Studio di Ingegneria Dott. Ing. Nicola Croce Prof. Ing. Pietro Croce
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-COMUNE DI SAN MINIATO

PROVINCIA DI PISA

INTEGRAZIONI ALLE OSSERVAZIONI PROPOSTE DAL COMUNE DI SAN MINIATO PER LO STUDIO IDROLOGICO ED IDRAULICO DI SUPPORTO AL PIANO STRUTTURALE

1. Premessa

Su richiesta del Comune di San Miniato, e come lo scrivente voleva fare fin dall'inizio dello studio idraulico idrologico, sono state considerate le effettive sezioni rilevate sull'asta del fiume Arno nel territorio comunale.

Tali sezioni sono state fornite ufficialmente al sottoscritto dall'Ufficio Idrografico e Mareografico di Pisa su richiesta del Comune di San miniato.

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Le portate ventennali sono state estrapolate, con metodo statistico, per gli studi esistenti, mediante regressione sui singoli valori degli idrogrammi di piena con TR pari a 30, 100, 200 e 500 anni. Nel caso di onda di piena trentennale laminata i valori della portata ventennale sono stati elaborati tenendo conto delle equazioni di regressione riferite ai valori immediatamente adiacenti al taglio del picco dell'onda; in tal modo sono stati sovrastimati i picchi a favore della sicurezza soprattutto nei casi in cui la verifica dei profili di rigurgito è stata effettuata a moto permanente.

Dalle elaborazioni effettuate con le nuove sezioni e tenendo conto dell'effetto laminativo dell'invaso di Roffia si evince che la portata ventennale dell'Arno risulta completamente contenuta in alveo nel territorio comunale.

La portata duecentennale dà luogo ad esondazioni sia in destra (comune di S. Croce) che in sinistra idrografica. Il volume che esonda nel territorio Comunale risulta pari a circa 10 milioni di metri cubi di cui circa 4.5 risultano invasati nel lago di Roffia.

Alcune arginature allo stato attuale risultano non essere adeguate e, cosa che appare piu' grave, risultano non avere le medesime quote arginali in destra e in

sinistra, determinando un aggravio del rischio idraulico non compatibile con le regole della corretta gestione del territorio.

Le nuove perimetrazioni sono riportate nelle cartografie allegate.

Le aree di ristagno nell'area di San Donato sono state classificate tenendo conto degli interventi in progettazione.

Appare comunque evidente che la realizzazione della cassa di Roffia unitamente al rialzamento arginale, porterà significativi benefici in termini di rischio idraulico.

L'eventuale rialzamento arginale, oltre a scongiurare il rischio di esondazione renderebbe pienamente efficace la cassa di espansione di Montopoli.

L'intervento sulle arginature non può essere disgiunto da quello delle casse di espansione:piccoli incrementi arginali determinano milioni di metri cubi in meno da invasare sul territorio.

Le verifiche sono state condotte a moto vario con il programma Hec-Ras 3.1.2

Sez n.	River Sta	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Top Width	Length Chnl	L. Levee Frbrd	R. Levee Frbrd
		(m3/s)	(m)	(m)	(m)	(m/s)	(m)	(m)	(m)	(m)
367	13599.1	3595.91	9.16	25.66	25.97	2.53	294.04	216.37	0.66	0.44
366	13382.73	3594.27	7.51	25.58	25.88	2.52	298.48	163.8	0.73	0.21
365	13218.93	3590.15	7.17	25.47	25.81	2.64	300.73	283.24	0.84	-1.06
364	12935.69	3590.02	8.02	25.26	25.67	2.89	194.67	27.67	0.82	-0.55
363	12908.02	3590.02	8.65	25.26	25.65	2.76	117.28	0.1	2.87	2.38
	12898	Bridge								
361	12897.9	3590.01	10.65	25.23	25.64	2.83	122.71	32.93	2.86	2.87
360	12864.98	3592.64	5.09	25.44	25.61	1.81	284.25	141.34	0.39	-0.56
359	12723.64	3589.94	8.51	25.31	25.57	2.26	181.43	139.69	0.51	-0.43
358_1	12583.95	3588.7	8.45	25.23	25.52	2.42	191.29	141.62	0.44	-0.74
358_b	12442.33	3588.68	7.36	25.25	25.47	2.17	604.91	131.78	0.37	-0.54
357	12310.54	3592.54	6.71	25.36	25.4	0.98	777.7	319.1	-2.03	-1.74
	12308	Lat Struct								
356	11991.45	3570.48	8.29	25.13	25.38	2.29	319.35	233.22	0.5	-0.74
355	11758.22	4036.94	7.5	25.07	25.24	1.93	681.88	56.99	0	-1.42
354_1	11701.23	4036.92	11.75	24.97	25.26	2.41	363.11	201.84	0.1	-0.93
	11500	Lat Struct								
354_0	11499.39	4018.6	7.13	24.93	25.14	2.1	484.17	242.93	0.32	-3.2
353	11256.46	4018.55	6.36	24.95	25.06	1.77	509.2	465.7	0.22	-3.52
352	10790.77	4017.29	7.17	24.73	24.98	2.37	428.62	304.48		-3.38
	10780	Lat Struct								
351	10486.29	3998.41	7.95	24.6	24.86	2.39	411.36	234.76		-3.17

350	10251.53	3997.22	8.2	24.39	24.79	2.84	195.39	765.16		0.4
	10250	Lat Struct								
348	9486.376	3982.04	7.4	24.38	24.43	1.32	1188	279.28	-1.27	-0.08
347	9207.098	3981.94	6.54	24.21	24.43	2.38	766.77	378.74		-1.15
	9200	Lat Struct								
346	8828.354	3975.21	6.91	24.19	24.31	1.82	1112.24	356	-1.15	-0.91
345	8472.357	3975.09	8.18	24.18	24.24	1.35	860.87	323.85	0.5	-0.69
	8471	Lat Struct								
344	8148.506	3947.85	8.12	24.18	24.2	0.95	1858.5	218.55	-1.28	-3.66
343	7929.953	3947.76	6.98	24.16	24.19	0.97	1180.05	206.97	-1.07	-4.02
	7723	Lat Struct								
342	7722.979	3903.76	4.28	24.14	24.18	1.02	895.94	235.46	-1.23	-3.56
341	7487.514	3903.74	9.02	24.12	24.17	1.15	715.23	325.62	-1.28	-4.33
340	7161.894	3902.32	7.33	24.02	24.14	1.78	737.37	405.17	0.13	-1.75
339	6756.725	3902.02	7.07	23.93	24.08	1.95	741.89	106.05	5.8	0.2
338	6650.676	3899.7	8.3	23.78	24.06	2.39	186.93	17.16	0.24	2.17
337	6633.521	3899.7	8.4	23.68	24.05	2.79	134.08	0.01	3.76	4.09
	6625.5	Bridge								
335	6625.056	3899.7	8.2	23.72	24.05	2.63	152.79	160.47	3.93	4.32
333	6464.583	3899.68	6.88	23.75	23.99	2.21	212.92	221.17	3.79	0.41
332	6243.409	3899.65	7.13	23.71	23.93	2.24	343.55	390.92	0.21	0.44
331	5852.489	3897.6	3.3	23.54	23.83	2.48	311.32	508.01	0.29	0.1
330	5344.482	3897.4	7.41	23.38	23.64	2.27	187.96	480.7	0.41	0.23
329	4863.783	3895.25	6.31	23.39	23.46	1.39	900.41	262.38	0.09	0
328	4601.4	3894.54	6.98	23.36	23.45	1.48	688.31	243.4	0.15	0.11
327	4358.005	3893.85	6.04	23.33	23.41	1.34	744.56	136.52	0.19	0.18
	4221.483	3977.43	6.41	23.28	23.39	1.53	537.8	136.63	0.05	-0.02
326	4084.852	3976.61	7.91	23.24	23.38	1.76	426.93	136.97	0.14	0.11
	3947.882	3975.95	3.01	23.22	23.35	1.65	393.68	103.01	0.14	0.06
325	3844.875	3975.71	2.7	23.15	23.34	1.98	394.6	118.18	0.24	0.07
	3726.691	3975.5	5.25	23.09	23.31	2.21	399.27	99.13	0.2	0
324	3627.562	3974.86	6.77	23.03	23.29	2.39	301.48	34.68	0.19	-0.16
	3627	Lat Struct								
	3601	3967.58	6.01	22.98	23.27	2.5	155.21	0.05	0.57	1.36
321	3593	Bridge								
320	3592.881	3967.58	5.76	22.97	23.26	2.48	154.32	18.59	0.97	1.94
319	3574.288	3967.58	3.72	23.07	23.25	1.92	177.95	56.19	0.54	0.37
	3518.096	3967.57	-1.01	23.13	23.24	1.43	230.37	82.43	0.43	0.14
318	3435.664	3967.56	6.81	23.06	23.23	1.82	256.94	102.46	0.34	-0.61
	3435	Lat Struct								
	3333.206	3814.52	4.92	23.05	23.22	1.83	232.19	96.98	0.42	-0.52
317	3236.228	3814.51	5.96	23.04	23.2	1.78	260.09	169.24	0.1	-0.4
	3236	Lat Struct								

	3066.991	3714.18	7.07	22.96	23.17	2.04	208.25	198.35	0.01	-0.15
316	2868.638	3712.2	4.7	22.84	23.11	2.34	190.88	133.76	0.25	-0.07
	2734.882	3712.16	3.33	22.87	23.08	2.1	287.26	123.55	-0.04	-0.25
	2611.329	3712.07	6.2	22.75	23.05	2.45	179.23	122.84	0.12	-0.27
315	2611	Lat Struct								
	2488.488	3649.47	-0.9	22.83	22.99	1.88	323.03	101.12	-0.1	-0.49
	2387.367	3649.33	-1.87	22.84	22.97	1.75	342.96	129.91	-0.2	-0.3
	2257.454	3649.19	2.78	22.68	22.96	2.4	188.47	210.13	-0.09	-0.18
314	2047.324	3649.04	5.52	22.75	22.92	1.96	380.31	42.39	-0.19	-0.35
	2046	Lat Struct								
	2004.934	3615.59	5.9	22.71	22.89	2.02	335.54	133.16	-0.23	0.41
	1871.775	3615.56	5.99	22.63	22.87	2.3	350.52	118	-0.36	0.53
313	1753.773	3615.53	5.63	22.66	22.83	1.9	380.15	146.01	-0.37	0.48
	1607.76	3615.5	6.22	22.6	22.8	2.11	339.04	105.87	-0.23	0.34
312	1502	Lat Struct								
	1501.891	3555.04	6.13	22.59	22.78	2.02	346.08	146.86	-0.39	0.44
	1355.033	3554.99	5.49	22.59	22.73	1.75	328.3	135.88	-0.32	0.58
311	1219.155	3554.95	6.34	22.58	22.71	1.7	442.83	195.05	-0.51	0.59
310	1024.108	3554.89	5.49	22.52	22.68	1.9	326.44	98.27	-0.18	0.53
309	925.836	3554.85	7.5	22.43	22.66	2.33	321.63	114.23	-0.06	0.33
308	811.607	3554.18	5.5	22.37	22.62	2.35	280.21	80.6	0.69	0.38
307	731.005	3554.18	5.31	22.36	22.59	2.29	269.36	222.11	0.37	0.25
	508.893	3554.17	4.29	22.1	22.5	2.97	255.05	111.56	0.86	0.58
	397.334	3554.15	-0.17	22.25	22.42	1.93	242.76	100.44	0.06	0.35
	296.89	3554.13	0.48	22.23	22.4	1.88	242.29	140.79	0.05	0.37
309	156.097	3554.11	4.46	22.1	22.38	2.45	242.97	51.93	-6.91	-3.33
306	104.163	3549.97	4.84	21.76	22.4	3.86	123.87	18.25	3.67	5.89
302A	85.908	3554.1	-3.78	22.15	22.28	1.64	226.3	22.8	-2.07	0.53
	63.111	3554.1	-1.31	22.18	22.28	1.44	339.91	368.85	-2.06	-2.23
302A	37	3554	5.1	22.1	22.24	1.71	336.53	186.86	-0.5	-4.81
298	36.7	3551.82	8.54	21.9	22.21	2.53	155.79	2.5	1.72	1.74
297	36.6	Bridge								
296	36.5	3551.82	8.54	21.86	22.17	2.54	155.79	345	1.76	1.78
295	36	3551.81	6.29	21.89	22	1.49	474.8	616.81	-0.57	-0.41
294	35	3550.21	2.1	21.78	21.84	1.32	995.69	509.65	0.34	-0.31
293	34	3550.07	5.43	21.74	21.77	1.08	1308.59	395.25	-0.39	-0.09
292	33	3548.55	4.98	21.7	21.74	1.15	1223	536	-0.56	-0.72
291	32	3548.43	4.71	21.65	21.69	1.14	1295.81	515.16	-0.72	-0.87
290	31	3547.13	4.29	21.59	21.64	1.18	1028	388.3	-0.84	-0.48
289	30	3547.08	5.58	21.56	21.6	1.15	1138.8	414.81	-0.94	-0.24
288	29	3546.97	4.31	21.52	21.57	1.14	1016.53	348.44	-1.09	-0.55
287	28	3546.85	6.16	21.45	21.5	1.26	974.37	571.76	-1.17	-0.23
286	27	3546.08	5	21.35	21.41	1.33	885.06	347.34	-1.03	-0.77
285	26	3546.05	3.58	21.27	21.37	1.53	678.7	455.38	-0.92	-0.55
284	25	3545.4	3.05	21.17	21.29	1.75	556.86	518.77	-0.83	-0.52
283	24	3545.38	3	21.11	21.2	1.54	621.07	368.12	-0.9	-0.71

282	23	3545.35	3.4	20.92	21.13	2.16	316.36	376.67	0.52	-0.36
281	22	3544.89	4.2	20.83	21.02	2.05	471.45	346.26	0.72	-0.22
279	21	3544.88	3.25	20.65	20.9	2.39	338.7	354.4	4.45	-0.29
277	20	3544.85	3.53	20.58	20.76	1.98	385.75	323.56	3.18	-0.2
276	19	3544.39	3.5	20.52	20.67	1.93	447.03	354.73	-1.3	-0.87
275	18	3544.37	2.41	20.42	20.6	2.03	425.15	341.97	-0.4	-0.19
274	17	3544.34	4.12	20.31	20.51	2.21	342.51	394.38	-0.13	-0.31
273	16	3544.3	4.14	20.25	20.4	1.81	285.12	274.69	0.07	-0.29
271	15	3543.93	3.71	20.1	20.34	2.26	241.69	267.99	0	0.44
269	14	3543.92	3.84	19.93	20.25	2.67	218.22	377.8	0.05	-0.41
267	13	3543.52	5.31	19.84	20.07	2.3	320.8	353.84	-0.06	-0.35
263	12	3543.51	4.23	19.76	19.96	2.17	323	379.68	-0.09	-0.35
259_a	11	3543.48	4.23	19.62	19.85	2.27	297.62	274.11	0.05	-0.21
	10	3543.45	4.37	19.61	19.75	1.92	409.83	579.55	-0.14	-0.54
259_a	9	3543.15	5.05	19.28	19.58	2.65	269.92	154.58	-0.43	1.69
306	8.7	3542.84	5.95	18.97	19.5	3.31	119.82	2.5	2.97	3.23
256	8.6	Bridge								
253	8.5	3542.84	5.95	18.91	19.45	3.33	119.81	85	3.02	3.29
250	8.251	3543.15	3.71	19.14	19.37	2.16	160.33	8.25	-2.67	2.86
246	8	3543.15	5.32	19.14	19.44	2.56	282.9	385.01	-0.42	-0.88
243	7	3542.85	4.9	18.9	19.21	2.61	233.35	364.92	0.05	-0.38
241	6	3542.83	5.35	18.84	19.06	2.33	332.1	353.59	-0.27	-0.62
238	5	3542.8	6.18	18.72	18.94	2.3	373.17	321.97	-0.32	-0.59
236	4	3542.78	4.6	18.65	18.8	1.84	356.39	182.34	-0.56	-0.58
	3	3542.77	4.55	18.57	18.79	2.26	350.62	319.37	-0.43	-0.34
	2	3542.76	4.77	18.27	18.59	2.65	274.36	186.49	0.03	-0.07
	1	3542.76	2.73	18.02	18.49	3.13	202.18		0.28	1.31

Portata duecentennale: principali grandezze idrauliche

. Dicembre 2004

Ing. Nicola Croce

ALLEGATI HEC

TEMPO DI RITORNO 20 ANNI

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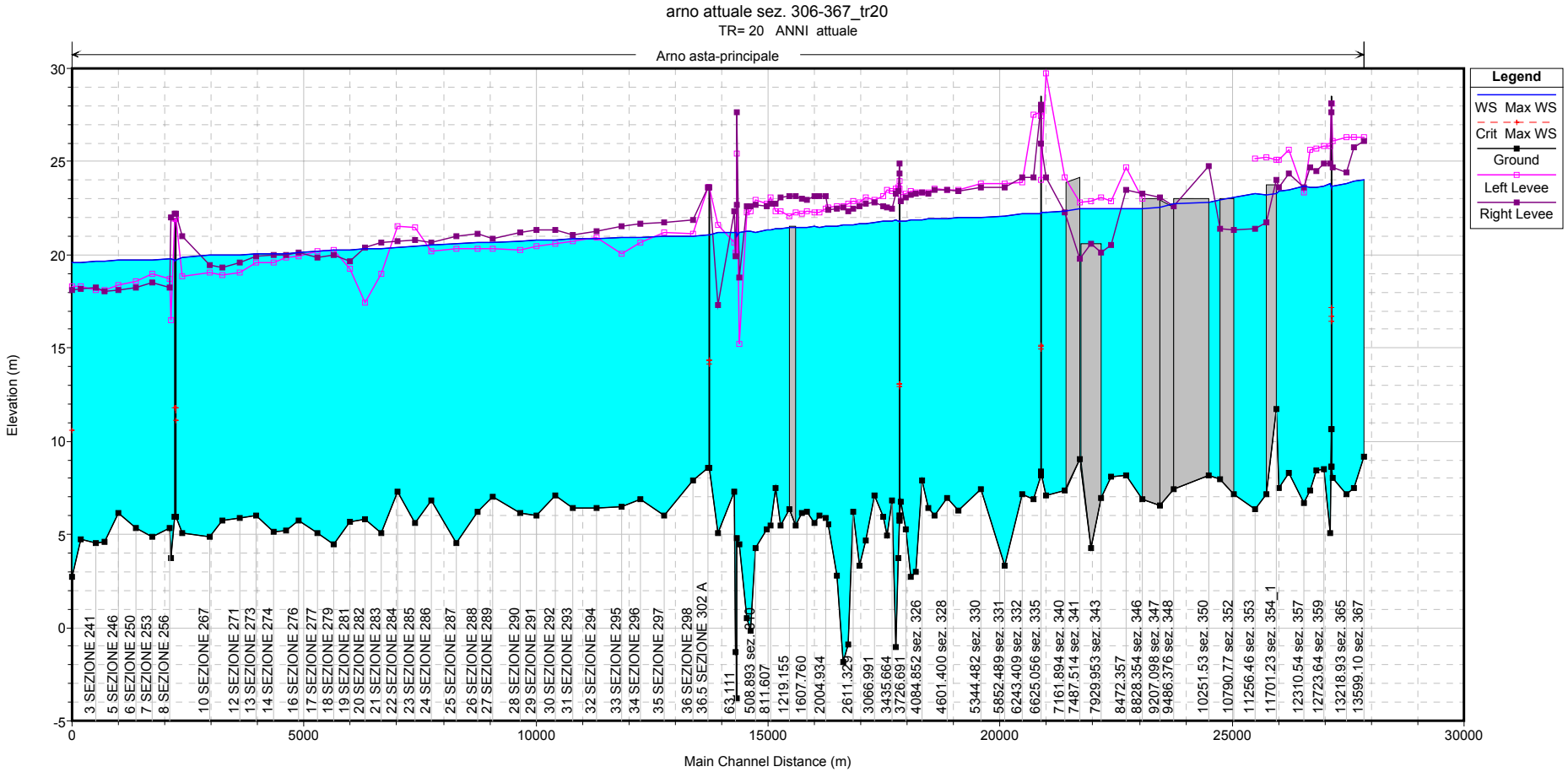
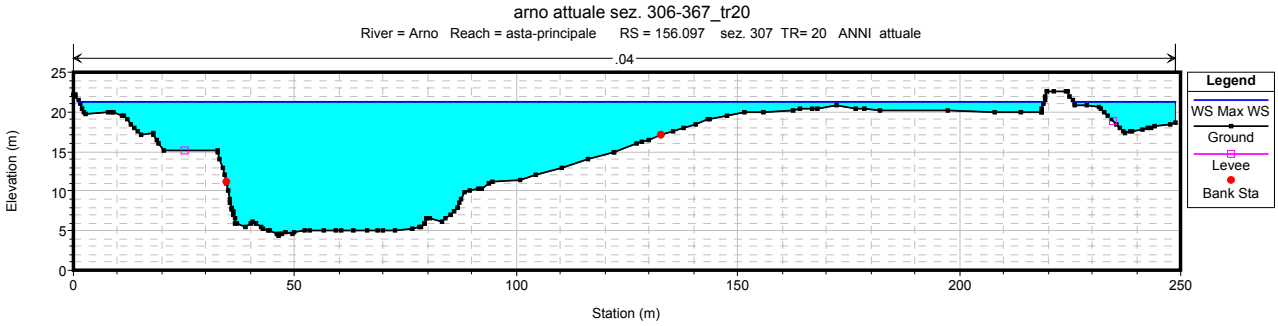


