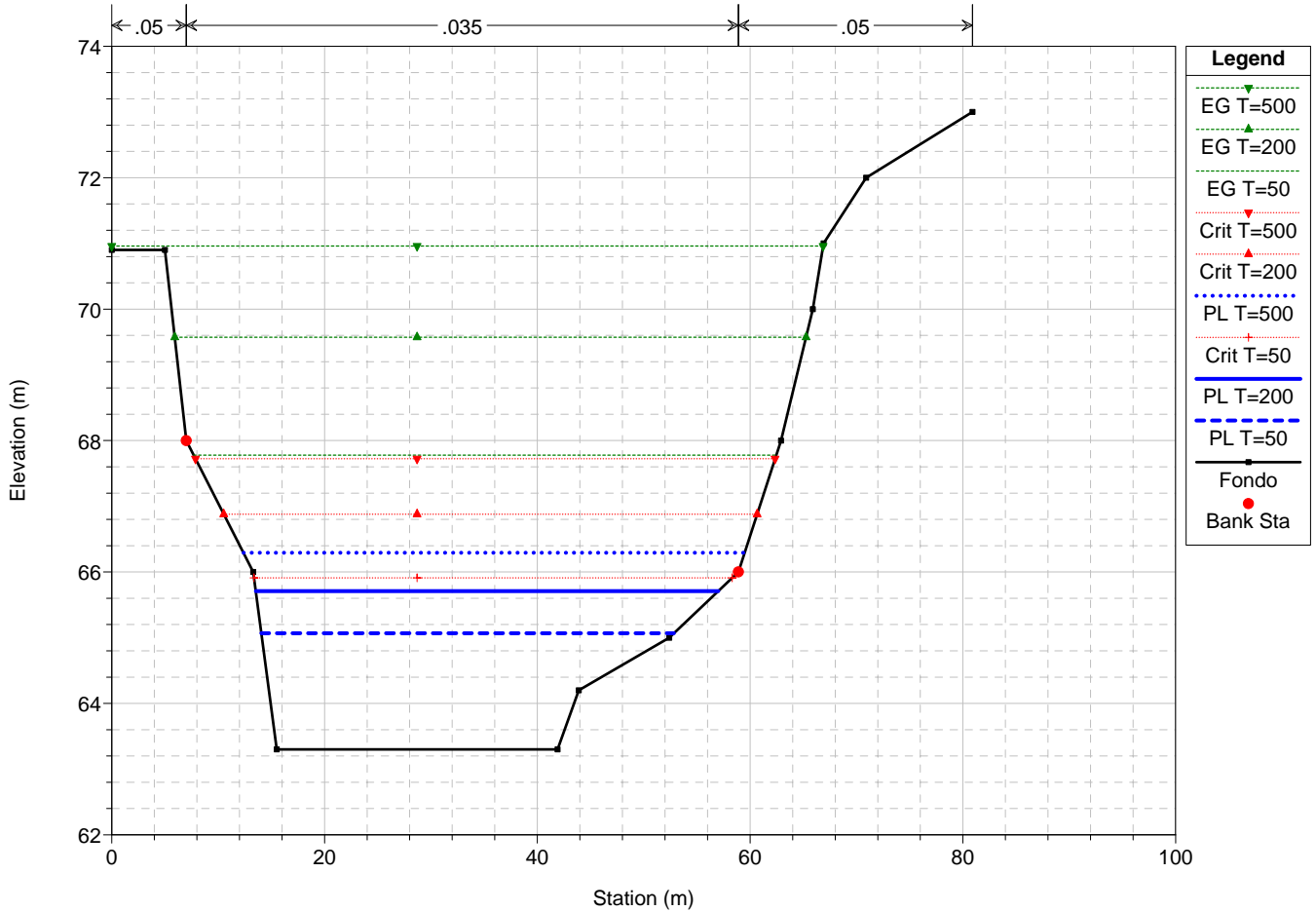
Sturla da Cicana a Mezzanego

Sez. 18



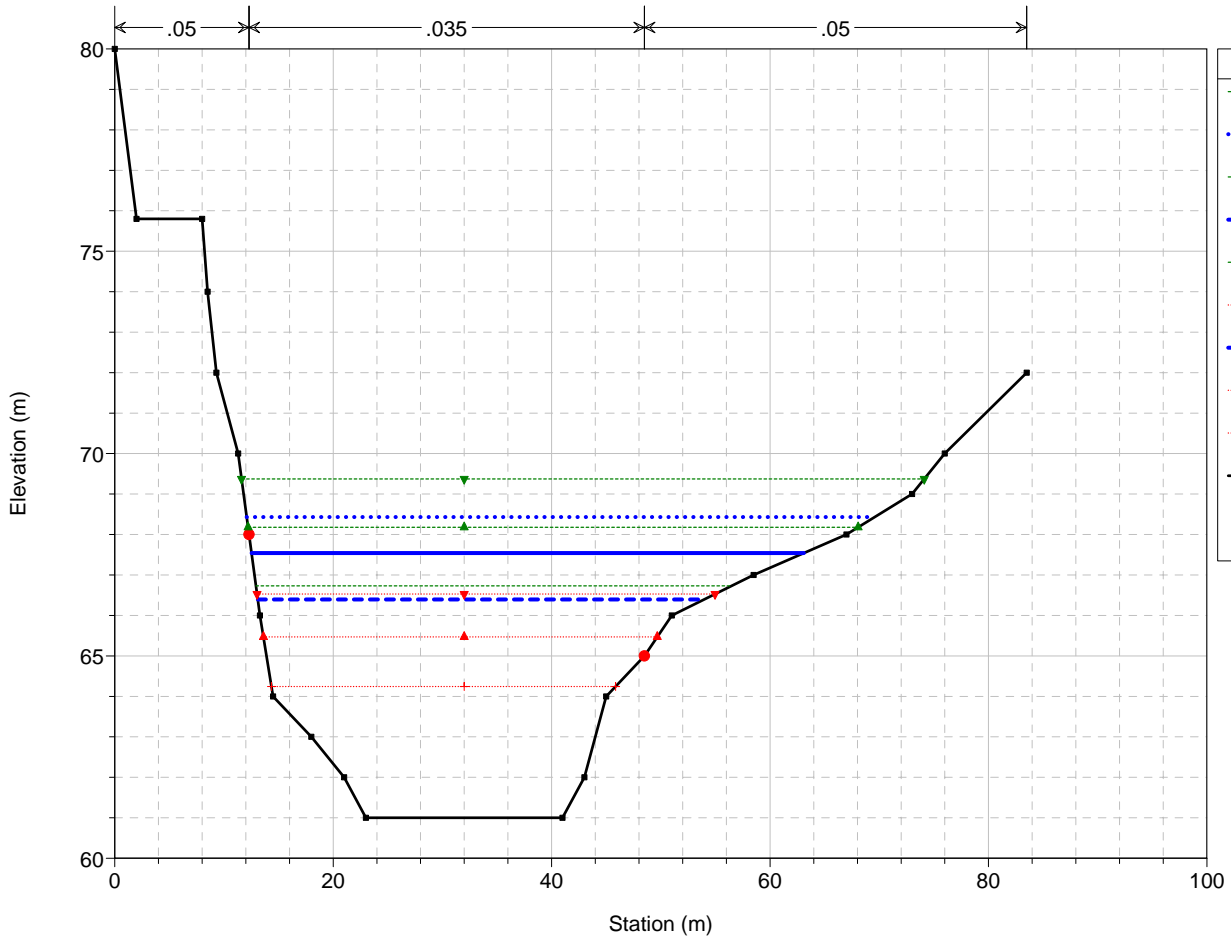
Sturla da Cicana a Mezzanego

Sez. 17



