



REGIONE LIGURIA



Autorità di Bacino Distrettuale
dell'Appennino Settentrionale

TORRENTI VALLECROSIA, BORGHETTO E RII MINORI

Ambito di Bacino n.2 - NERVIA

PIANO DI BACINO STRALCIO PER LA TUTELA DAL RISCHIO IDROGEOLOGICO



VERIFICHE IDRAULICHE - T. VERBONE

LOC. SAN BIAGIO DELLA CIMA

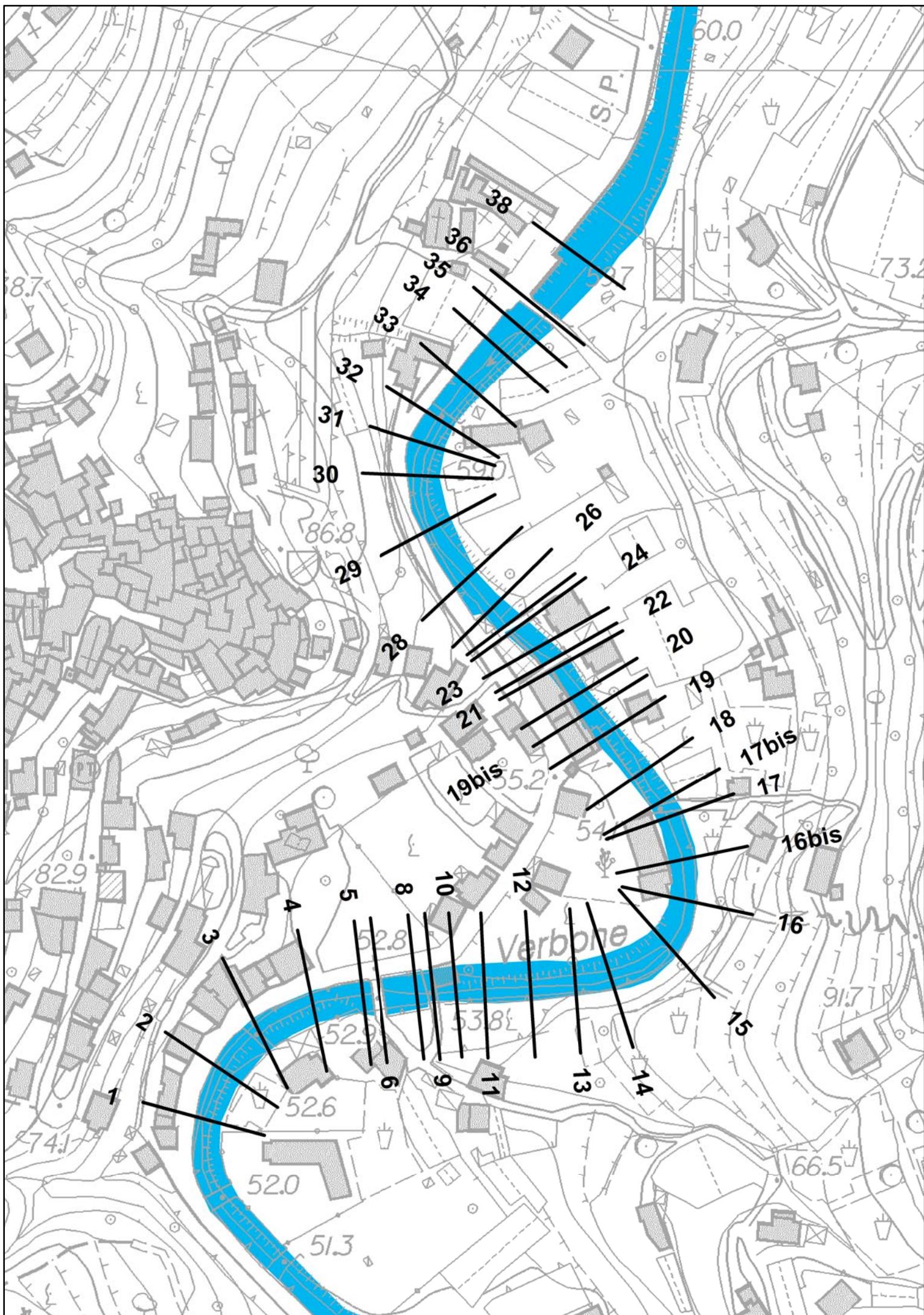
PRIMA APPROVAZIONE DEL PIANO	Delibera del Consiglio Provinciale di Imperia n. 86 del 15/10/2002
ULTIMA MODIFICA DELL'ELABORATO	Decreto del Direttore Generale n. 1664 del 05/03/2020
ENTRATA IN VIGORE	BURL n. 13 del 25/03/2020 – parte II

Risultati modello idraulico

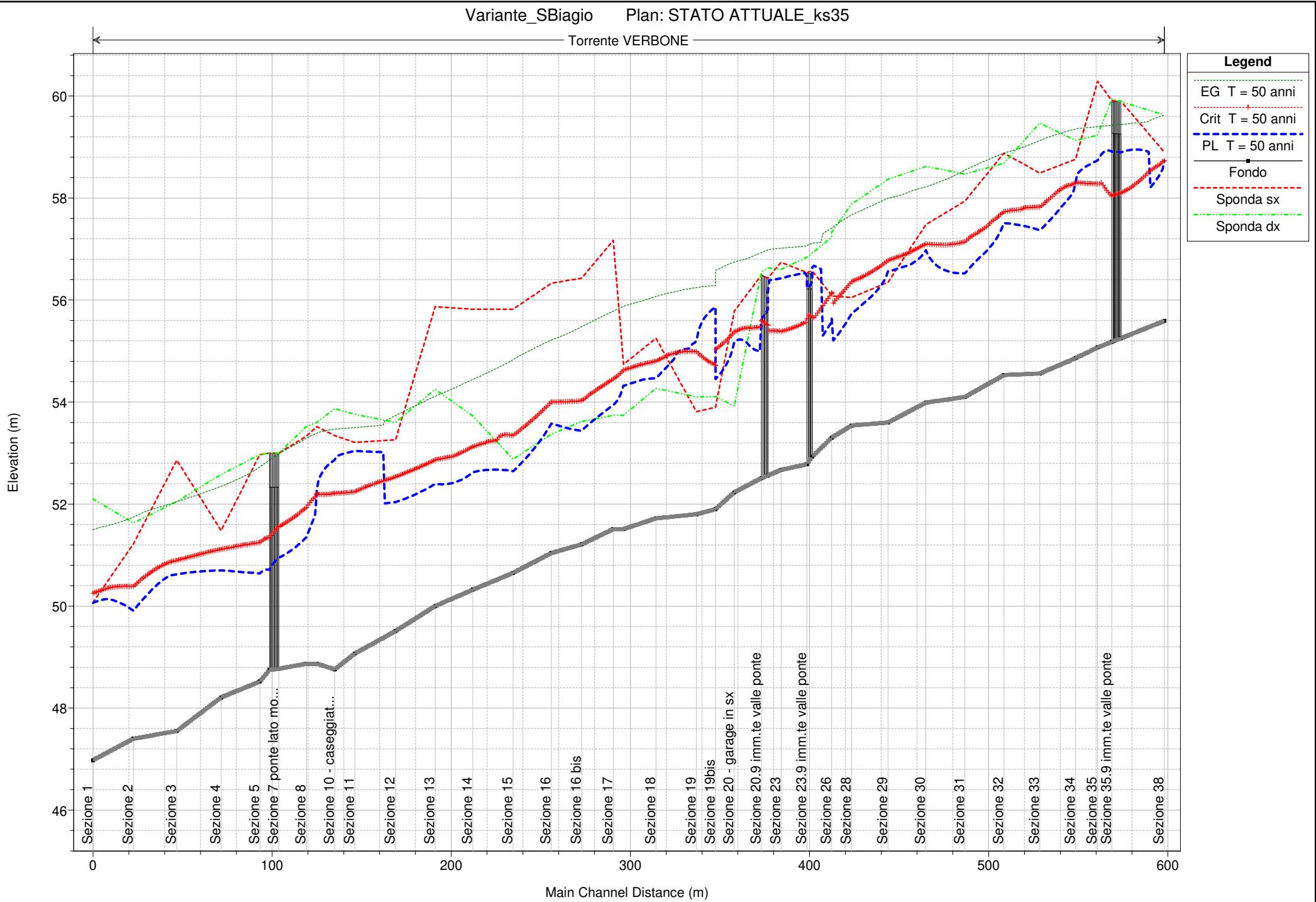
Loc. San Biagio della Cima

Da SEZ 38 a SEZ1

- **Ubicazione delle sezioni**
- **Profili idraulici**
- **Sezioni**
- **Tabelle dei risultati**