Profilo Longitudinale Tr 20 anni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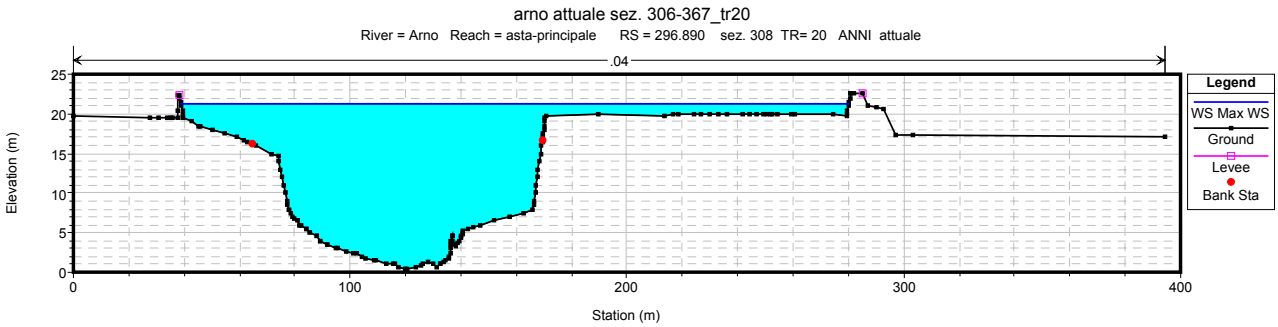
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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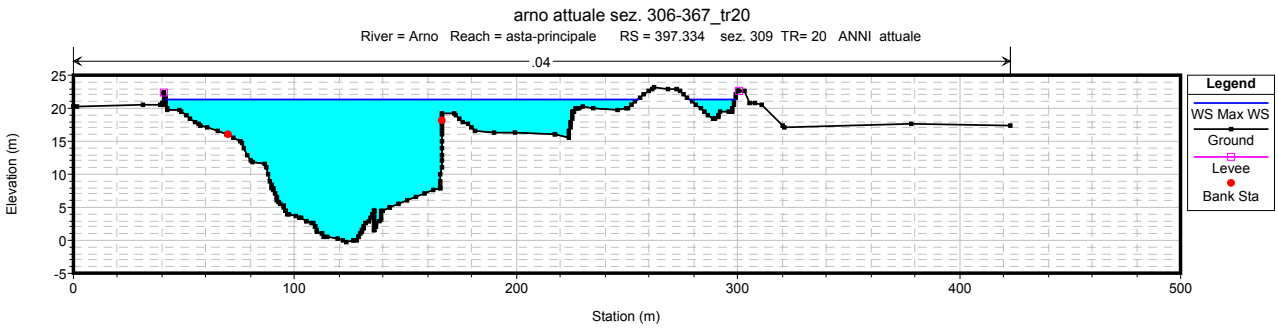
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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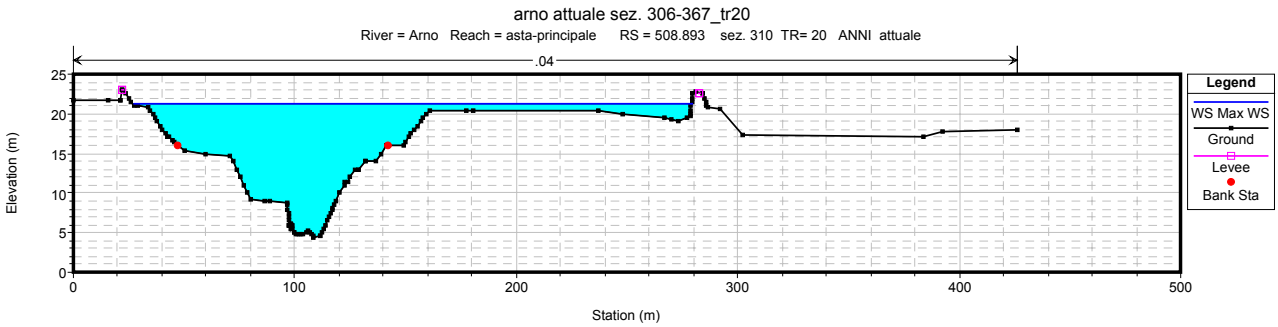
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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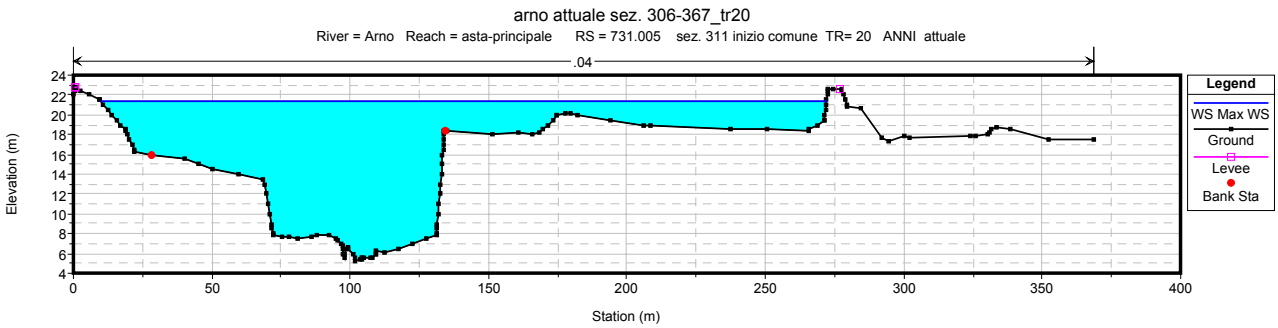
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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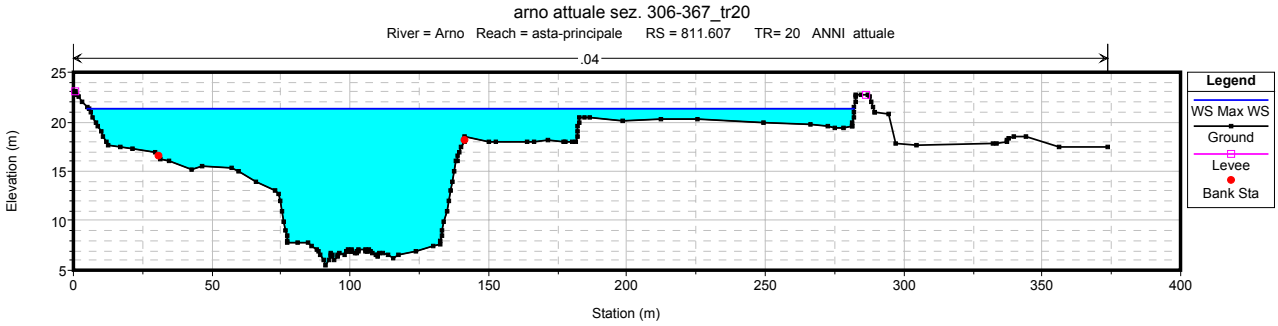
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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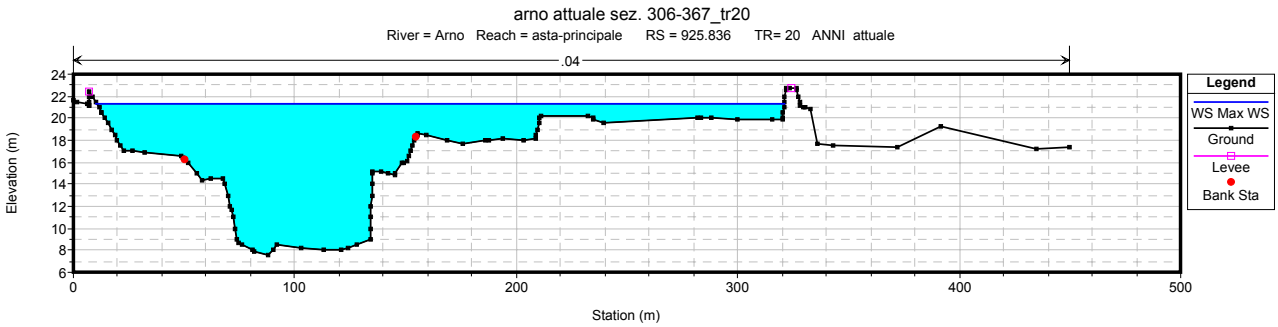
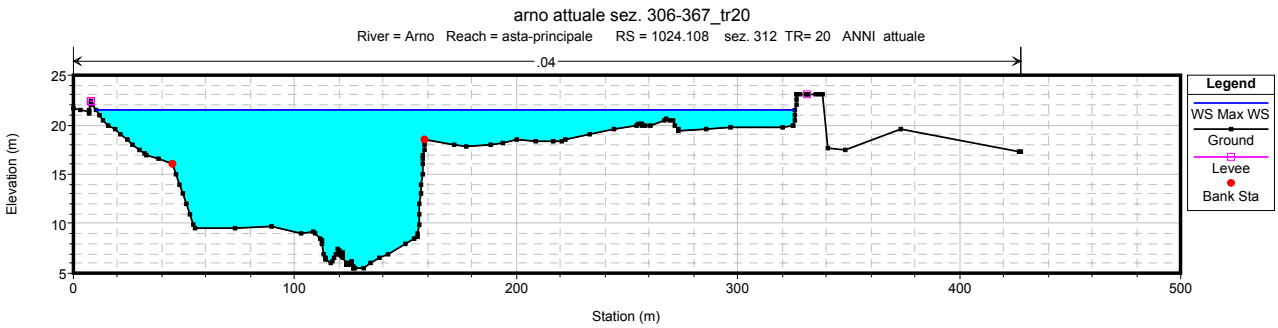
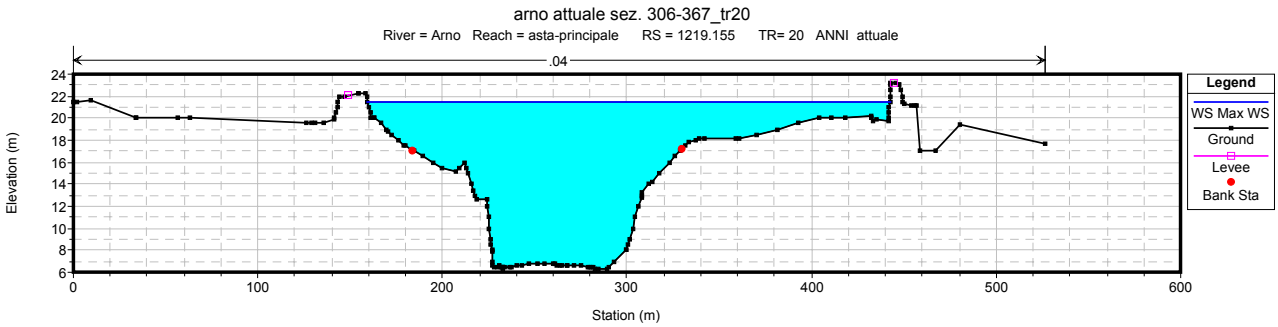
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 925.836 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 1024.108 sez. 312 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 1219.155 TR= 20 ANNI attuale
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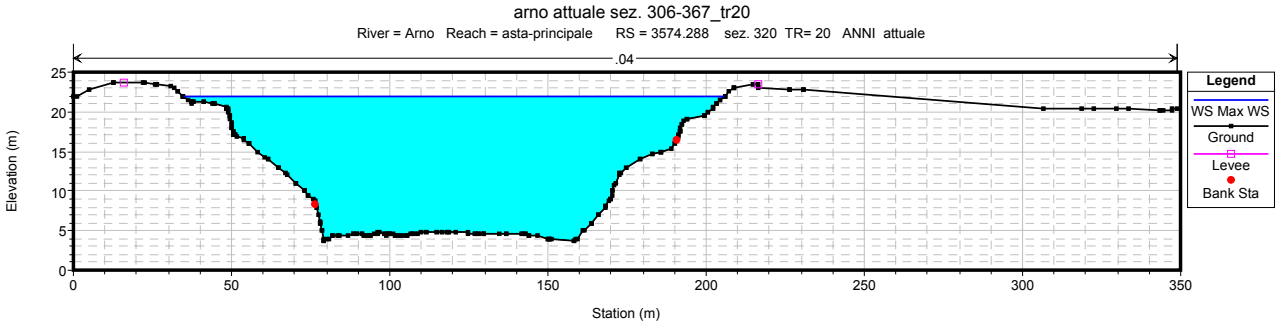
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3574.288 sez. 320 TR= 20 ANNI attuale
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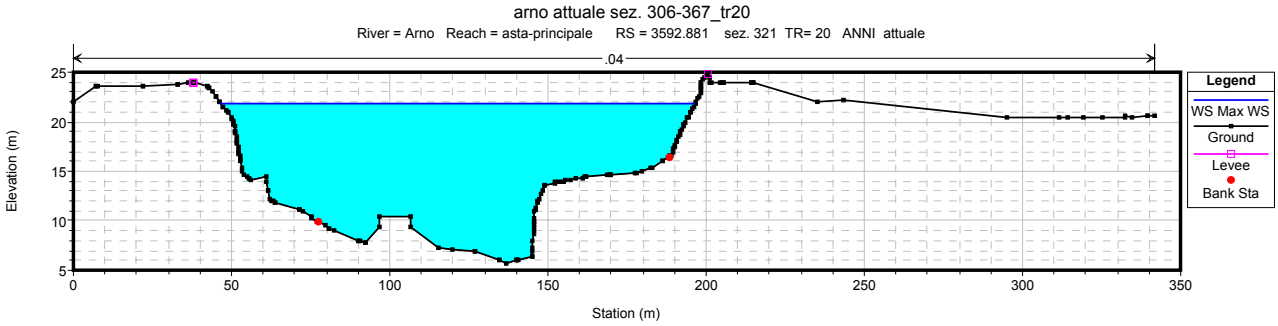
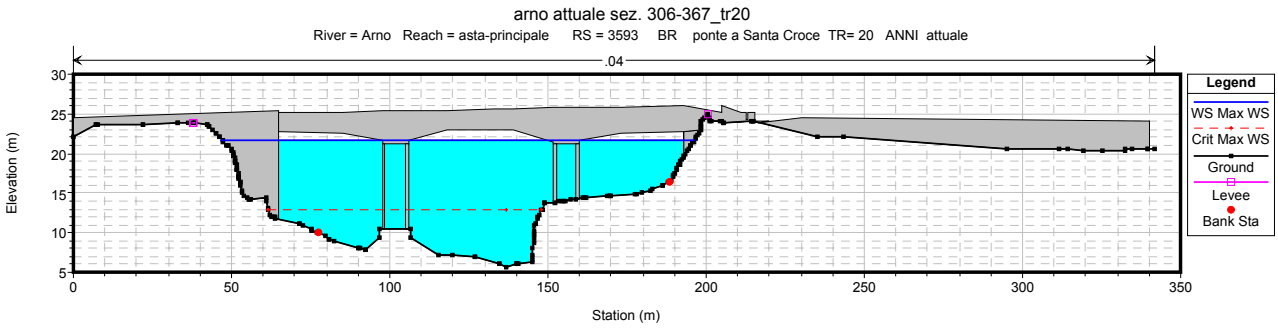
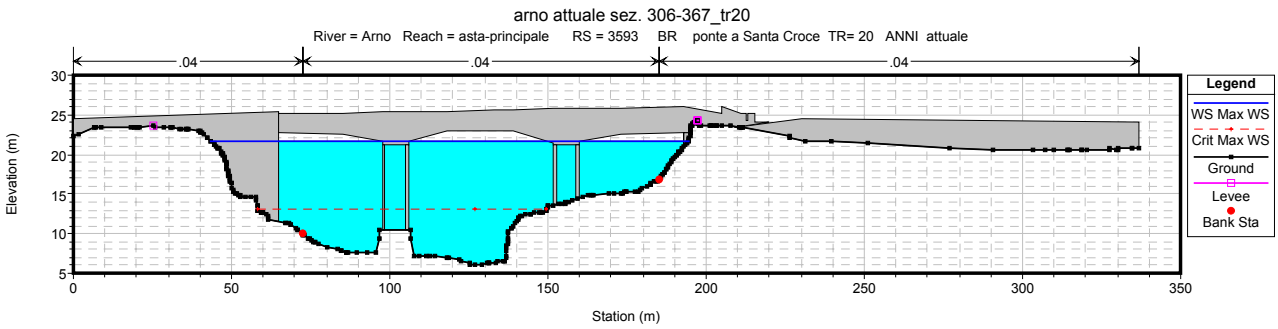
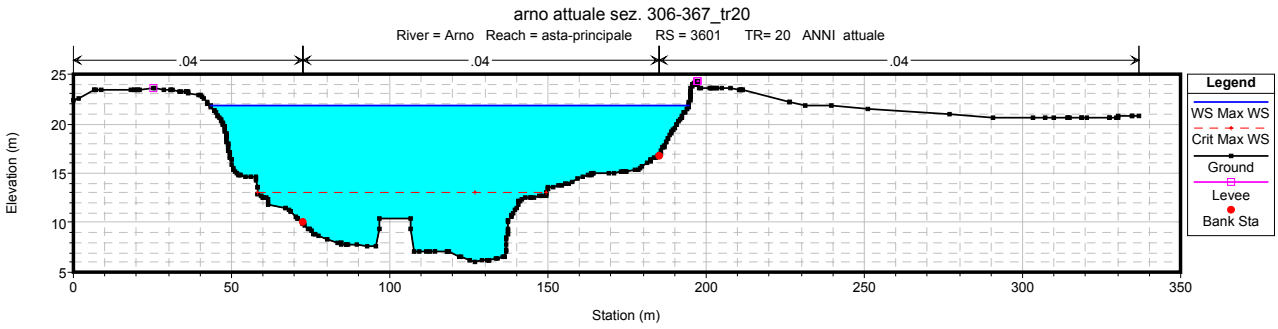
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3592.881 sez. 321 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3593 BR ponte a Santa Croce TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3593 BR ponte a Santa Croce TR= 20 ANNI attuale
.04
.04
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3601 TR= 20 ANNI attuale
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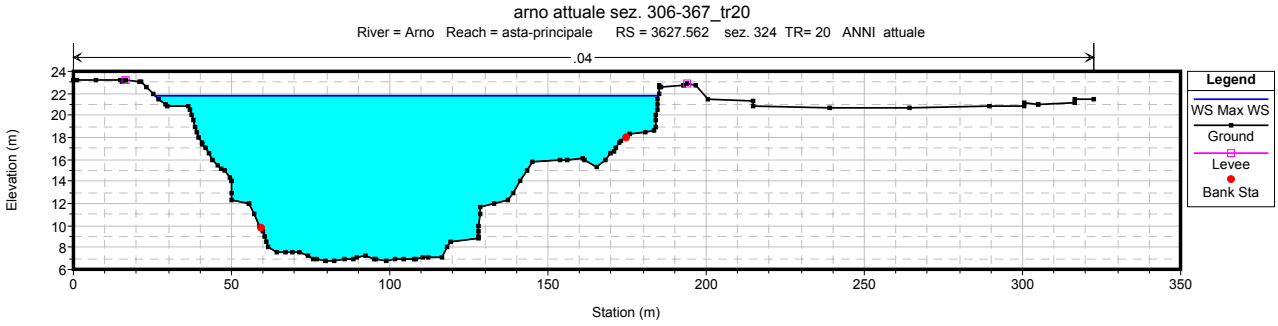
.04
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3627.562 sez. 324 TR= 20 ANNI attuale
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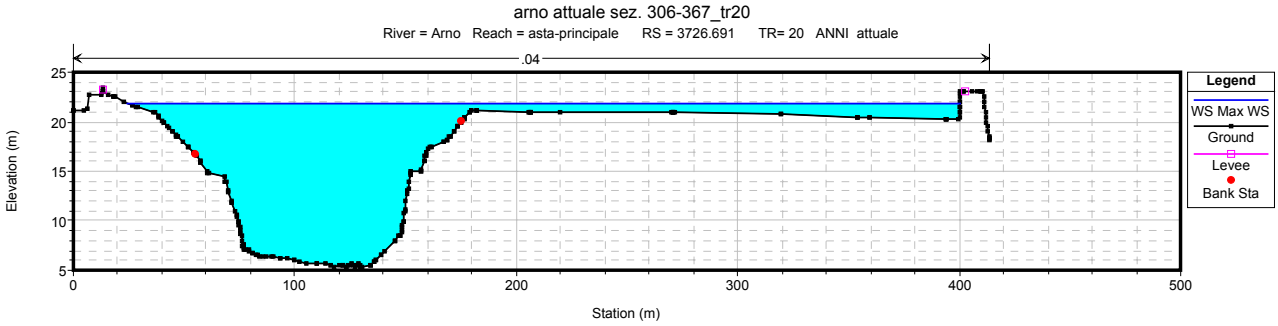
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3726.691 TR= 20 ANNI attuale
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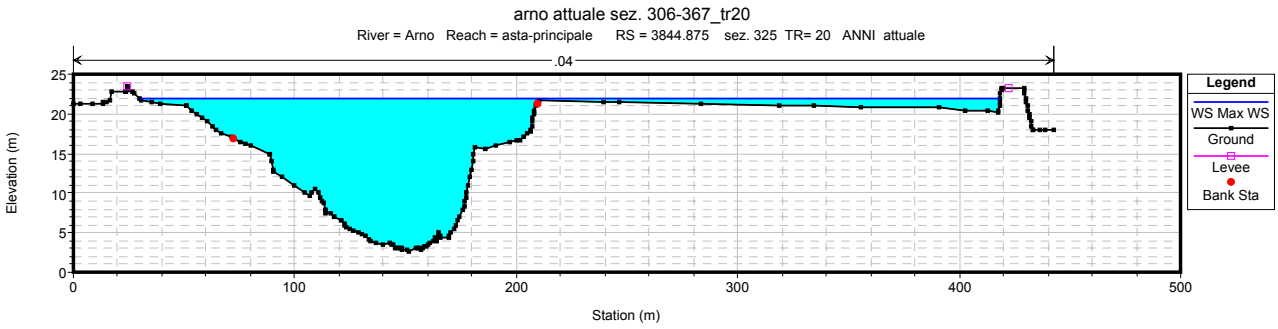
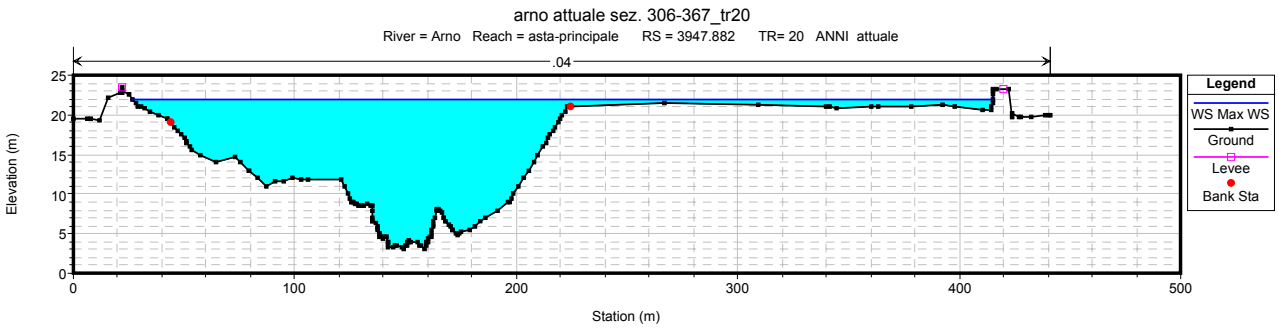
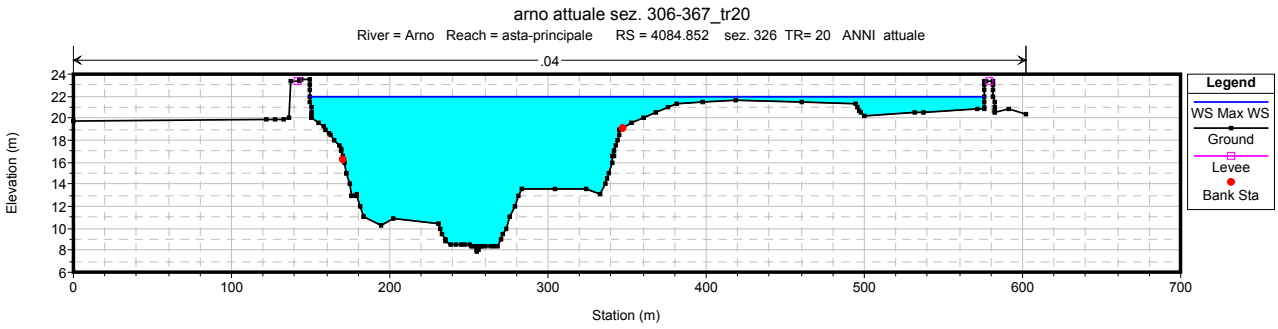
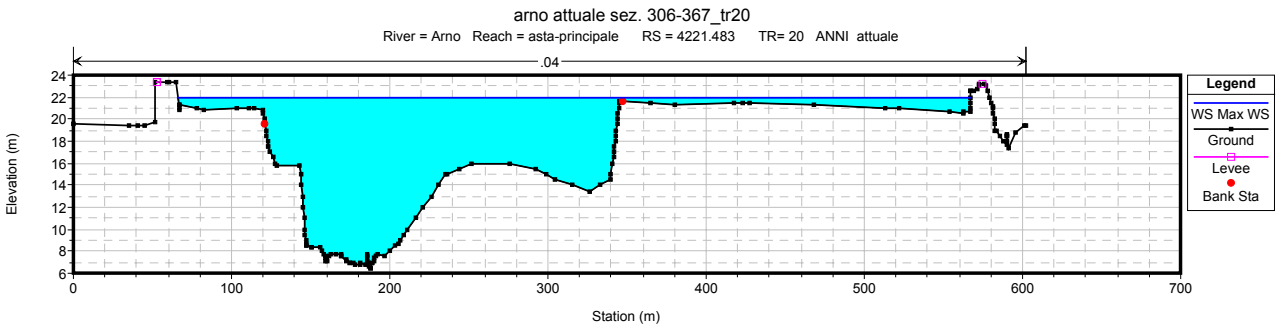
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3844.875 sez. 325 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 3947.882 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 4084.852 sez. 326 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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River = Arno Reach = asta-principale RS = 4221.483 TR= 20 ANNI attuale
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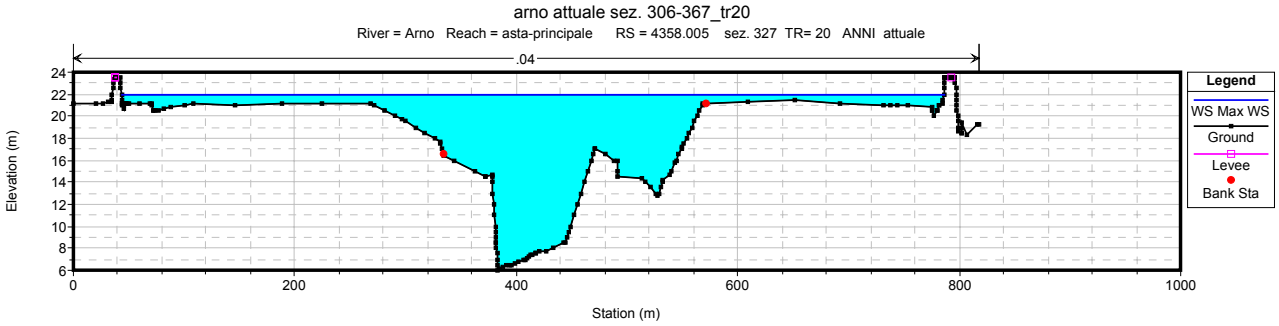
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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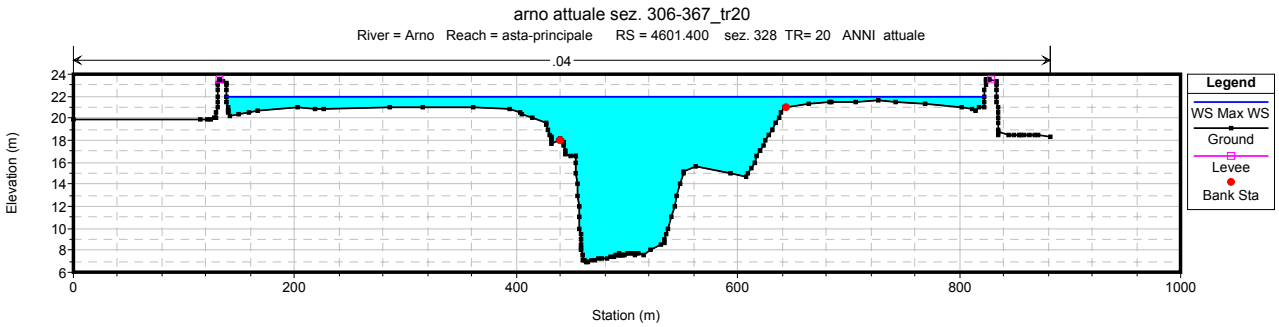
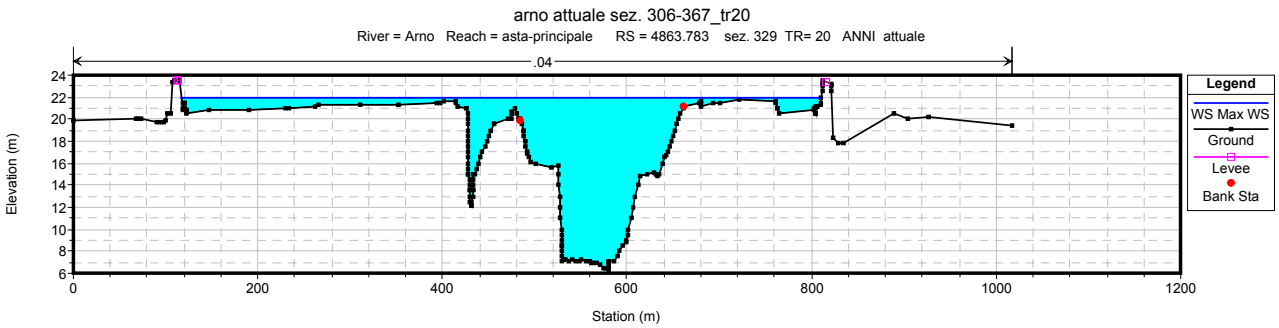
River = Arno Reach = asta-principale RS = 4358.005 sez. 327 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 4601.400 sez. 328 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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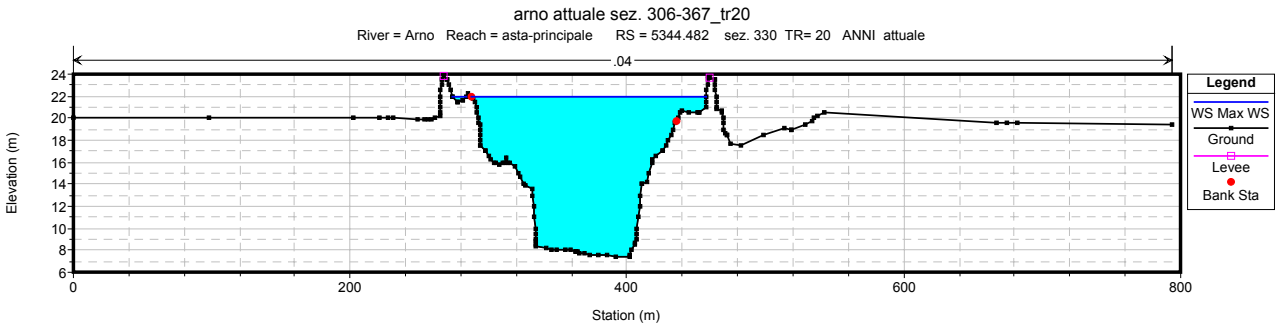
River = Arno Reach = asta-principale RS = 4863.783 sez. 329 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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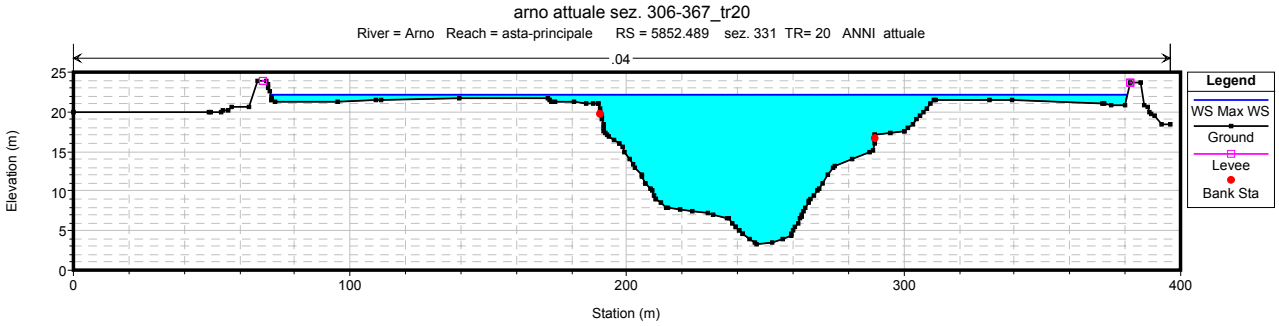
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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River = Arno Reach = asta-principale RS = 5852.489 sez. 331 TR= 20 ANNI attuale
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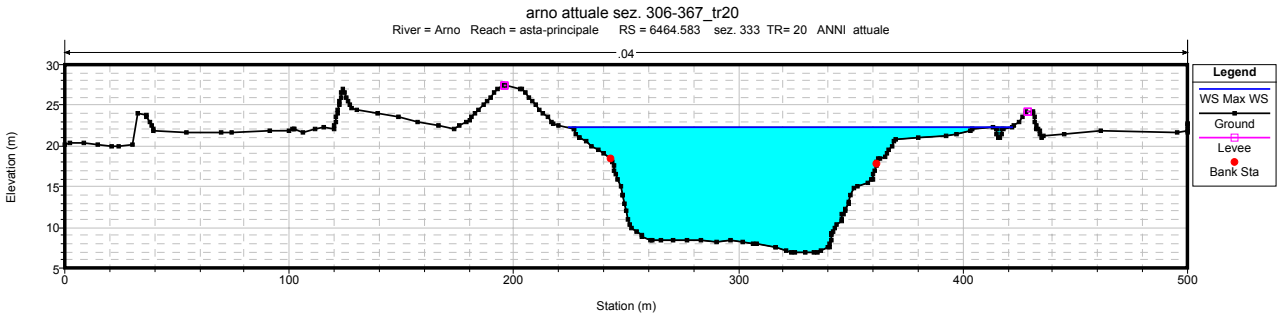
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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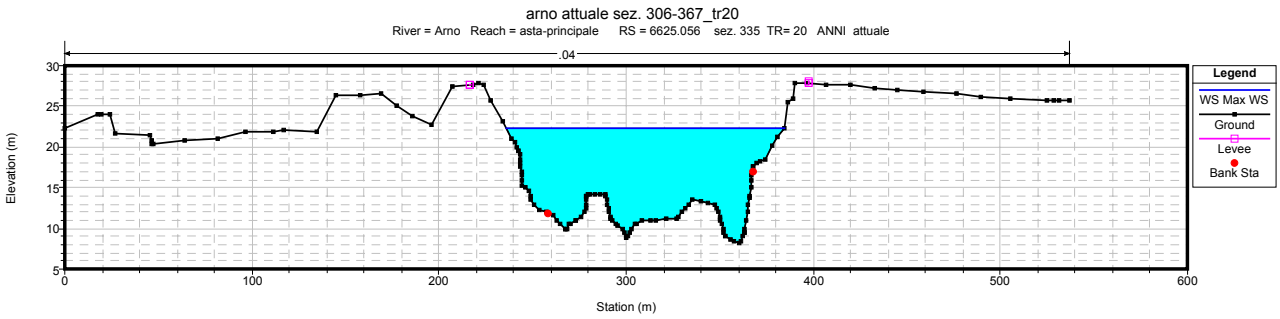
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 6625.056 sez. 335 TR= 20 ANNI attuale
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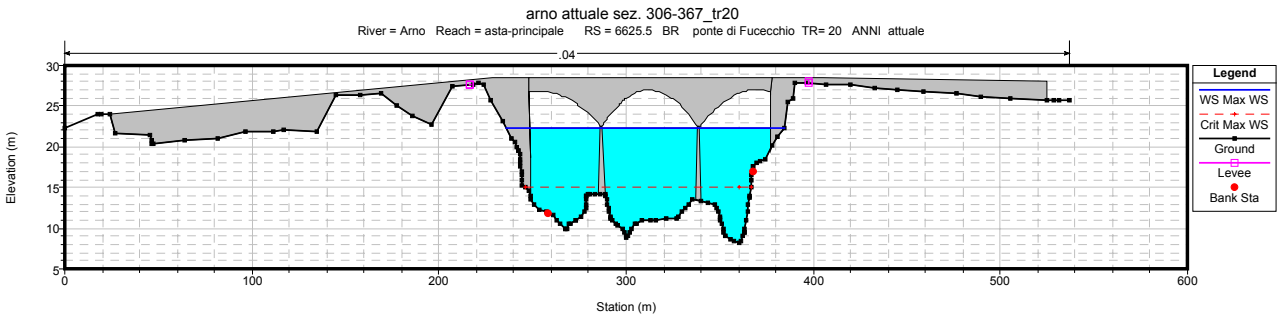
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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River = Arno Reach = asta-principale RS = 6625.5 BR ponte di Fucecchio TR= 20 ANNI attuale
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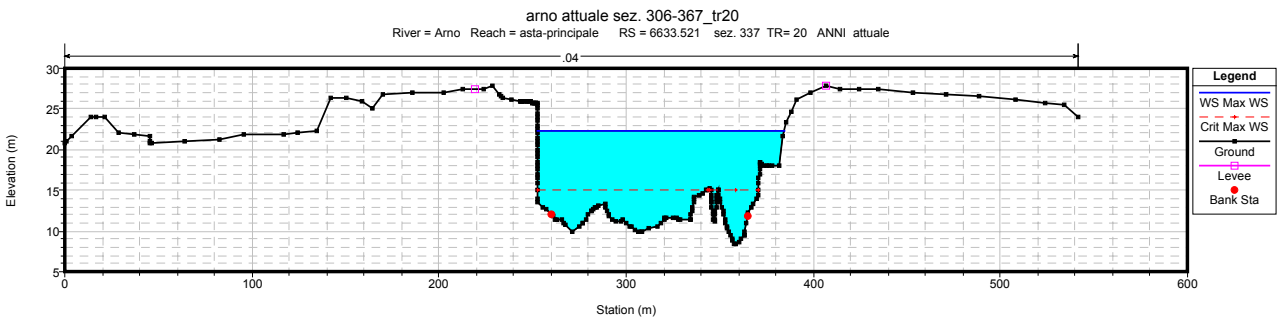
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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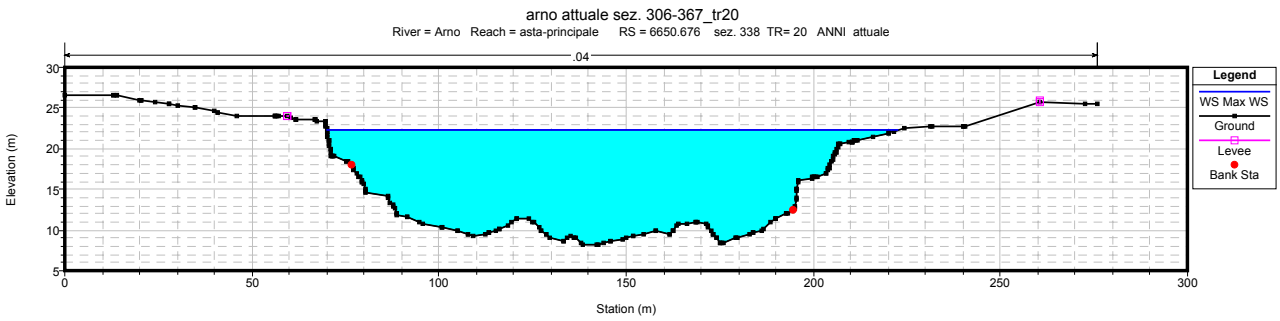
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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River = Arno Reach = asta-principale RS = 6650.676 sez. 338 TR= 20 ANNI attuale
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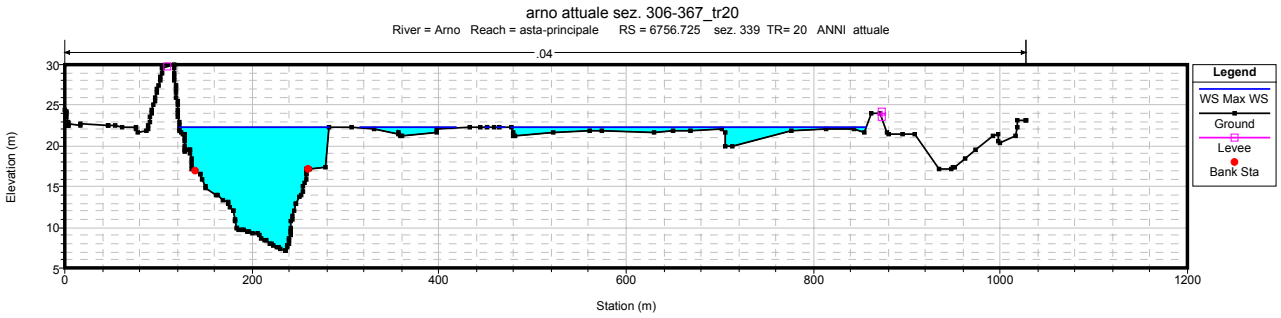
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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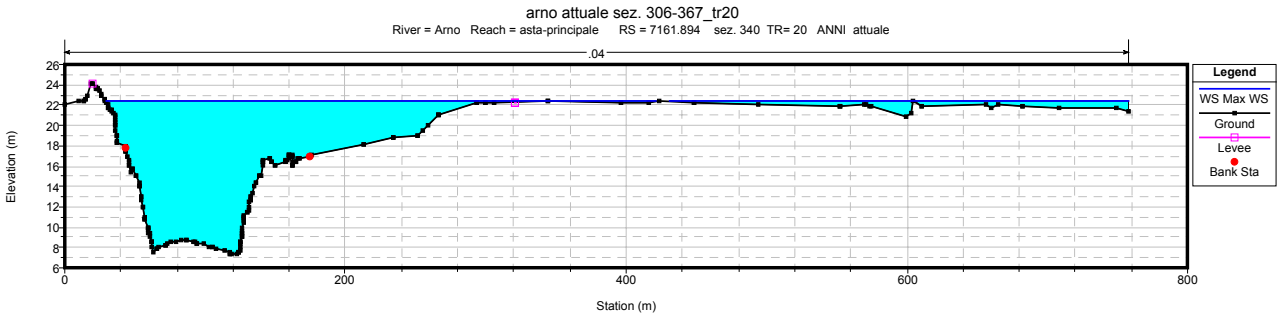