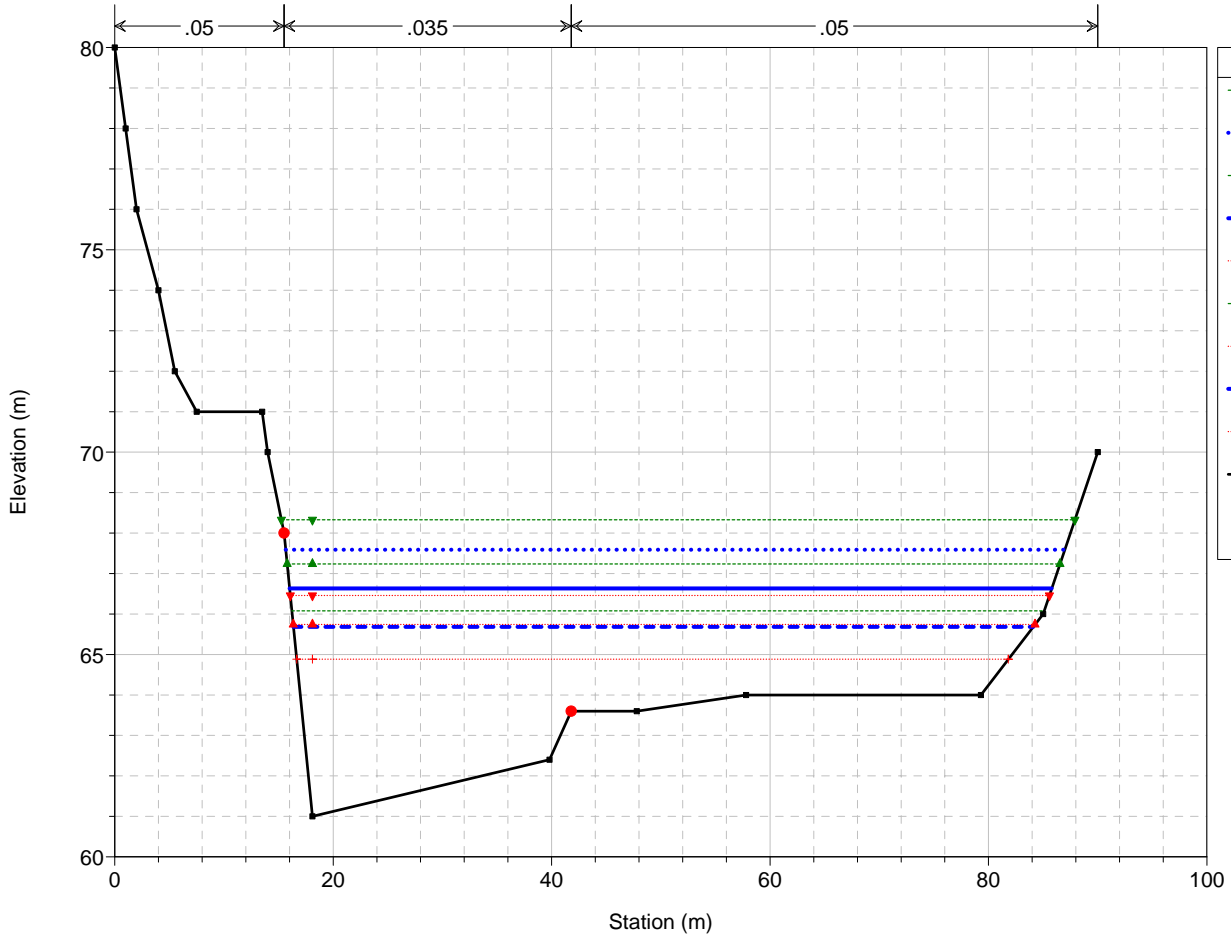
Sturla da Cicana a Mezzanego

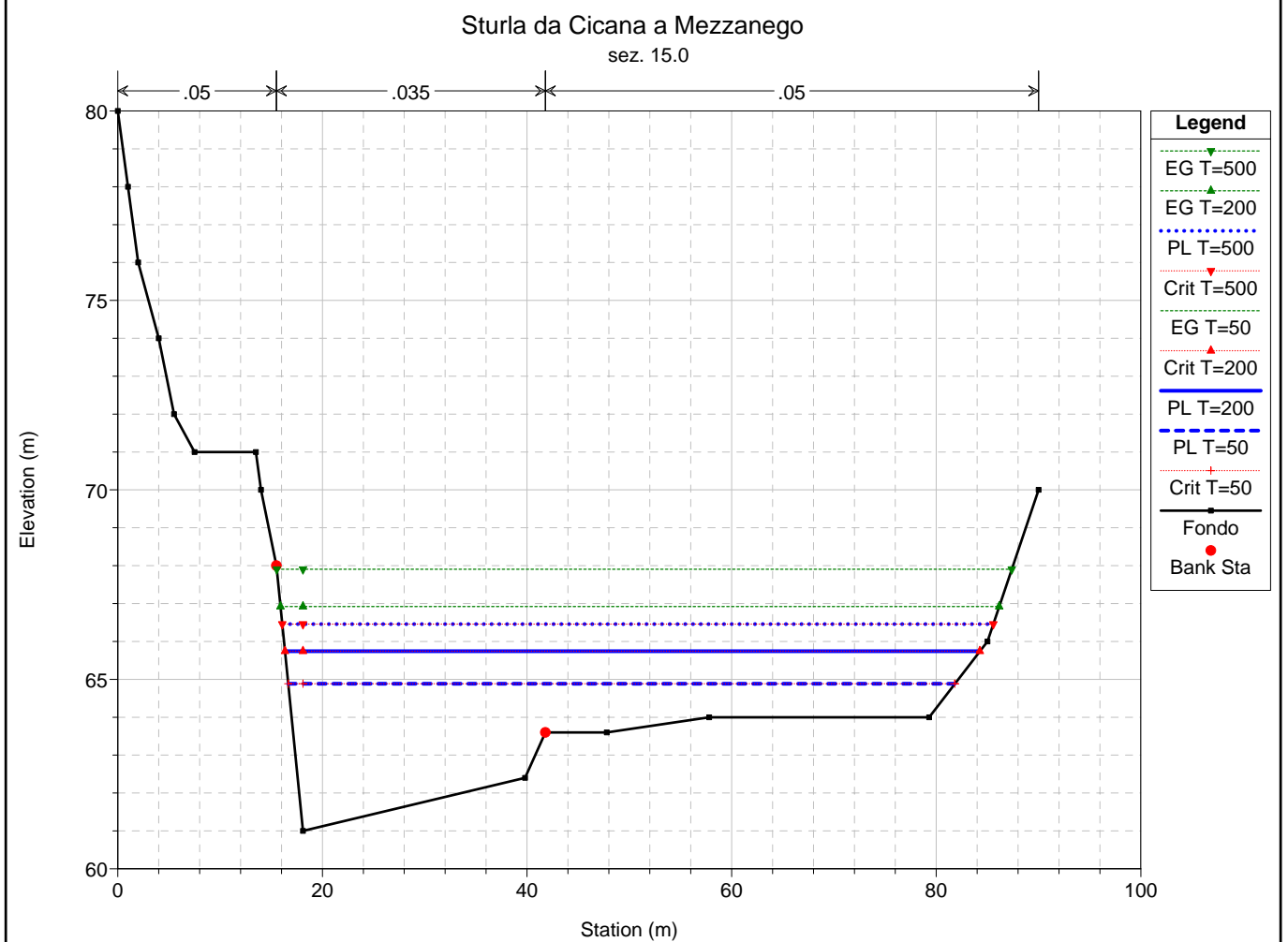
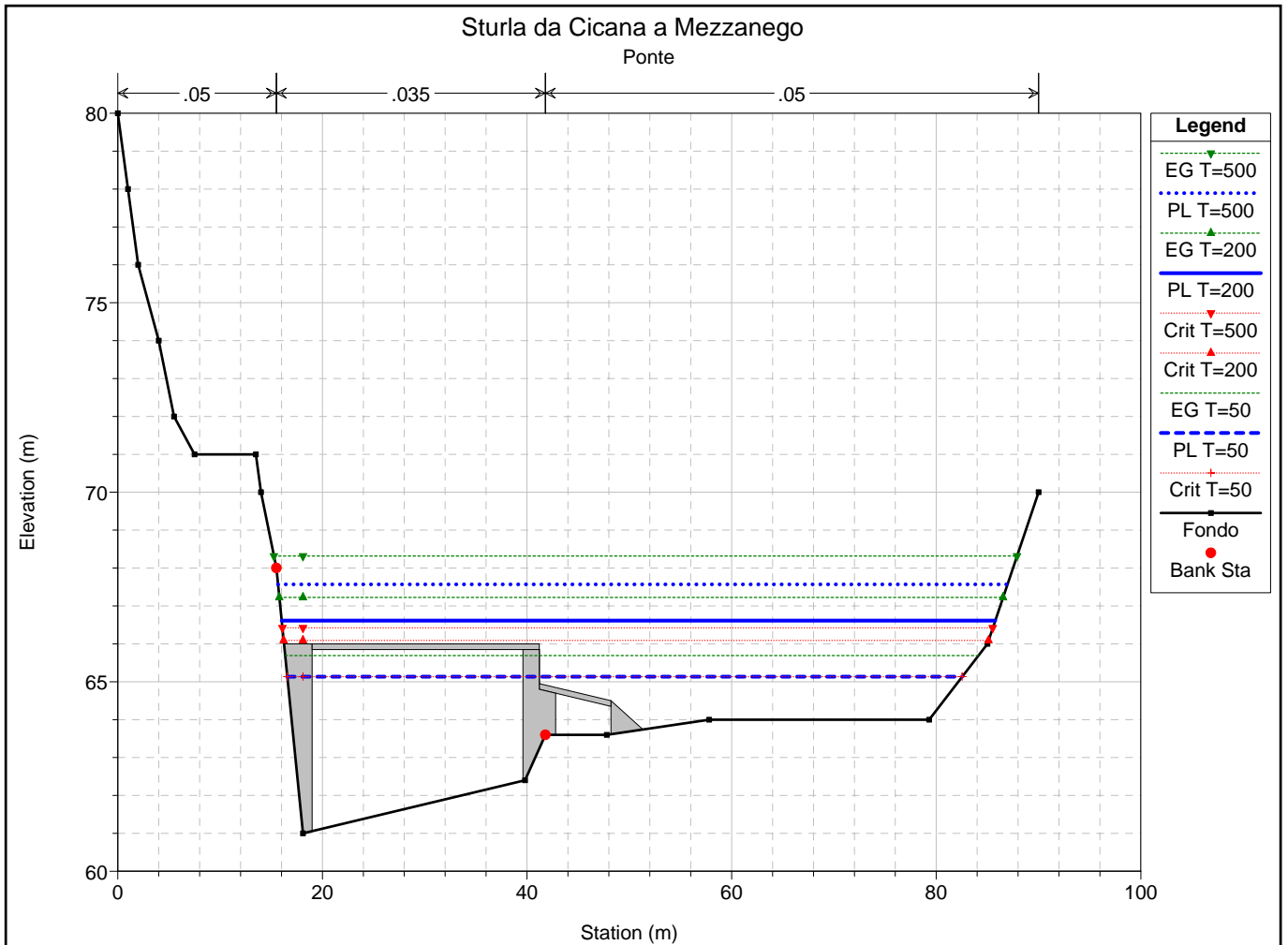
Sez. 16