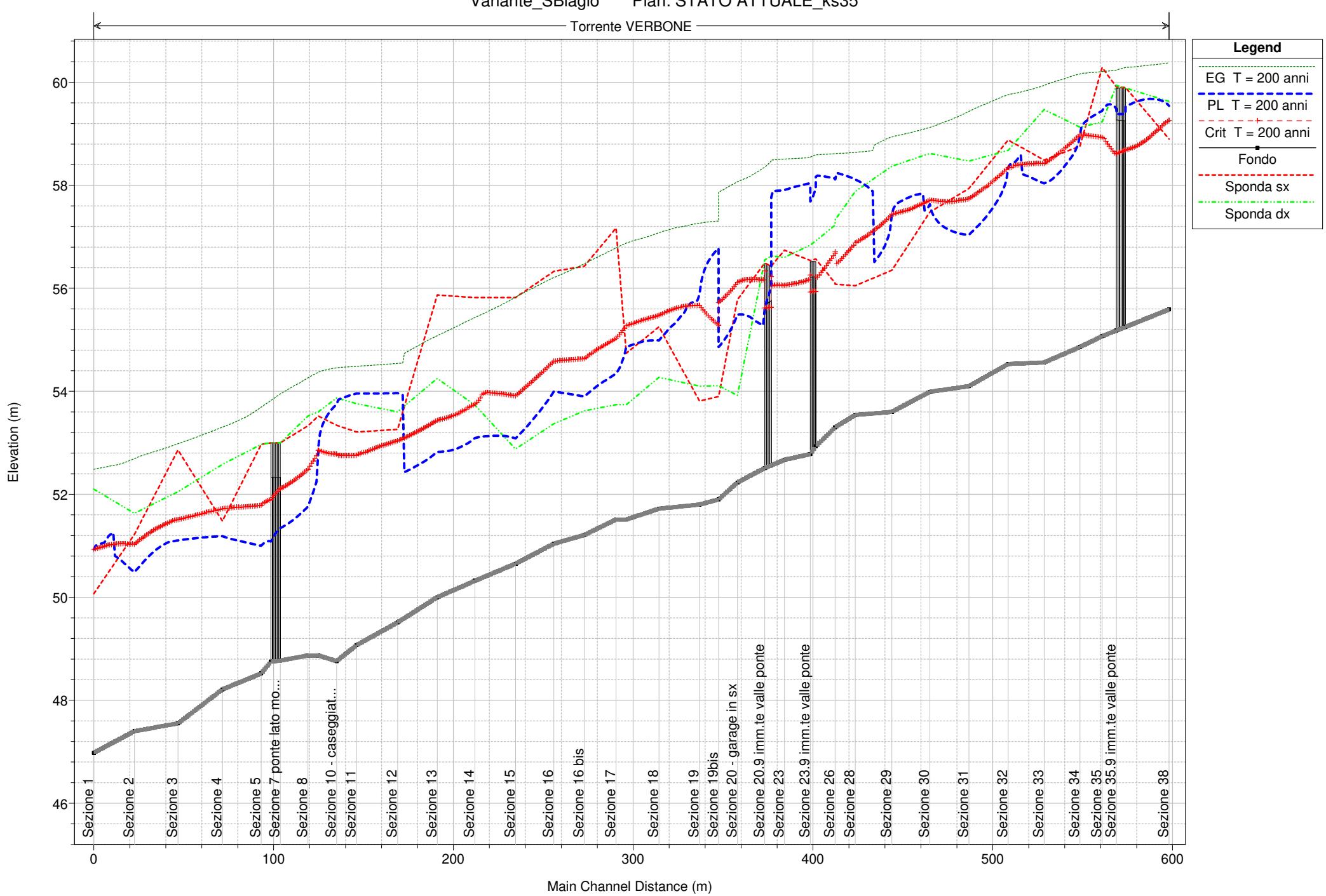


Variante_SBiagio Plan: STATO ATTUALE_ks35



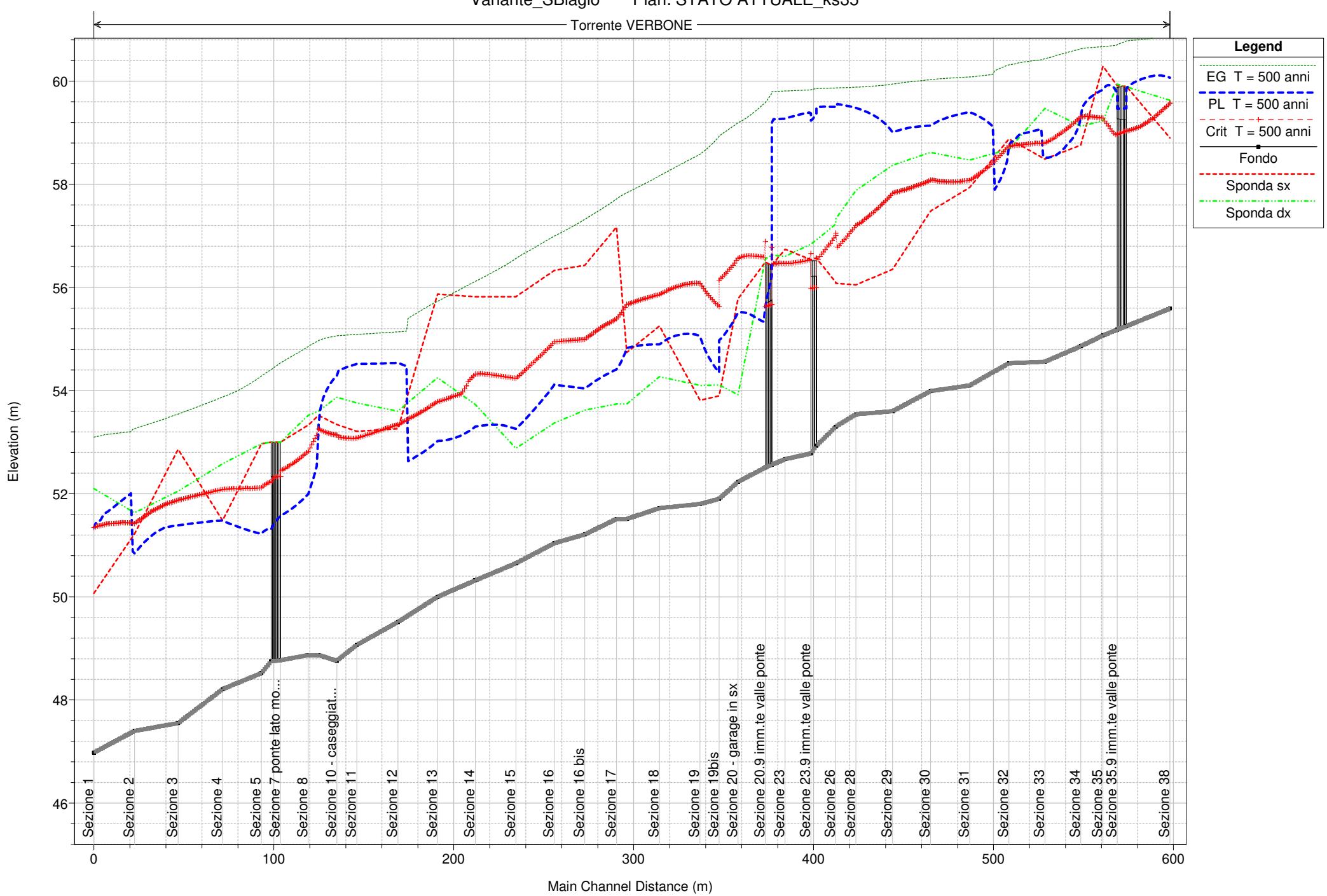
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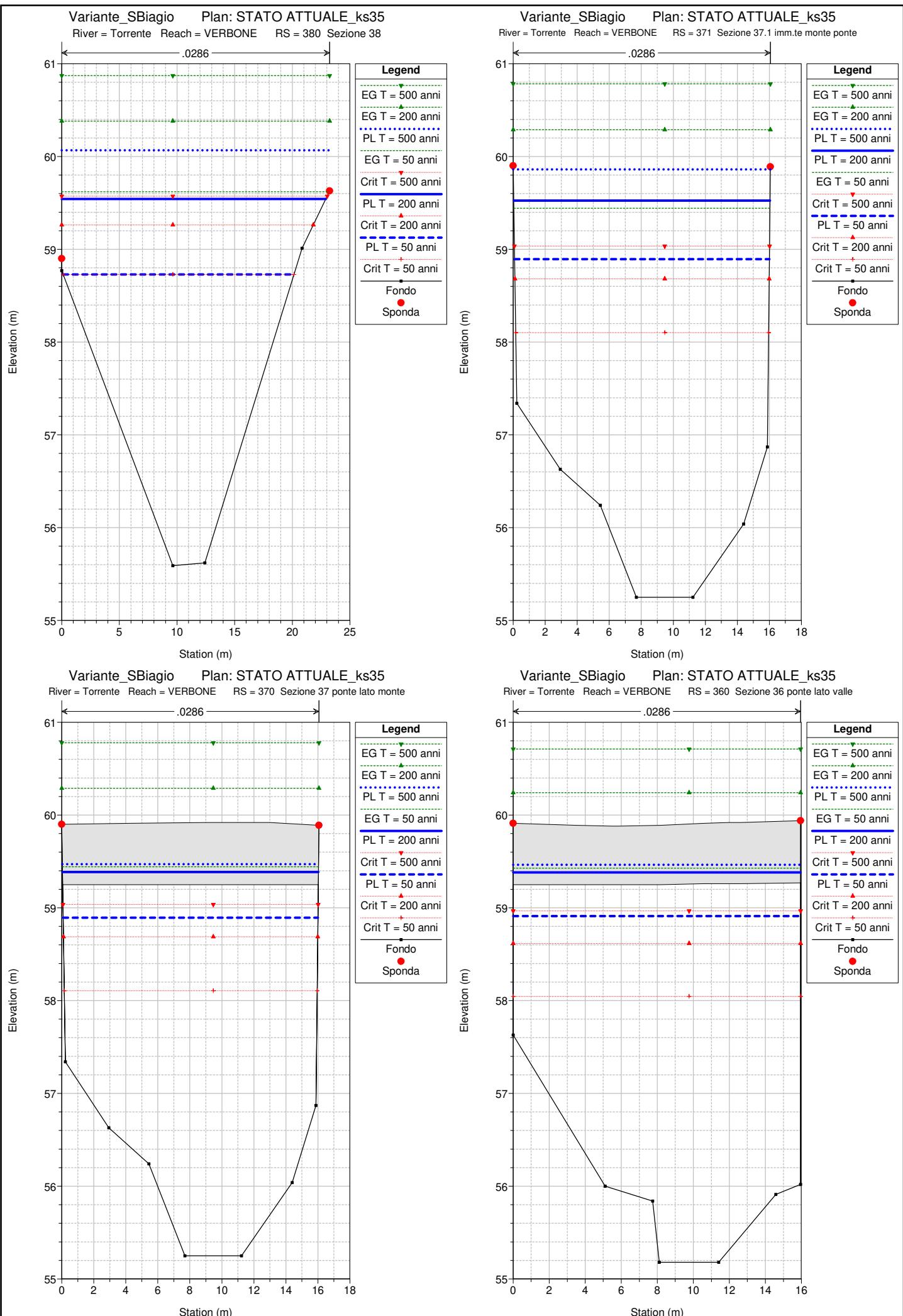
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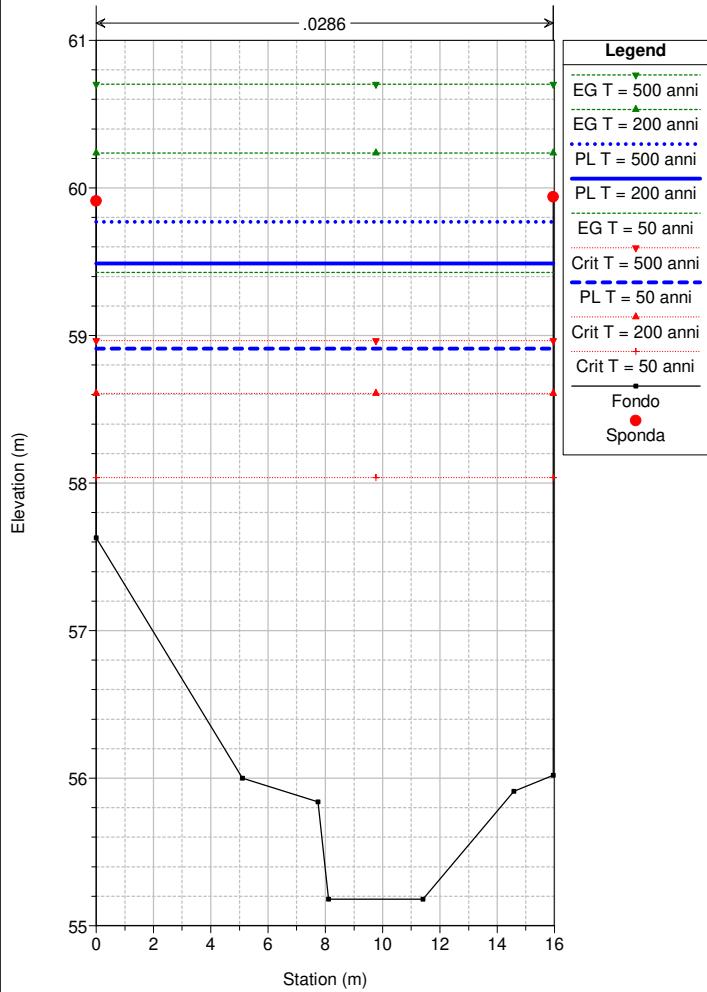
Variante_SBiagio Plan: STATO ATTUALE_ks35

Torrente VERBONE

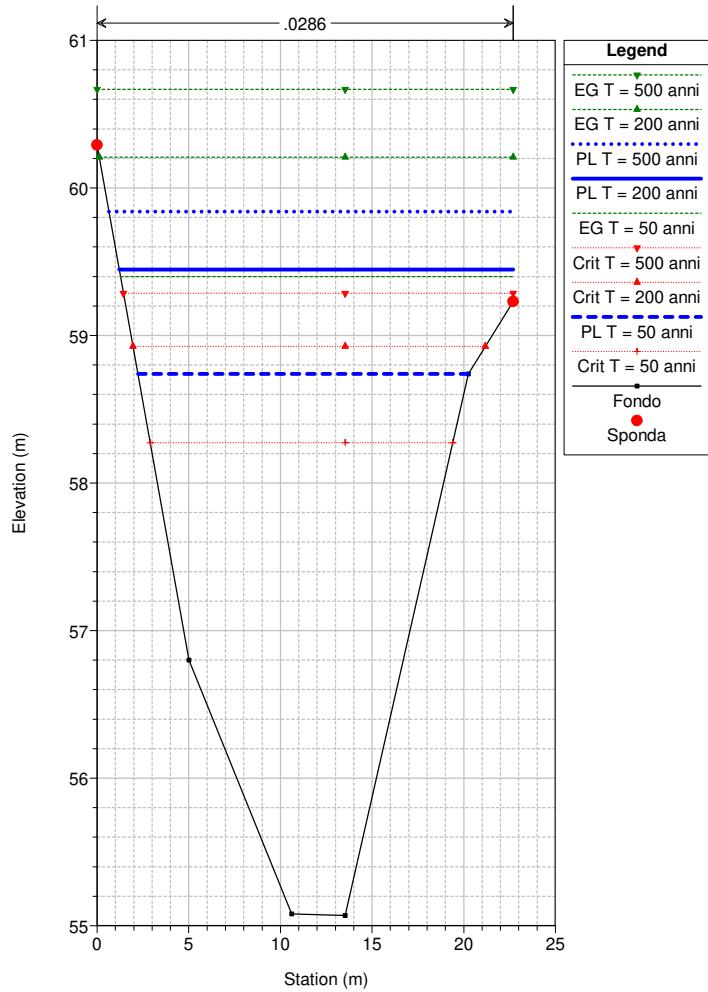




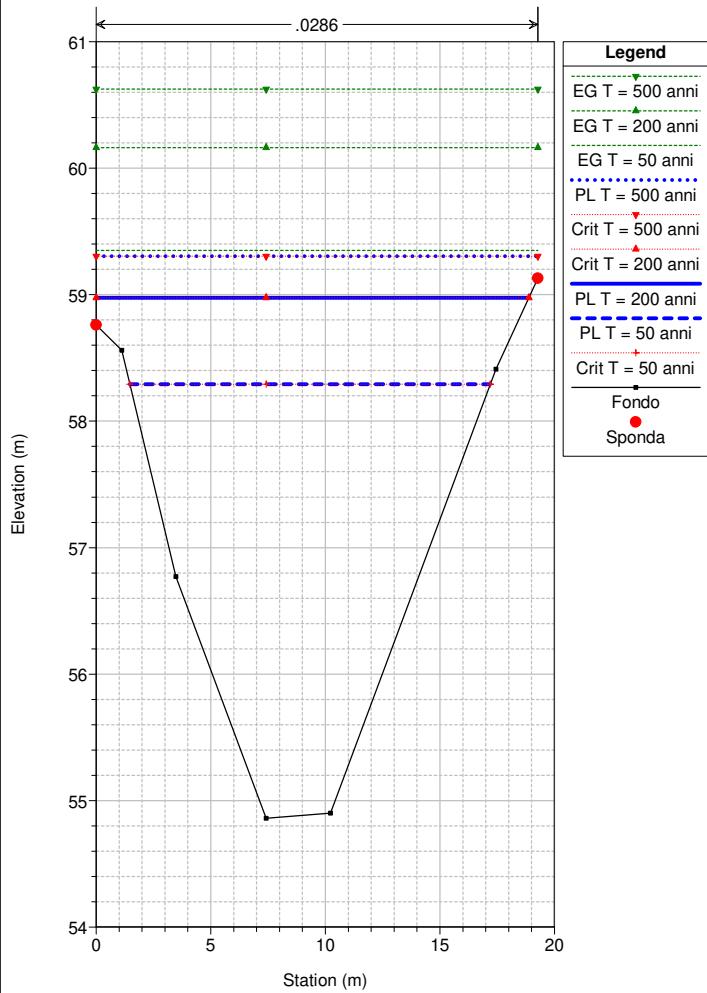
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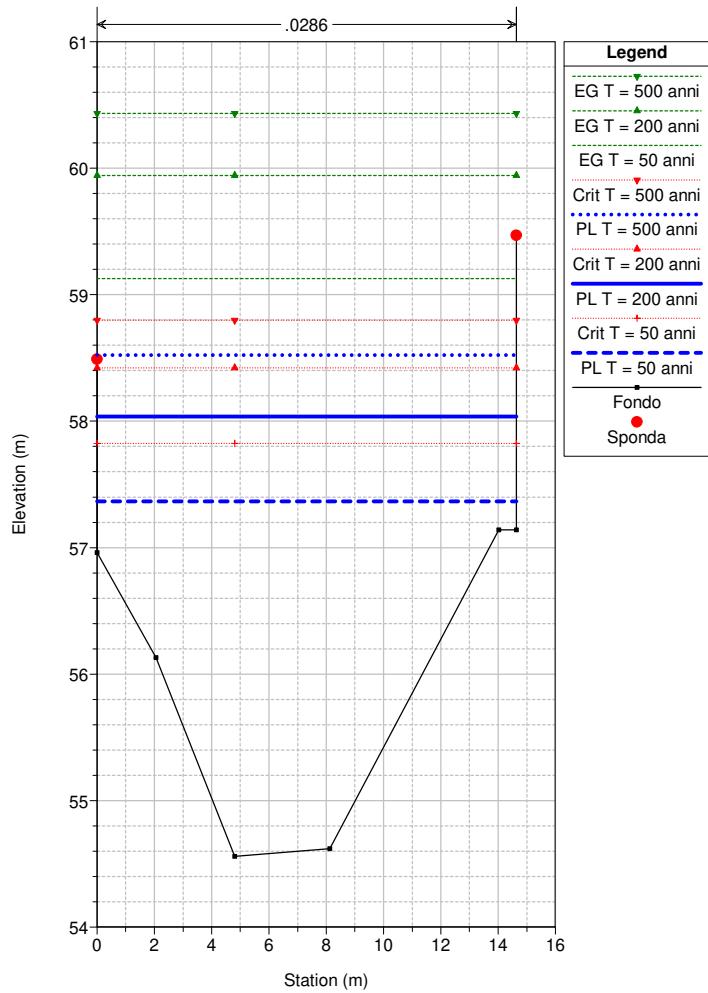
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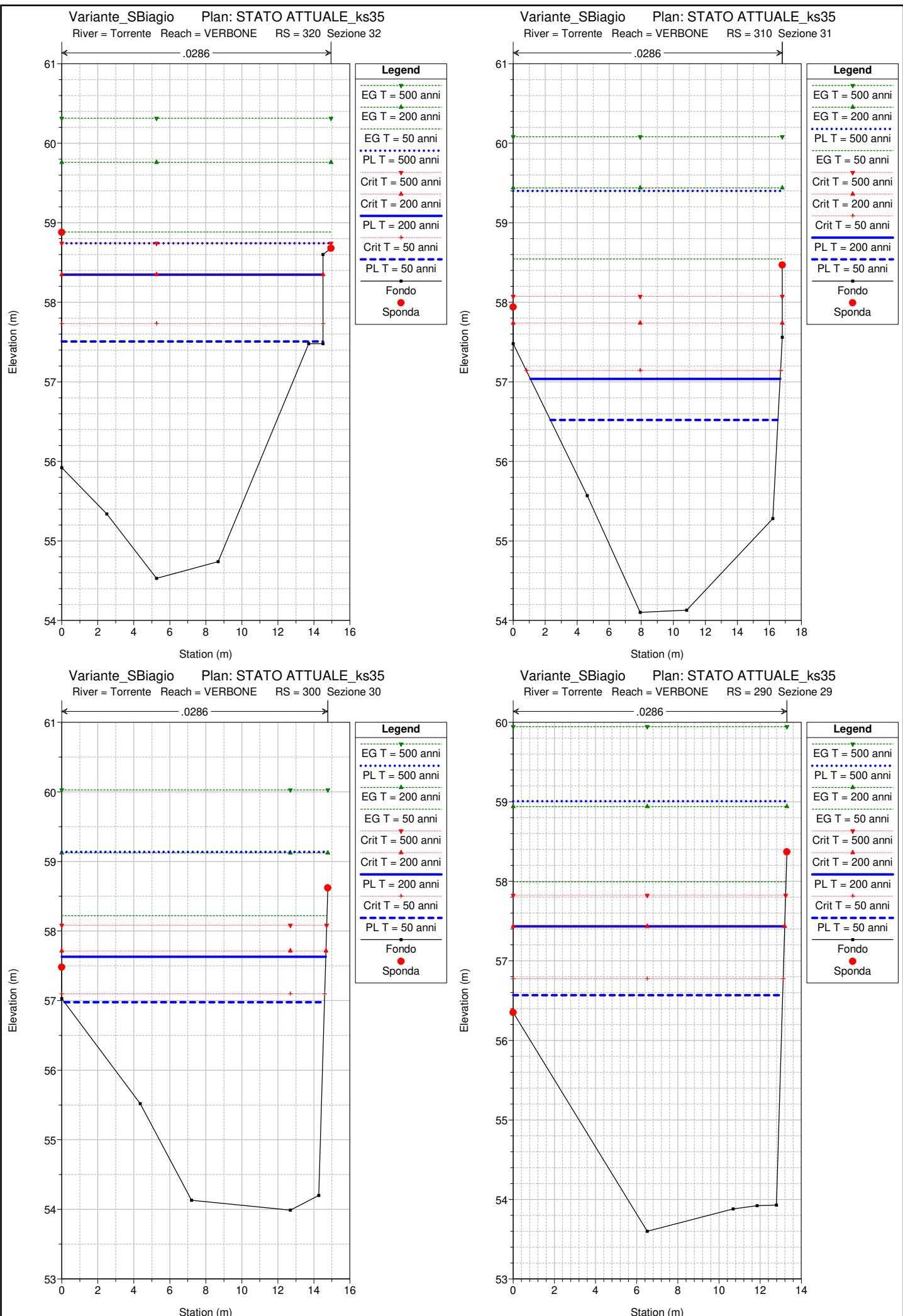