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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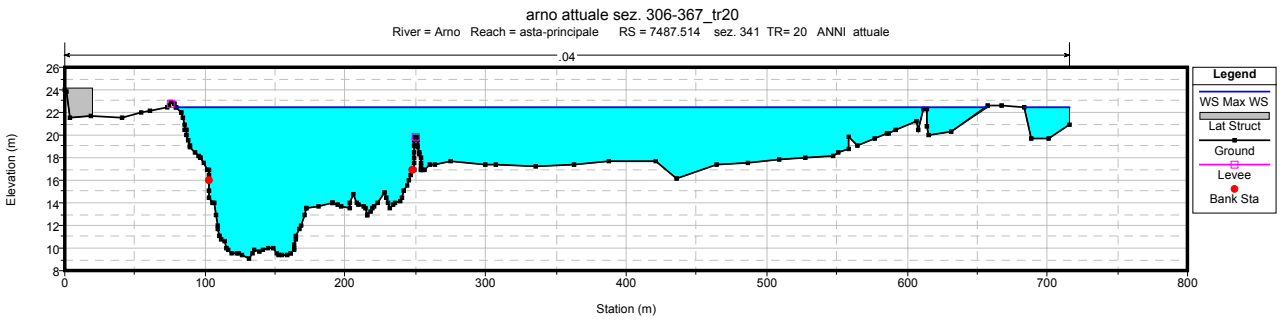
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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River = Arno Reach = asta-principale RS = 7487.514 sez. 341 TR= 20 ANNI attuale
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Legend
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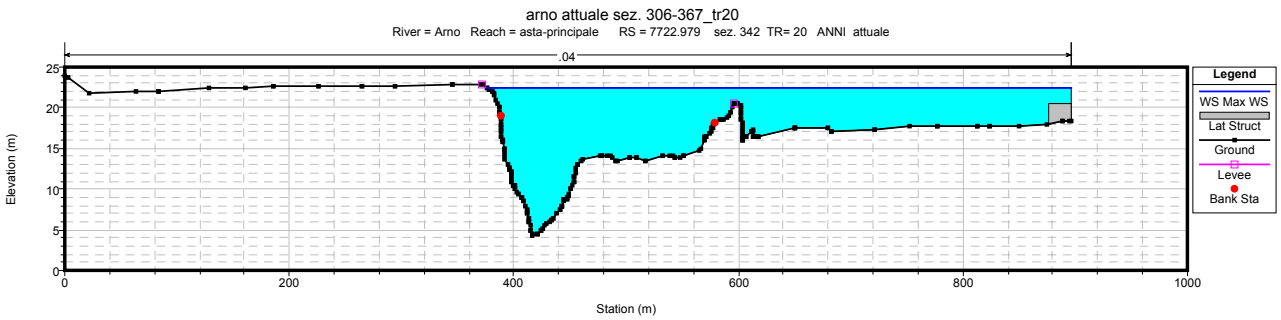
Lat Struct
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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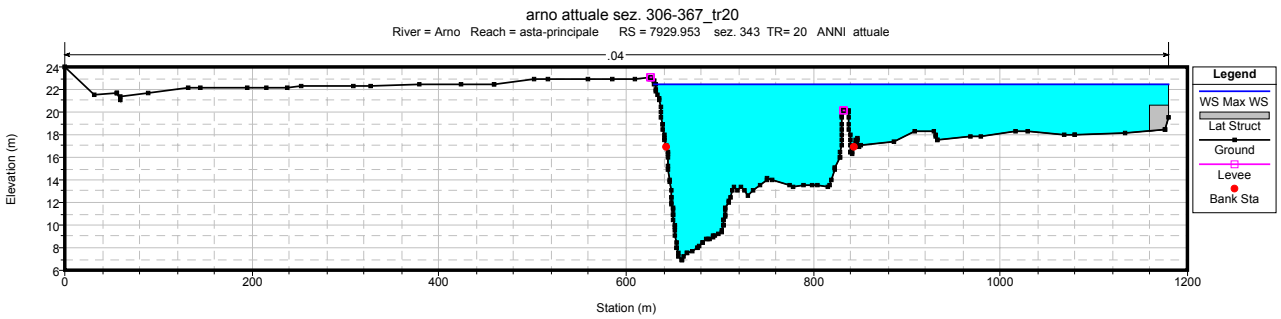
River = Arno Reach = asta-principale RS = 7722.979 sez. 342 TR= 20 ANNI attuale
.04
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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Legend
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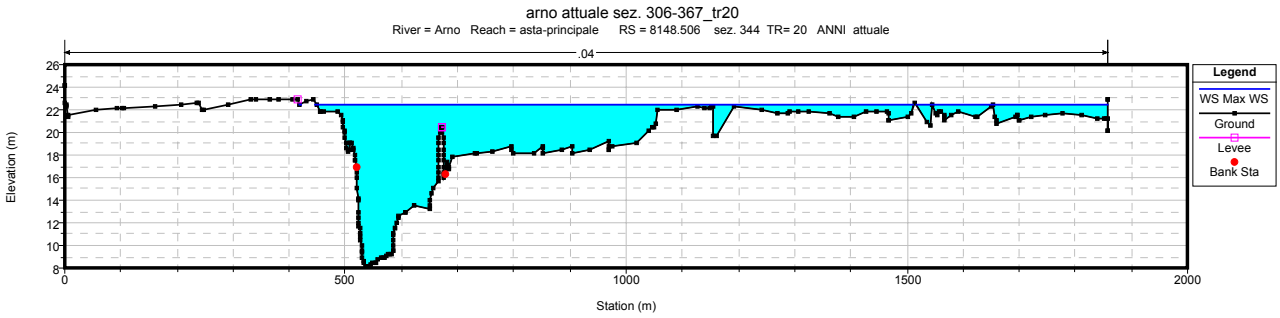
Lat Struct
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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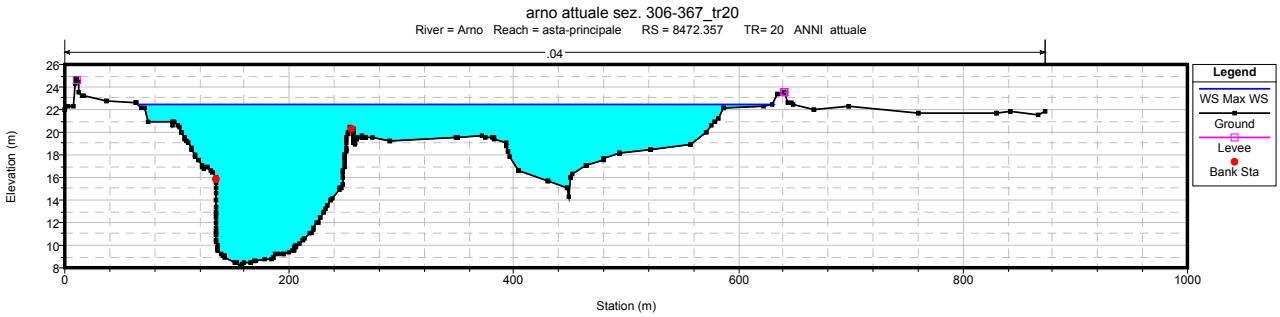
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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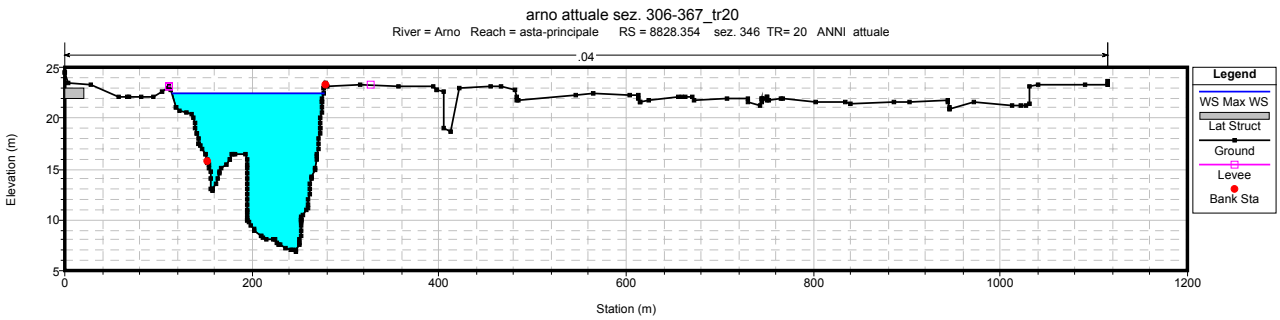
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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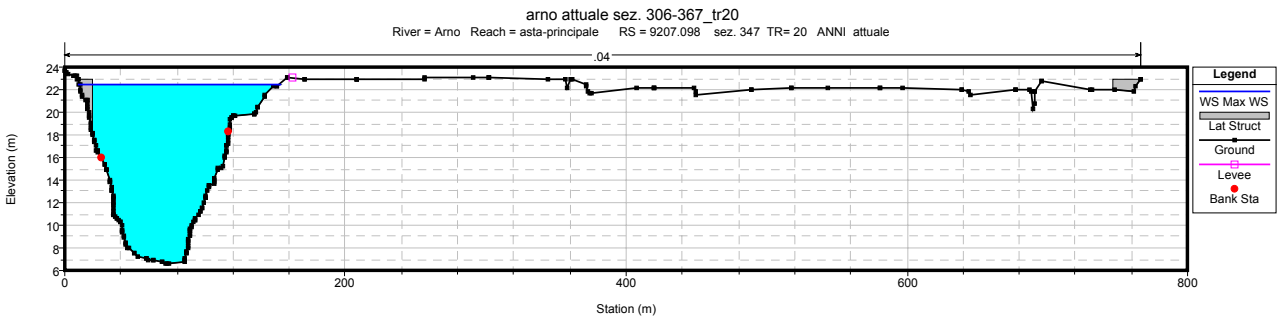
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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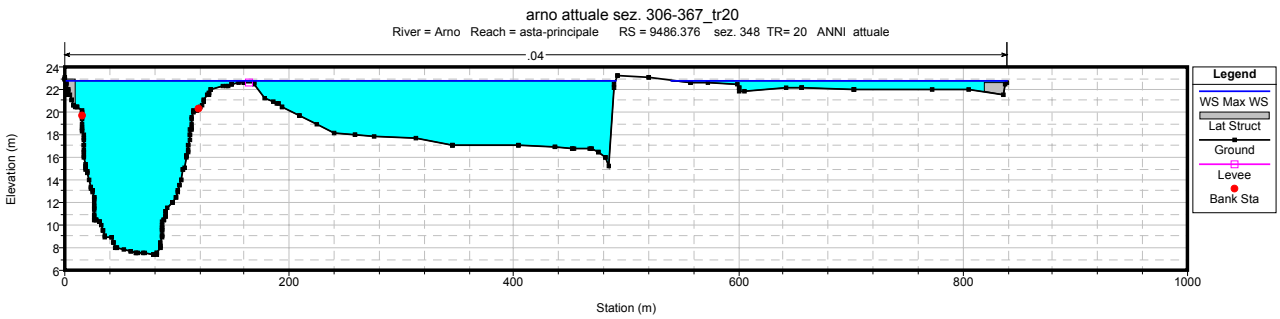
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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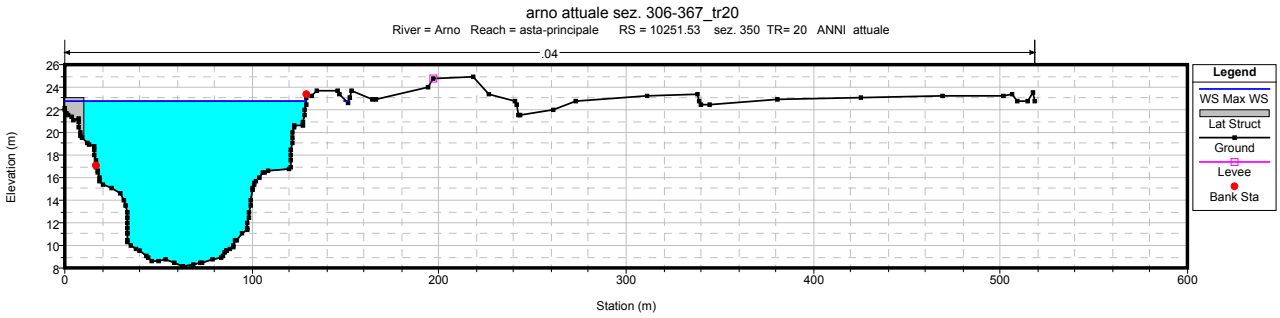
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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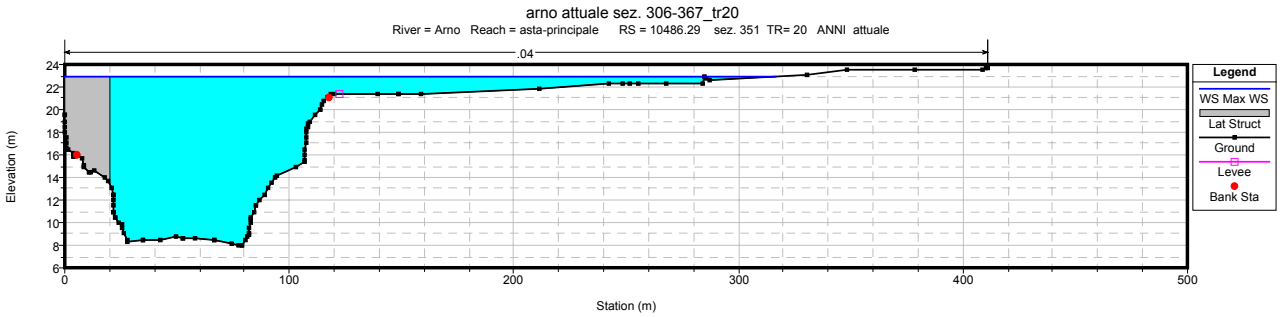
River = Arno Reach = asta-principale RS = 10251.53 sez. 350 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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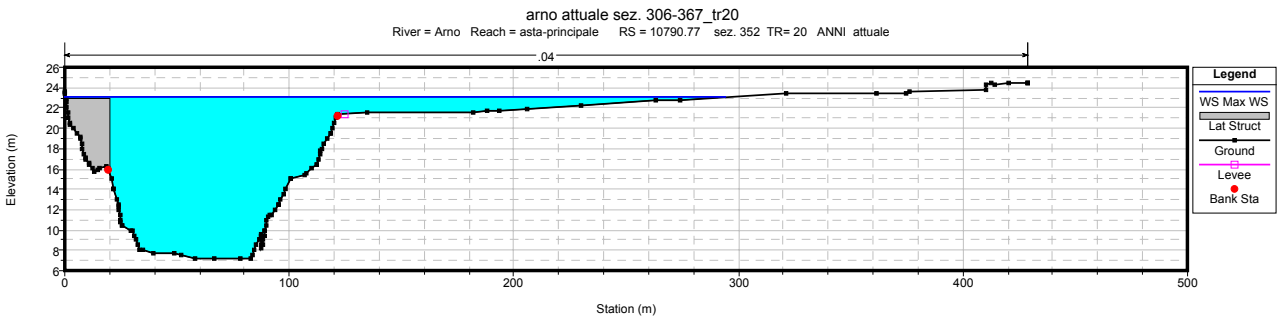
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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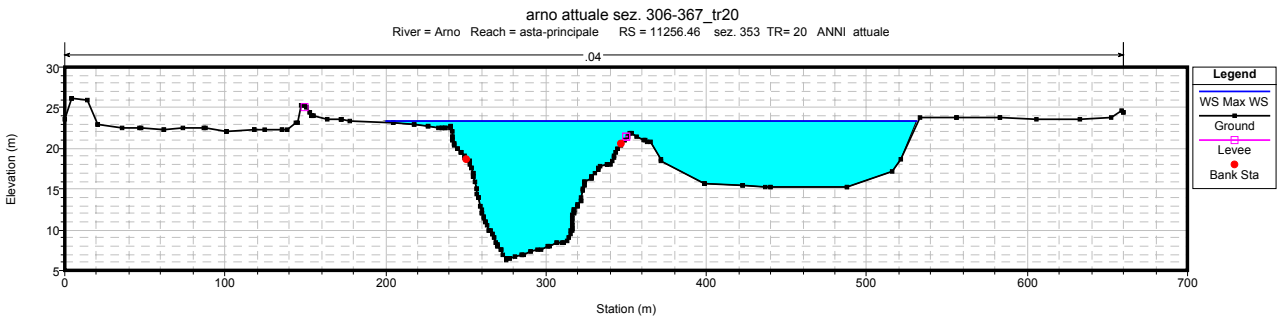
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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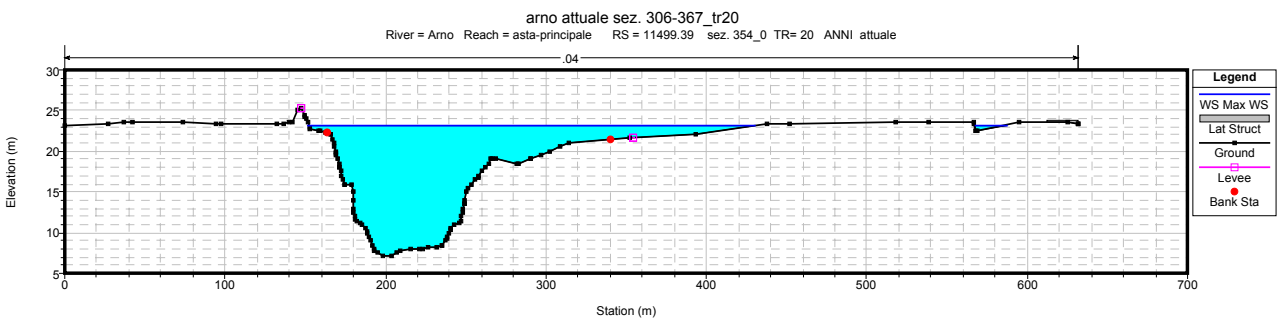
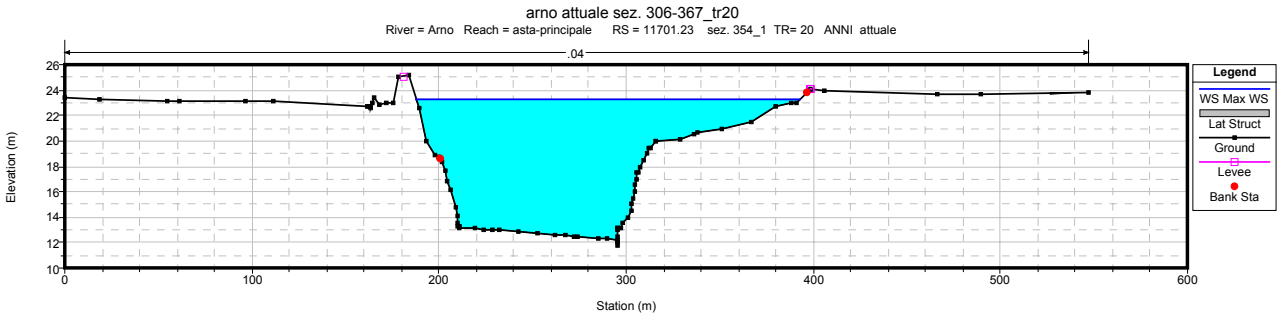
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno attuale sez. 306-367_tr20
River = Arno Reach = asta-principale RS = 11499.39 sez. 354_0 TR= 20 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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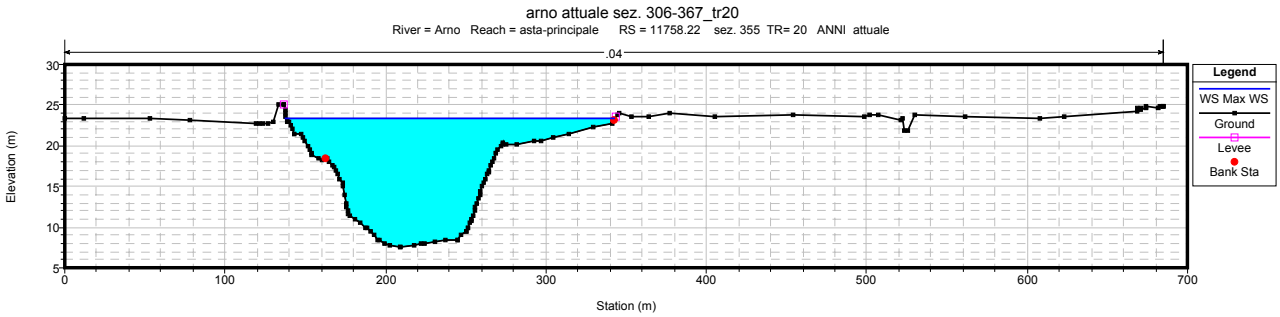
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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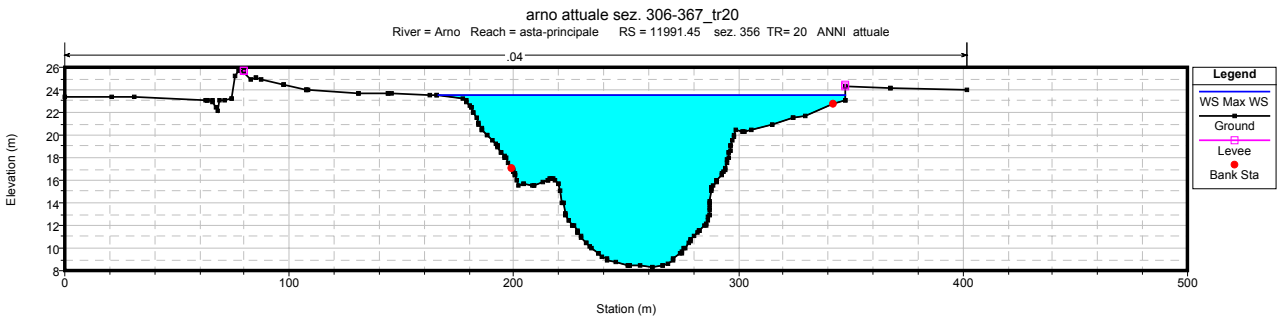
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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River = Arno Reach = asta-principale RS = 11991.45 sez. 356 TR= 20 ANNI attuale
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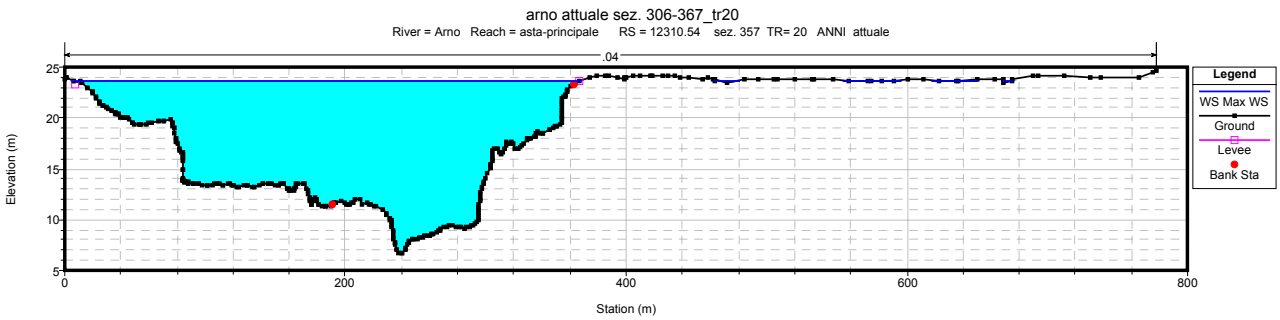
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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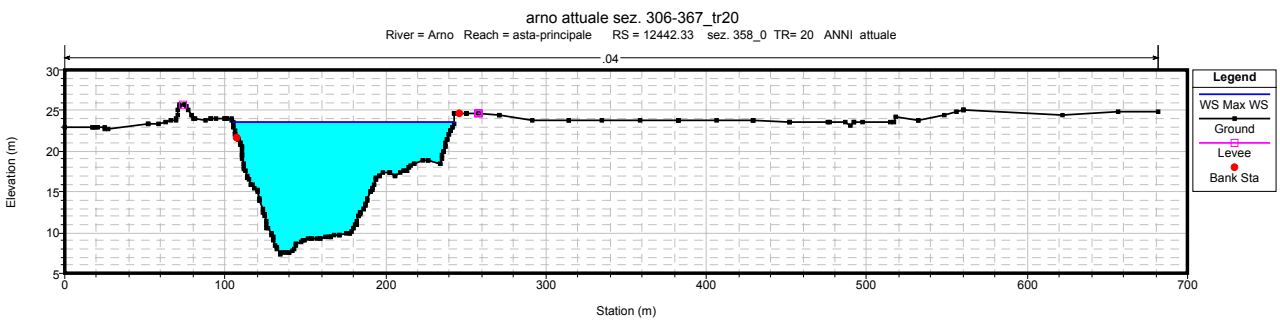
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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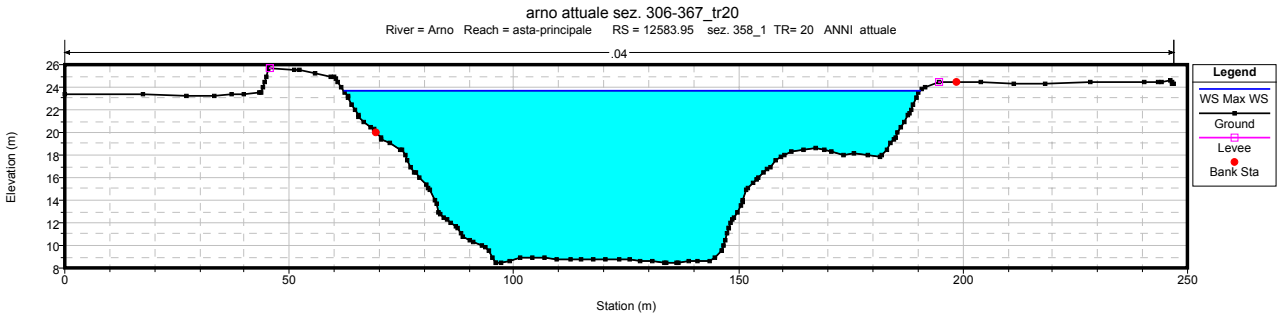
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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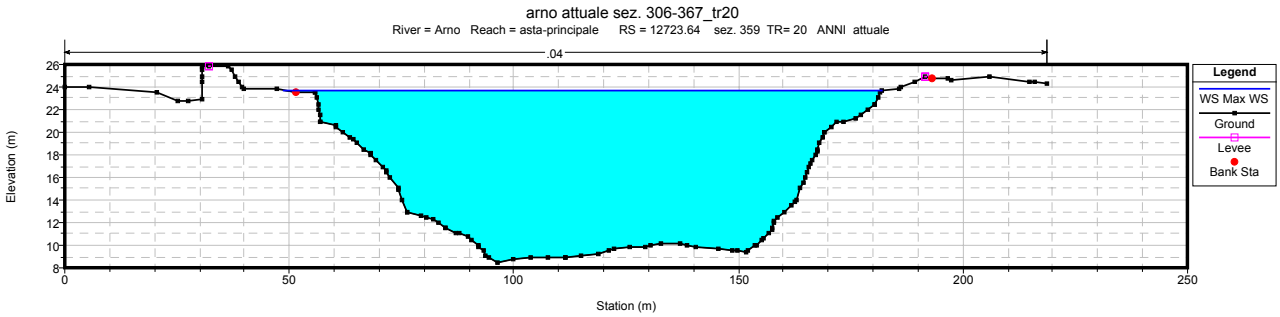
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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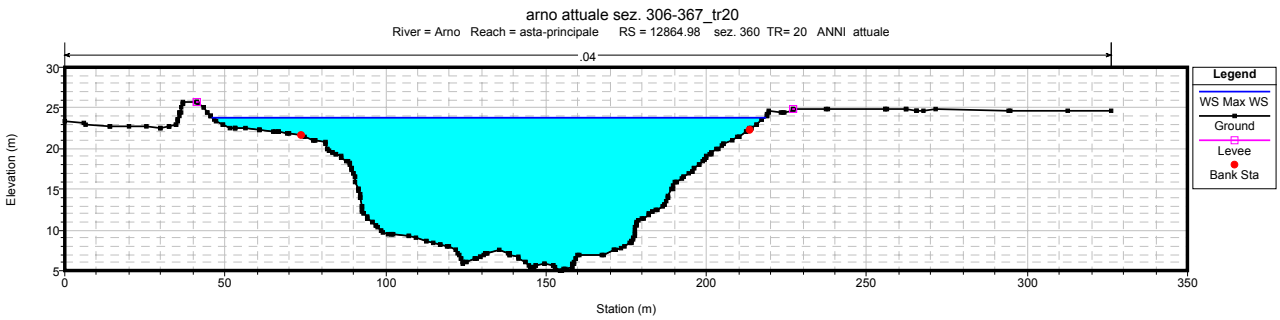
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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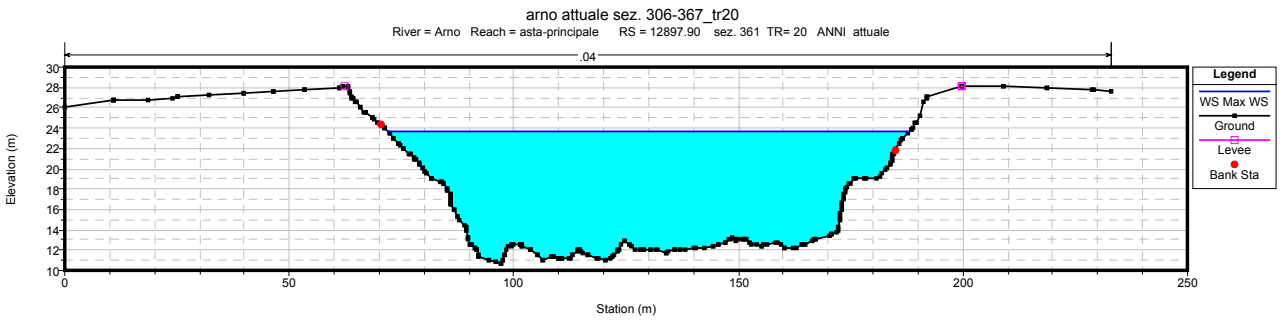
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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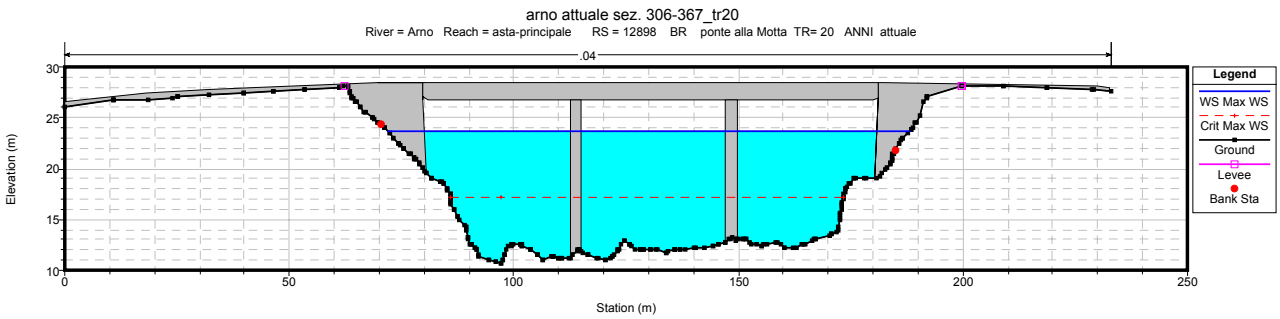
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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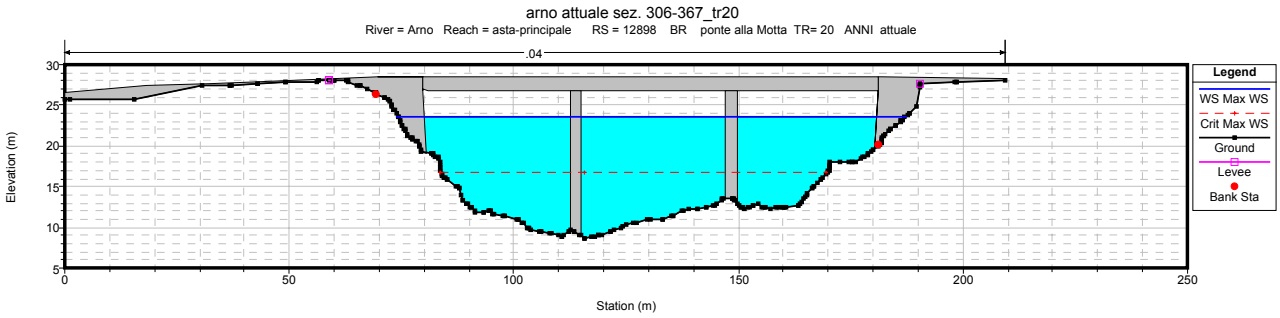
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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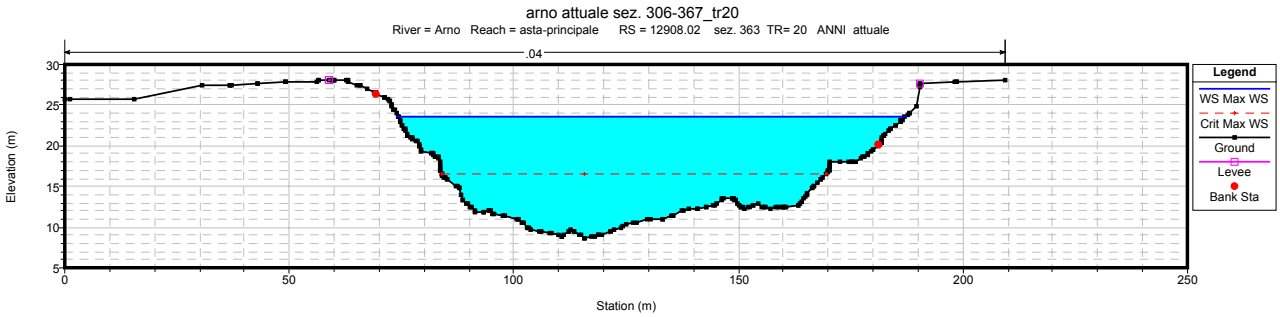
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta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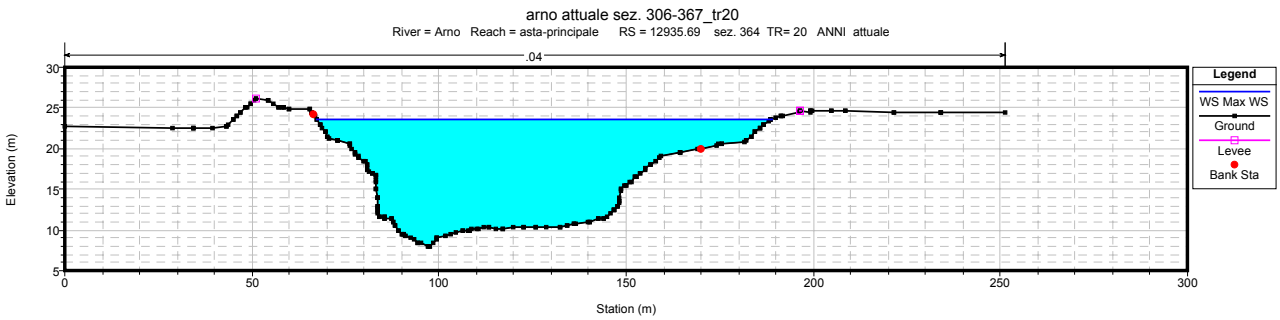
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta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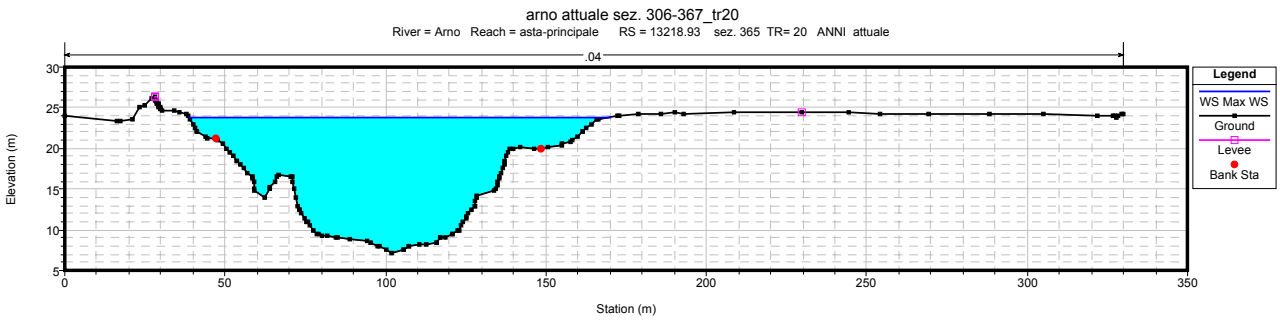
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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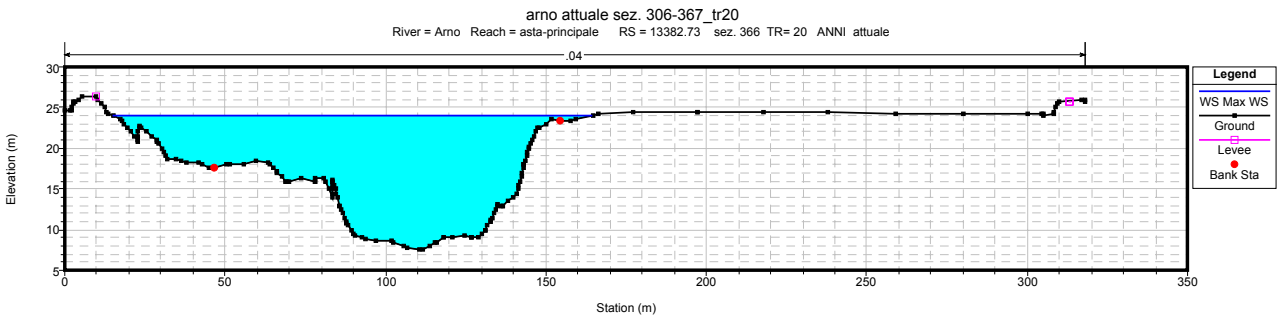
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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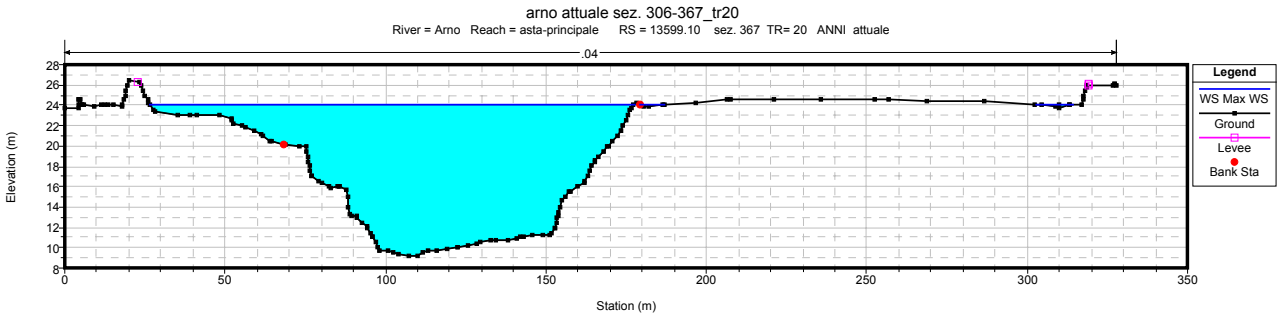
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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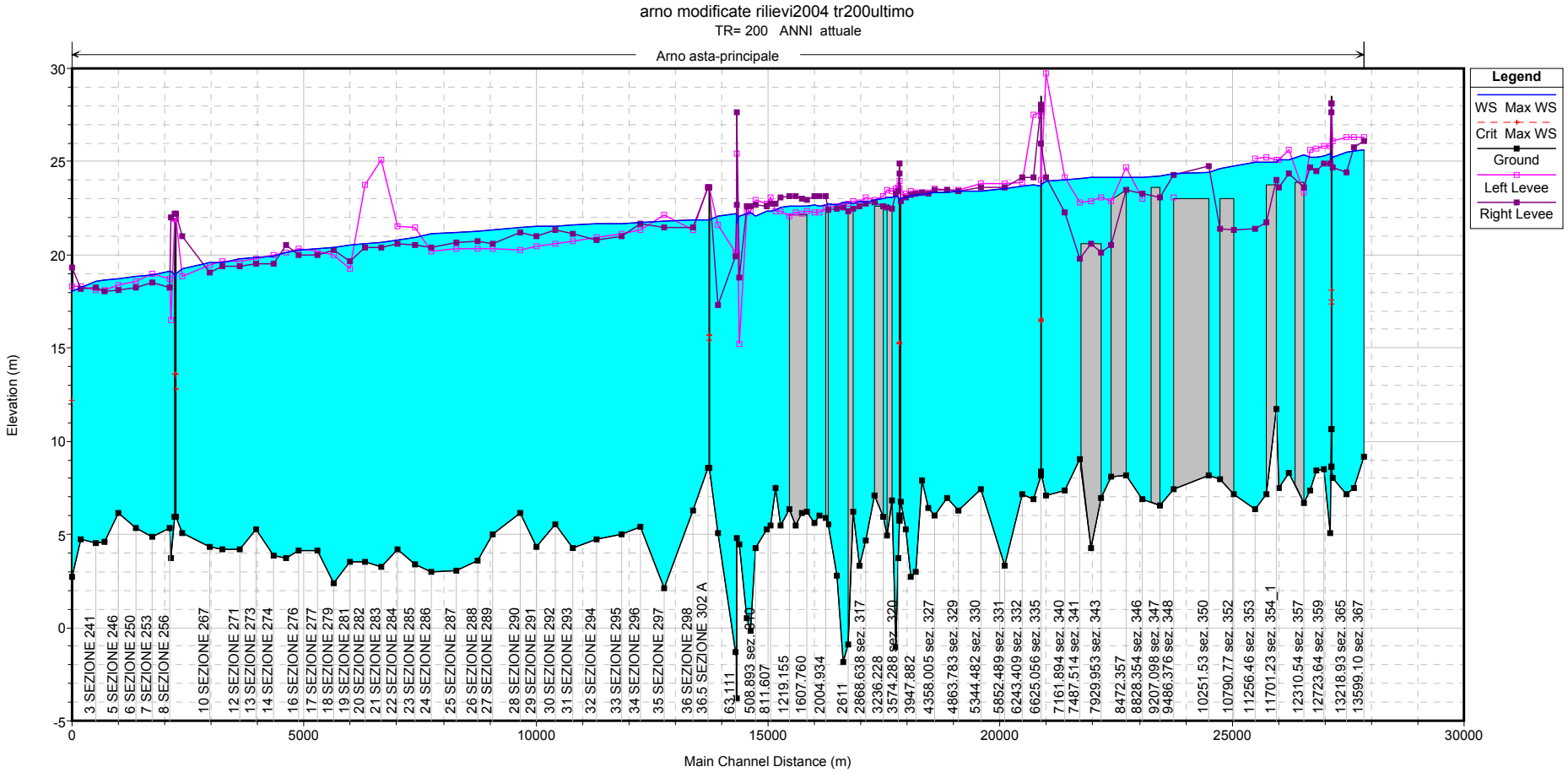
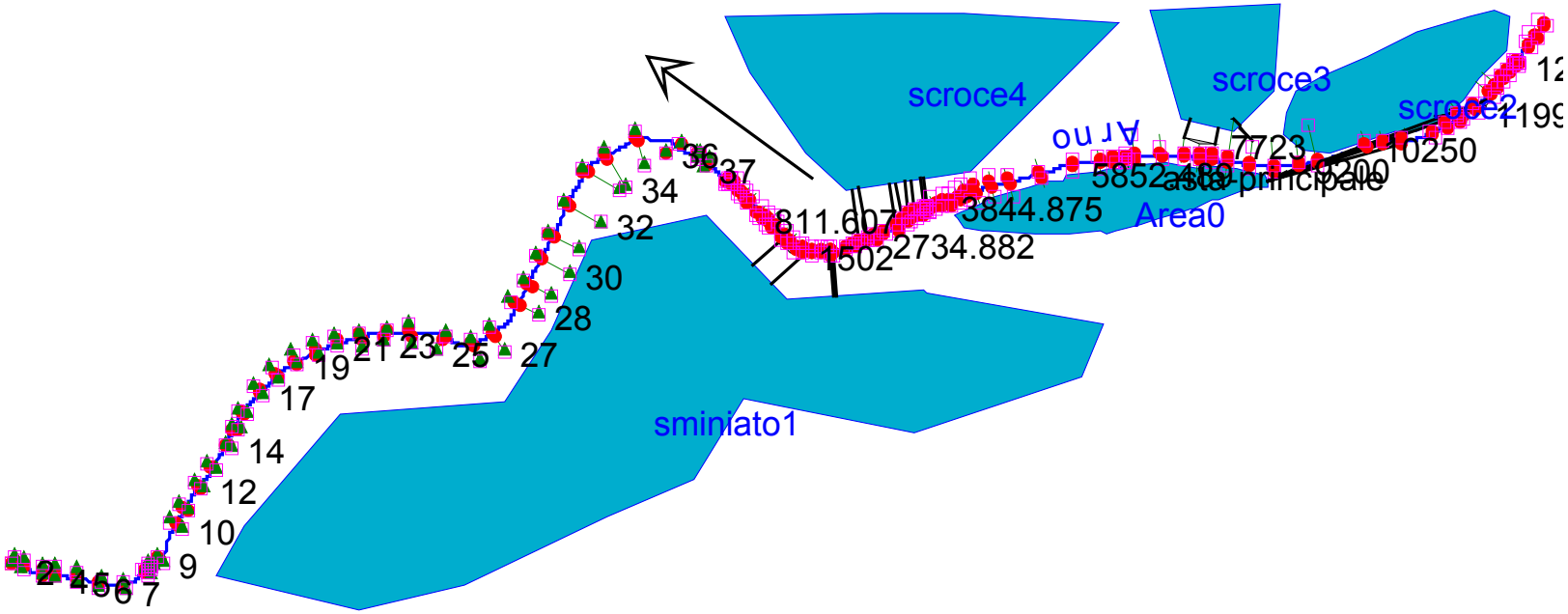
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