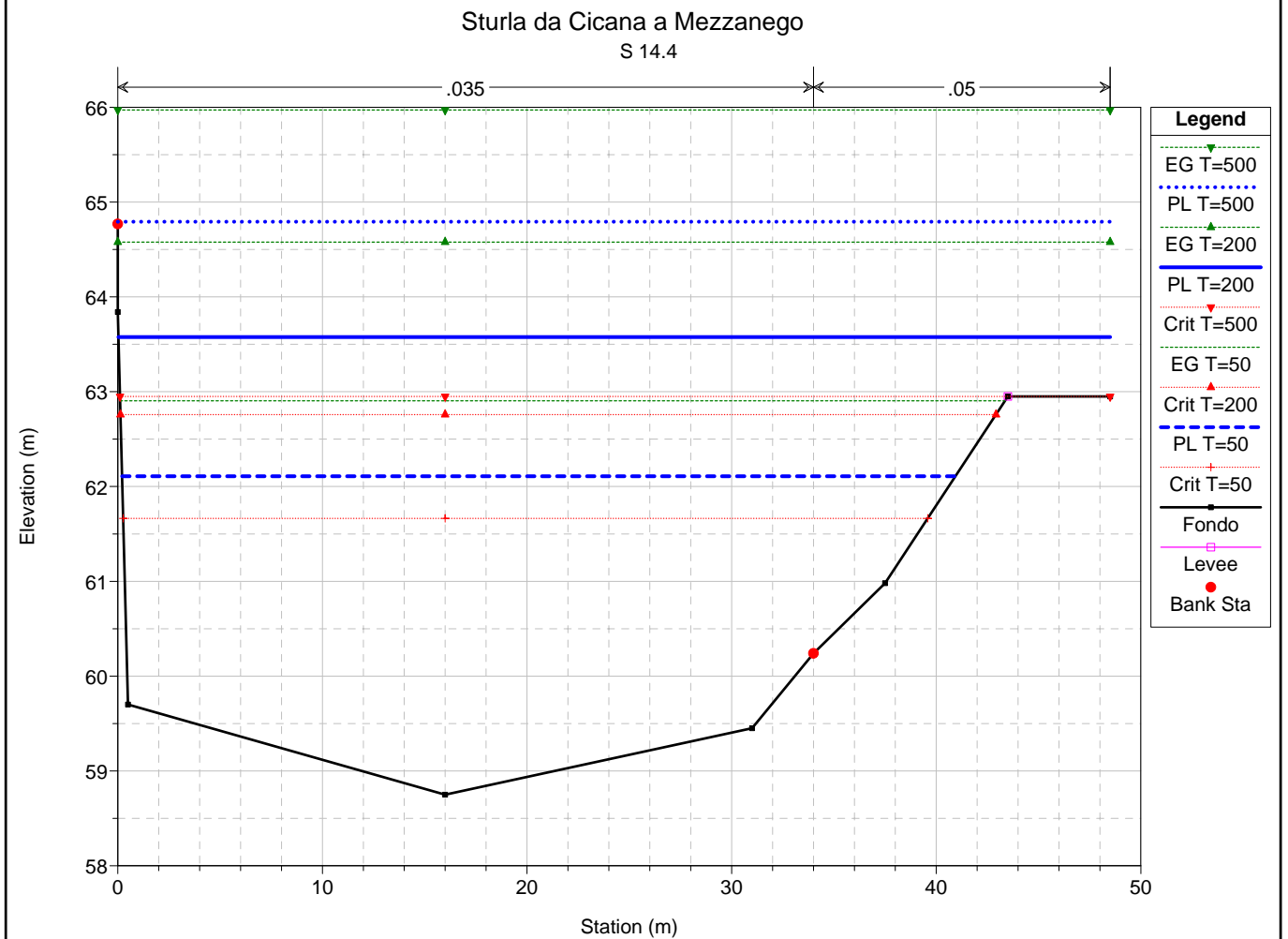
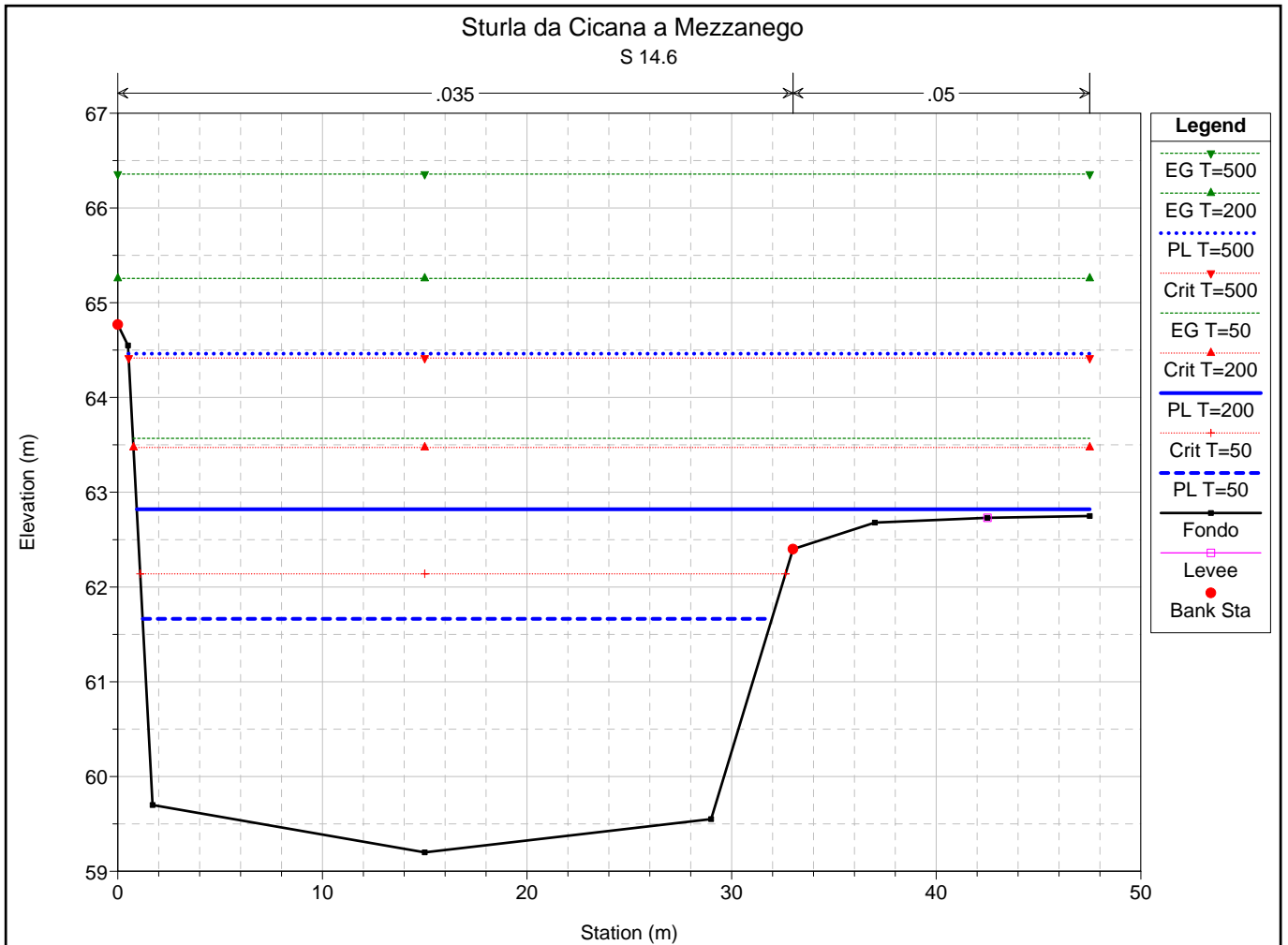