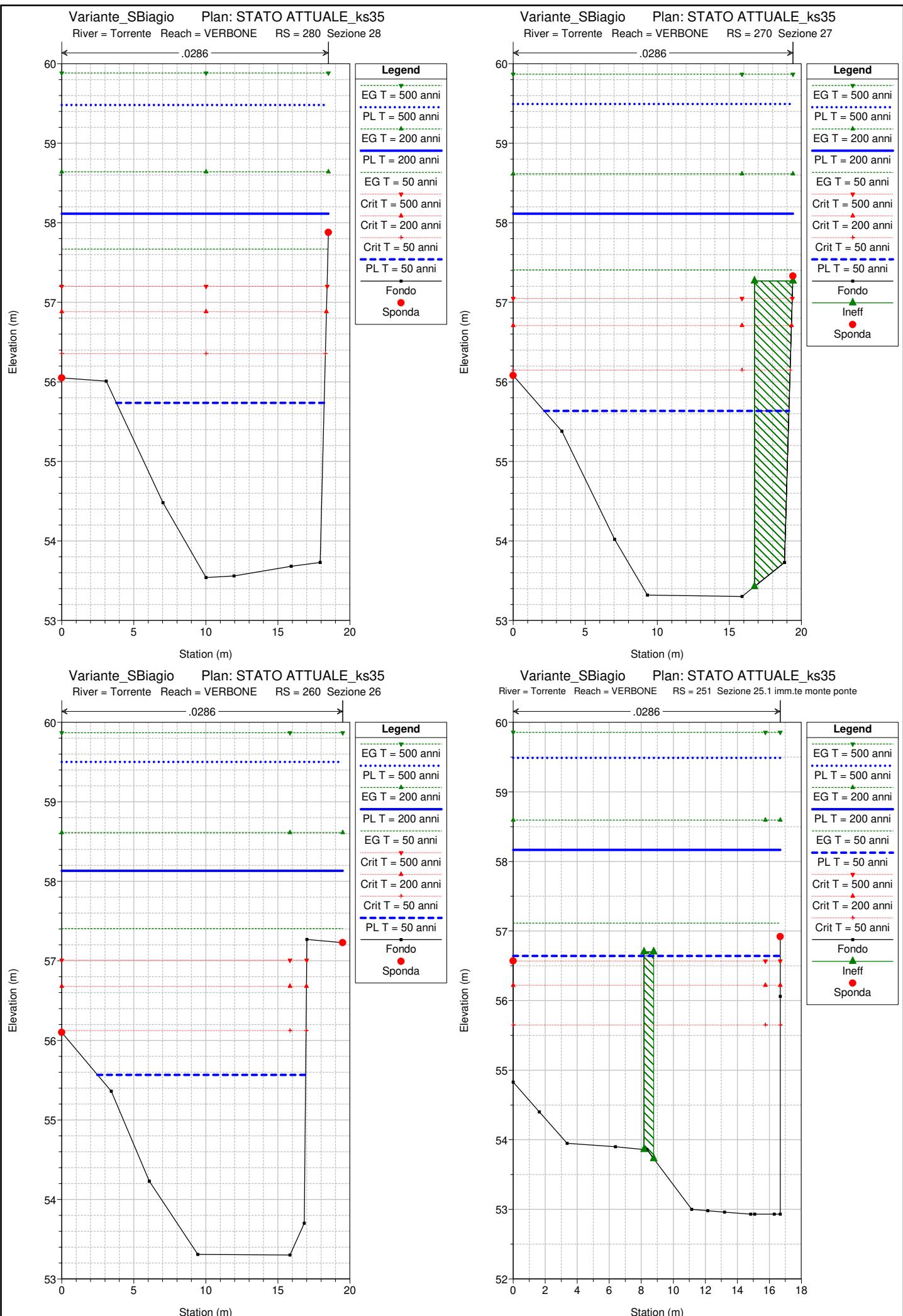
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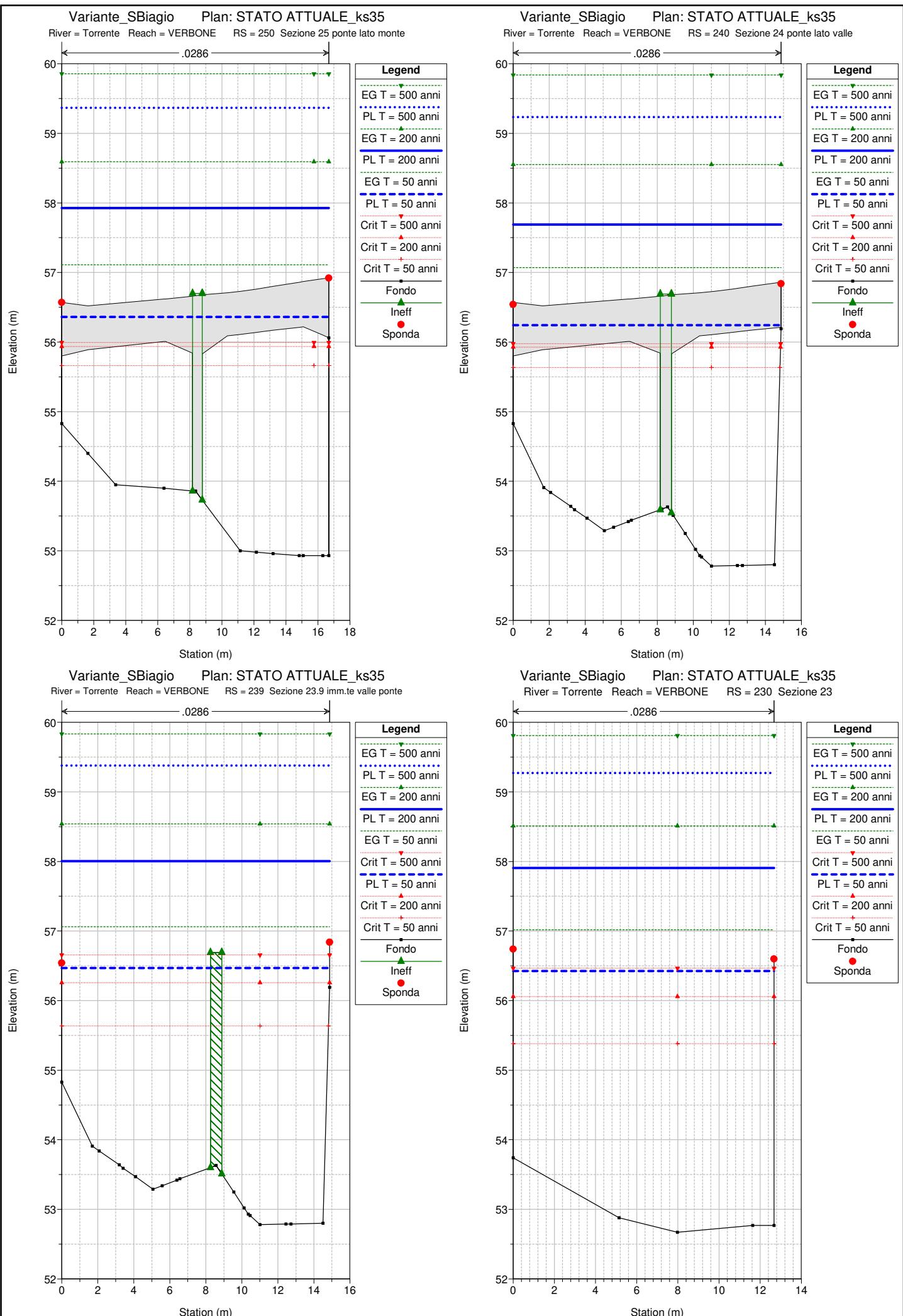