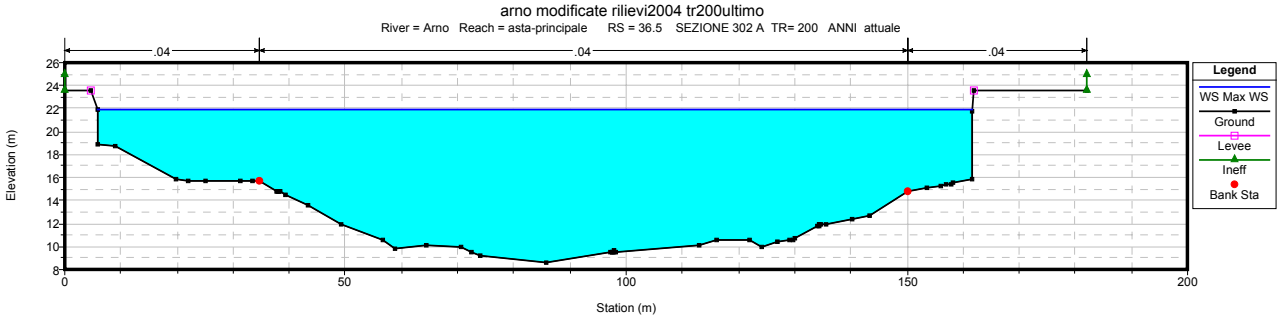
TEMPO DI RITORNO 200 ANNI

Studio di Ingegneria Dott. Ing. Nicola Croce Prof. Ing. Pietro Croce
via Carducci, 47 - 56010 Ghezzano (PI) e-mail: croce@interfree.it tel 050 878 716 050 878 507 fax 050 877 994



Studio di Ingegneria Dott. Ing. Nicola Croce Prof. Ing. Pietro Croce
via Carducci, 47 - 56010 Ghezzano (PI) e-mail: croce@interfree.it tel 050 878 716 050 878 507 fax 050 877 994