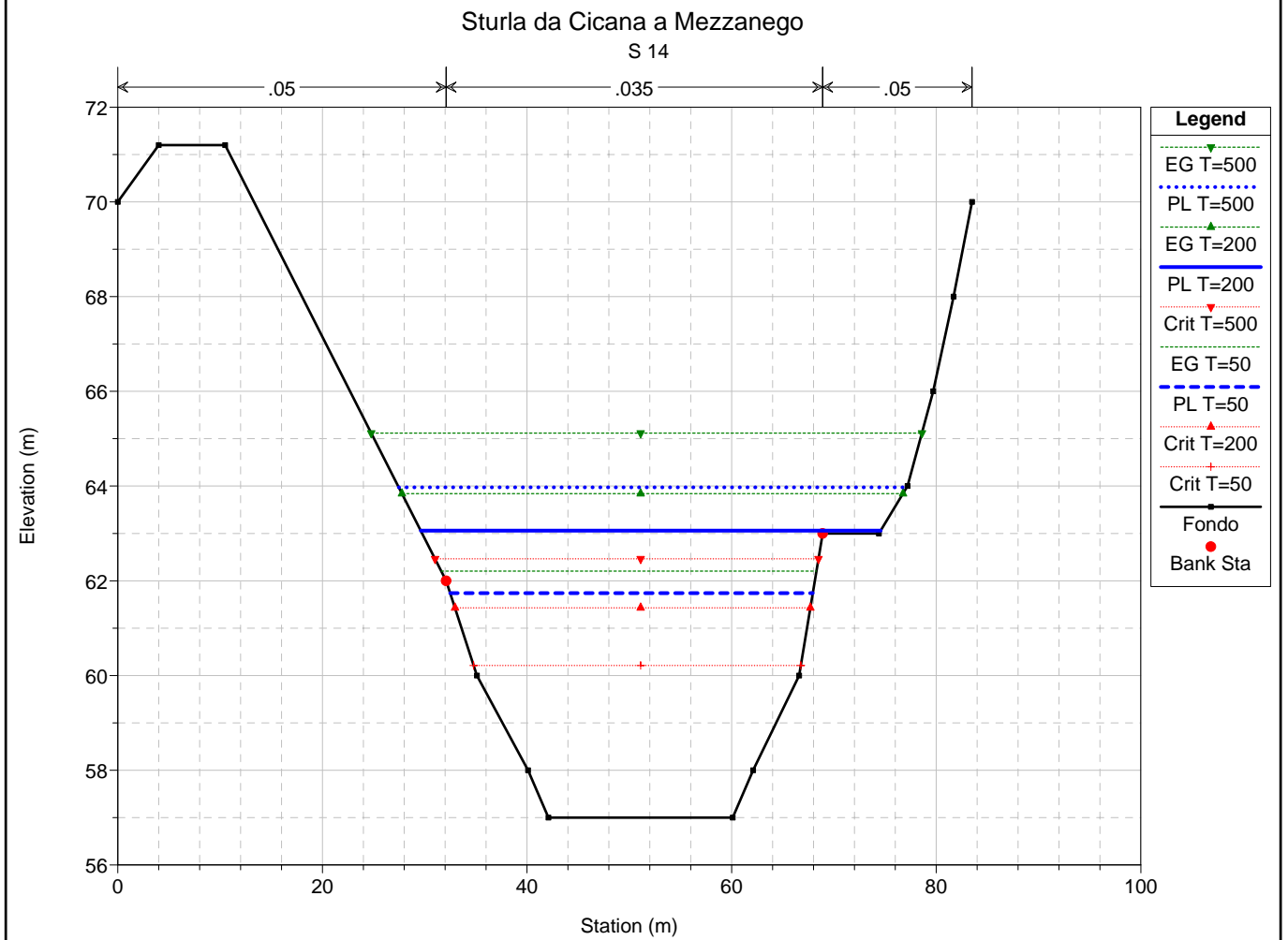
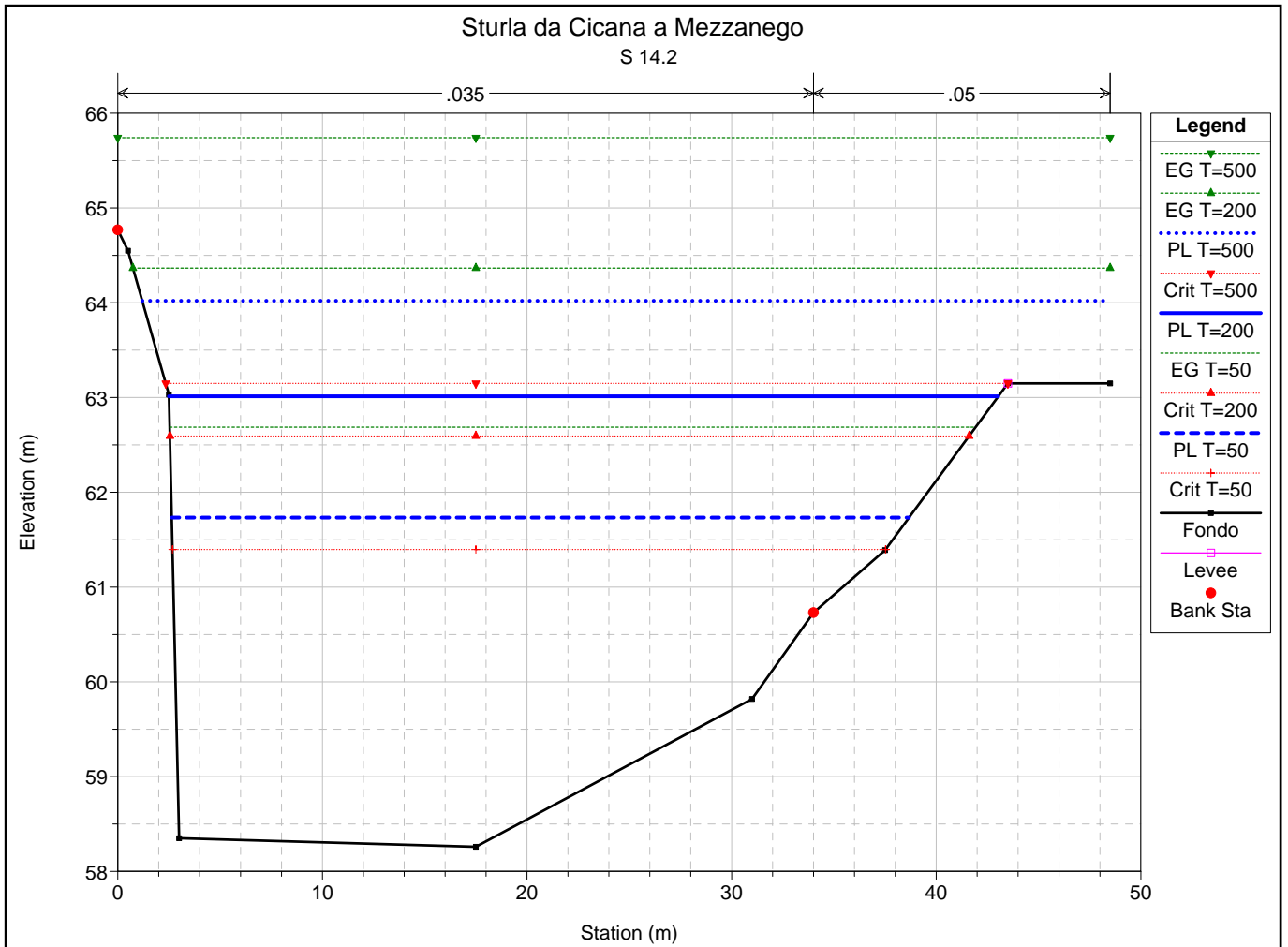
Sturla da Cicana a Mezzanego