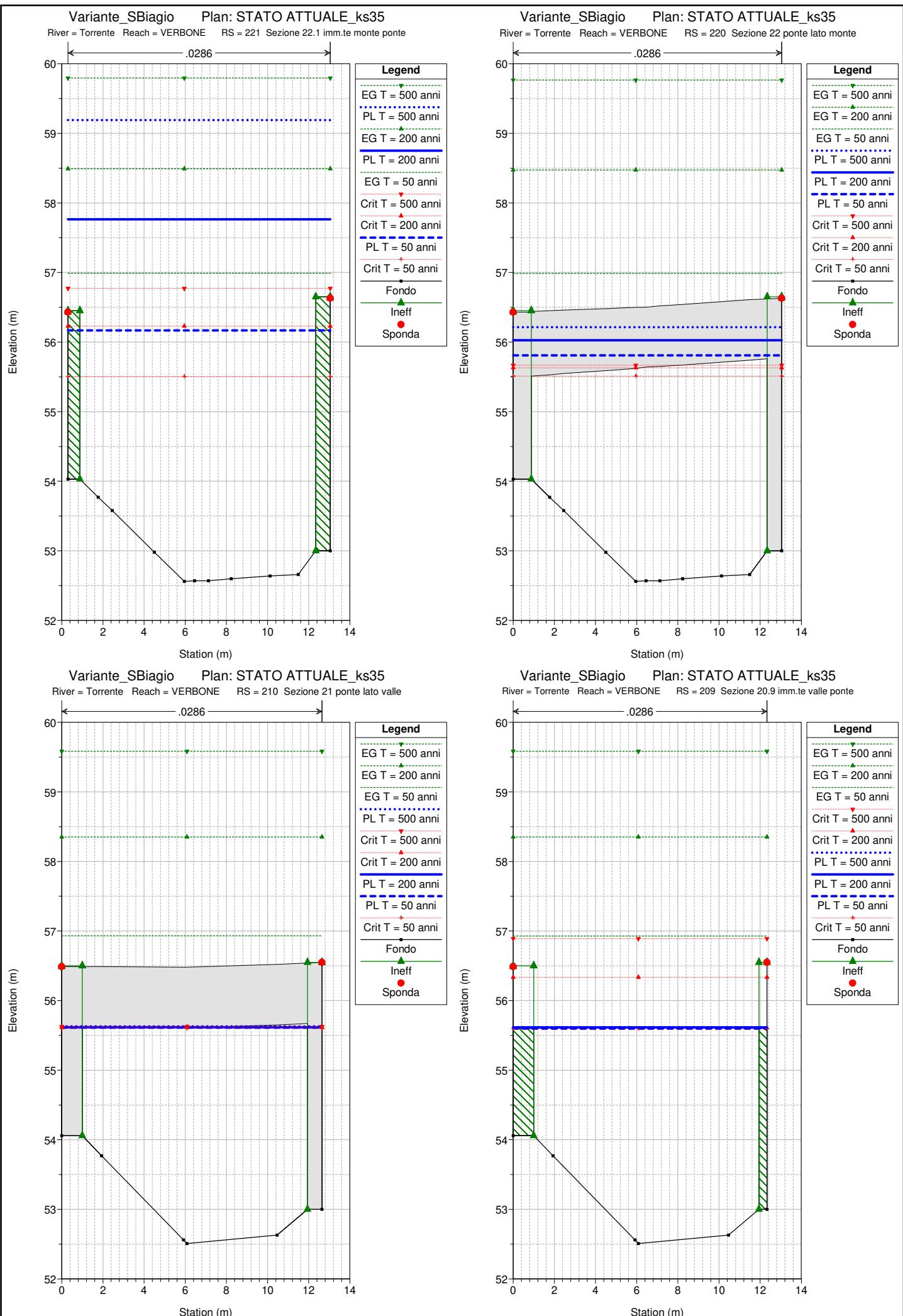
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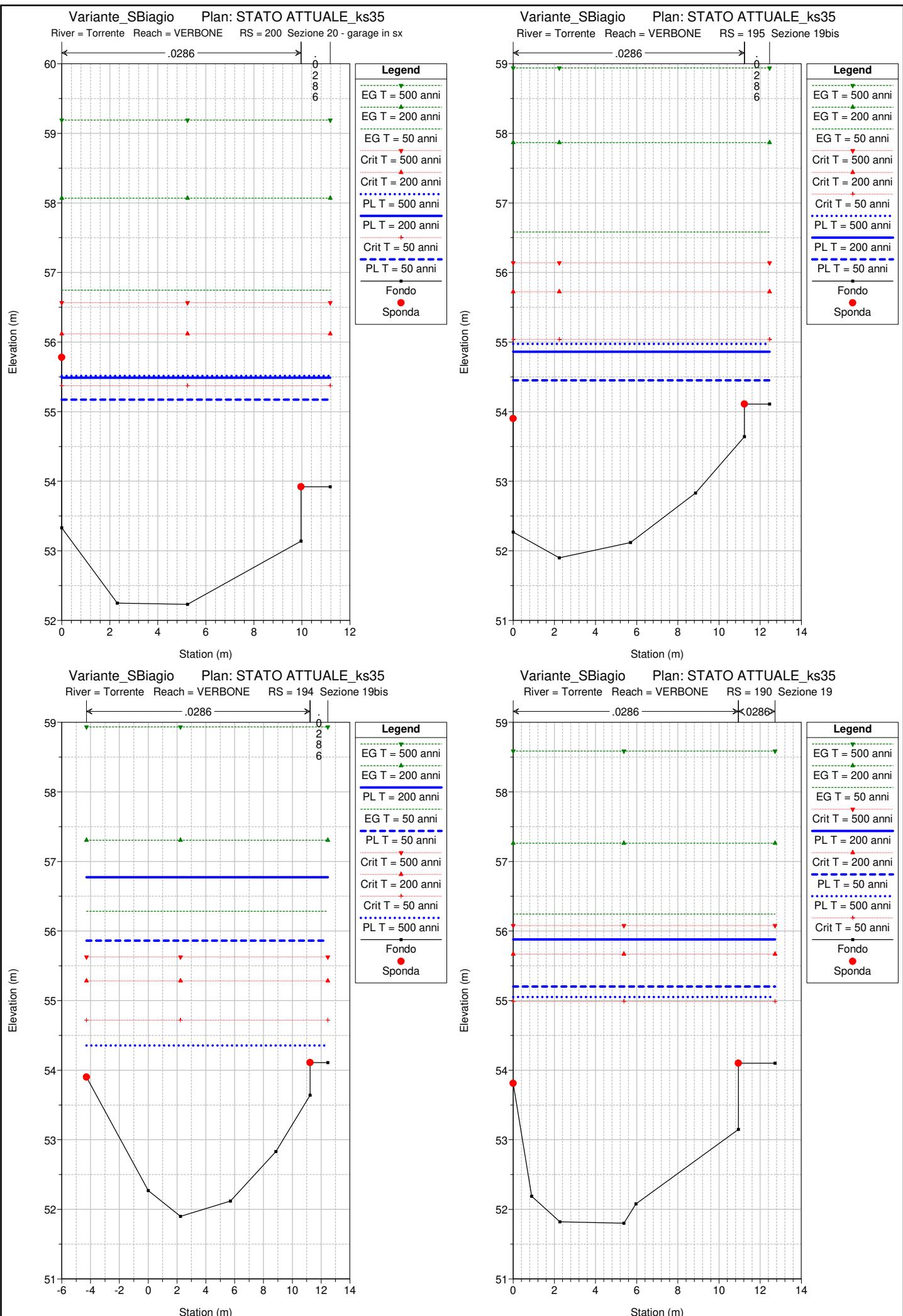




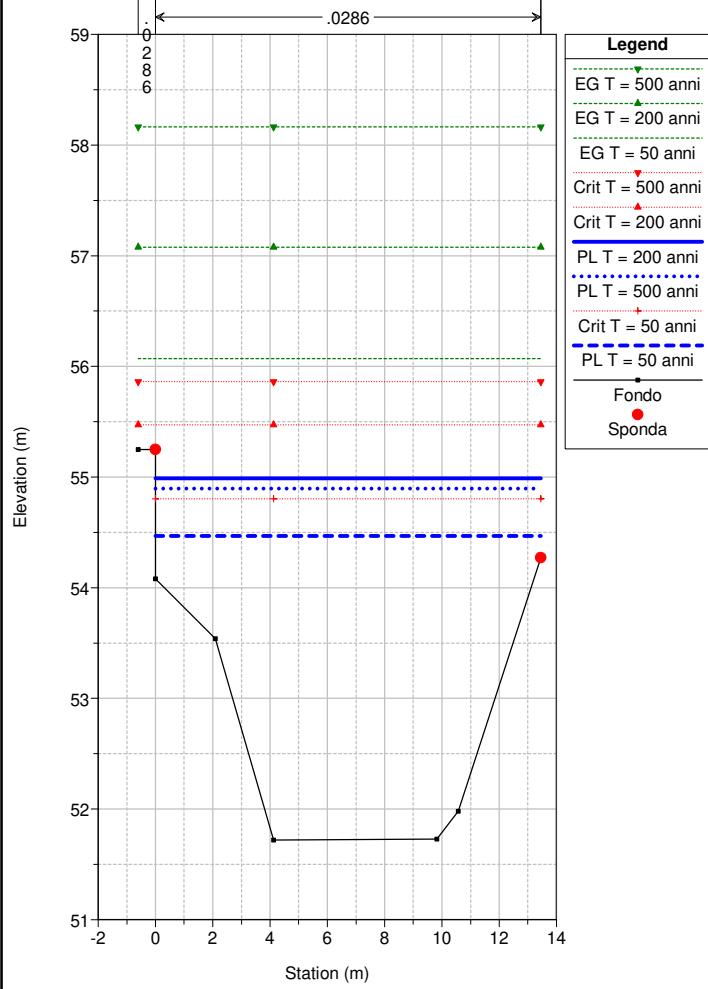




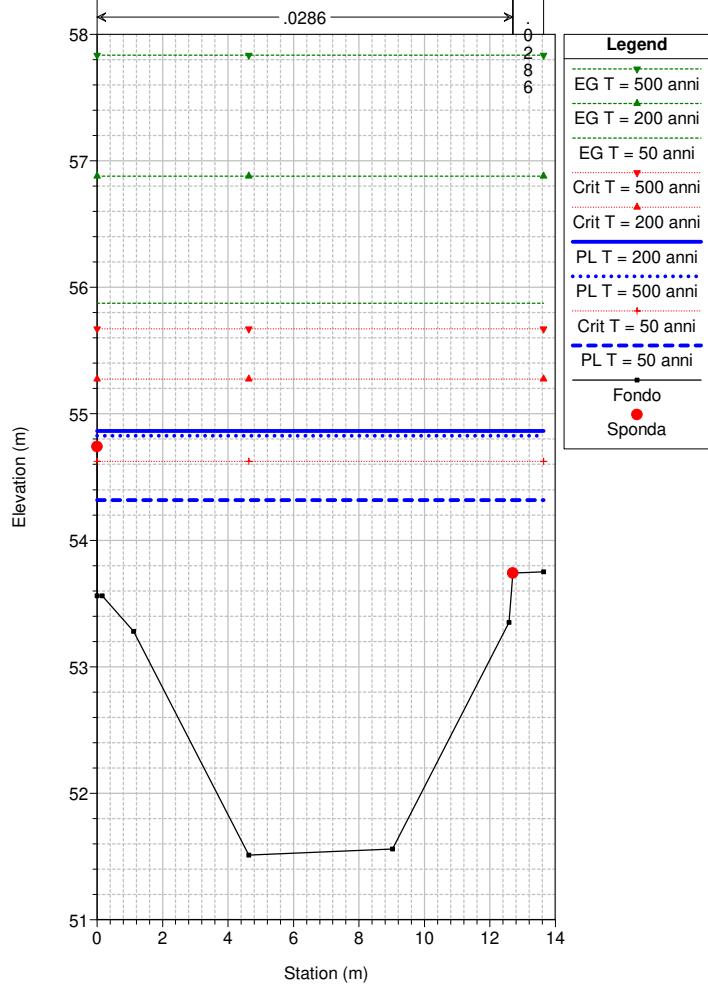




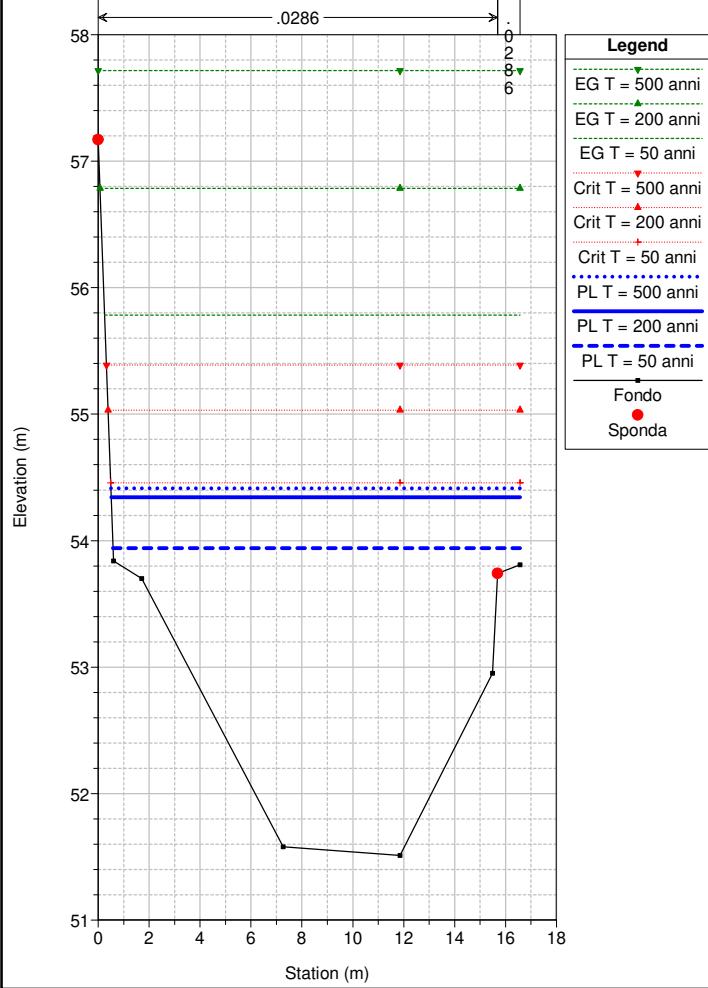
Variante_SBiagio Plan: STATO ATTUALE_ks35
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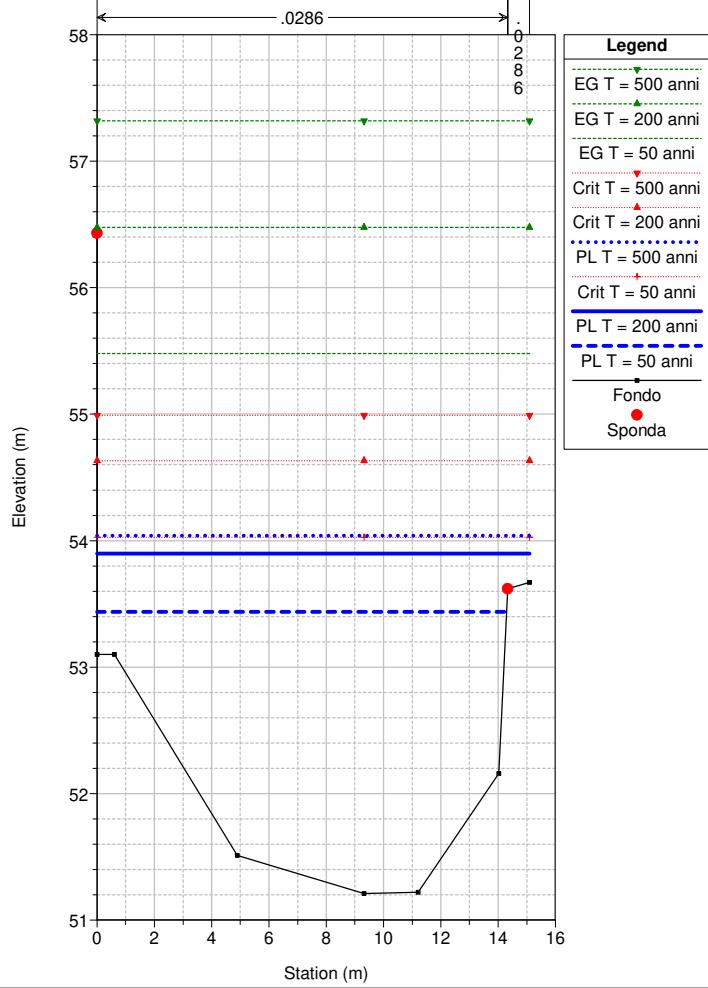
Variante_SBiagio Plan: STATO ATTUALE_ks35
River = Torrente Reach = VERBONE RS = 175 Sezione 17 bis