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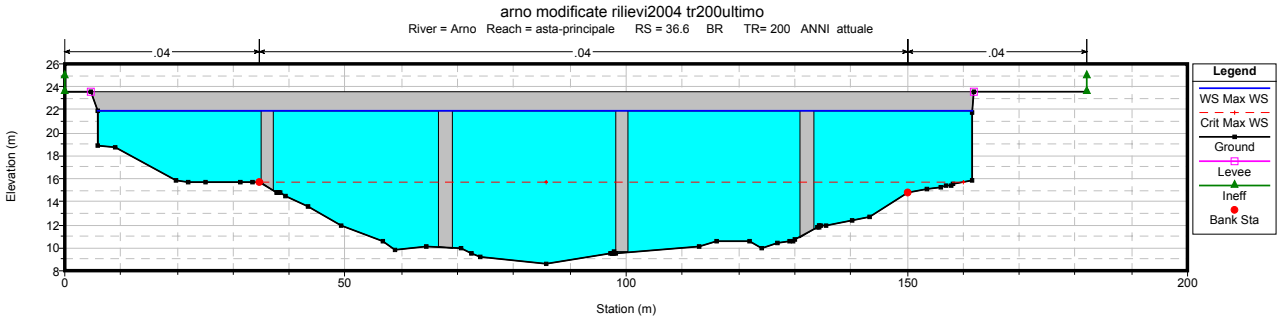
.04
.04
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Ineff
Bank Sta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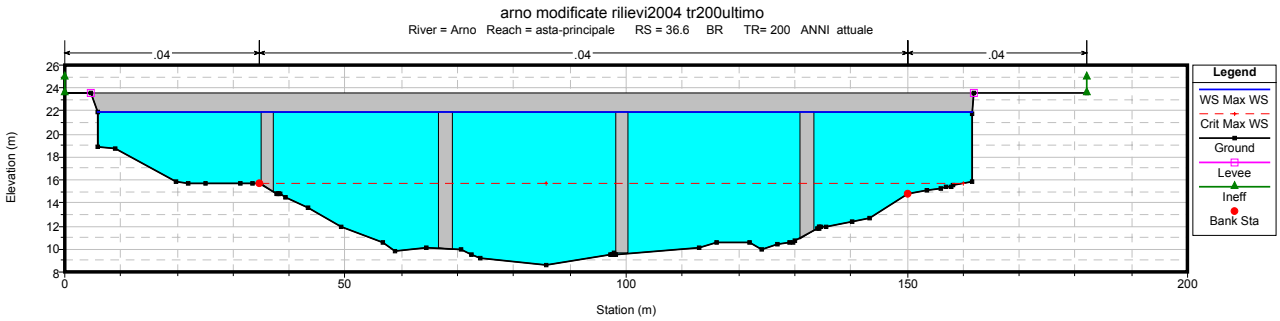
River = Arno Reach = asta-principale RS = 36.6 BR TR= 200 ANNI attuale
.04
.04
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Ineff
Bank Sta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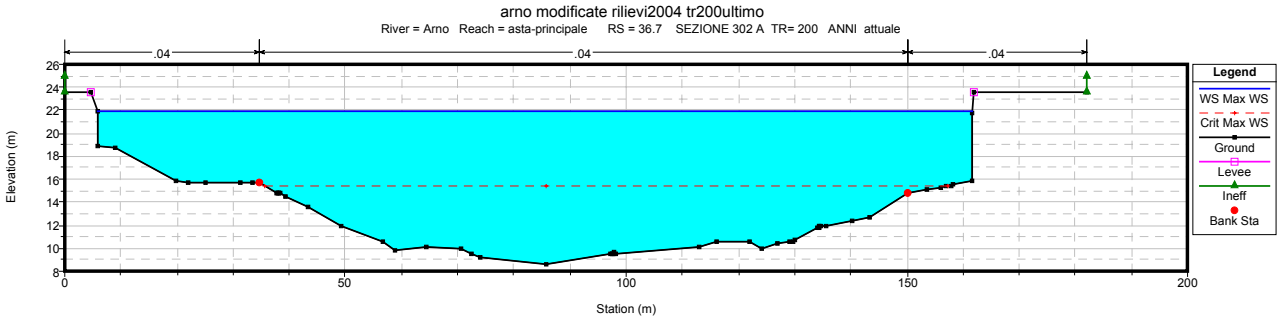
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Ineff
Bank Sta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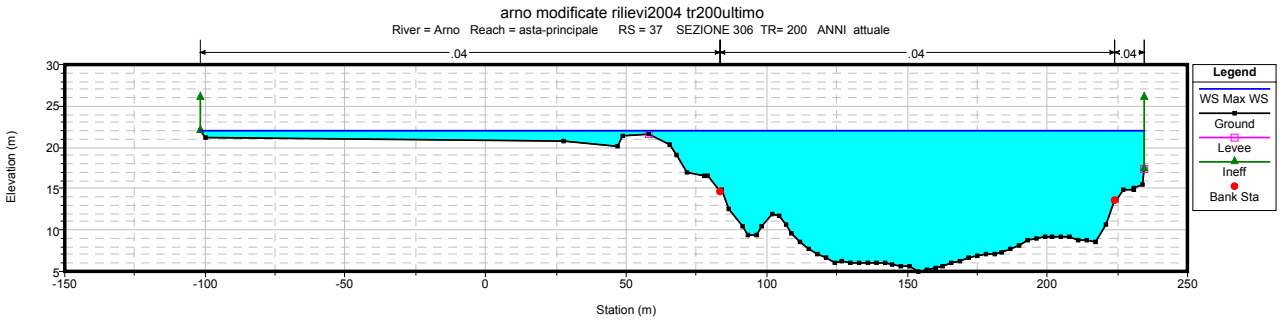
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Ineff
Bank Sta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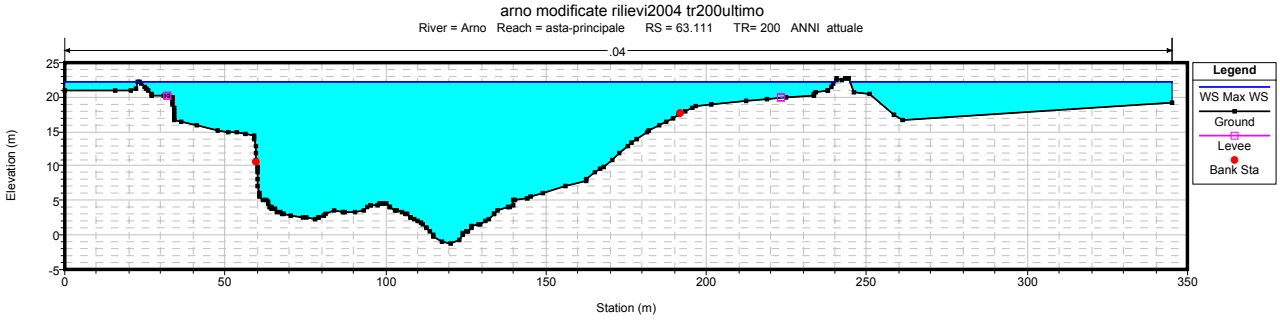
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Ineff
Bank Sta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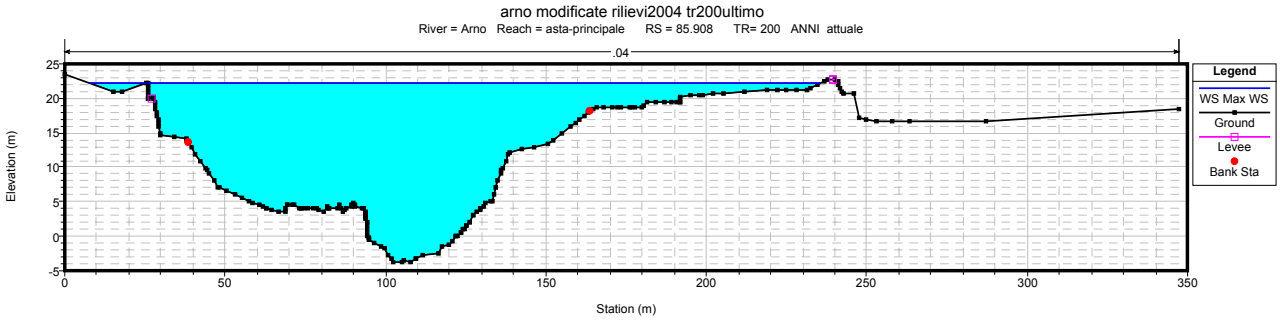
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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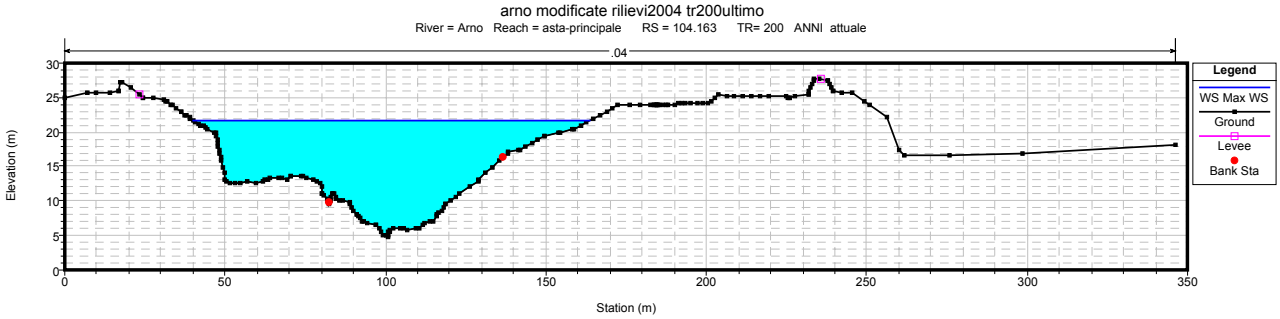
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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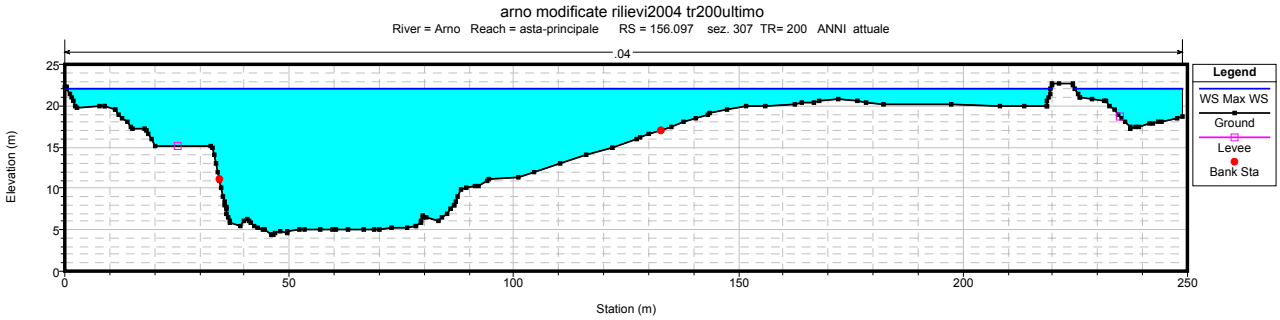
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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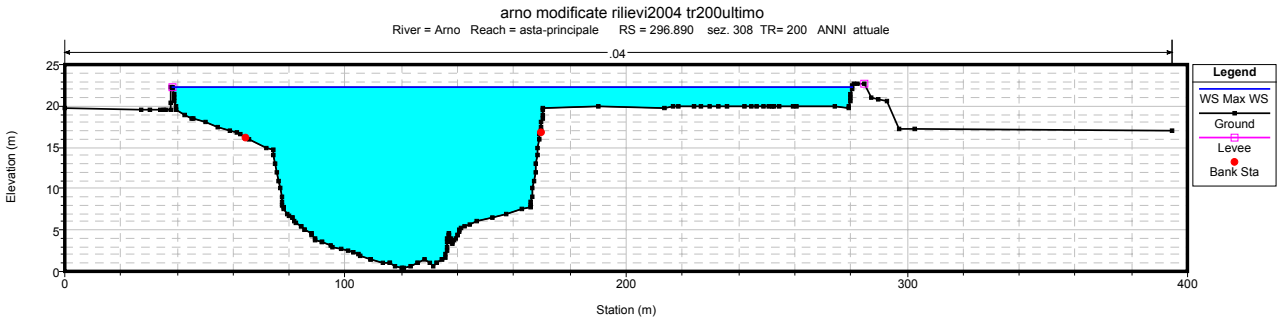
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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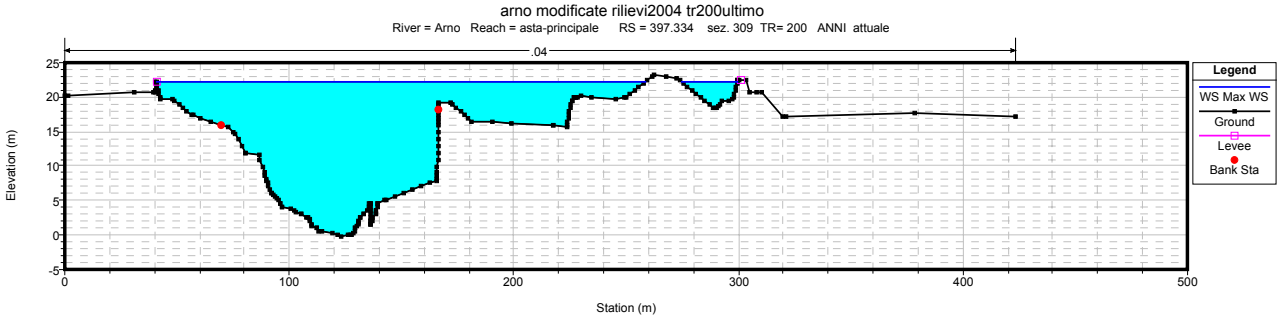
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)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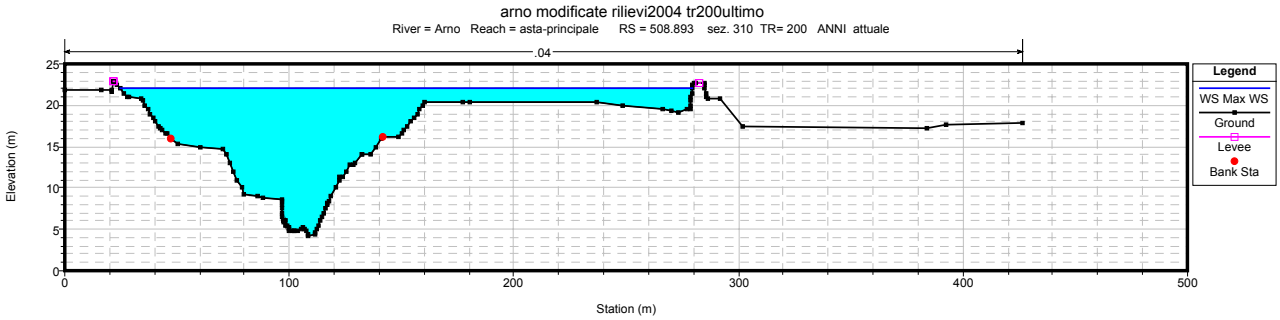
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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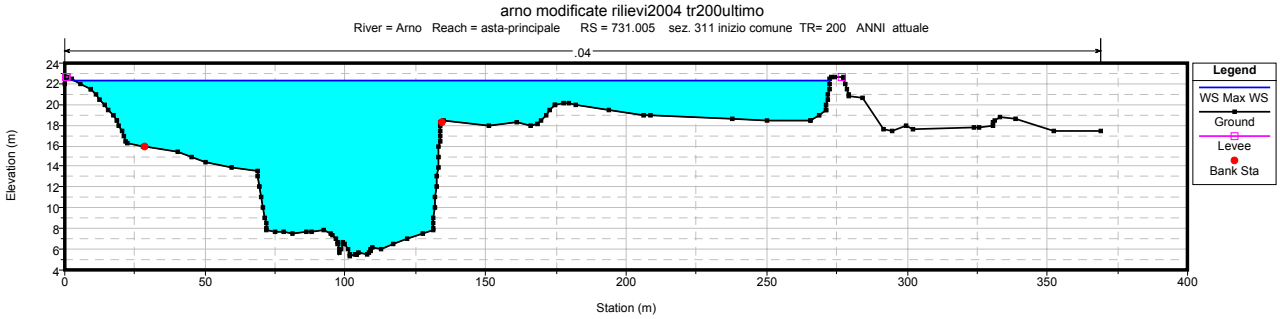
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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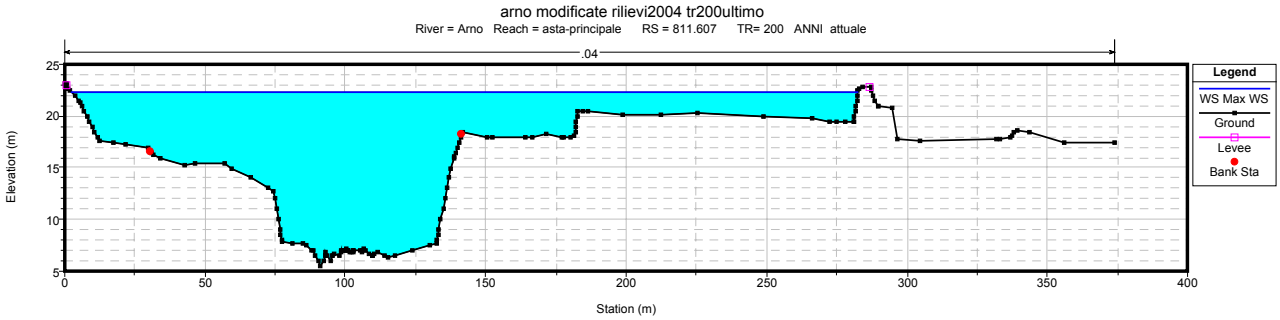
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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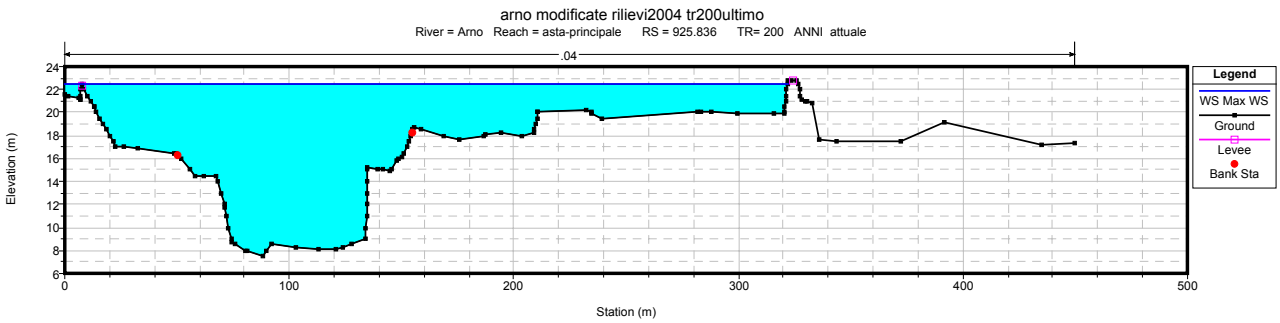
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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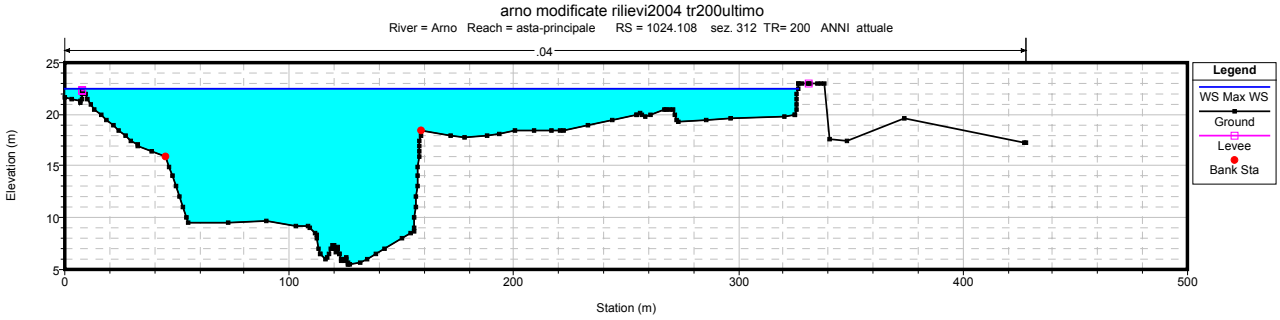
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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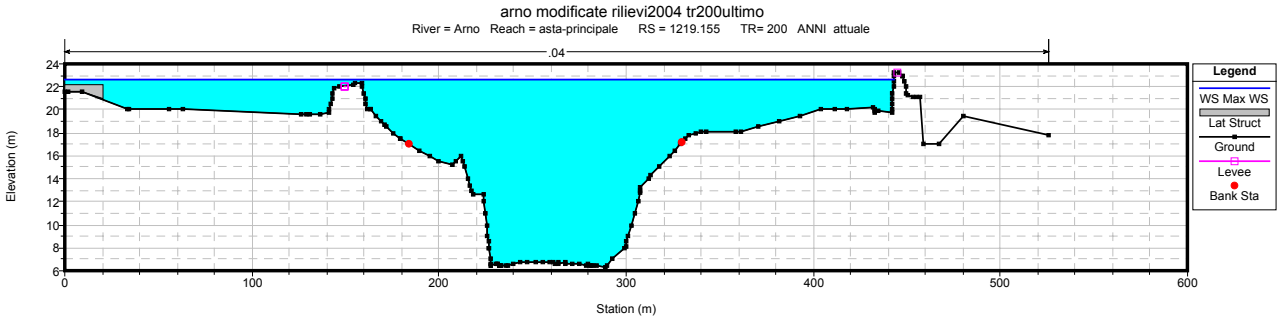
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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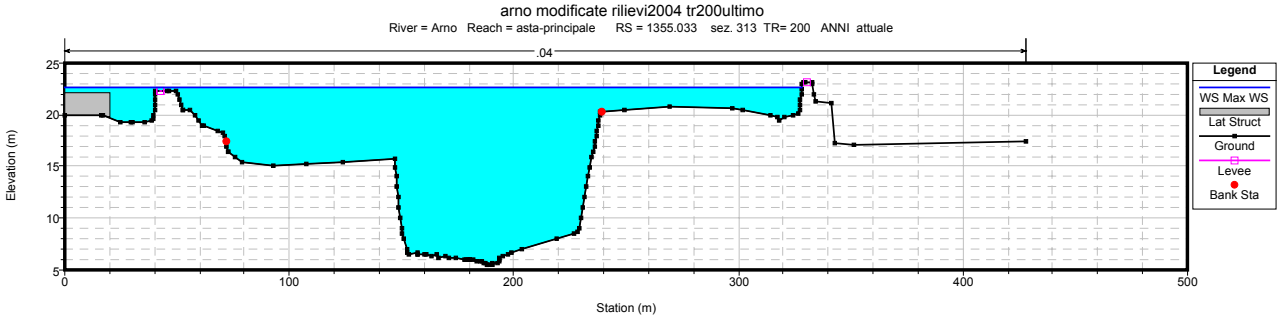
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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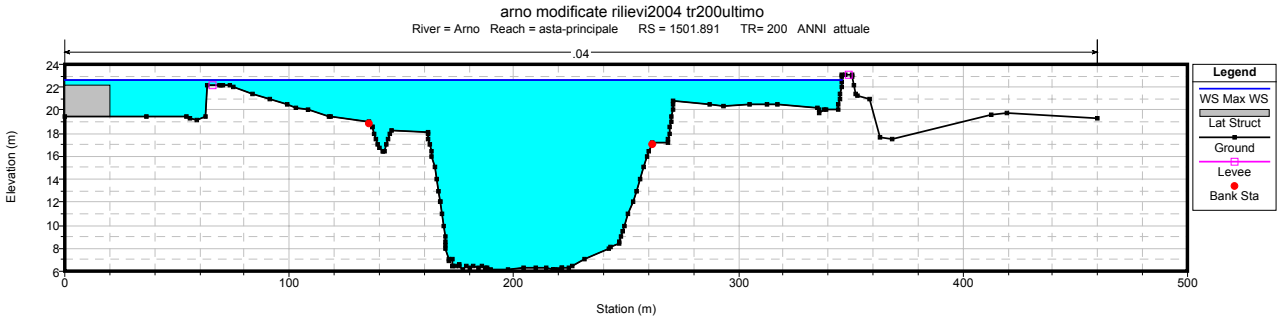
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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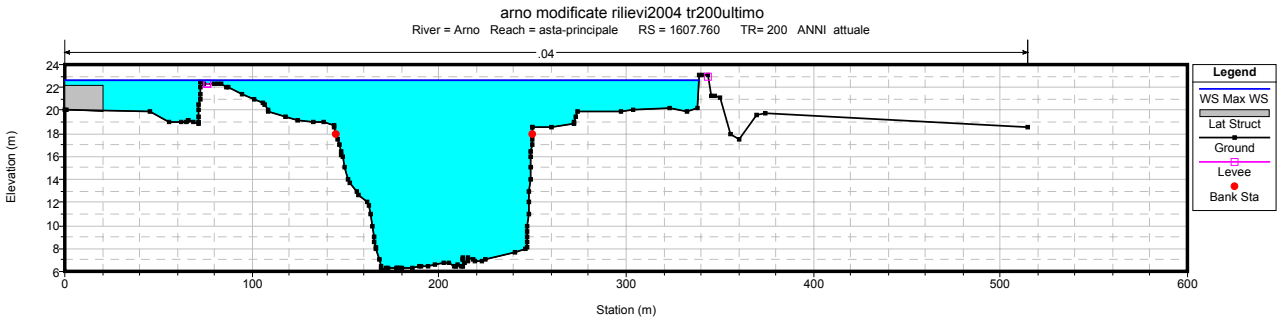
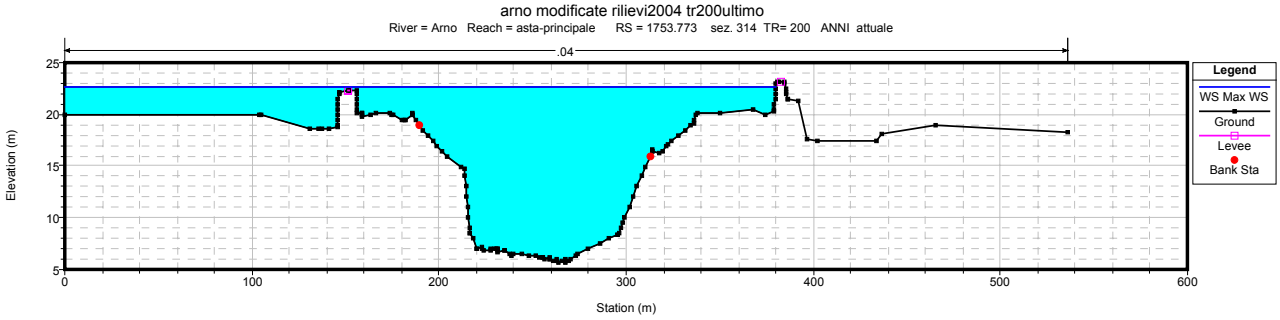
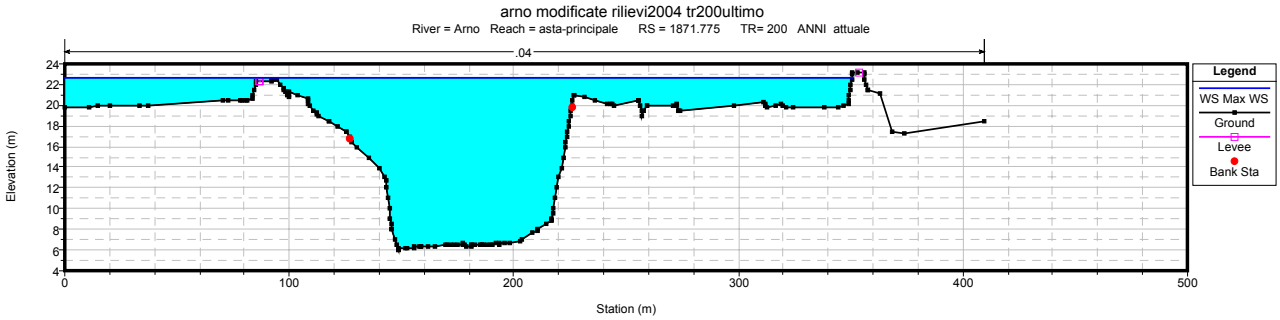
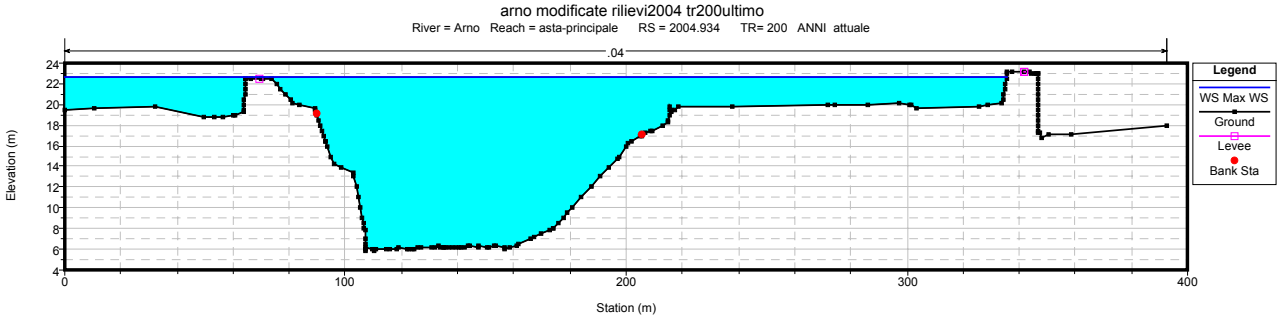
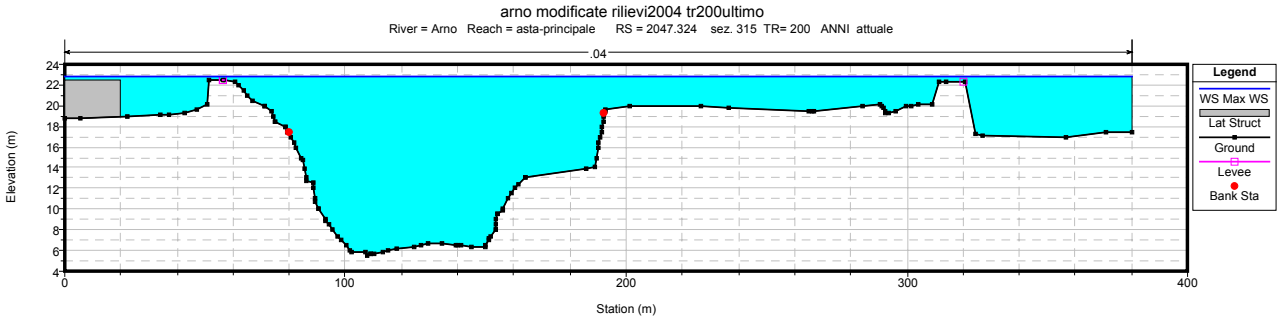
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

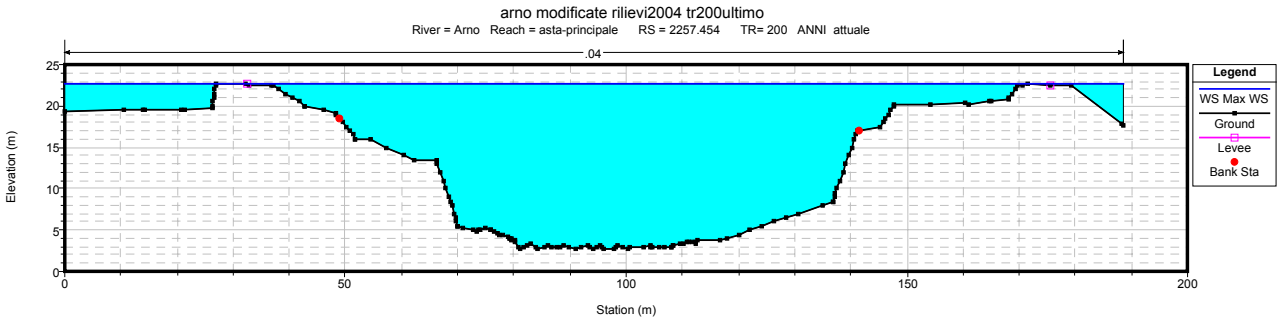

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 1607.760 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

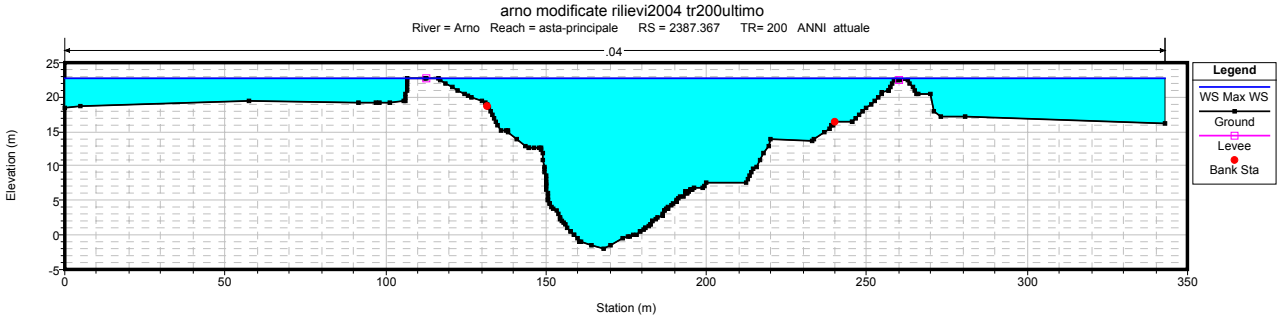

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 1753.773 sez. 314 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