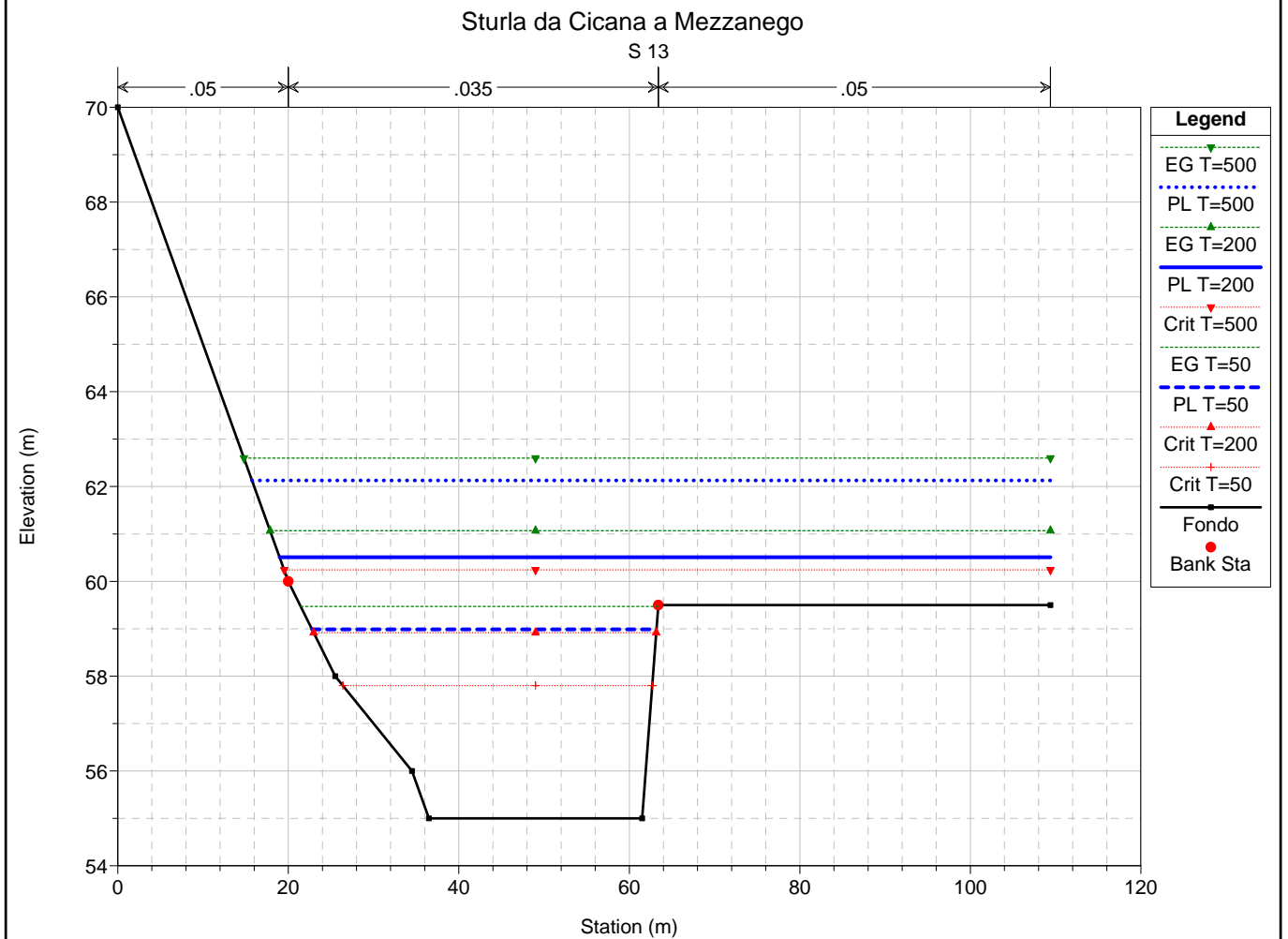
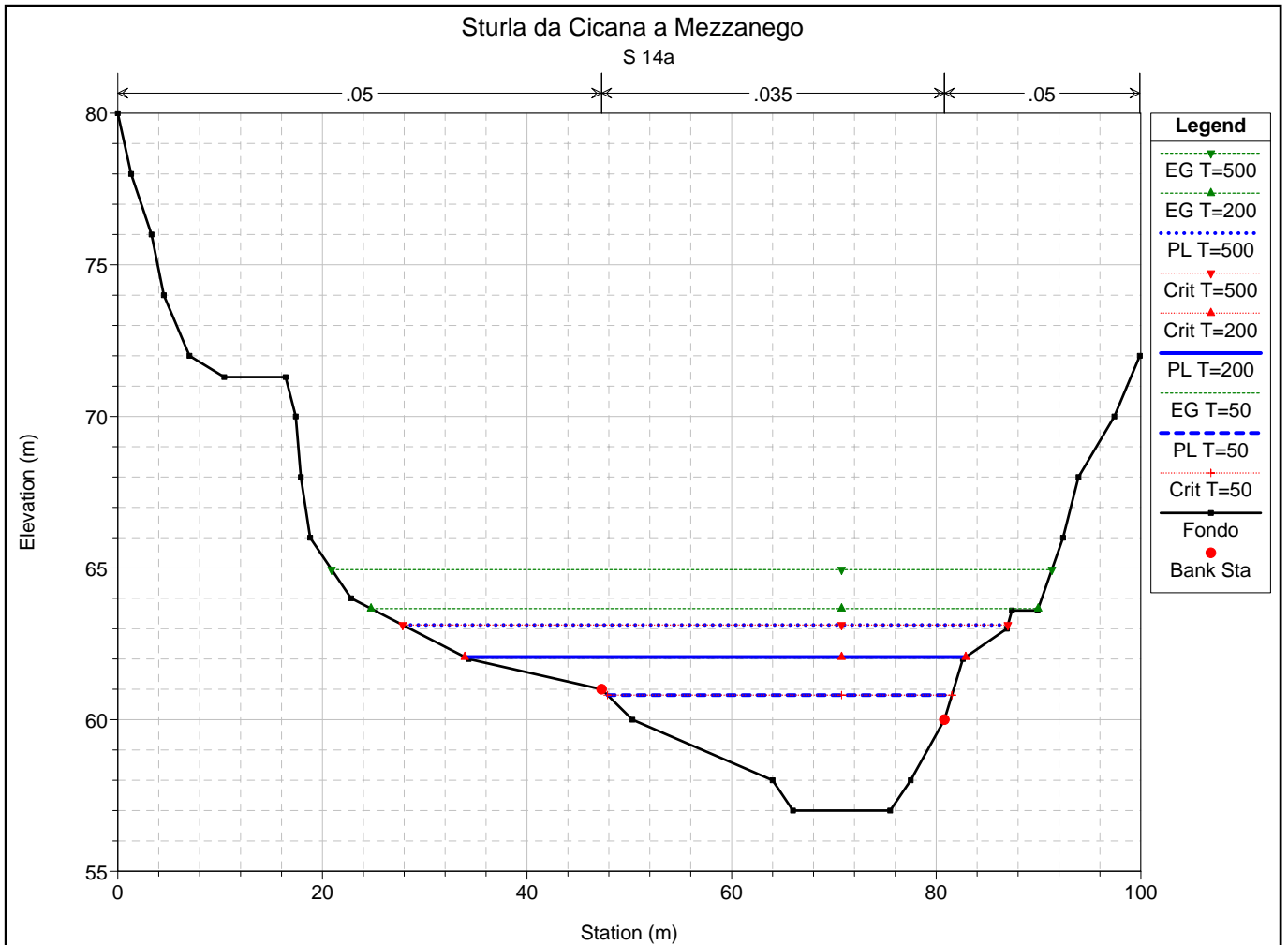
sez.15.3