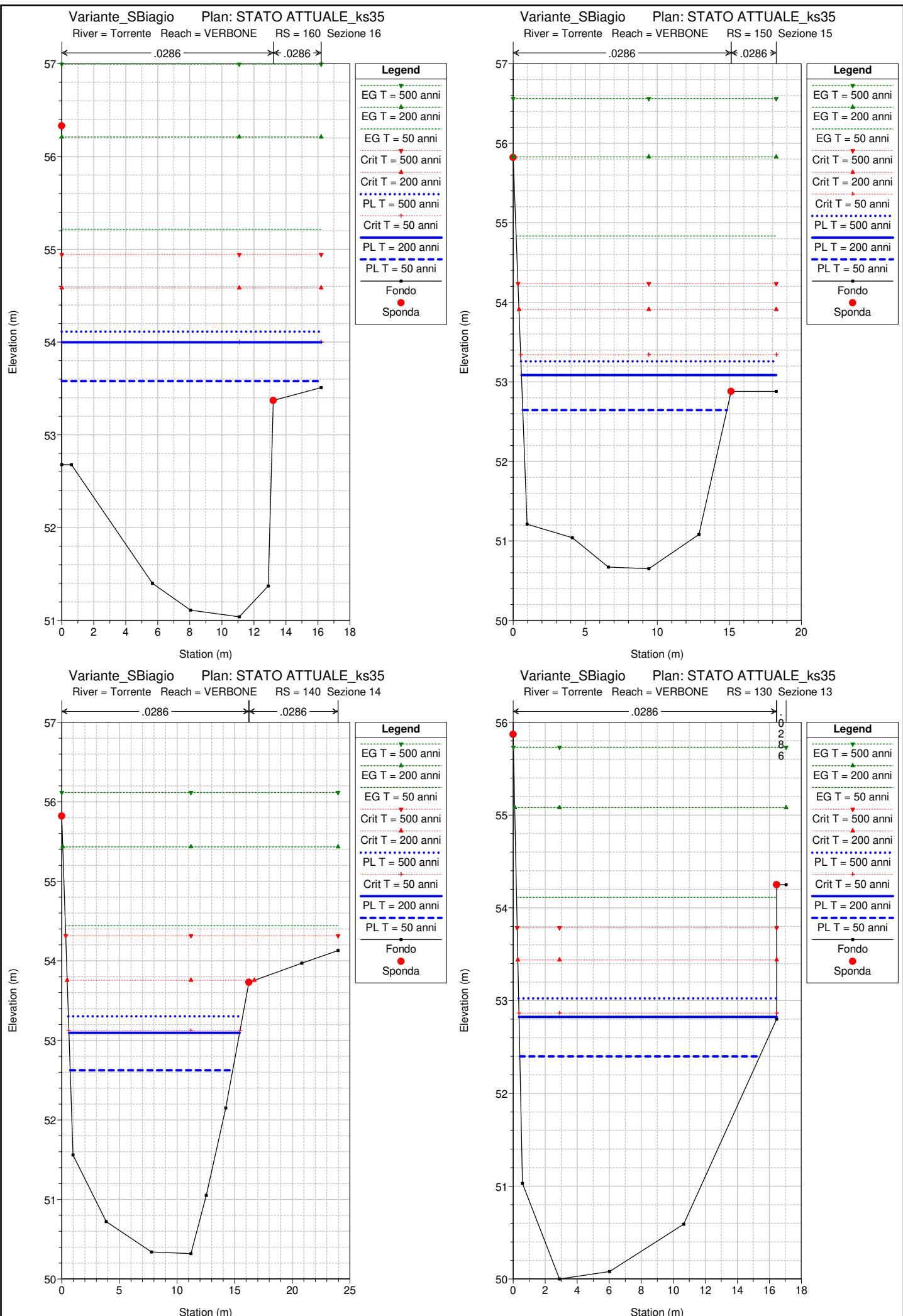


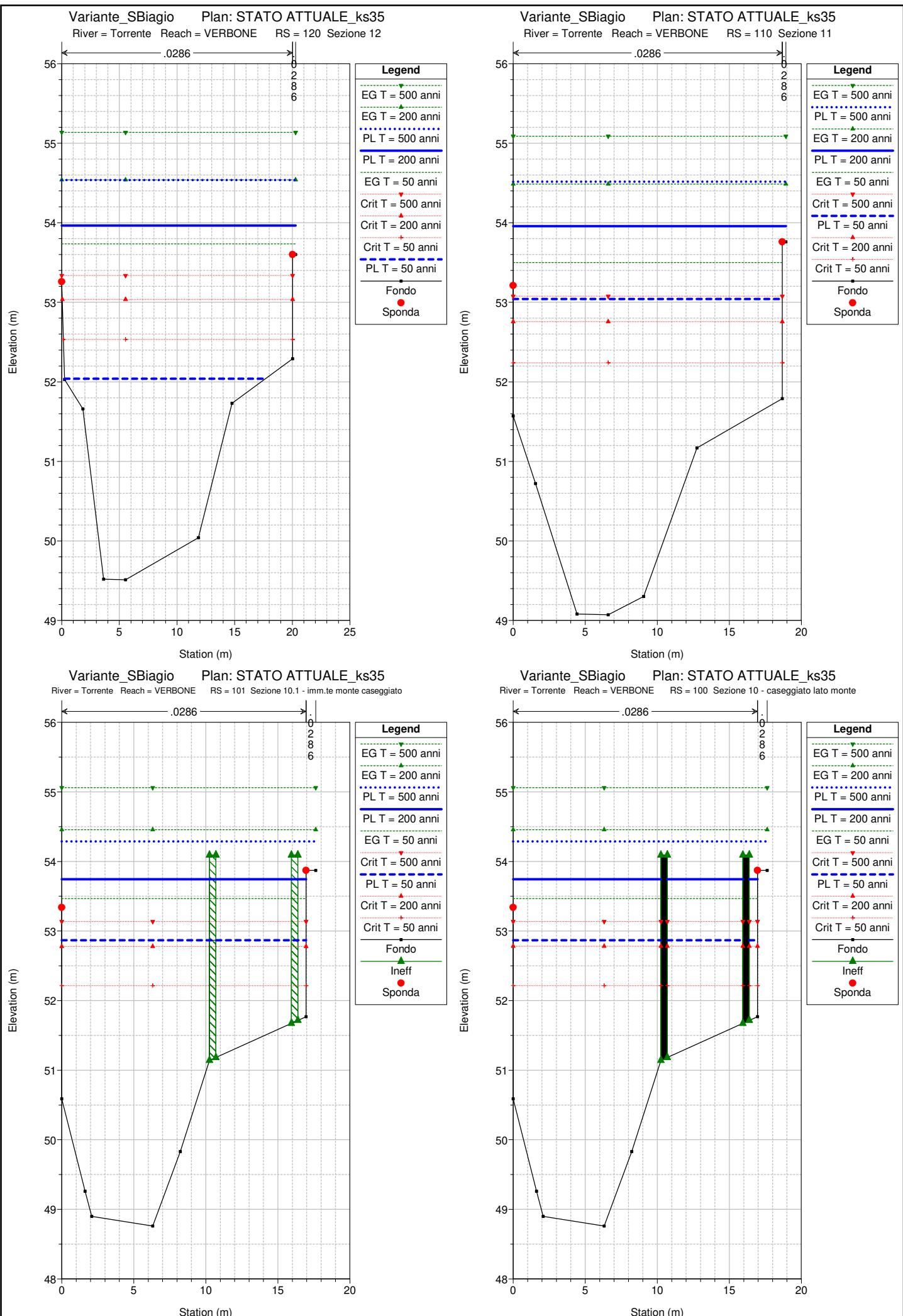
Variante_SBiagio Plan: STATO ATTUALE_ks35
River = Torrente Reach = VERBONE RS = 170 Sezione 17



Variante_SBiagio Plan: STATO ATTUALE_ks35
River = Torrente Reach = VERBONE RS = 165 Sezione 16 bis

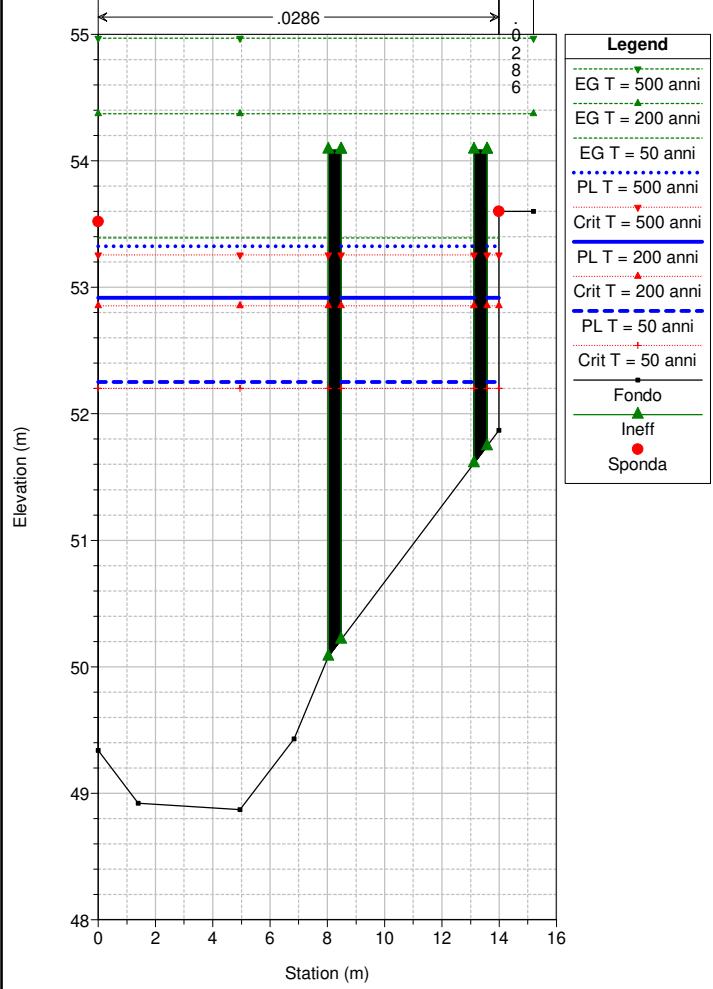






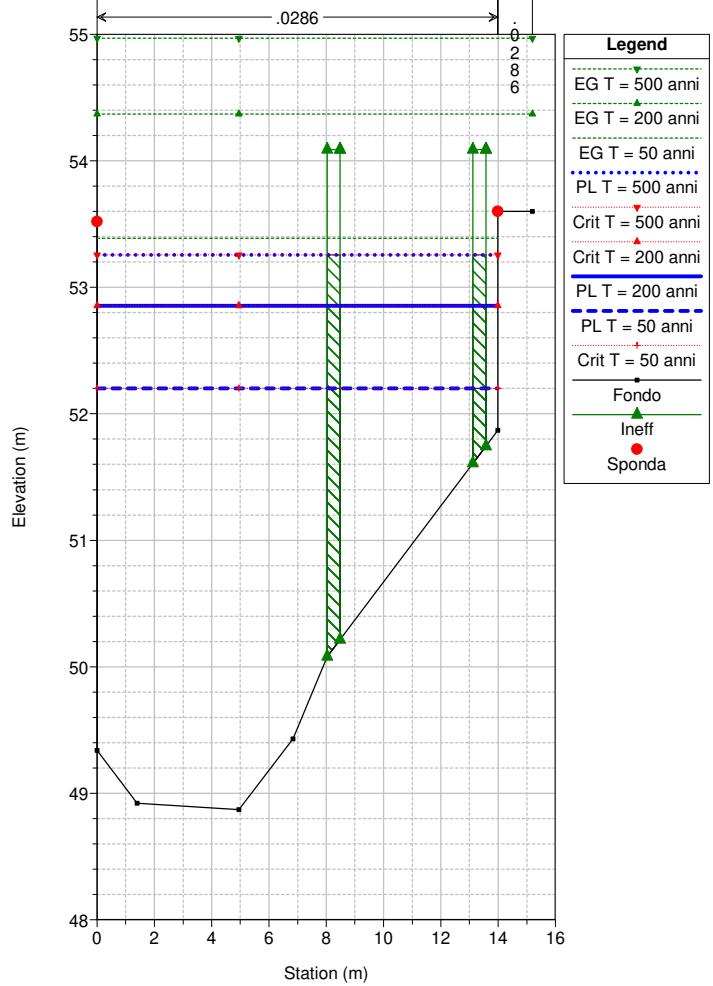
Variante_SBiagio Plan: STATO ATTUALE_ks35

River = Torrente Reach = VERBONE RS = 90 Sezione 9 - caseggiato lato valle



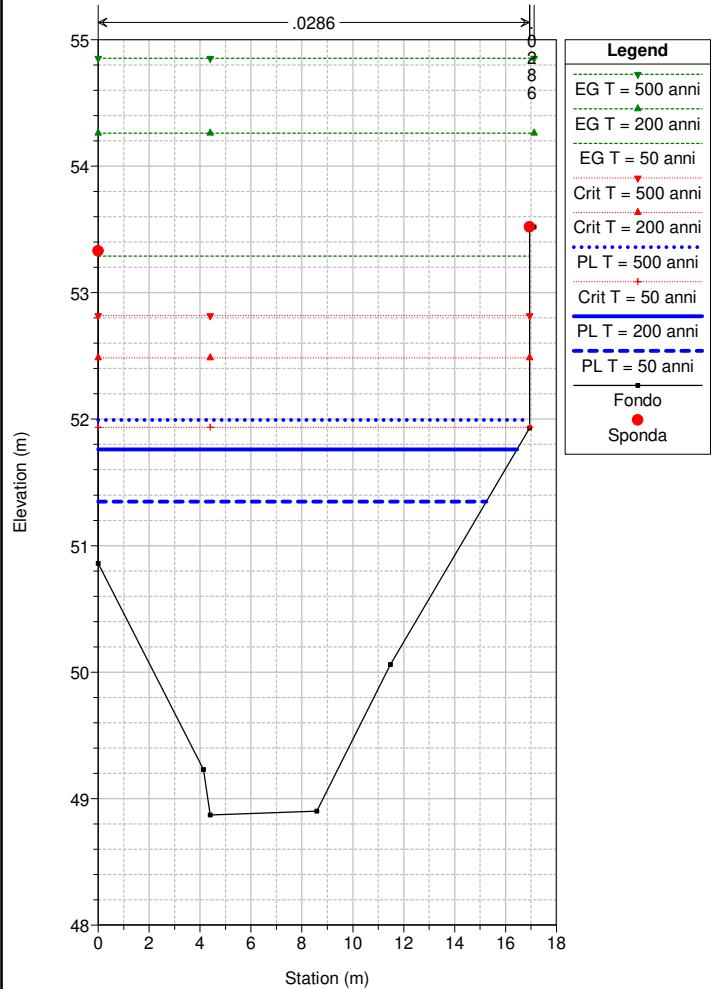
Variante_SBiagio Plan: STATO ATTUALE_ks35