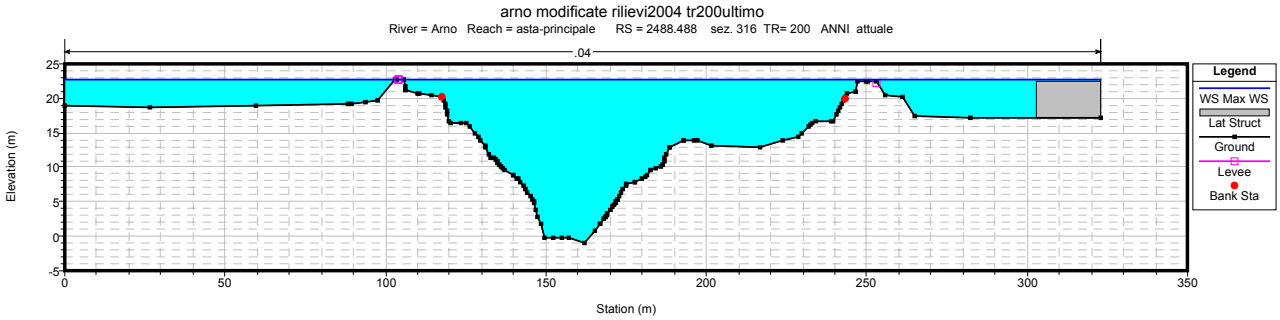

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 1871.775 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

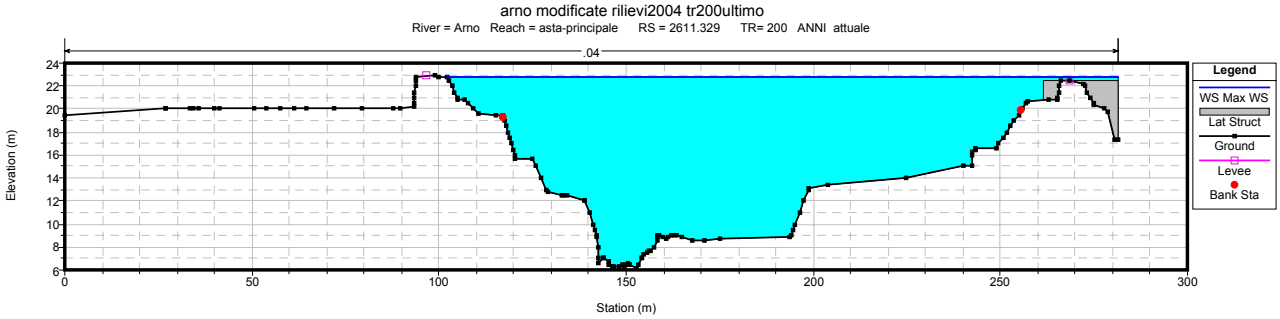

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2004.934 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

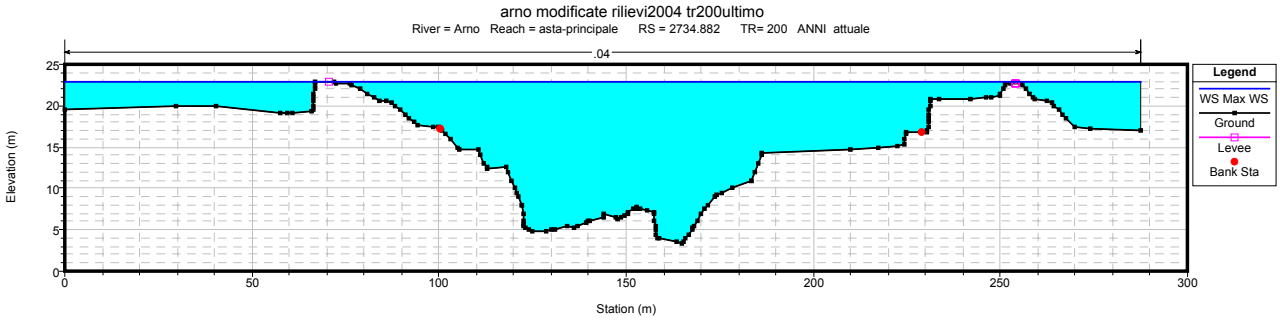

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2047.324 sez. 315 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

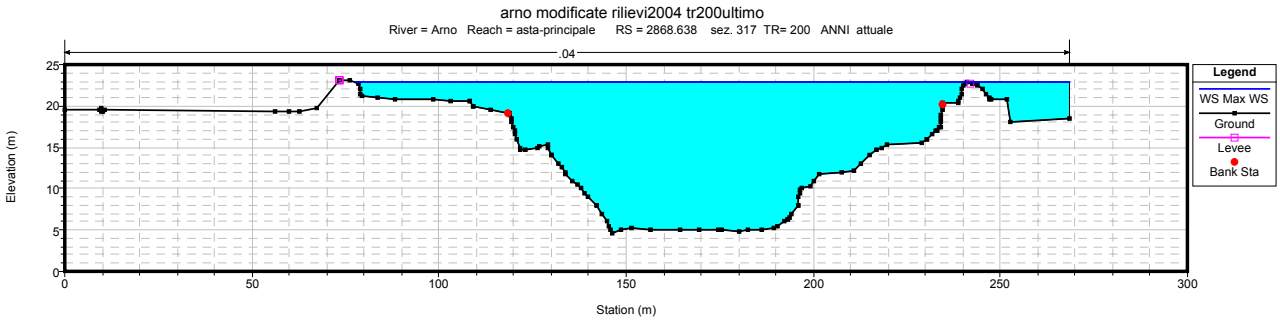

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2257.454 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

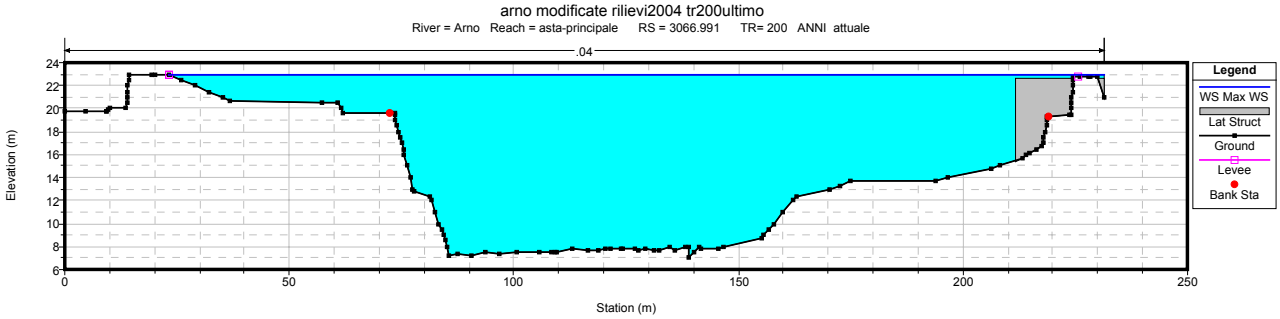

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2387.367 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

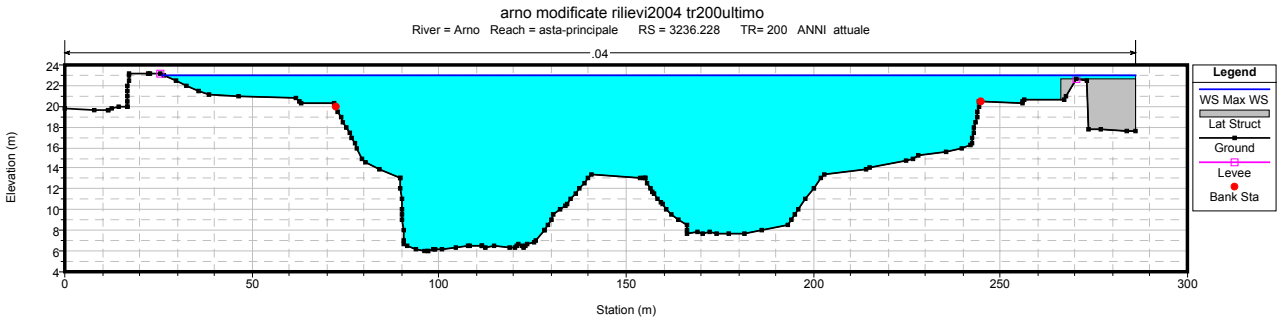

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2488.488 sez. 316 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

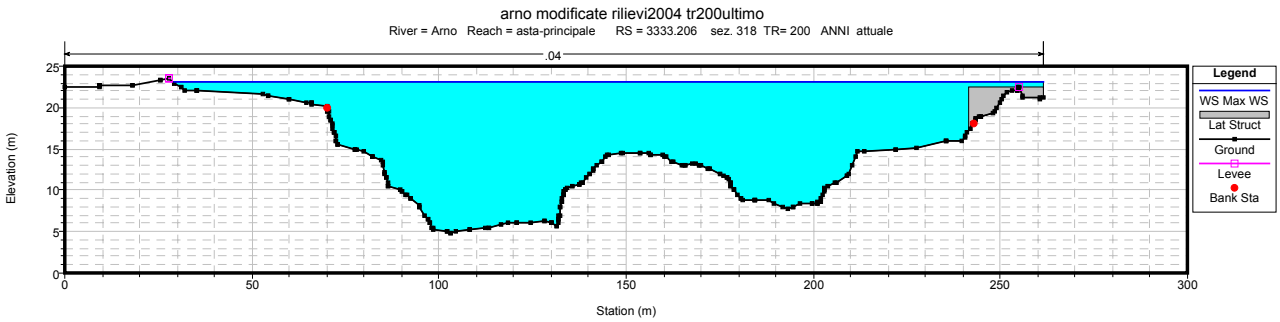

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2611.329 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

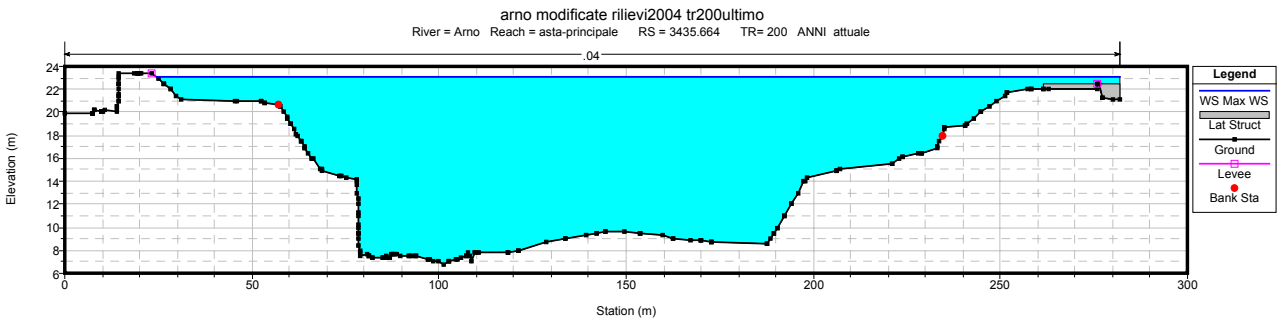

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2734.882 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

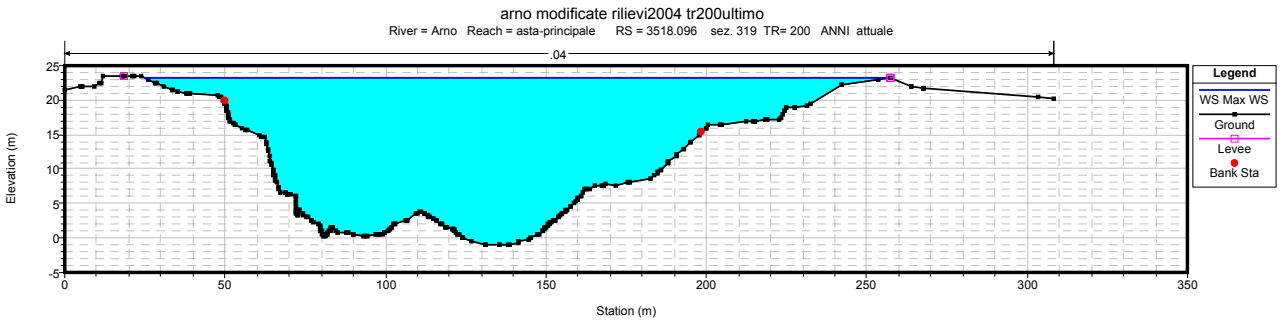

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 2868.638 sez. 317 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

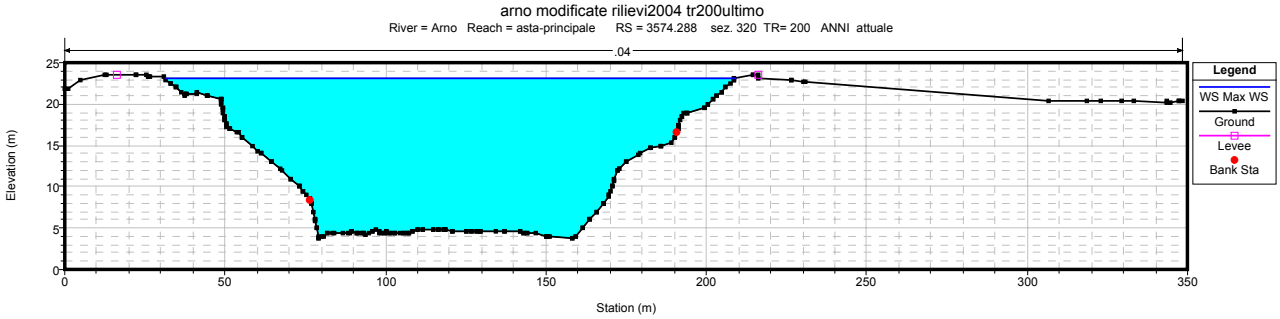

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3066.991 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

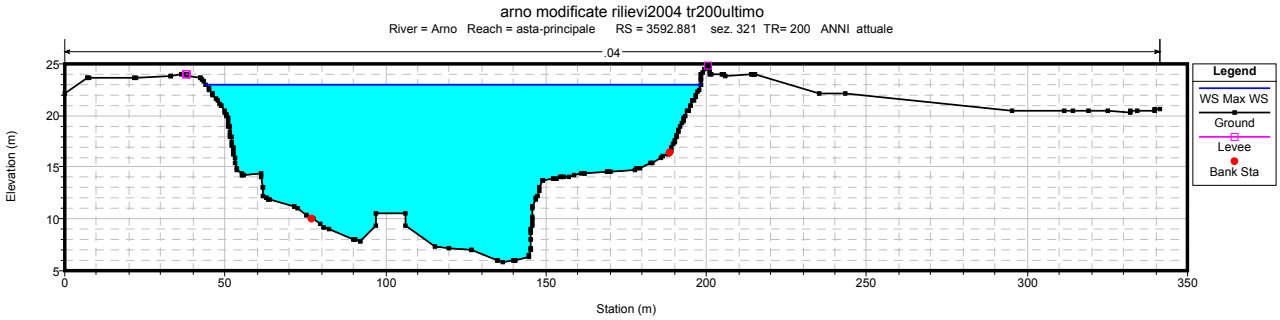

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3236.228 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

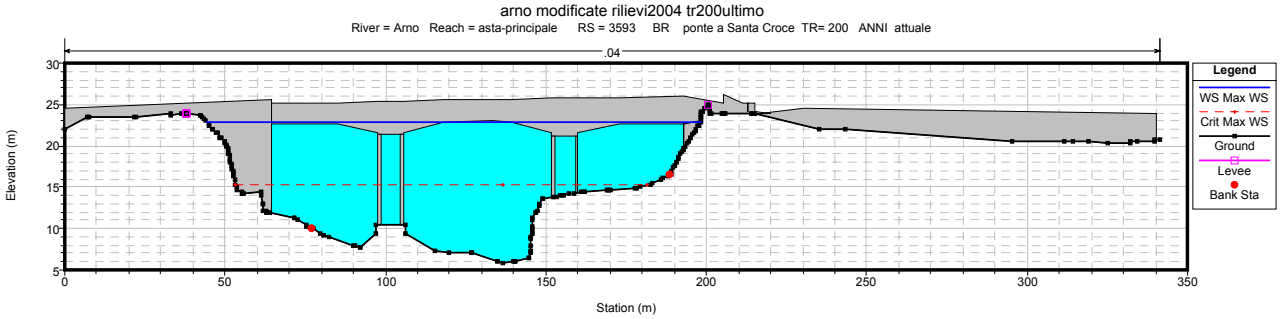

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3333.206 sez. 318 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

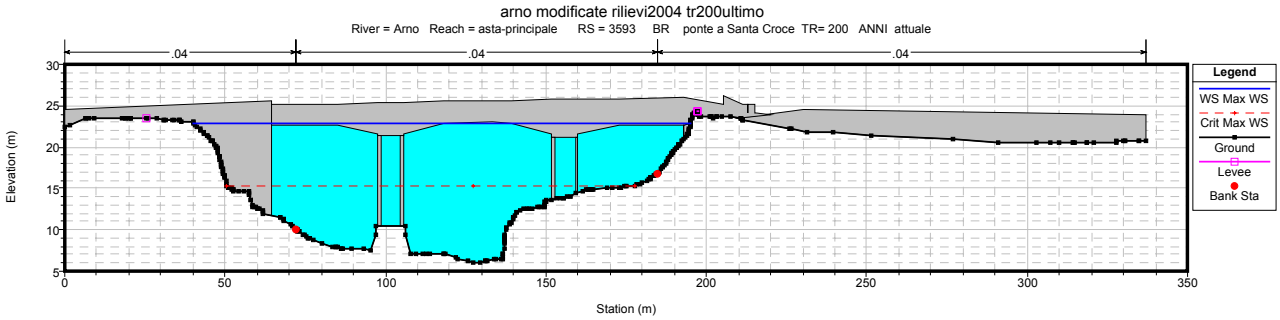

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3435.664 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

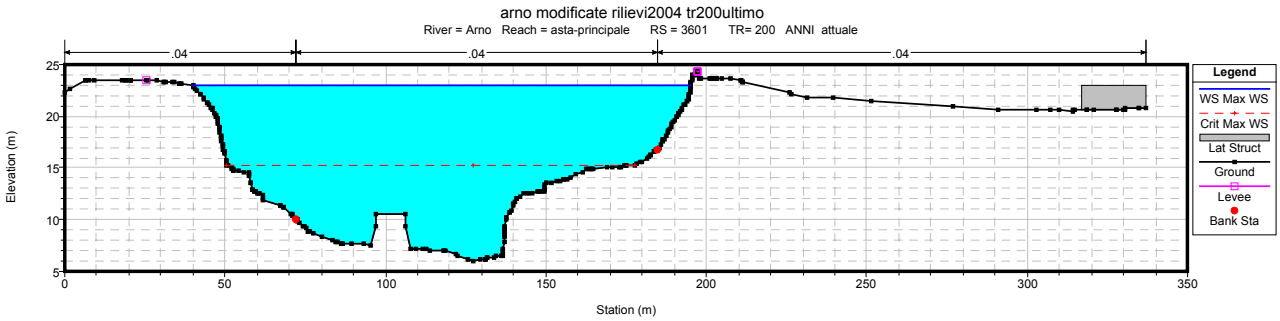

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3518.096 sez. 319 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

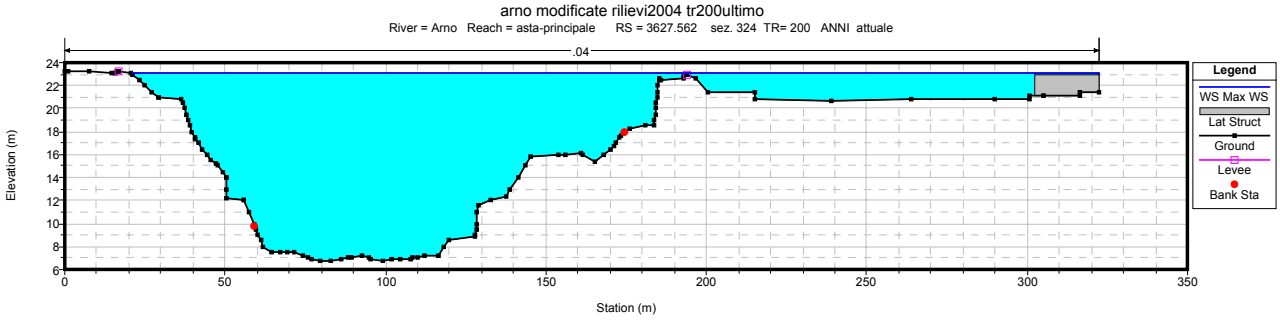

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3574.288 sez. 320 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

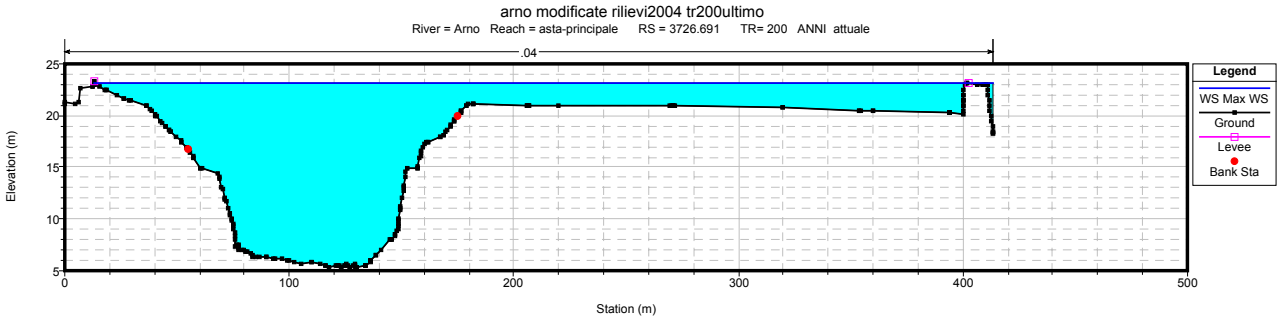

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3592.881 sez. 321 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

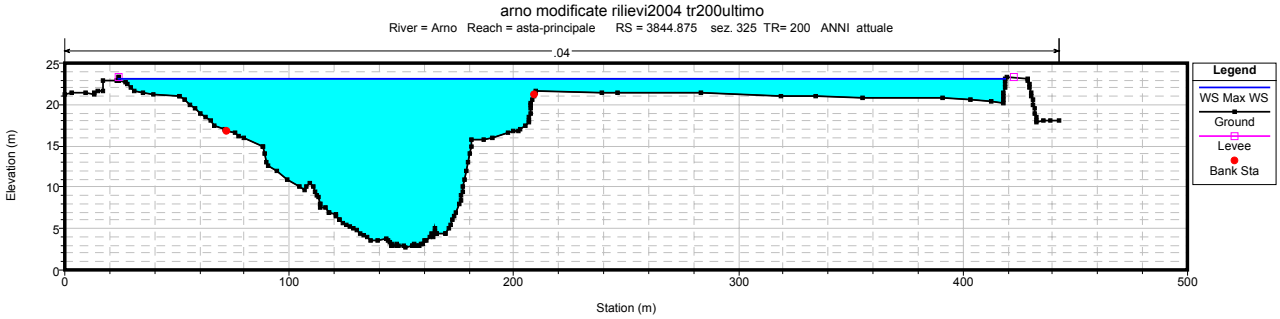

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3593 BR ponte a Santa Croce TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta

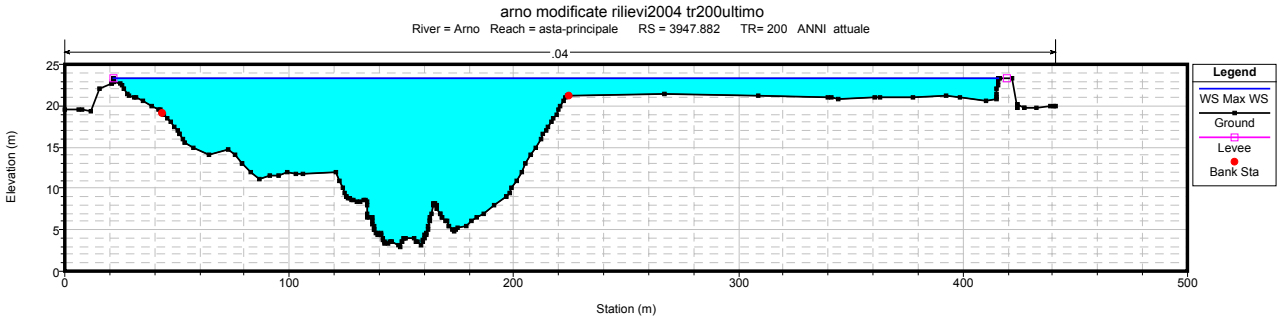

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3593 BR ponte a Santa Croce TR= 200 ANNI attuale
.04
.04
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta

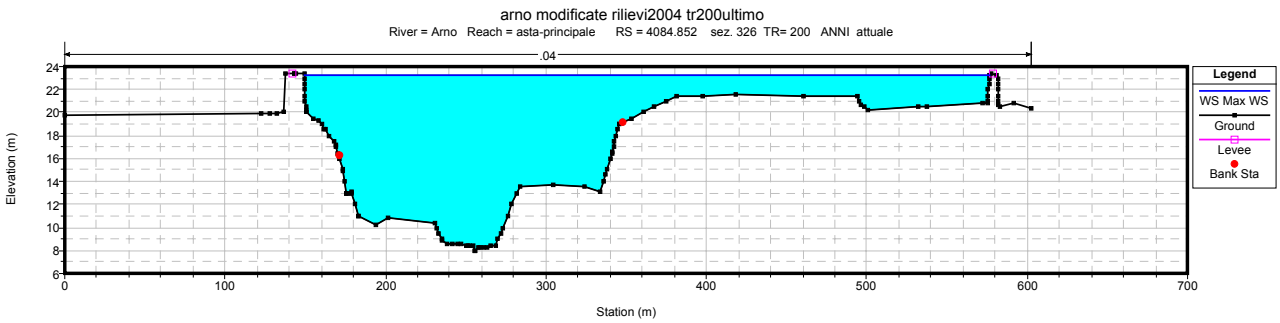

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3601 TR= 200 ANNI attuale
.04
.04
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Lat Struct
Ground
Levee
Bank Sta

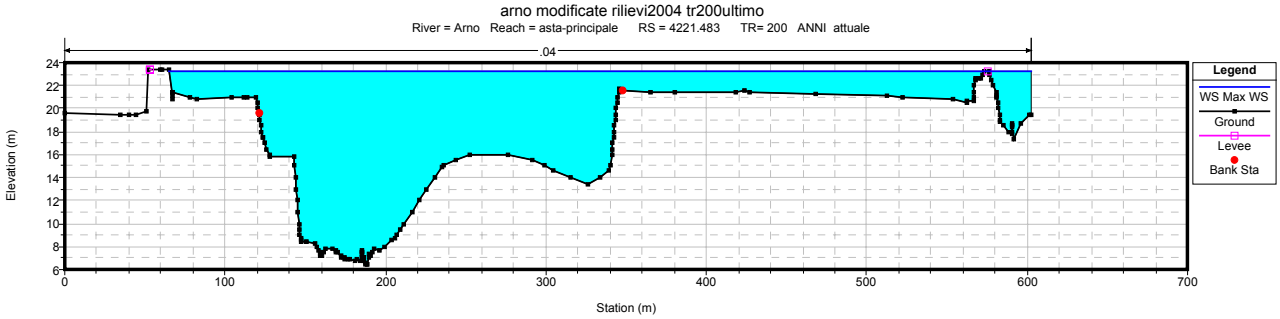

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3627.562 sez. 324 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

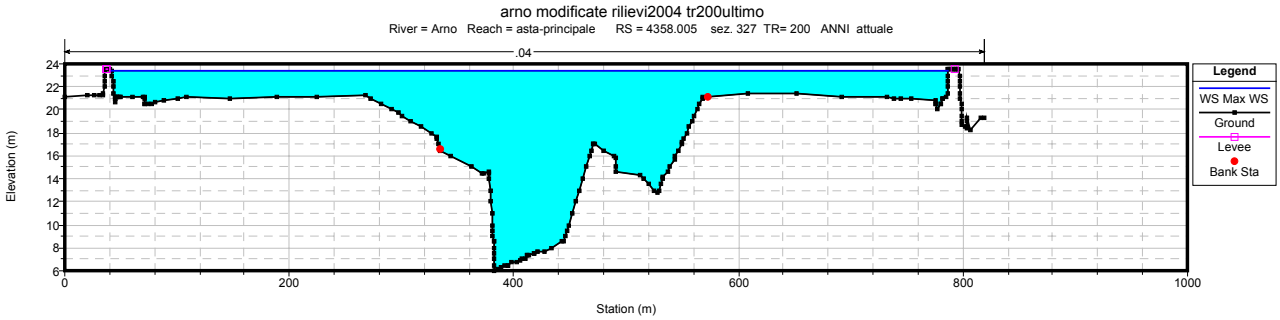

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3726.691 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