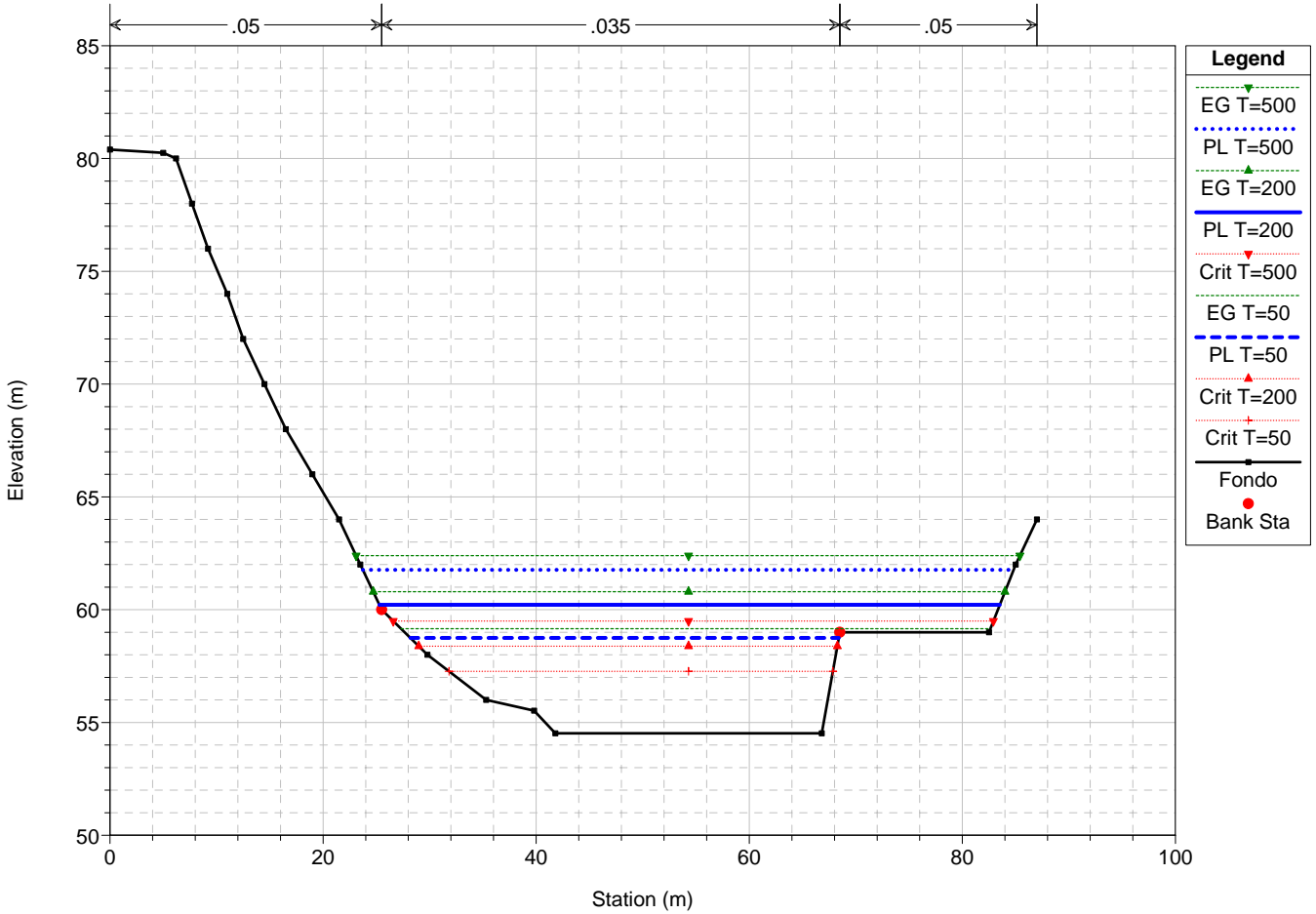




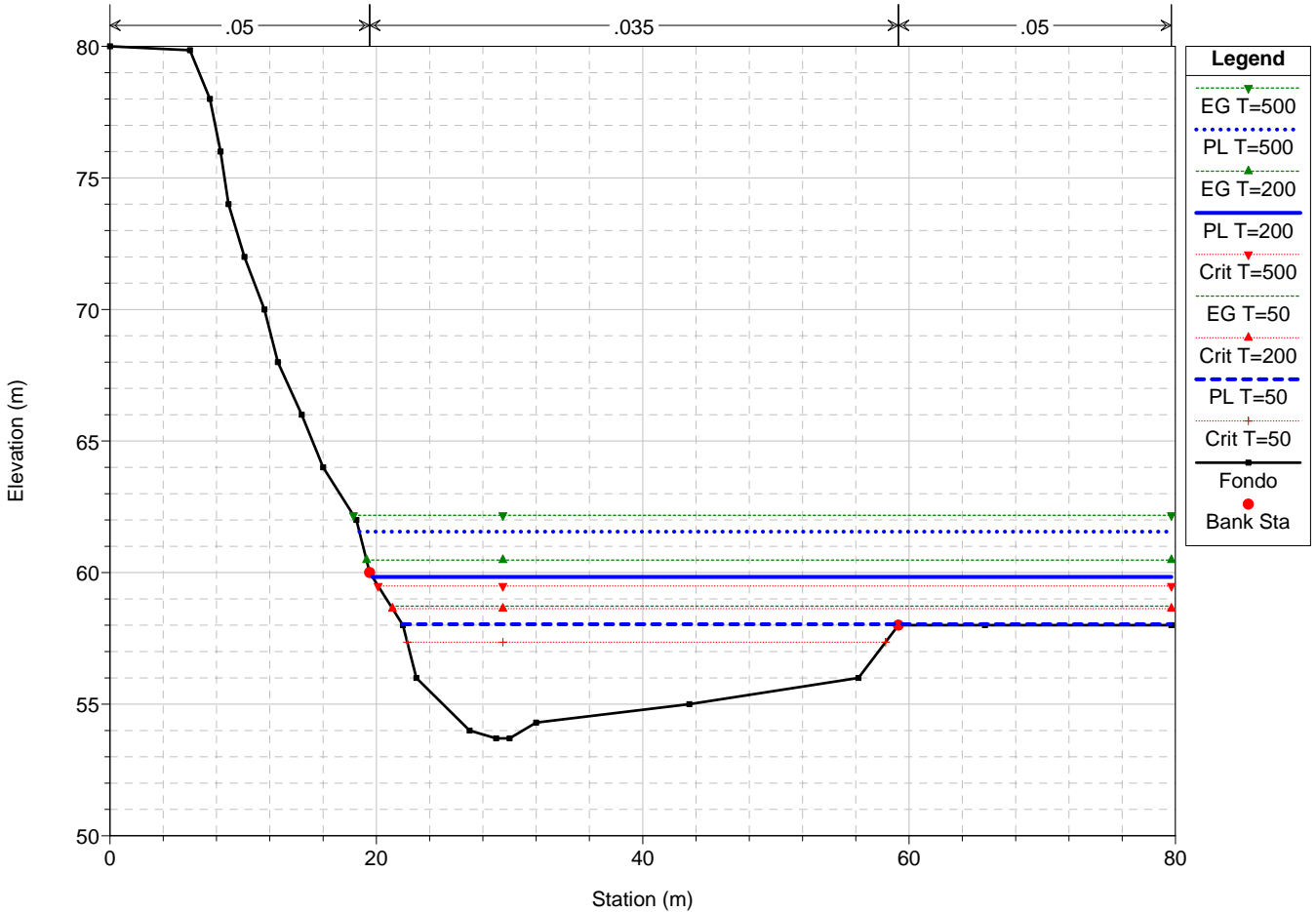




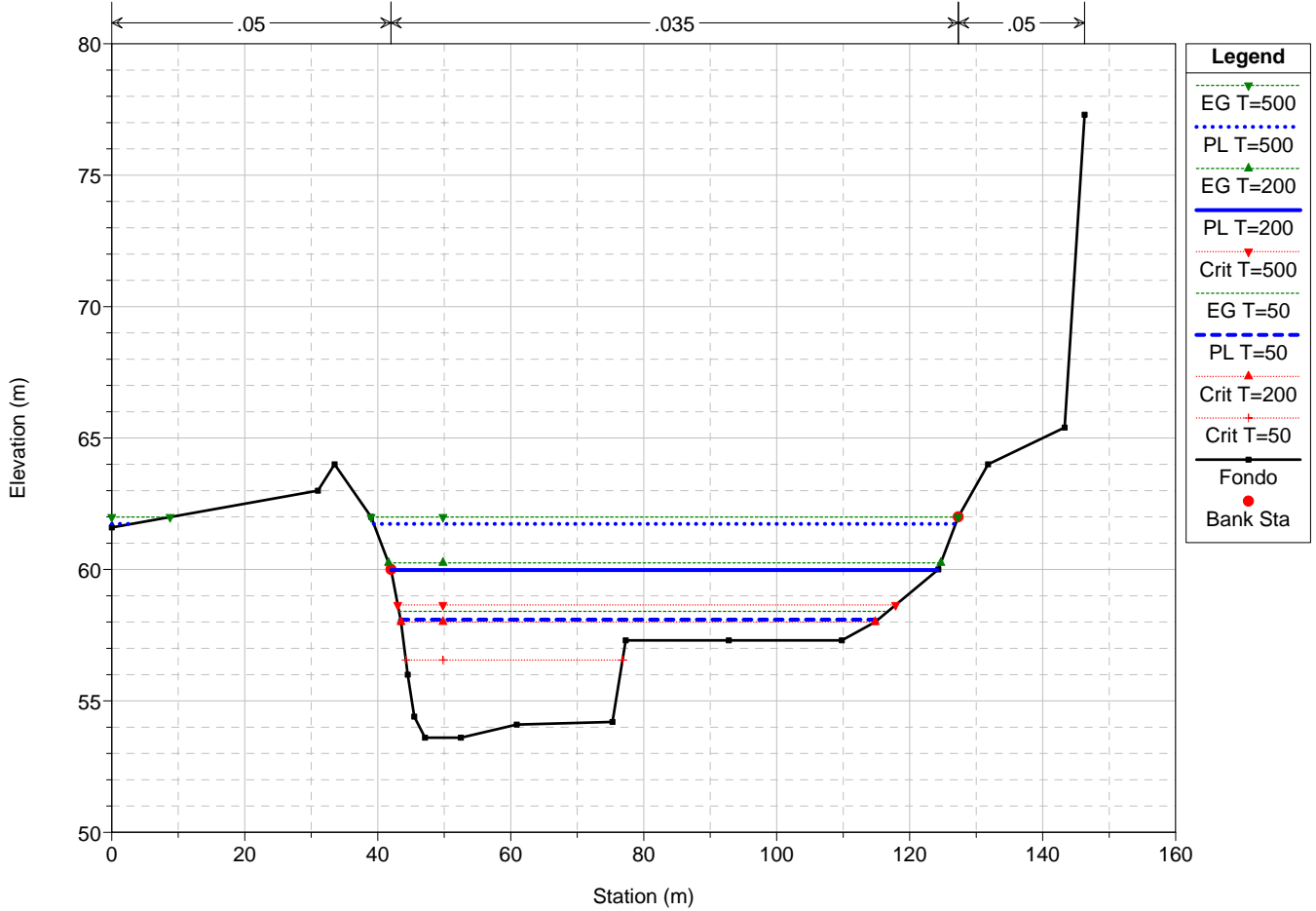
Sturla da Cicana a Mezzanego