River = Torrente Reach = VERBONE RS = 89.9 Sezione 8.9 - imm.te valle caseggiato



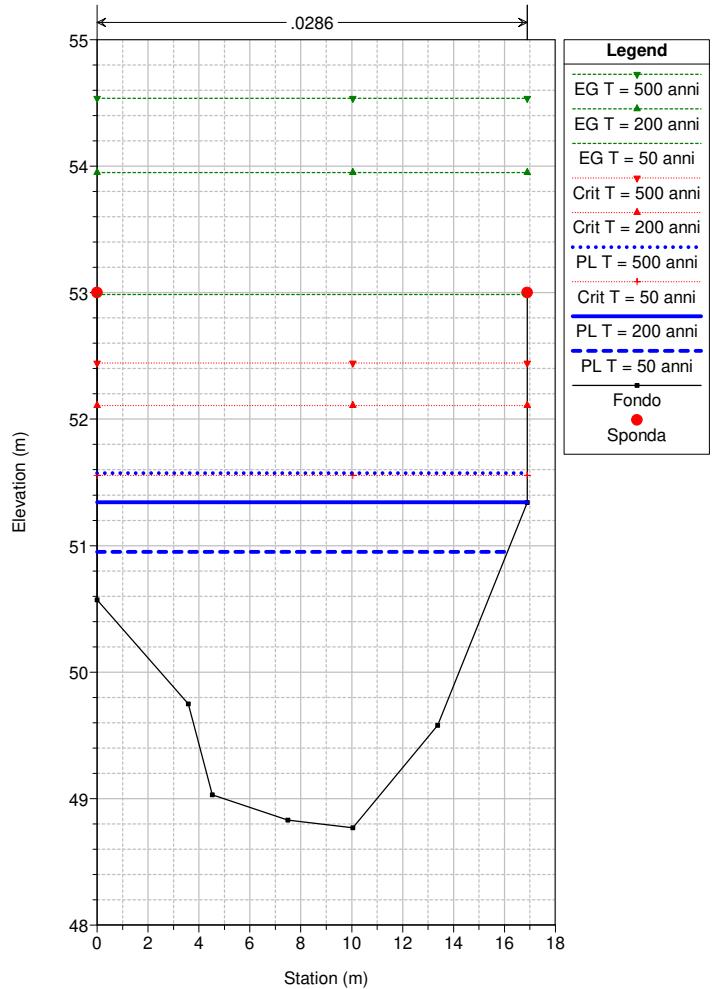
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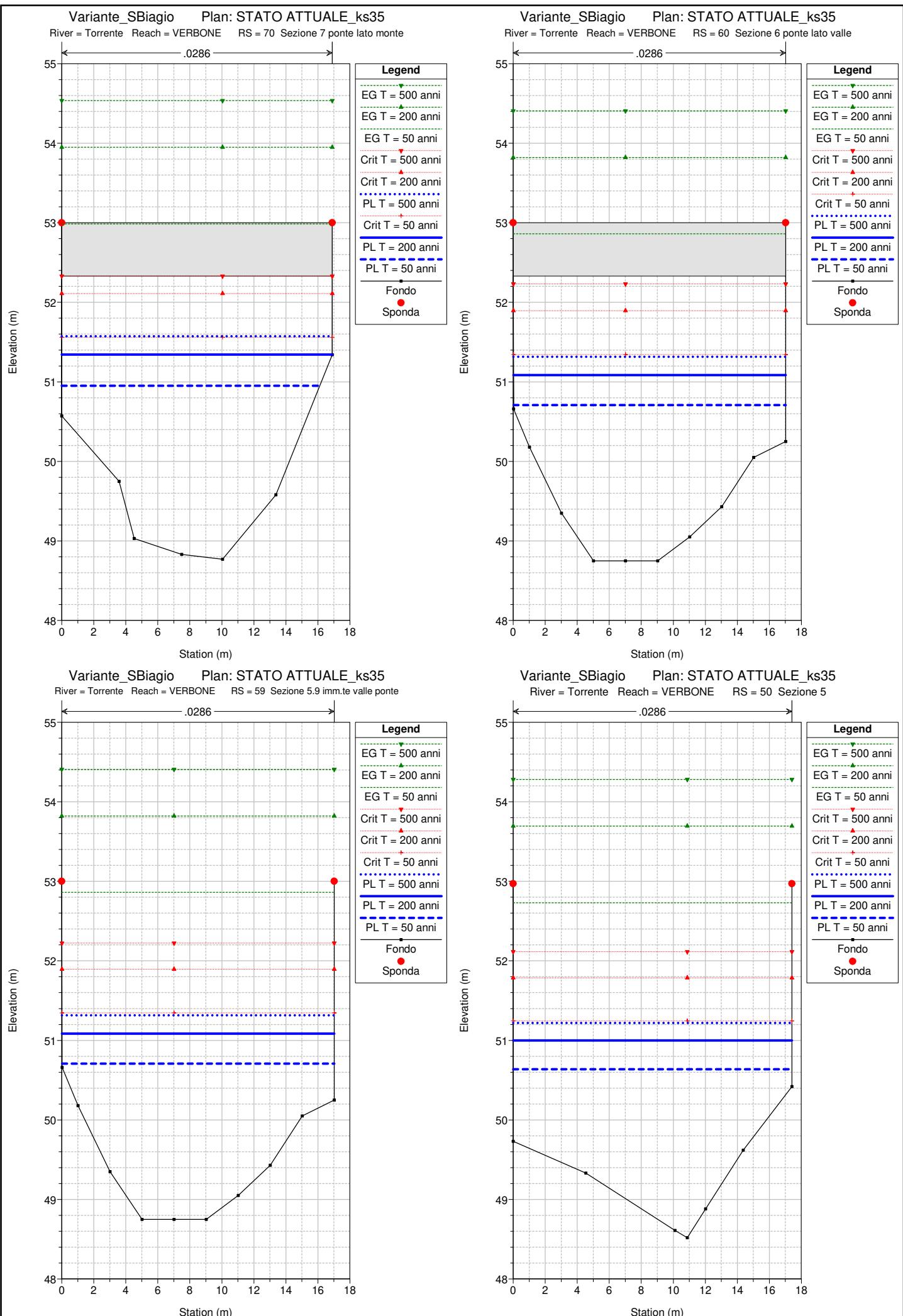
River = Torrente Reach = VERBONE RS = 80 Sezione 8



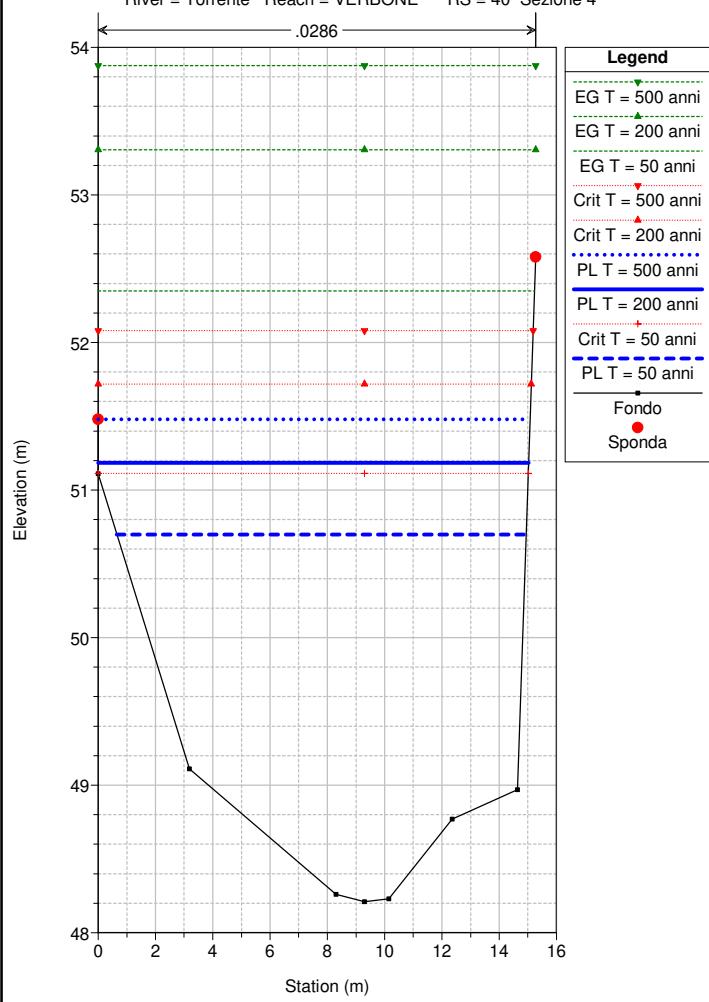
Variante_SBiagio Plan: STATO ATTUALE_ks35

River = Torrente Reach = VERBONE RS = 71 Sezione 7 imm.te monte ponte

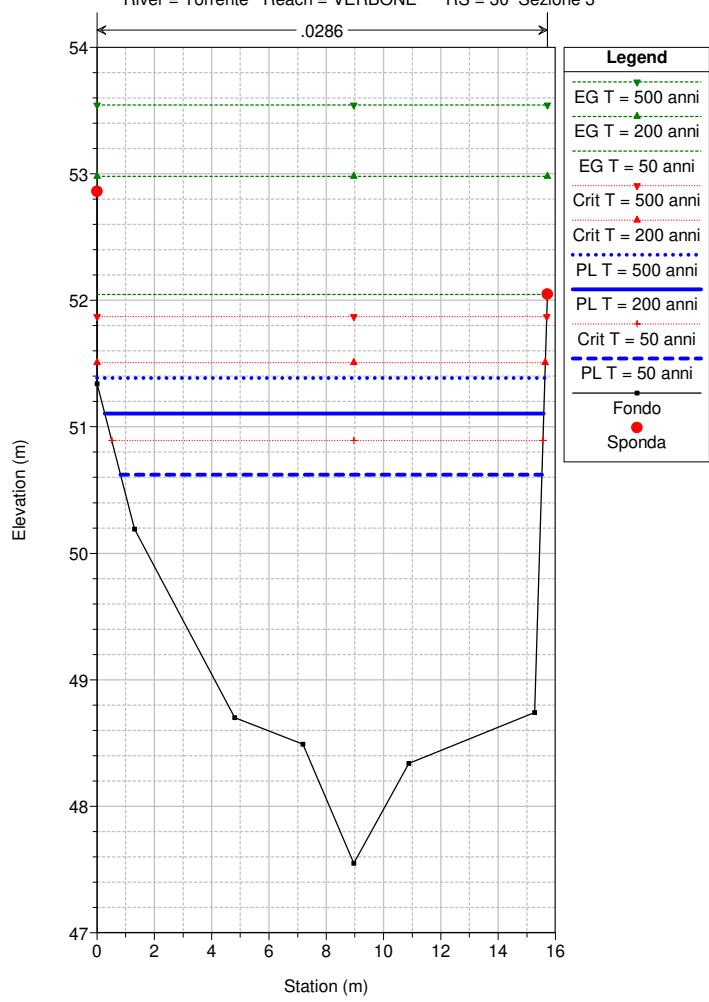




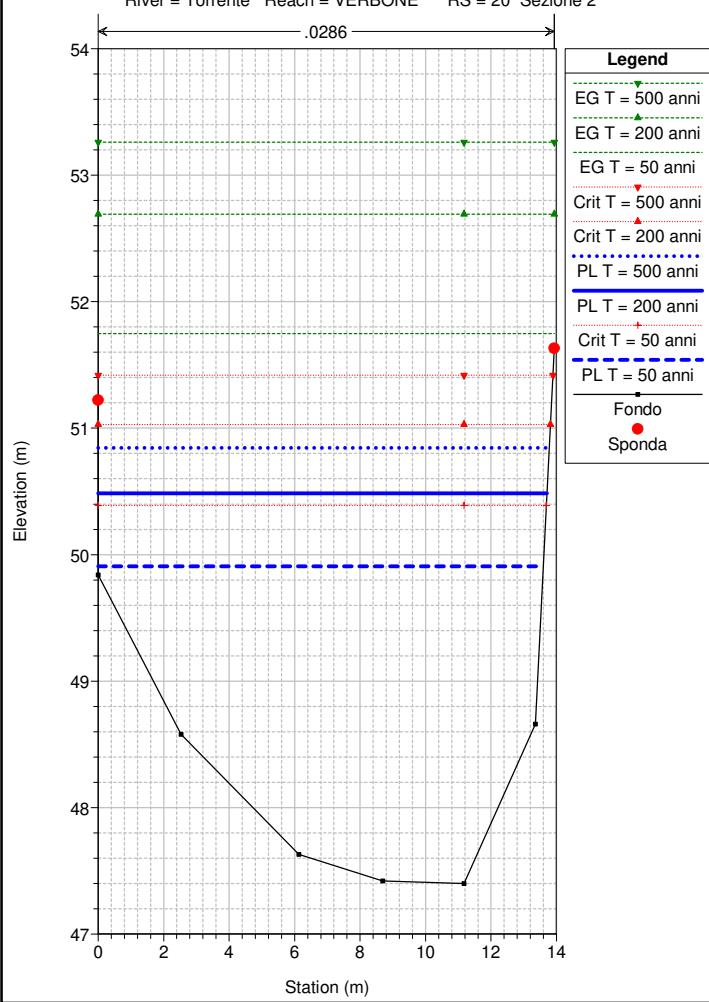
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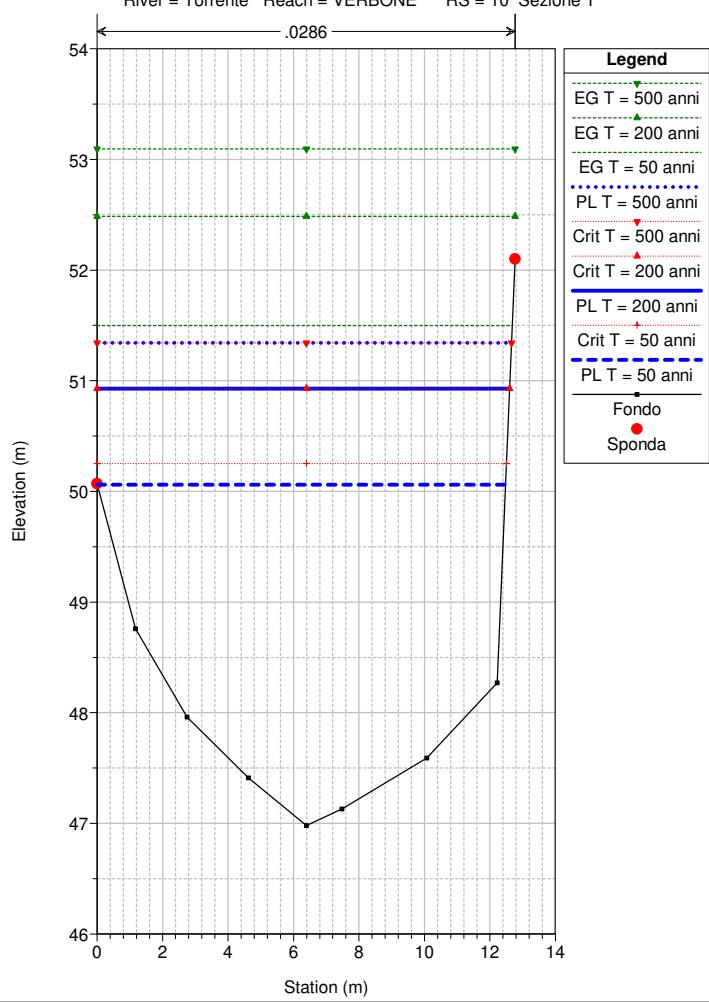
Variante_SBiagio Plan: STATO ATTUALE_ks35
River = Torrente Reach = VERBONE RS = 30 Sezione 3