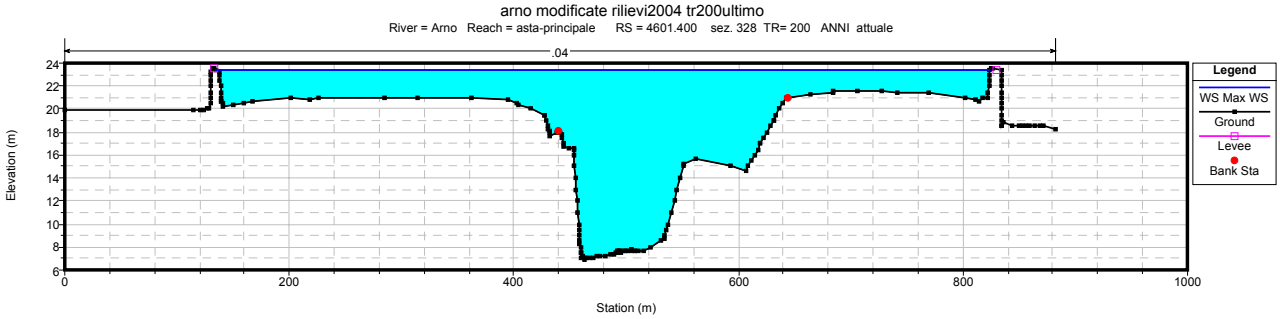

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3844.875 sez. 325 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

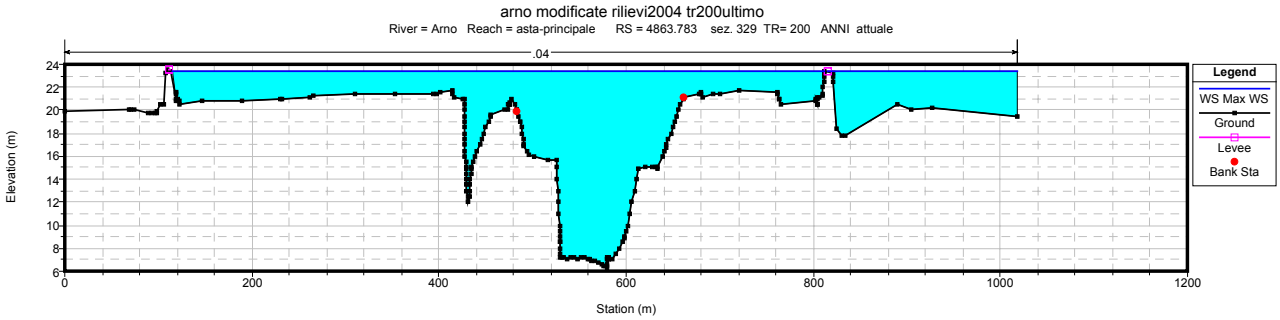

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 3947.882 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

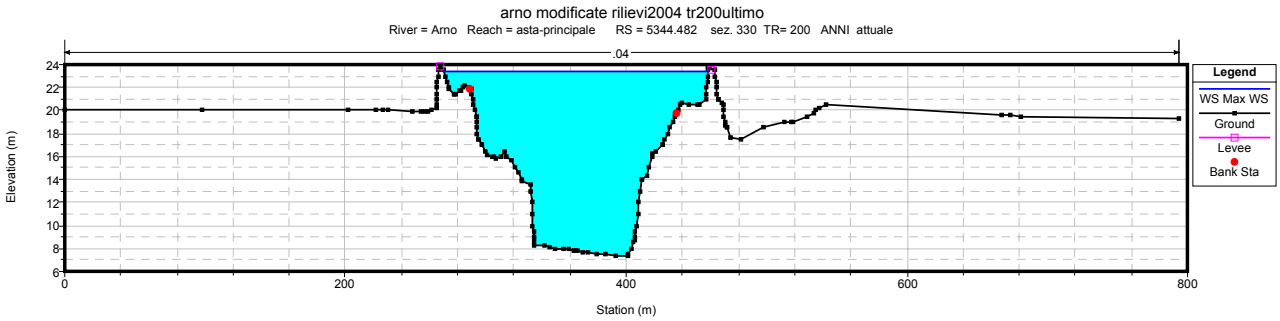

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 4084.852 sez. 326 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

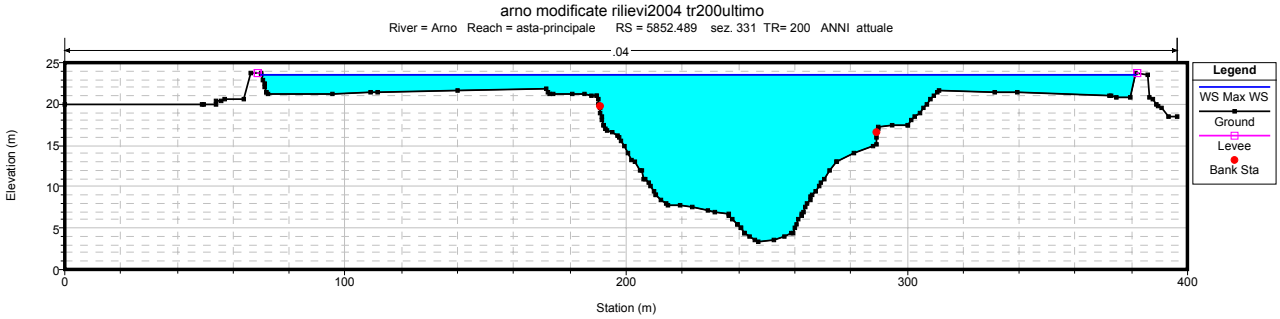

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 4221.483 TR= 200 ANNI attuale
.04
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

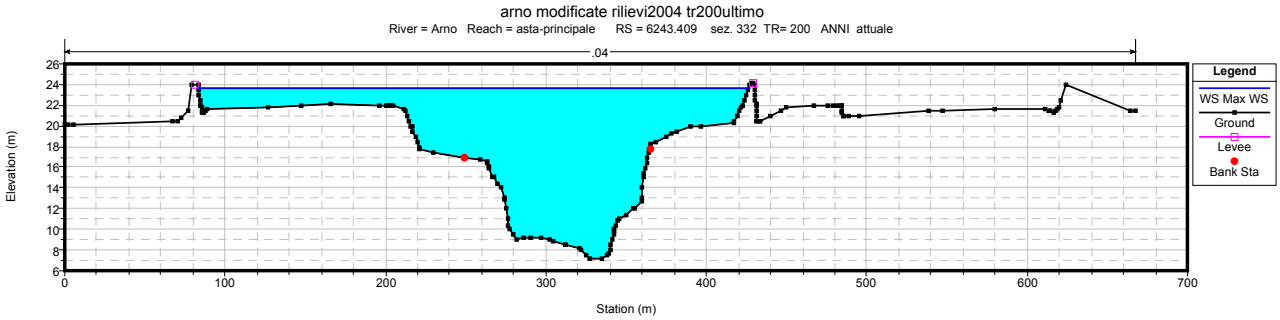

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 4358.005 sez. 327 TR= 200 ANNI attuale
.04
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

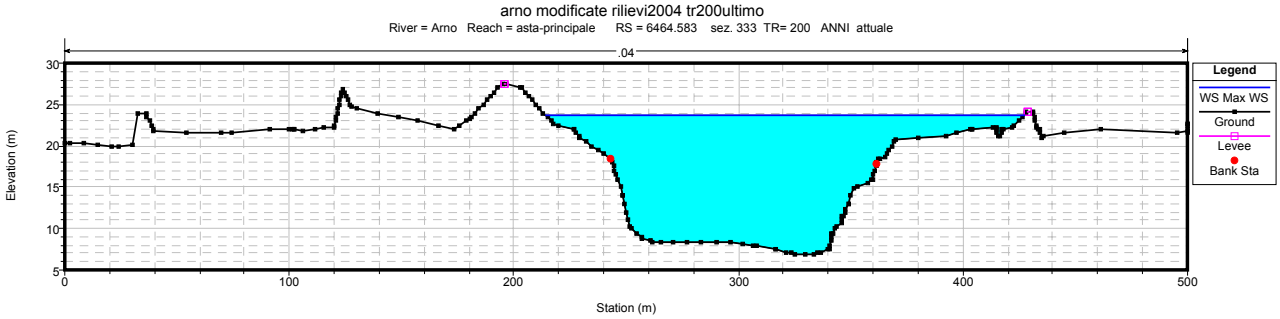

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 4601.400 sez. 328 TR= 200 ANNI attuale
.04
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

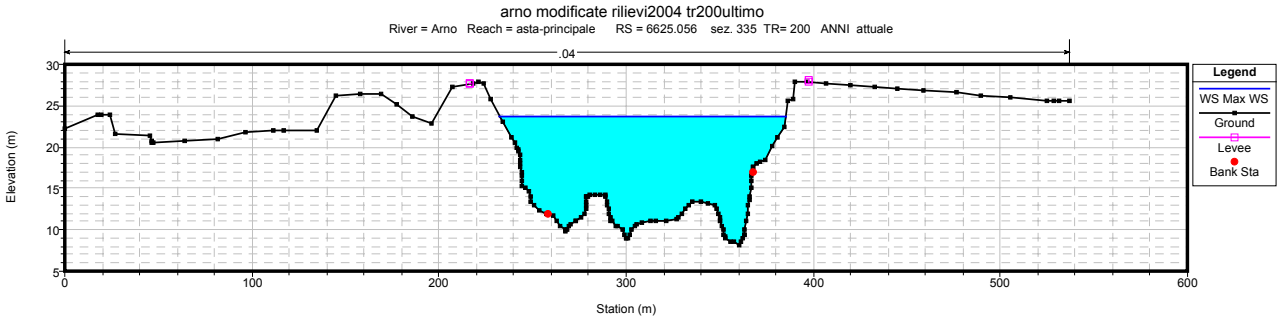

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 4863.783 sez. 329 TR= 200 ANNI attuale
.04
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

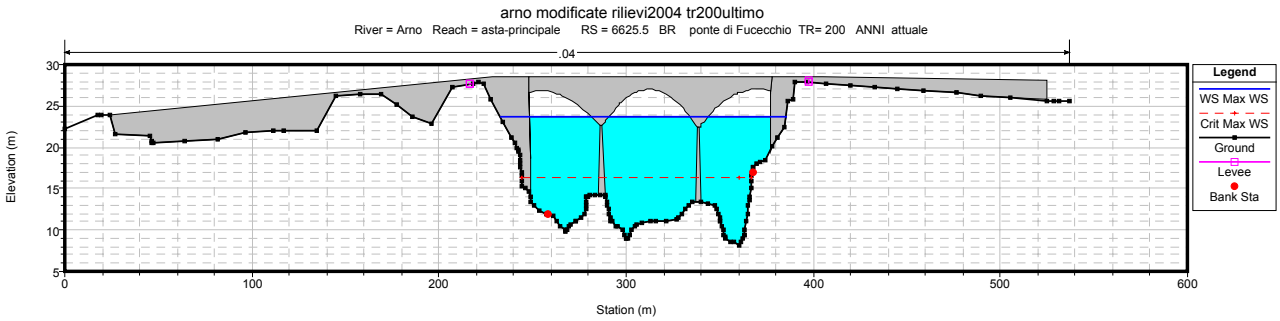

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 5344.482 sez. 330 TR= 200 ANNI attuale
.04
Legend
WS Max WS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

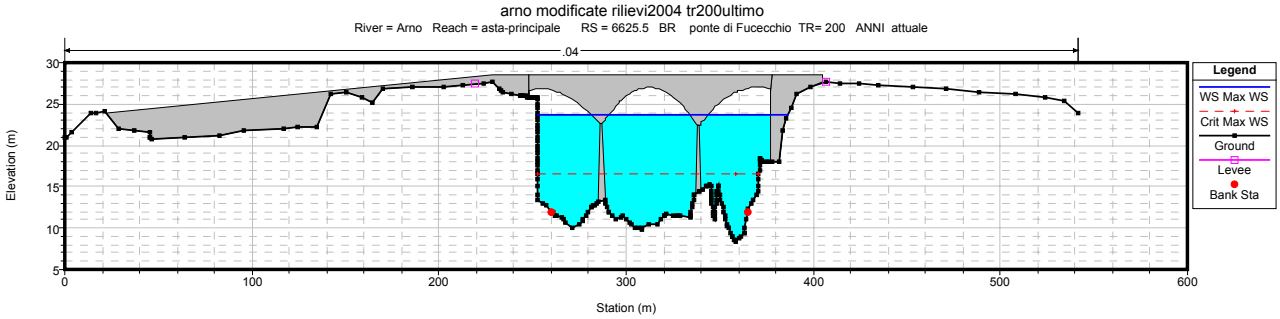

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 5852.489 sez. 331 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

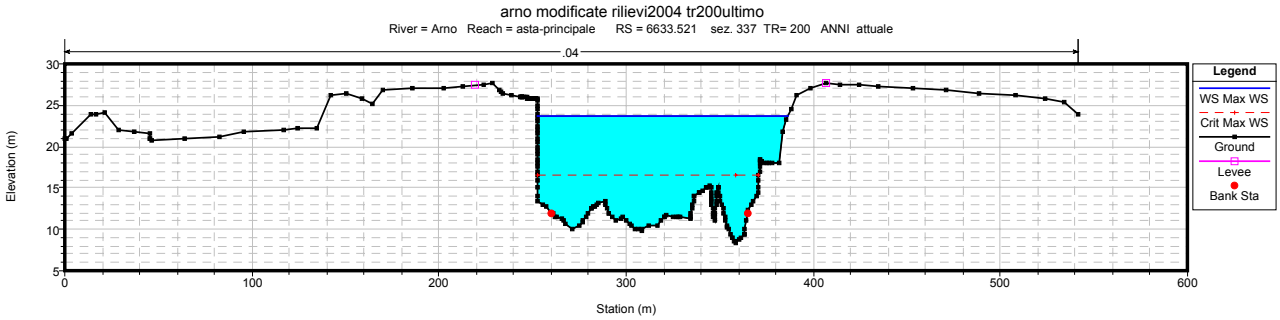

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6243.409 sez. 332 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

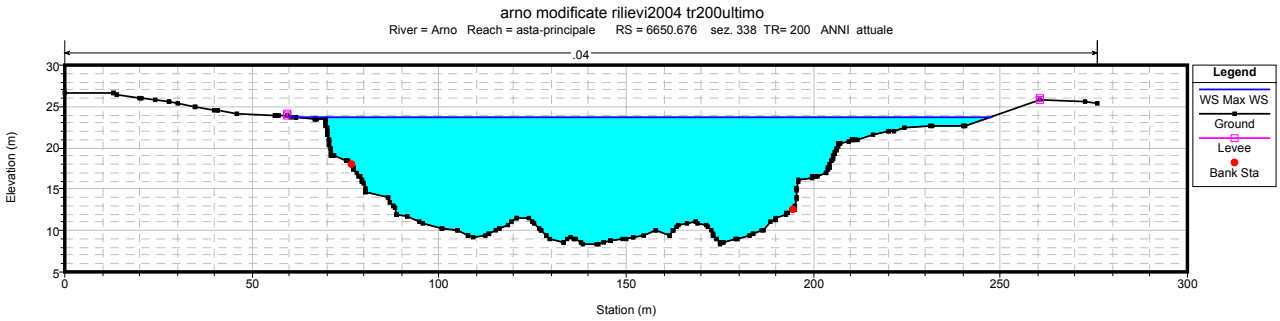

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6464.583 sez. 333 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

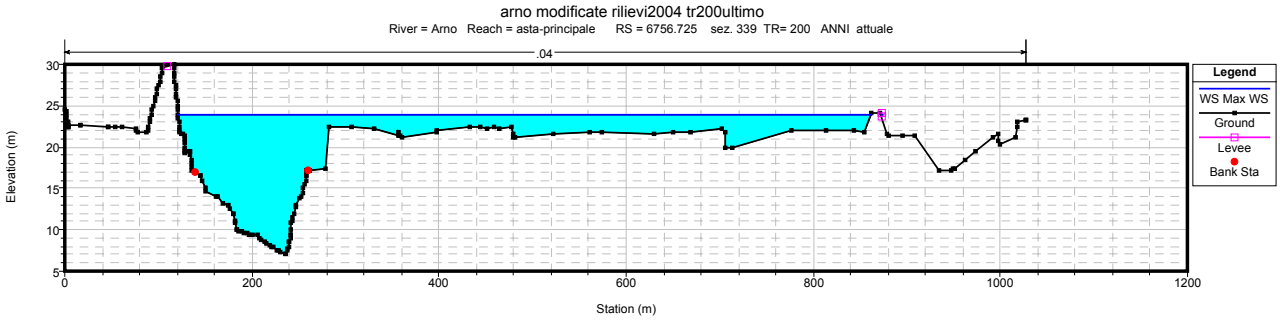

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6625.056 sez. 335 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

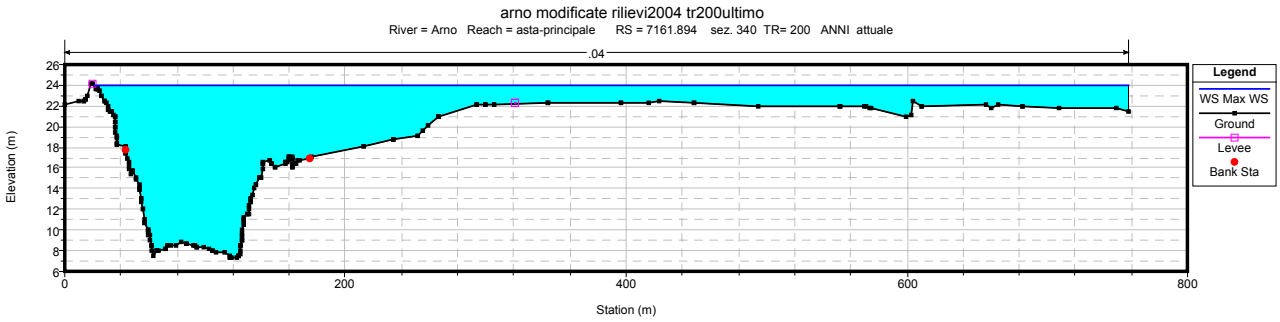

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6625.5 BR ponte di Fucecchio TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta

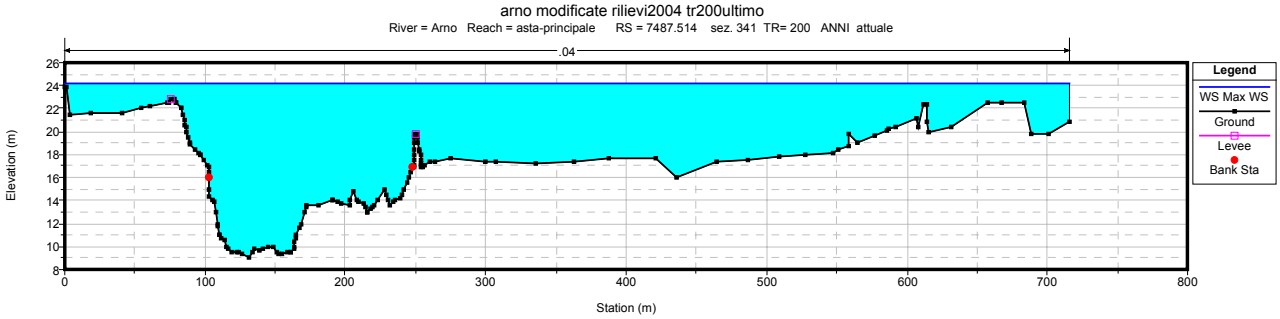

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6625.5 BR ponte di Fucecchio TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6633.521 sez. 337 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6650.676 sez. 338 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 6756.725 sez. 339 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 7161.894 sez. 340 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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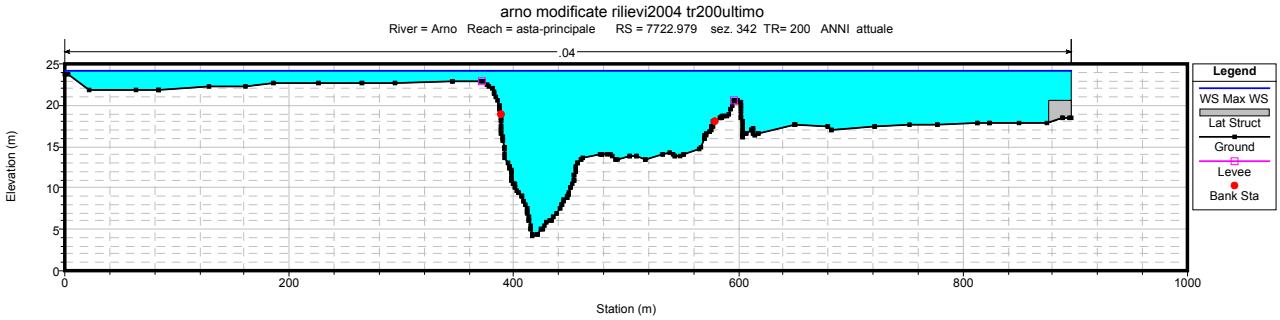
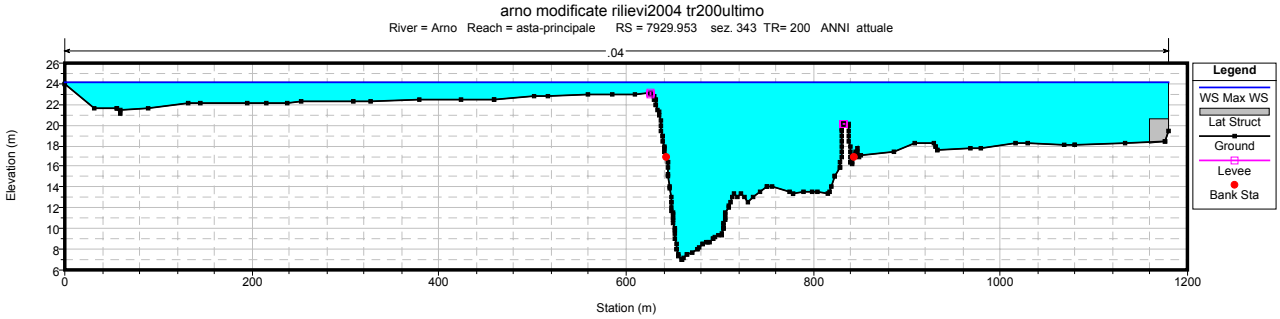
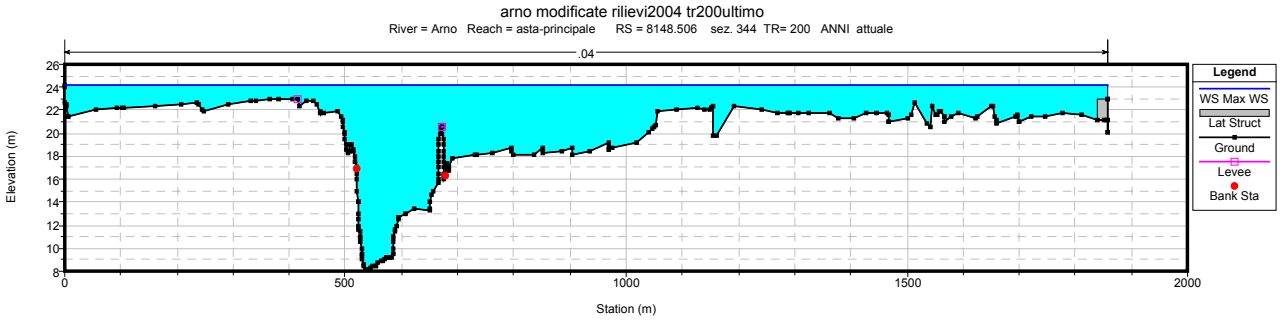
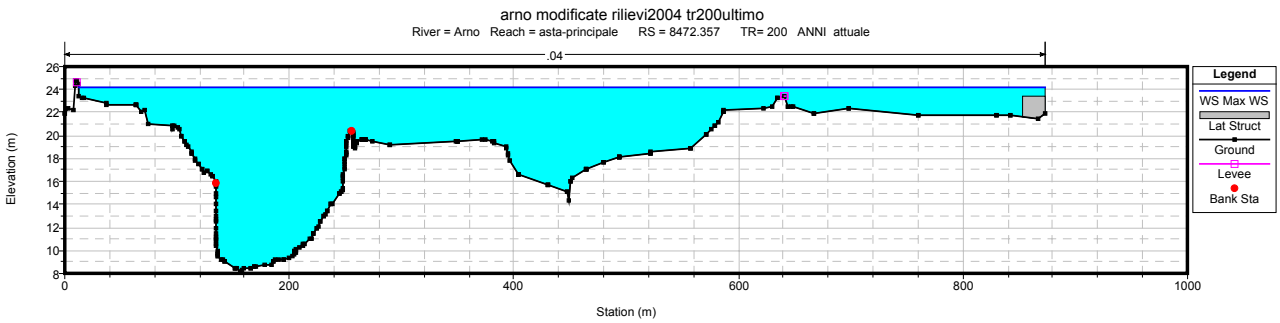
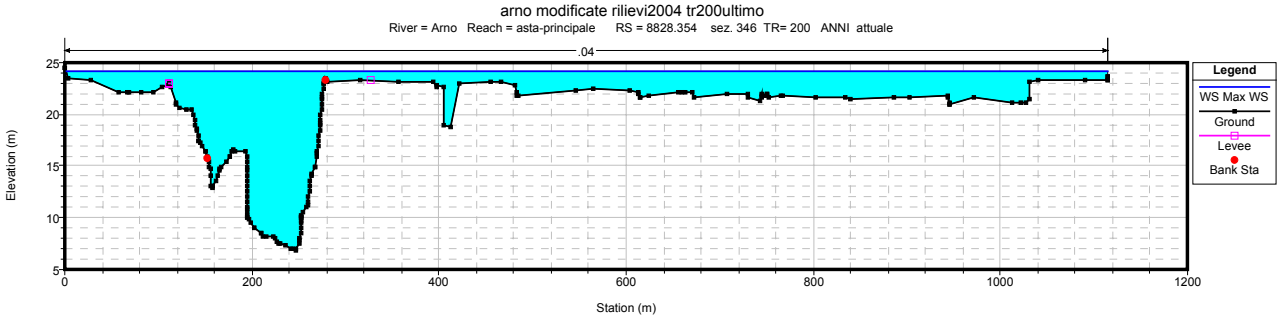
River = Arno Reach = asta-principale RS = 7487.514 sez. 341 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta

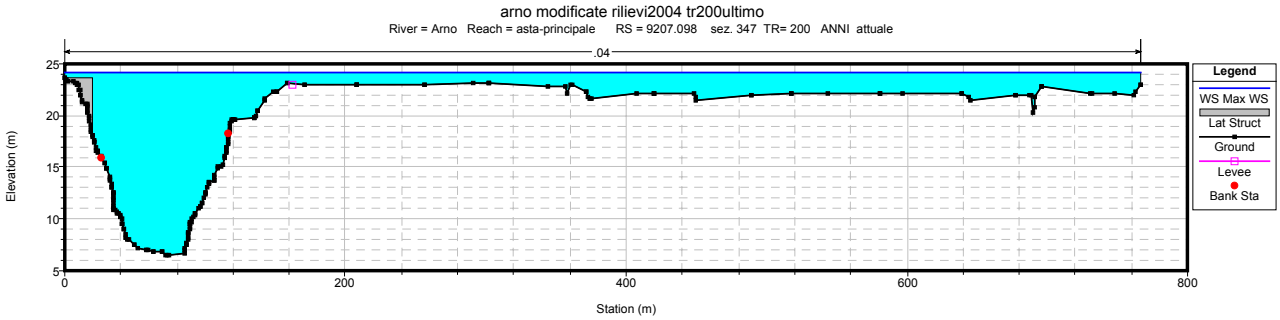

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 7722.979 sez. 342 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

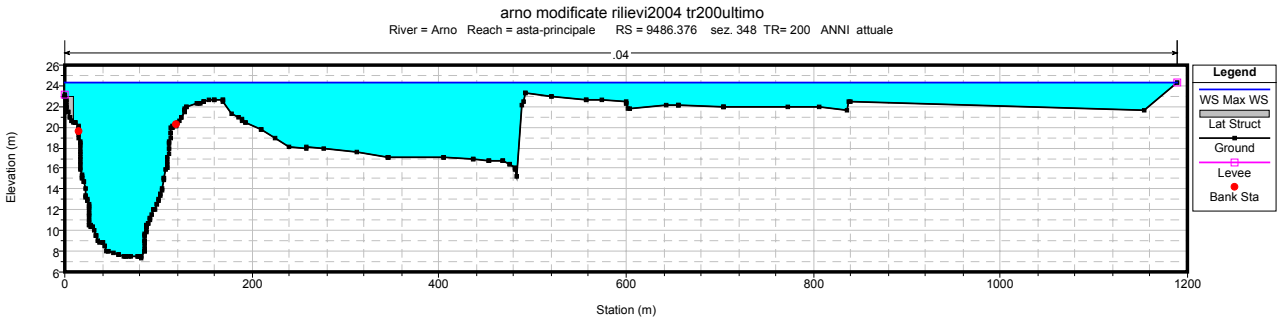

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 7929.953 sez. 343 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