S 12



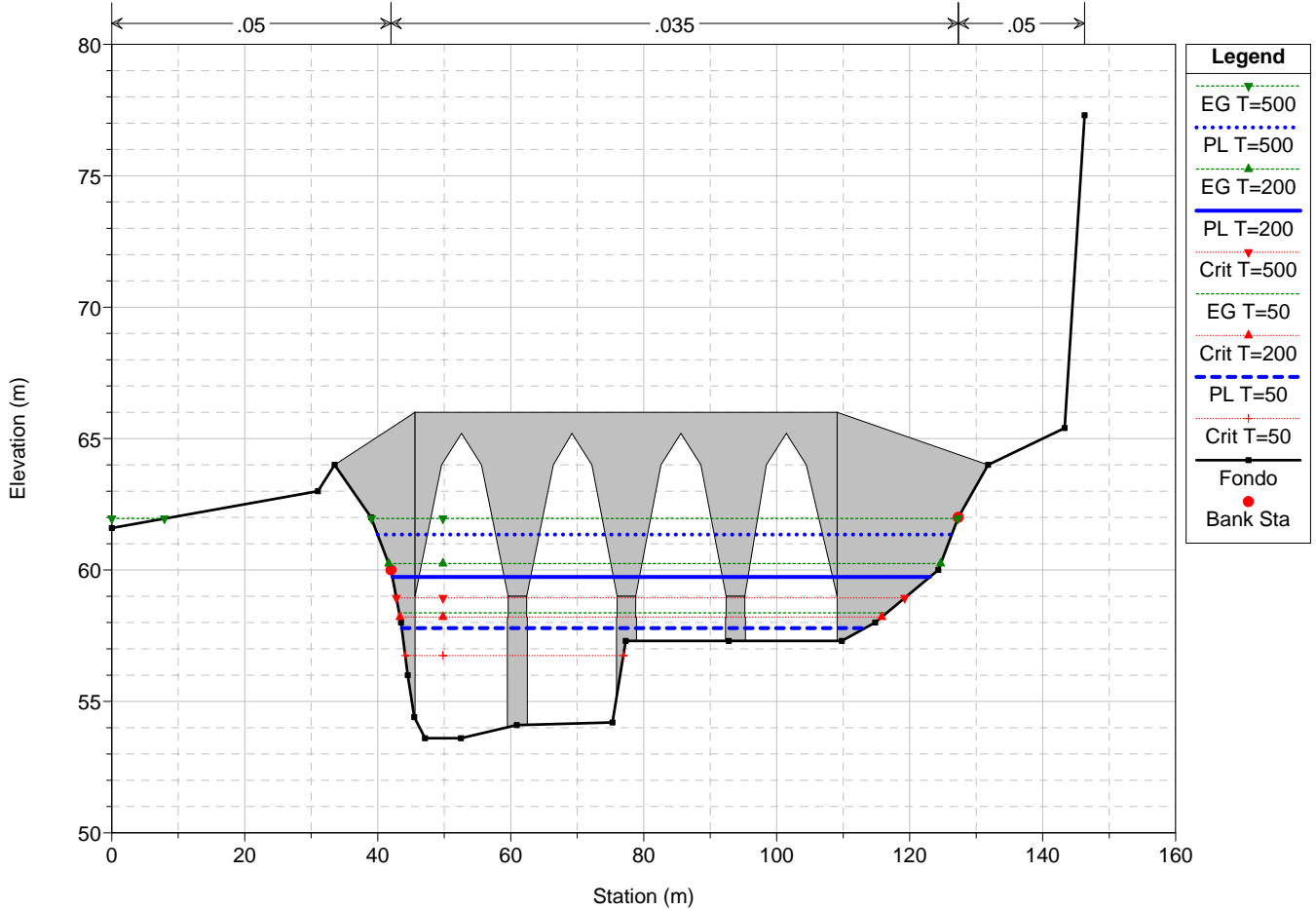
Sturla da Cicana a Mezzanego
S 11



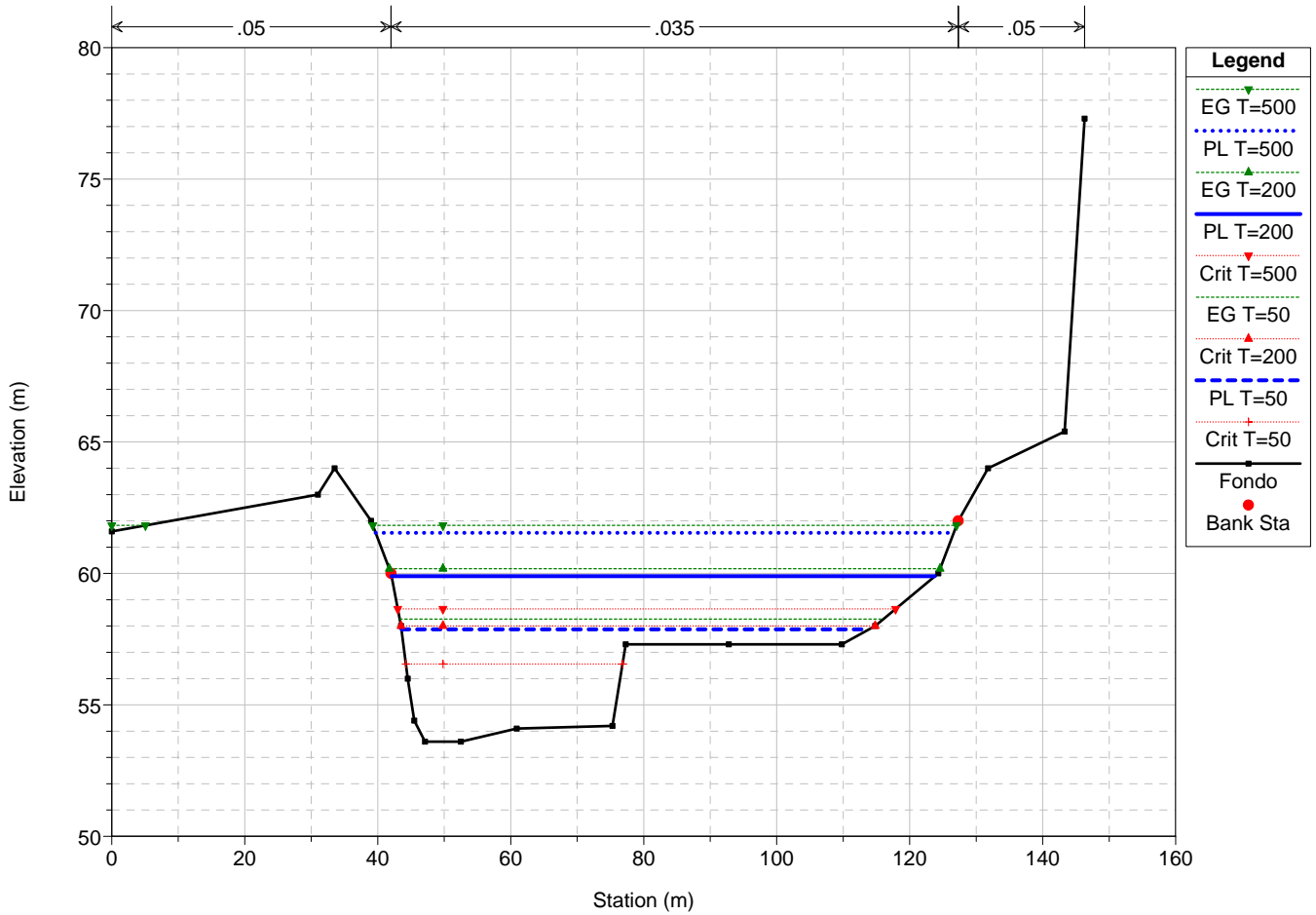
Sturla da Cicana a Mezzanego
Ponte 10.3



Sturla da Cicana a Mezzanego
Ponte



Sturla da Cicana a Mezzanego
Ponte 10.0



Sturla da Cicana a Mezzanego
S 9