Variante_SBiagio Plan: STATO ATTUALE_ks35
River = Torrente Reach = VERBONE RS = 20 Sezione 2



Variante_SBiagio Plan: STATO ATTUALE_ks35
River = Torrente Reach = VERBONE RS = 10 Sezione 1



HEC-RAS Plan: Attuale_ks35 River: Torrente Reach: VERBONE

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
VERBONE	380	T = 50 anni	149.00	55.59	58.73	58.90	0.17	59.63	0.90	58.73	59.62	0.007130	4.18	35.63	20.02	1.00
VERBONE	380	T = 200 anni	215.00	55.59	59.54	58.90	-0.64	59.63	0.09	59.26	60.38	0.004913	4.05	53.02	22.90	0.85
VERBONE	380	T = 500 anni	259.00	55.59	60.07	58.90	-1.17	59.63	-0.44	59.57	60.87	0.003836	3.97	65.18	23.24	0.76
VERBONE	371	T = 50 anni	149.00	55.25	58.89	59.90	1.01	59.89	1.00	58.10	59.44	0.002922	3.28	45.44	15.91	0.62
VERBONE	371	T = 200 anni	215.00	55.25	59.52	59.90	0.38	59.89	0.37	58.68	60.29	0.003391	3.87	55.50	16.00	0.66
VERBONE	371	T = 500 anni	259.00	55.25	59.86	59.90	0.04	59.89	0.03	59.03	60.78	0.003764	4.25	60.90	16.05	0.70
VERBONE	370	T = 50 anni	149.00	55.25	58.89	59.25	0.36	59.25	0.36	58.11	59.44	0.002922	3.28	45.44	15.91	0.62
VERBONE	370	T = 200 anni	215.00	55.25	59.39	59.25	-0.14	59.25	-0.14	58.69	60.29	0.009257	4.21	51.11		0.66
VERBONE	370	T = 500 anni	259.00	55.25	59.47	59.25	-0.22	59.25	-0.22	59.04	60.78	0.013434	5.07	51.11		0.79
VERBONE	360	T = 50 anni	149.00	55.18	58.91	59.25	0.34	59.27	0.36	58.05	59.43	0.002811	3.18	46.86	15.95	0.59
VERBONE	360	T = 200 anni	215.00	55.18	59.38	59.25	-0.13	59.27	-0.11	58.62	60.24	0.008847	4.11	52.34		0.64
VERBONE	360	T = 500 anni	259.00	55.18	59.46	59.25	-0.21	59.27	-0.19	58.97	60.71	0.012839	4.95	52.34		0.76
VERBONE	359	T = 50 anni	149.00	55.18	58.91	59.91	1.00	59.94	1.03	58.04	59.43	0.002811	3.18	46.86	15.95	0.59
VERBONE	359	T = 200 anni	215.00	55.18	59.49	59.91	0.42	59.94	0.45	58.61	60.24	0.003459	3.84	56.06	15.95	0.65
VERBONE	359	T = 500 anni	259.00	55.18	59.77	59.91	0.14	59.94	0.17	58.96	60.70	0.004015	4.28	60.55	15.95	0.70
VERBONE	350	T = 50 anni	149.00	55.07	58.74	60.29	1.55	59.23	0.49	58.27	59.40	0.003974	3.60	41.39	18.02	0.76
VERBONE	350	T = 200 anni	215.00	55.07	59.45	60.29	0.84	59.23	-0.22	58.93	60.21	0.003932	3.86	55.63	21.48	0.77
VERBONE	350	T = 500 anni	259.00	55.07	59.84	60.29	0.45	59.23	-0.61	59.29	60.67	0.003764	4.04	64.15	22.04	0.76
VERBONE	340	T = 50 anni	149.00	54.86	58.29	58.76	0.47	59.13	0.84	58.29	59.35	0.007358	4.56	32.70	15.73	1.01
VERBONE	340	T = 200 anni	215.00	54.86	58.98	58.76	-0.22	59.13	0.15	58.98	60.16	0.007020	4.83	44.56	18.89	1.00
VERBONE	340	T = 500 anni	259.00	54.86	59.30	58.76	-0.54	59.13	-0.17	59.30	60.63	0.006943	5.09	50.85	19.28	1.00
VERBONE	330	T = 50 anni	149.00	54.56	57.37	58.49	1.12	59.47	2.10	57.82	59.13	0.015786	5.88	25.34	14.64	1.43
VERBONE	330	T = 200 anni	215.00	54.56	58.04	58.49	0.45	59.47	1.43	58.42	59.94	0.012444	6.11	35.17	14.64	1.26
VERBONE	330	T = 500 anni	259.00	54.56	58.52	58.49	-0.03	59.47	0.95	58.80	60.43	0.010322	6.12	42.29	14.64	1.15
VERBONE	320	T = 50 anni	149.00	54.53	57.51	58.88	1.37	58.68	1.17	57.73	58.88	0.010988	5.19	28.69	14.50	1.18
VERBONE	320	T = 200 anni	215.00	54.53	58.35	58.88	0.53	58.68	0.33	58.35	59.76	0.007984	5.26	40.85	14.50	1.00
VERBONE	320	T = 500 anni	259.00	54.53	58.74	58.88	0.14	58.68	-0.06	58.74	60.31	0.008082	5.55	46.63	14.95	1.00
VERBONE	310	T = 50 anni	149.00	54.10	56.52	57.94	1.42	58.47	1.95	57.14	58.55	0.018995	6.30	23.64	14.22	1.56
VERBONE	310	T = 200 anni	215.00	54.10	57.04	57.94	0.90	58.47	1.43	57.74	59.44	0.017996	6.87	31.32	15.60	1.55
VERBONE	310	T = 500 anni	259.00	54.10	59.40	57.94	-1.46	58.47	-0.93	58.08	60.08	0.002469	3.66	70.77	16.81	0.57
VERBONE	300	T = 50 anni	149.00	53.99	56.98	57.48	0.50	58.62	1.64	57.10	58.22	0.009646	4.94	30.17	14.43	1.09
VERBONE	300	T = 200 anni	215.00	53.99	57.63	57.48	-0.15	58.62	0.99	57.71	59.12	0.008904	5.41	39.73	14.66	1.05
VERBONE	300	T = 500 anni	259.00	53.99	59.14	57.48	-1.66	58.62	-0.52	58.08	60.03	0.003583	4.18	61.94	14.77	0.65
VERBONE	290	T = 50 anni	149.00	53.60	56.57	56.35	-0.22	58.37	1.80	56.78	57.99	0.010978	5.29	28.16	13.09	1.15
VERBONE	290	T = 200 anni	215.00	53.60	57.43	56.35	-1.08	58.37	0.94	57.43	58.94	0.008449	5.44	39.54	13.19	1.00
VERBONE	290	T = 500 anni	259.00	53.60	59.01	56.35	-2.66	58.37	-0.64	57.82	59.94	0.003696	4.28	60.45	13.30	0.64
VERBONE	280	T = 50 anni	149.00	53.54	55.73	56.05	0.32	57.88	2.15	56.36	57.67	0.018749	6.16	24.17	14.42	1.52
VERBONE	280	T = 200 anni	215.00	53.54	58.11	56.05	-2.06	57.88	-0.23	56.88	58.64	0.002257	3.21	66.89	18.51	0.54
VERBONE	280	T = 500 anni	259.00	53.54	59.48	56.05	-3.43	57.88	-1.60	57.20	59.88	0.001291	2.81	92.21	18.51	0.40

HEC-RAS Plan: Attuale_ks35 River: Torrente Reach: VERBONE (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
VERBONE	270	T = 50 anni	149.00	53.30	55.63	56.08	0.45	57.33	1.70	56.15	57.41	0.014178	5.90	25.26	16.98	1.43
VERBONE	270	T = 200 anni	215.00	53.30	58.11	56.08	-2.03	57.33	-0.78	56.71	58.62	0.002182	3.14	68.53	19.41	0.53
VERBONE	270	T = 500 anni	259.00	53.30	59.49	56.08	-3.41	57.33	-2.16	57.05	59.87	0.001209	2.72	95.30	19.41	0.39
VERBONE	260	T = 50 anni	149.00	53.30	55.57	56.10	0.53	57.23	1.66	56.12	57.41	0.017407	6.01	24.80	14.45	1.46
VERBONE	260	T = 200 anni	215.00	53.30	58.13	56.10	-2.03	57.23	-0.90	56.68	58.61	0.002107	3.08	69.90	19.50	0.52
VERBONE	260	T = 500 anni	259.00	53.30	59.50	56.10	-3.40	57.23	-2.27	57.01	59.87	0.001186	2.68	96.61	19.50	0.38
VERBONE	251	T = 50 anni	149.00	52.93	56.64	56.57	-0.07	56.92	0.28	55.65	57.11	0.002595	3.05	48.87	16.68	0.56
VERBONE	251	T = 200 anni	215.00	52.93	58.17	56.57	-1.60	56.92	-1.25	56.22	58.59	0.001648	2.89	74.27	16.68	0.44
VERBONE	251	T = 500 anni	259.00	52.93	59.49	56.57	-2.92	56.92	-2.57	56.57	59.86	0.001147	2.69	96.32	16.68	0.36
VERBONE	250	T = 50 anni	149.00	52.93	56.36	55.80	-0.56	56.06	-0.30	55.66	57.11	0.012758	3.84	38.85		0.66
VERBONE	250	T = 200 anni	215.00	52.93	57.93	55.80	-2.13	56.06	-1.87	55.94	58.59	0.010100	3.61	59.59	16.68	0.52
VERBONE	250	T = 500 anni	259.00	52.93	59.37	55.80	-3.57	56.06	-3.31	55.99	59.85	0.004744	3.10	83.59	16.68	0.39
VERBONE	240	T = 50 anni	149.00	52.78	56.24	55.80	-0.44	56.21	-0.03	55.63	57.07	0.013585	4.03	36.96		0.69
VERBONE	240	T = 200 anni	215.00	52.78	57.69	55.80	-1.89	56.21	-1.48	55.93	58.55	0.013889	4.11	52.28	14.87	0.59
VERBONE	240	T = 500 anni	259.00	52.78	59.23	55.80	-3.43	56.21	-3.02	55.98	59.84	0.005984	3.44	75.25	14.87	0.43
VERBONE	239	T = 50 anni	149.00	52.78	56.47	56.54	0.07	56.84	0.37	55.64	57.06	0.003304	3.42	43.57	14.87	0.62
VERBONE	239	T = 200 anni	215.00	52.78	58.00	56.54	-1.46	56.84	-1.16	56.26	58.54	0.002141	3.24	66.28	14.87	0.49
VERBONE	239	T = 500 anni	259.00	52.78	59.38	56.54	-2.84	56.84	-2.54	56.66	59.83	0.001472	2.99	86.71	14.87	0.39
VERBONE	230	T = 50 anni	149.00	52.67	56.43	56.74	0.31	56.60	0.17	55.38	57.02	0.003149	3.41	43.71	12.67	0.59
VERBONE	230	T = 200 anni	215.00	52.67	57.91	56.74	-1.17	56.60	-1.31	56.06	58.51	0.002417	3.44	62.47	12.67	0.49
VERBONE	230	T = 500 anni	259.00	52.67	59.27	56.74	-2.53	56.60	-2.67	56.46	59.81	0.001814	3.25	79.78	12.67	0.41
VERBONE	221	T = 50 anni	149.00	52.56	56.17	56.43	0.26	56.63	0.46	55.51	56.99	0.002839	4.01	37.12	12.74	0.71
VERBONE	221	T = 200 anni	215.00	52.56	57.76	56.43	-1.33	56.63	-1.13	56.23	58.49	0.003183	3.77	56.96	12.74	0.57
VERBONE	221	T = 500 anni	259.00	52.56	59.19	56.43	-2.76	56.63	-2.56	56.77	59.80	0.002168	3.45	75.11	12.74	0.45
VERBONE	220	T = 50 anni	149.00	52.56	55.81	54.03	-1.78	53.00	-2.81	55.51	56.99	0.016026	4.80	31.02		0.85
VERBONE	220	T = 200 anni	215.00	52.56	56.03	54.03	-2.00	53.00	-3.03	55.63	58.47	0.033368	6.93	31.02		1.19
VERBONE	220	T = 500 anni	259.00	52.56	56.21	54.03	-2.18	53.00	-3.21	55.67	59.77	0.048423	8.35	31.02		1.39
VERBONE	210	T = 50 anni	149.00	52.51	55.61	54.06	-1.55	53.00	-2.61	55.60	56.93	0.007223	5.08	29.31	9.06	0.92
VERBONE	210	T = 200 anni	215.00	52.51	55.62	54.06	-1.56	53.00	-2.62	55.62	58.35	0.019427	7.33	29.35	6.23	1.33
VERBONE	210	T = 500 anni	259.00	52.51	55.63	54.06	-1.57	53.00	-2.63	55.63	59.58	0.038003	8.81	29.40	3.71	1.59
VERBONE	209	T = 50 anni	149.00	52.51	55.60	56.49	0.89	56.55	0.95	55.60	56.93	0.005998	5.12	29.13	12.33	1.00
VERBONE	209	T = 200 anni	215.00	52.51	55.62	56.49	0.87	56.55	0.93	56.34	58.35	0.012201	7.33	29.33	12.33	1.43
VERBONE	209	T = 500 anni	259.00	52.51	55.62	56.49	0.87	56.55	0.93	56.89	59.58	0.017663	8.82	29.35	12.33	1.72
VERBONE	200	T = 50 anni	149.00	52.23	55.17	55.78	0.61	53.92	-1.25	55.37	56.75	0.010212	5.61	27.38	11.18	1.11
VERBONE	200	T = 200 anni	215.00	52.23	55.49	55.78	0.29	53.92	-1.57	56.12	58.07	0.014915	7.20	30.88	11.18	1.35
VERBONE	200	T = 500 anni	259.00	52.23	55.51	55.78	0.27	53.92	-1.59	56.57	59.19	0.021044	8.60	31.18	11.18	1.60
VERBONE	195	T = 50 anni	149.00	51.90	54.45	53.90	-0.55	54.11	-0.34	55.04	56.58	0.018122	6.49	23.27	12.46	1.45
VERBONE	195	T = 200 anni	215.00	51.90	54.86	53.90	-0.96	54.11	-0.75	55.72	57.87	0.020903	7.73	28.39	12.46	1.58
VERBONE	195	T = 500 anni	259.00	51.90	54.97	53.90	-1.07	54.11	-0.86	56.14	58.94	0.026256	8.88	29.81	12.46	1.77