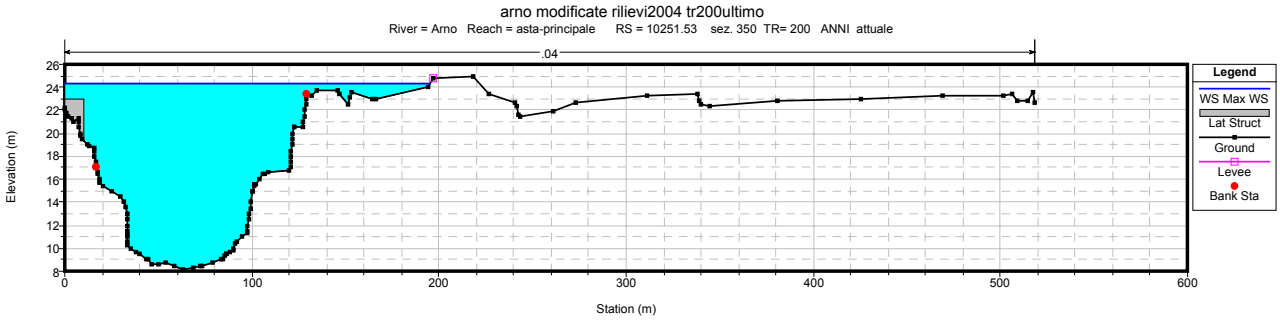

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 8148.506 sez. 344 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

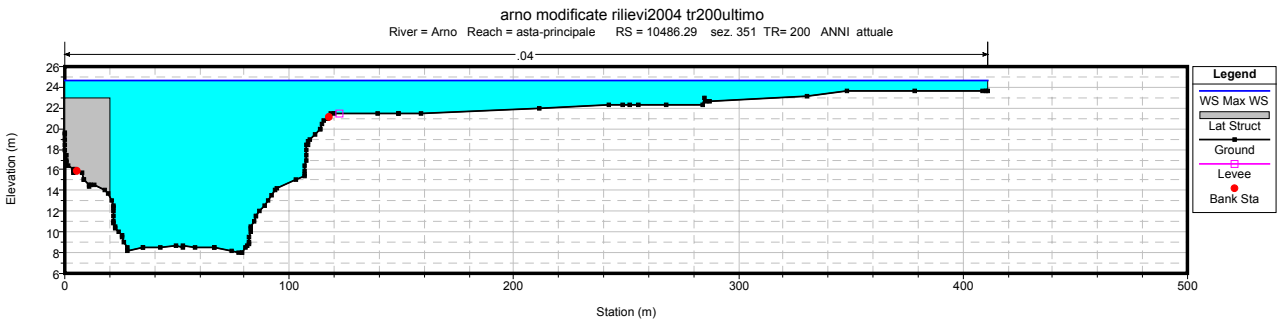

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 8472.357 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta

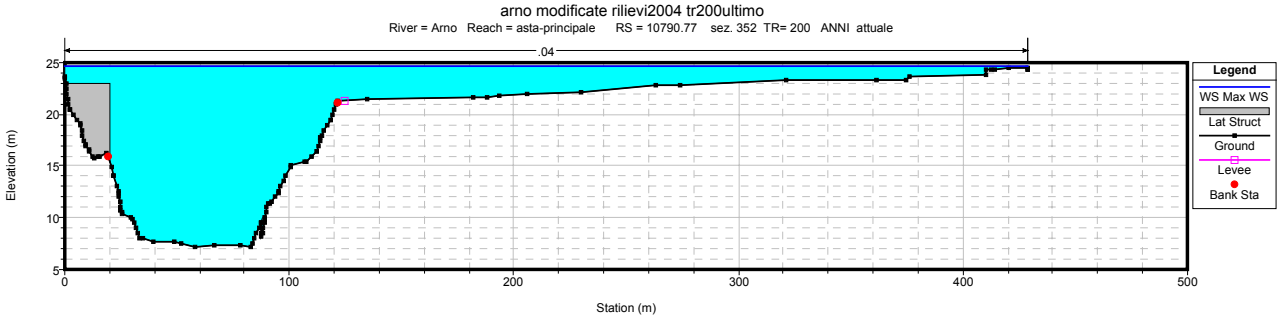

arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 8828.354 sez. 346 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 9207.098 sez. 347 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 9486.376 sez. 348 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 10251.53 sez. 350 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 10486.29 sez. 351 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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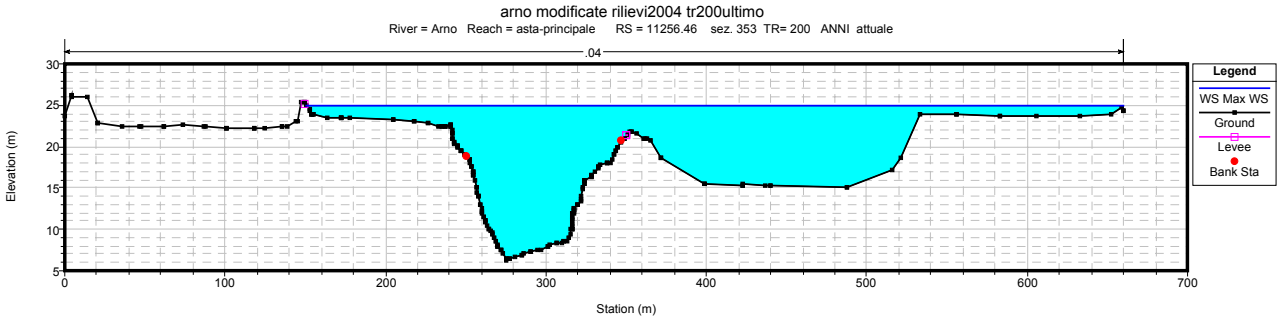
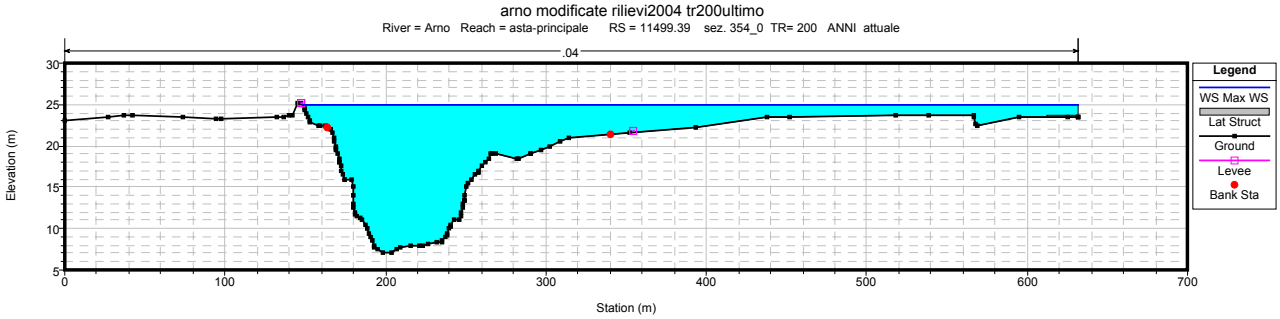
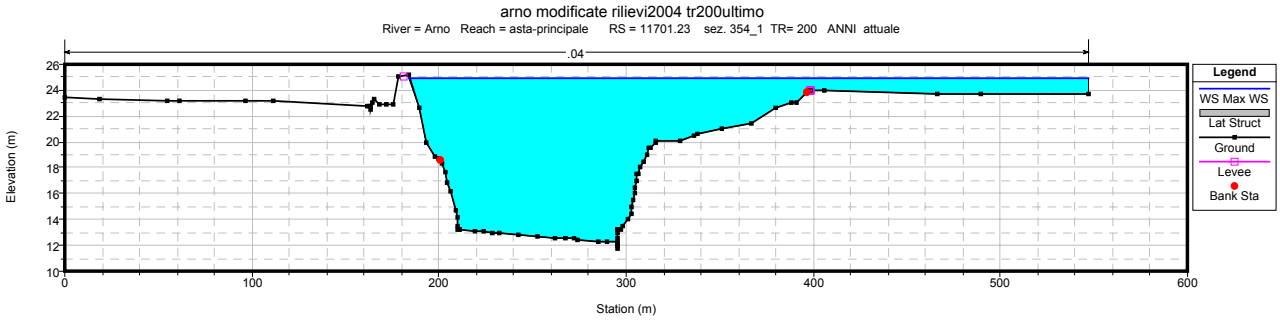
River = Arno Reach = asta-principale RS = 10790.77 sez. 352 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 11256.46 sez. 353 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 11499.39 sez. 354_0 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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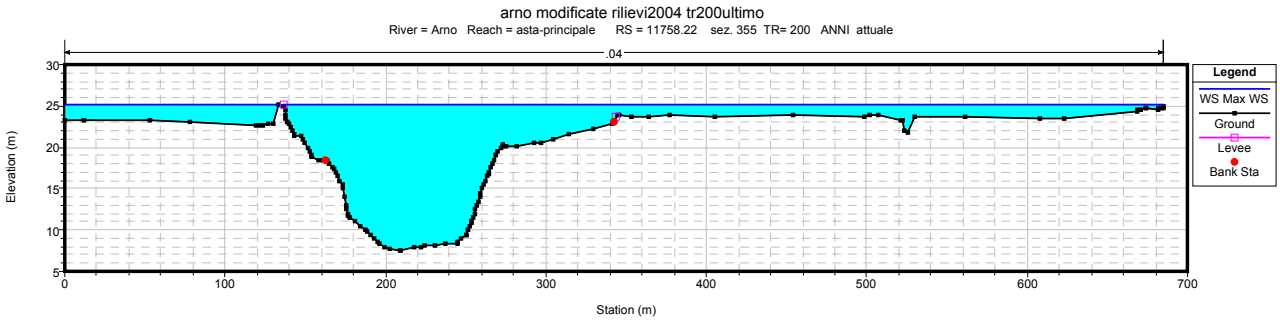
River = Arno Reach = asta-principale RS = 11701.23 sez. 354_1 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta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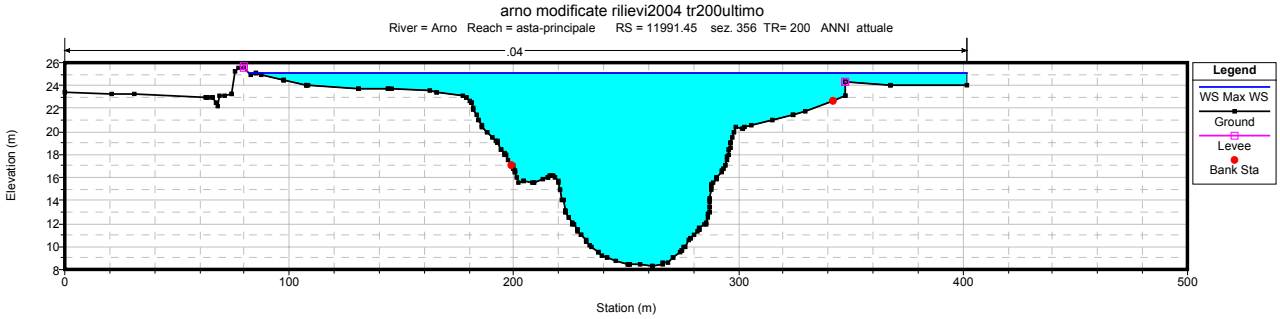
River = Arno Reach = asta-principale RS = 11758.22 sez. 355 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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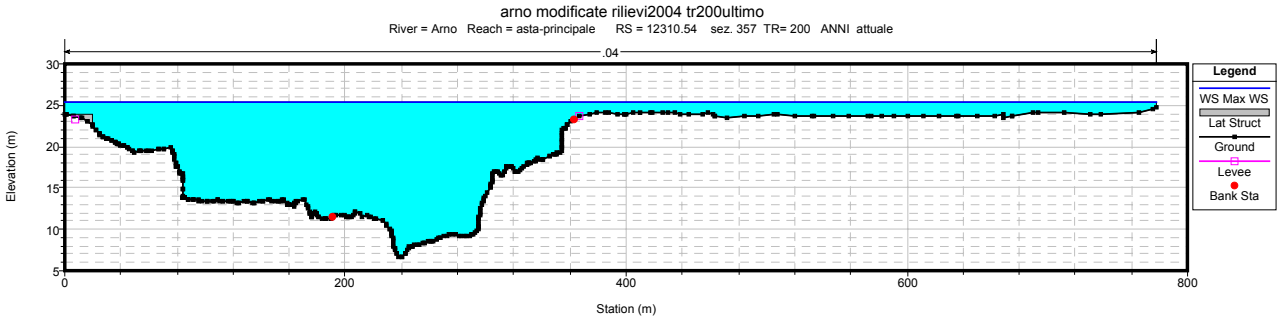
River = Arno Reach = asta-principale RS = 11991.45 sez. 356 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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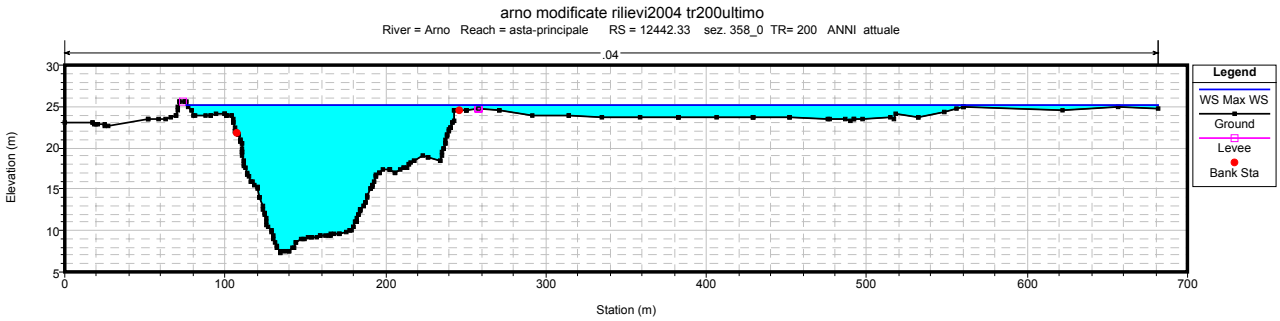
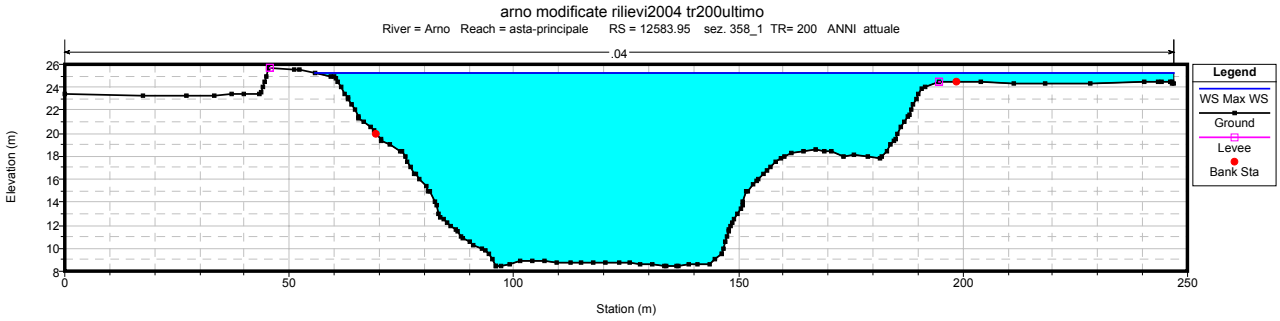
River = Arno Reach = asta-principale RS = 12310.54 sez. 357 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Lat Struct
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 12442.33 sez. 358_0 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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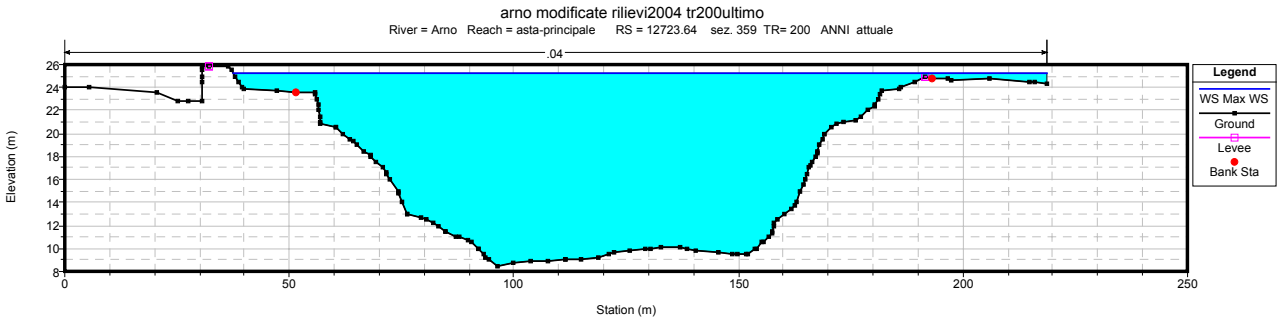
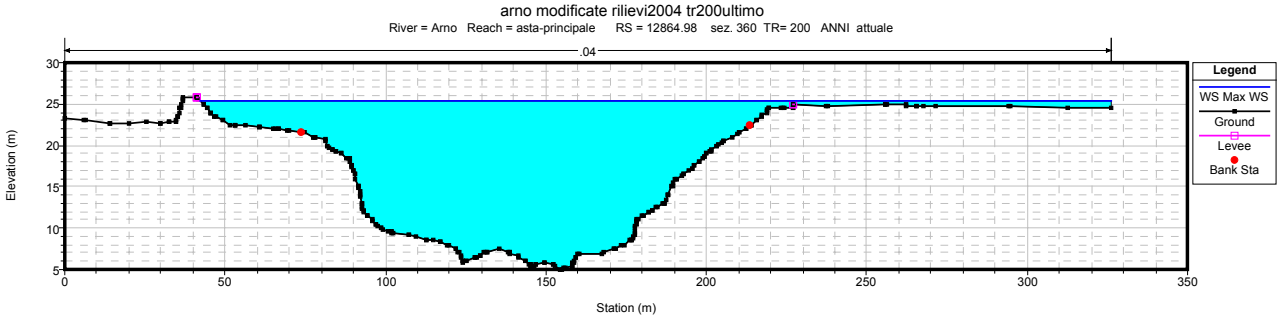
River = Arno Reach = asta-principale RS = 12583.95 sez. 358_1 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 12723.64 sez. 359 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta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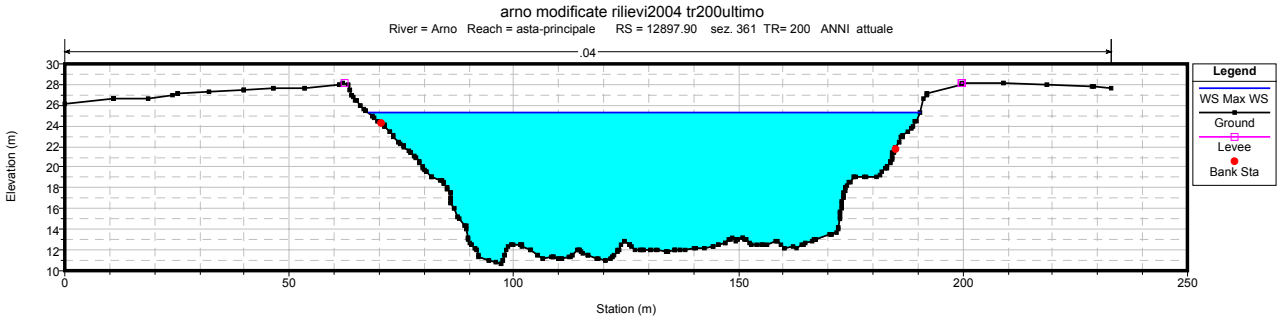
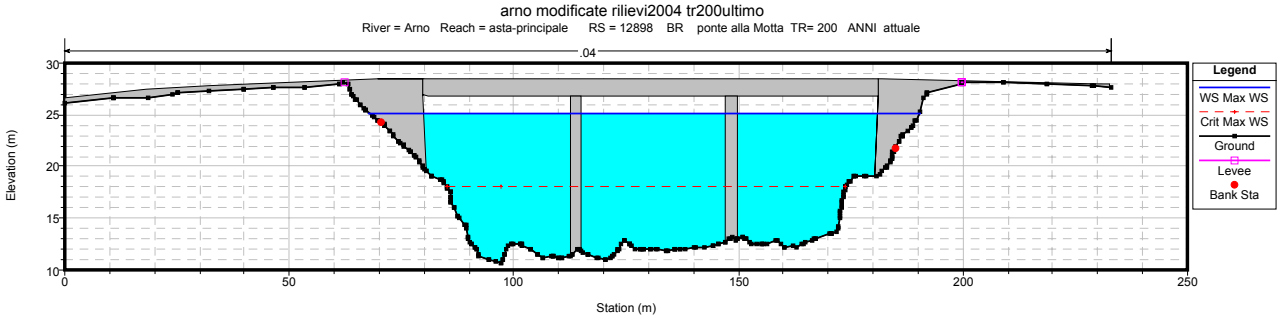
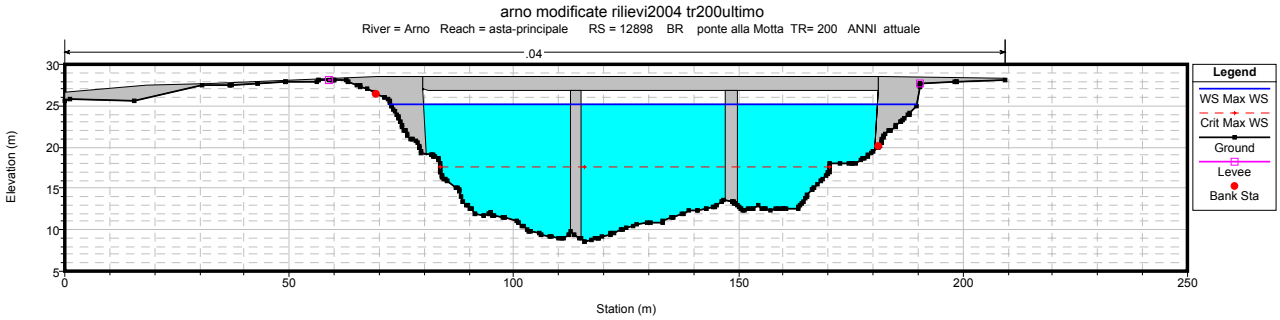
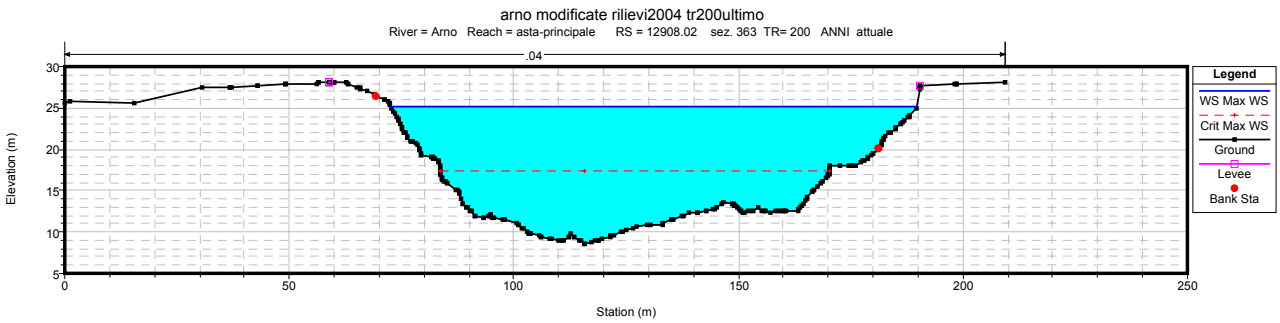
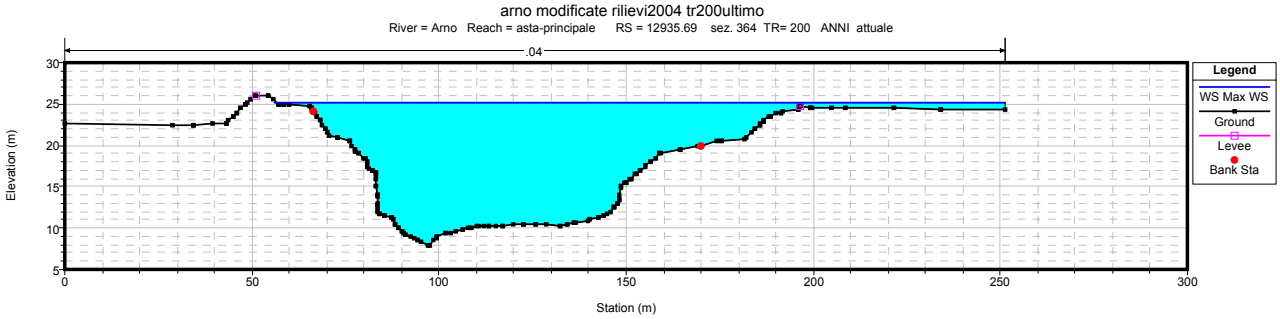
River = Arno Reach = asta-principale RS = 12864.98 sez. 360 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 12897.90 sez. 361 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 12898 BR ponte alla Motta TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 12898 BR ponte alla Motta TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 12908.02 sez. 363 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Crit Max WS
Ground
Levee
Bank Sta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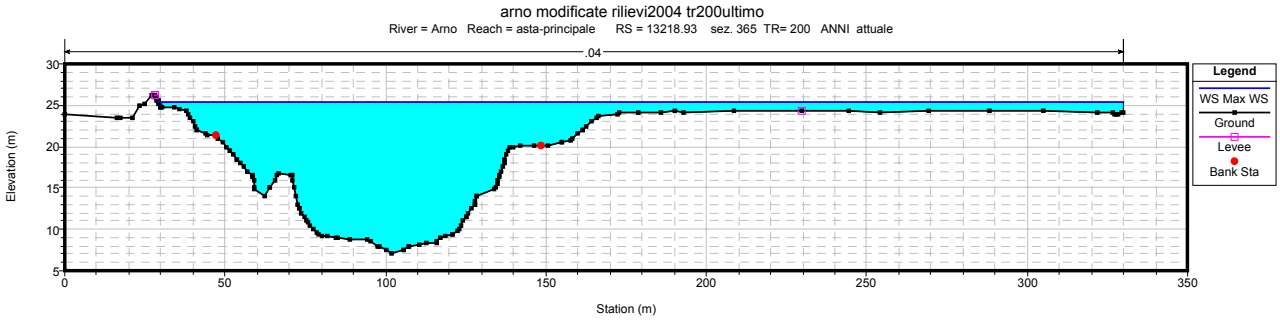
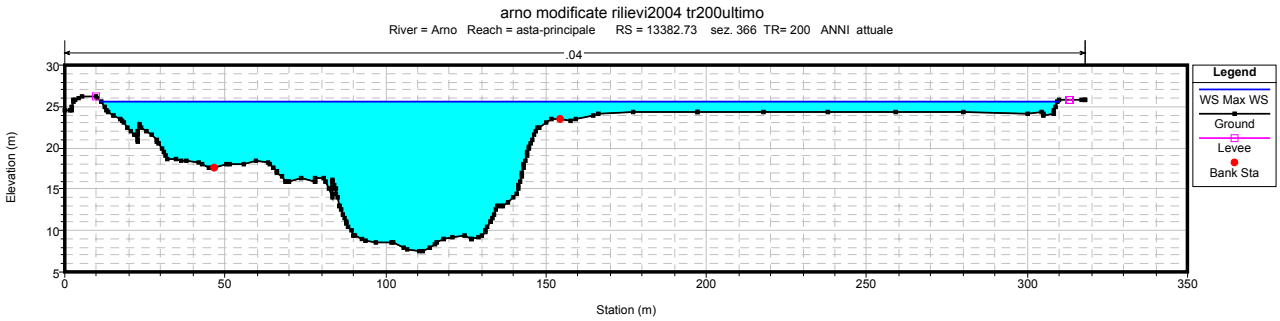
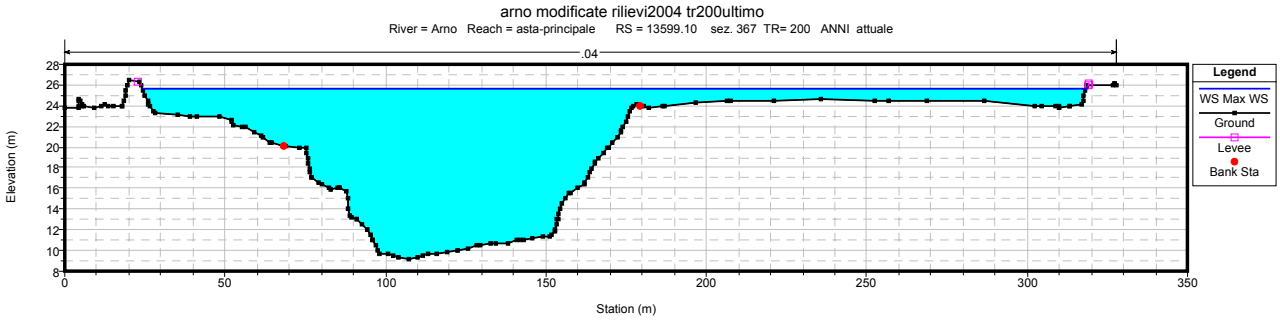
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 13218.93 sez. 365 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 13382.73 sez. 366 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta


arno modificate rilievi2004 tr200ultimo
River = Arno Reach = asta-principale RS = 13599.10 sez. 367 TR= 200 ANNI attuale
.04
Elevation (m)
Station (m)
Legend
WS Max WS
Ground
Levee
Bank Sta