HEC-RAS Plan: Attuale_ks35 River: Torrente Reach: VERBONE (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
VERBONE	194	T = 50 anni	149.00	51.90	55.86	53.90	-1.96	54.11	-1.75	54.72	56.28	0.001788	2.89	52.77	16.74	0.51
VERBONE	194	T = 200 anni	215.00	51.90	56.77	53.90	-2.87	54.11	-2.66	55.28	57.30	0.001738	3.25	68.02	16.74	0.51
VERBONE	194	T = 500 anni	259.00	51.90	54.35	53.90	-0.45	54.11	-0.24	55.63	58.93	0.039319	9.49	27.51	16.74	2.29
VERBONE	190	T = 50 anni	149.00	51.80	55.20	53.81	-1.39	54.10	-1.10	54.99	56.24	0.006009	4.57	33.65	12.72	0.86
VERBONE	190	T = 200 anni	215.00	51.80	55.88	53.81	-2.07	54.10	-1.78	55.67	57.26	0.006457	5.29	42.26	12.72	0.89
VERBONE	190	T = 500 anni	259.00	51.80	55.05	53.81	-1.24	54.10	-0.95	56.08	58.59	0.021531	8.41	31.74	12.72	1.62
VERBONE	180	T = 50 anni	149.00	51.72	54.47	55.25	0.78	54.27	-0.20	54.80	56.07	0.012715	5.61	26.55	13.45	1.27
VERBONE	180	T = 200 anni	215.00	51.72	54.99	55.25	0.26	54.27	-0.72	55.47	57.08	0.013193	6.40	33.58	13.45	1.29
VERBONE	180	T = 500 anni	259.00	51.72	54.90	55.25	0.35	54.27	-0.63	55.86	58.17	0.021401	8.01	32.33	13.45	1.65
VERBONE	175	T = 50 anni	149.00	51.51	54.32	54.74	0.42	53.74	-0.58	54.62	55.87	0.011275	5.54	27.24	13.64	1.22
VERBONE	175	T = 200 anni	215.00	51.51	54.86	54.74	-0.12	53.74	-1.12	55.27	56.88	0.011322	6.32	34.67	13.64	1.24
VERBONE	175	T = 500 anni	259.00	51.51	54.83	54.74	-0.09	53.74	-1.09	55.67	57.84	0.017163	7.72	34.17	13.64	1.53
VERBONE	170	T = 50 anni	149.00	51.51	53.94	57.17	3.23	53.74	-0.20	54.46	55.78	0.017210	6.02	24.89	15.99	1.50
VERBONE	170	T = 200 anni	215.00	51.51	54.34	57.17	2.83	53.74	-0.60	55.03	56.79	0.017678	6.94	31.30	16.06	1.56
VERBONE	170	T = 500 anni	259.00	51.51	54.41	57.17	2.76	53.74	-0.67	55.39	57.72	0.022967	8.07	32.45	16.07	1.78
VERBONE	165	T = 50 anni	149.00	51.21	53.44	56.43	2.99	53.62	0.18	54.03	55.48	0.019767	6.33	23.54	14.29	1.57
VERBONE	165	T = 200 anni	215.00	51.21	53.90	56.43	2.53	53.62	-0.28	54.63	56.48	0.018948	7.12	30.35	15.10	1.57
VERBONE	165	T = 500 anni	259.00	51.21	54.04	56.43	2.39	53.62	-0.42	54.99	57.32	0.022396	8.03	32.46	15.10	1.71
VERBONE	160	T = 50 anni	149.00	51.04	53.58	56.33	2.75	53.37	-0.21	54.00	55.22	0.013717	5.68	26.58	16.20	1.29
VERBONE	160	T = 200 anni	215.00	51.04	54.00	56.33	2.33	53.37	-0.63	54.58	56.21	0.015090	6.65	33.34	16.20	1.37
VERBONE	160	T = 500 anni	259.00	51.04	54.11	56.33	2.22	53.37	-0.74	54.94	57.00	0.018681	7.60	35.23	16.20	1.53
VERBONE	150	T = 50 anni	149.00	50.65	52.64	55.82	3.18	52.88	0.24	53.34	54.83	0.021912	6.56	22.72	14.16	1.65
VERBONE	150	T = 200 anni	215.00	50.65	53.08	55.82	2.74	52.88	-0.20	53.91	55.83	0.021250	7.36	29.71	17.68	1.66
VERBONE	150	T = 500 anni	259.00	50.65	53.26	55.82	2.56	52.88	-0.38	54.24	56.56	0.023346	8.10	32.79	17.72	1.76
VERBONE	140	T = 50 anni	149.00	50.32	52.62	55.82	3.19	53.73	1.11	53.12	54.44	0.015820	5.97	24.95	14.10	1.43
VERBONE	140	T = 200 anni	215.00	50.32	53.09	55.82	2.73	53.73	0.64	53.75	55.43	0.016339	6.77	31.74	14.81	1.48
VERBONE	140	T = 500 anni	259.00	50.32	53.30	55.82	2.52	53.73	0.43	54.32	56.12	0.018138	7.43	34.84	15.12	1.56
VERBONE	130	T = 50 anni	149.00	50.00	52.40	55.87	3.47	54.25	1.85	52.86	54.11	0.015589	5.80	25.69	14.98	1.41
VERBONE	130	T = 200 anni	215.00	50.00	52.82	55.87	3.05	54.25	1.43	53.44	55.08	0.017054	6.66	32.30	16.08	1.50
VERBONE	130	T = 500 anni	259.00	50.00	53.02	55.87	2.85	54.25	1.23	53.78	55.73	0.018554	7.29	35.52	16.11	1.57
VERBONE	120	T = 50 anni	149.00	49.51	52.04	53.26	1.22	53.60	1.56	52.53	53.74	0.018043	5.77	25.82	17.42	1.51
VERBONE	120	T = 200 anni	215.00	49.51	53.96	53.26	-0.70	53.60	-0.36	53.04	54.54	0.002586	3.36	64.02	20.28	0.60
VERBONE	120	T = 500 anni	259.00	49.51	54.54	53.26	-1.28	53.60	-0.94	53.34	55.14	0.002232	3.43	75.64	20.28	0.56
VERBONE	110	T = 50 anni	149.00	49.07	53.04	53.21	0.17	53.76	0.72	52.24	53.50	0.002563	3.00	49.69	18.67	0.59
VERBONE	110	T = 200 anni	215.00	49.07	53.96	53.21	-0.75	53.76	-0.20	52.76	54.49	0.002187	3.22	66.82	18.92	0.54
VERBONE	110	T = 500 anni	259.00	49.07	54.52	53.21	-1.31	53.76	-0.76	53.08	55.09	0.002016	3.35	77.40	18.92	0.53
VERBONE	101	T = 50 anni	149.00	48.76	52.87	53.34	0.47	53.87	1.00	52.21	53.47	0.003589	3.43	43.43	16.95	0.67
VERBONE	101	T = 200 anni	215.00	48.76	53.74	53.34	-0.40	53.87	0.13	52.78	54.46	0.003271	3.74	57.48	16.95	0.63
VERBONE	101	T = 500 anni	259.00	48.76	54.29	53.34	-0.95	53.87	-0.42	53.14	55.06	0.003205	3.90	66.69	17.62	0.63

HEC-RAS Plan: Attuale_ks35 River: Torrente Reach: VERBONE (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
VERBONE	100	T = 50 anni	149.00	48.76	52.87	53.34	0.47	53.87	1.00	52.21	53.47	0.004978	3.43	43.43	16.05	0.67
VERBONE	100	T = 200 anni	215.00	48.76	53.74	53.34	-0.40	53.87	0.13	52.78	54.46	0.005182	3.74	57.48	16.05	0.63
VERBONE	100	T = 500 anni	259.00	48.76	54.29	53.34	-0.95	53.87	-0.42	53.14	55.06	0.005220	3.90	66.70	17.62	0.63
VERBONE	90	T = 50 anni	149.00	48.87	52.25	53.52	1.27	53.60	1.35	52.20	53.39	0.011501	4.73	31.52	13.09	0.97
VERBONE	90	T = 200 anni	215.00	48.87	52.92	53.52	0.60	53.60	0.68	52.85	54.37	0.013238	5.35	40.22	13.09	0.97
VERBONE	90	T = 500 anni	259.00	48.87	53.32	53.52	0.20	53.60	0.28	53.26	54.97	0.014281	5.68	45.56	13.09	0.97
VERBONE	89.9	T = 50 anni	149.00	48.87	52.20	53.52	1.32	53.60	1.40	52.20	53.39	0.008476	4.83	30.87	13.99	1.00
VERBONE	89.9	T = 200 anni	215.00	48.87	52.85	53.52	0.67	53.60	0.75	52.85	54.37	0.008640	5.46	39.41	13.99	1.00
VERBONE	89.9	T = 500 anni	259.00	48.87	53.26	53.52	0.26	53.60	0.34	53.26	54.97	0.008746	5.80	44.68	13.99	1.00
VERBONE	80	T = 50 anni	149.00	48.87	51.35	53.33	1.98	53.52	2.17	51.93	53.29	0.019028	6.17	24.14	15.25	1.57
VERBONE	80	T = 200 anni	215.00	48.87	51.76	53.33	1.57	53.52	1.76	52.48	54.26	0.020238	7.01	30.69	16.46	1.64
VERBONE	80	T = 500 anni	259.00	48.87	51.99	53.33	1.34	53.52	1.53	52.82	54.85	0.020947	7.49	34.56	16.95	1.68
VERBONE	71	T = 50 anni	149.00	48.77	50.95	53.00	2.05	53.00	2.05	51.56	52.98	0.021545	6.32	23.58	16.11	1.67
VERBONE	71	T = 200 anni	215.00	48.77	51.34	53.00	1.66	53.00	1.66	52.11	53.95	0.021929	7.15	30.06	16.89	1.71
VERBONE	71	T = 500 anni	259.00	48.77	51.57	53.00	1.43	53.00	1.43	52.44	54.54	0.021888	7.62	33.97	16.89	1.72
VERBONE	70	T = 50 anni	149.00	48.77	50.95	52.33	1.38	52.33	1.38	51.56	52.98	0.021540	6.32	23.58	16.11	1.67
VERBONE	70	T = 200 anni	215.00	48.77	51.34	52.33	0.99	52.33	0.99	52.11	53.95	0.021929	7.15	30.06	16.89	1.71
VERBONE	70	T = 500 anni	259.00	48.77	51.57	52.33	0.76	52.33	0.76	52.33	54.54	0.021888	7.62	33.97	16.89	1.72
VERBONE	60	T = 50 anni	149.00	48.75	50.71	52.33	1.62	52.33	1.62	51.34	52.86	0.025137	6.50	22.91	17.00	1.79
VERBONE	60	T = 200 anni	215.00	48.75	51.08	52.33	1.25	52.33	1.25	51.89	53.82	0.024259	7.33	29.33	17.00	1.78
VERBONE	60	T = 500 anni	259.00	48.75	51.31	52.33	1.02	52.33	1.02	52.23	54.41	0.023970	7.79	33.24	17.01	1.78
VERBONE	59	T = 50 anni	149.00	48.75	50.71	53.00	2.29	53.00	2.29	51.34	52.86	0.025137	6.50	22.91	17.00	1.79
VERBONE	59	T = 200 anni	215.00	48.75	51.08	53.00	1.92	53.00	1.92	51.89	53.82	0.024259	7.33	29.33	17.00	1.78
VERBONE	59	T = 500 anni	259.00	48.75	51.31	53.00	1.69	53.00	1.69	52.22	54.41	0.023970	7.79	33.24	17.01	1.78
VERBONE	50	T = 50 anni	149.00	48.52	50.64	52.97	2.33	52.97	2.33	51.25	52.73	0.025457	6.41	23.25	17.41	1.77
VERBONE	50	T = 200 anni	215.00	48.52	51.00	52.97	1.97	52.97	1.97	51.78	53.69	0.025000	7.27	29.57	17.41	1.78
VERBONE	50	T = 500 anni	259.00	48.52	51.22	52.97	1.75	52.97	1.75	52.11	54.28	0.024875	7.75	33.41	17.41	1.79
VERBONE	40	T = 50 anni	149.00	48.21	50.70	51.48	0.78	52.58	1.88	51.11	52.35	0.014139	5.69	26.18	14.29	1.34
VERBONE	40	T = 200 anni	215.00	48.21	51.19	51.48	0.29	52.58	1.39	51.72	53.31	0.014623	6.45	33.33	15.03	1.38
VERBONE	40	T = 500 anni	259.00	48.21	51.48	51.48	0.00	52.58	1.10	52.08	53.88	0.014618	6.86	37.77	15.08	1.38
VERBONE	30	T = 50 anni	149.00	47.55	50.62	52.86	2.24	52.05	1.43	50.89	52.05	0.011859	5.29	28.19	14.71	1.22
VERBONE	30	T = 200 anni	215.00	47.55	51.10	52.86	1.76	52.05	0.95	51.51	52.98	0.012635	6.07	35.42	15.32	1.27
VERBONE	30	T = 500 anni	259.00	47.55	51.39	52.86	1.47	52.05	0.66	51.87	53.54	0.013067	6.51	39.78	15.63	1.30
VERBONE	20	T = 50 anni	149.00	47.40	49.91	51.22	1.31	51.63	1.72	50.39	51.75	0.015708	6.01	24.81	13.59	1.42
VERBONE	20	T = 200 anni	215.00	47.40	50.48	51.22	0.74	51.63	1.15	51.03	52.69	0.014388	6.58	32.67	13.71	1.36
VERBONE	20	T = 500 anni	259.00	47.40	50.84	51.22	0.38	51.63	0.79	51.42	53.26	0.013825	6.89	37.61	13.78	1.33
VERBONE	10	T = 50 anni	149.00	46.98	50.06	50.07	0.01	52.10	2.04	50.25	51.50	0.010113	5.32	28.03	12.47	1.13
VERBONE	10	T = 200 anni	215.00	46.98	50.93	50.07	-0.86	52.10	1.17	50.93	52.48	0.008160	5.52	38.92	12.60	1.00
VERBONE	10	T = 500 anni	259.00	46.98	51.34	50.07	-1.27	52.10	0.76	51.34	53.10	0.008291	5.87	44.16	12.66	1.00