Piano Strutturale R2

ALLEGATI HEC-RAS

settembre 2023

progetto:

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Martina Romeo
Valentina Vettori
Andrea Debernardi con Chiara Taiariol e Lorena Mastropasqua, META s.r.l., per gli aspetti della mobilità
Maria Rita Cecchini per la Valutazione Ambientale Strategica

Sindaco e Assessore all'Urbanistica: Alessandro Donati
Garante dell'informazione e della partecipazione: Francesco Manganelli
Responsabile del procedimento: Rita Lucci

Comune di Colle di Val d'Elsa

MODELLI HEC RAS

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FOSSO AMBOIANA

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

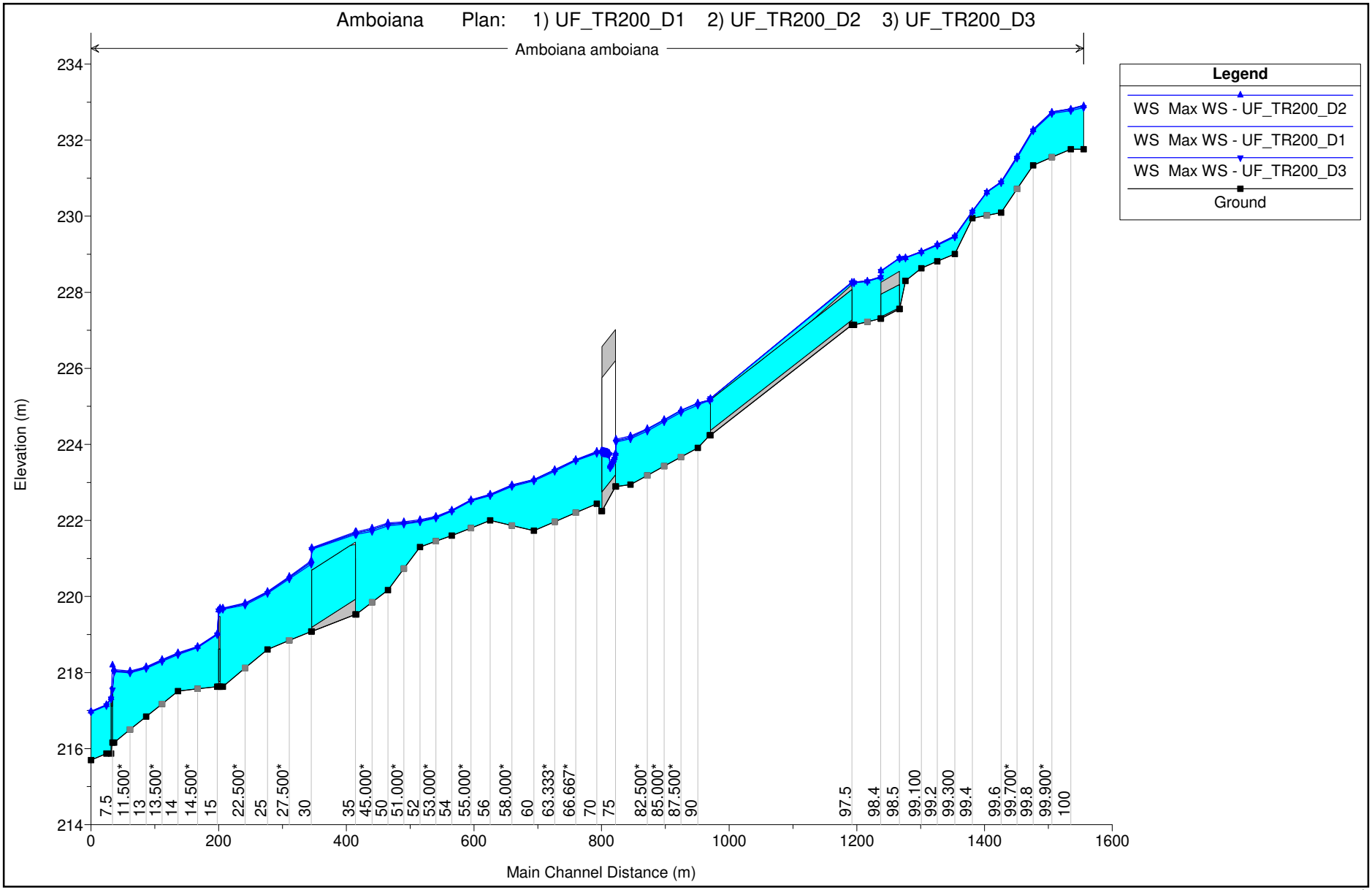
MODELLAZIONE HEC-RAS 5.0.7 "Amboiana"

FOSSO AMBOIANA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
Amboiana amboiana
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D3
Ground
Elevation (m)
Main Channel Distance (m)
234
232
230
228
226
224
222
220
218
216
214
0
200
400
600
800
1000
1200
1400
1600
7.5
11.500*
13
13.500*
14
14.500*
15
22.500*
25
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35
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75
82.500*
85.000*
87.500*
90
97.5
98.4
98.5
99.100
99.2
99.300
99.4
99.6
99.700*
99.8
99.900*
100

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Amboiana"

FOSSO AMBOIANA

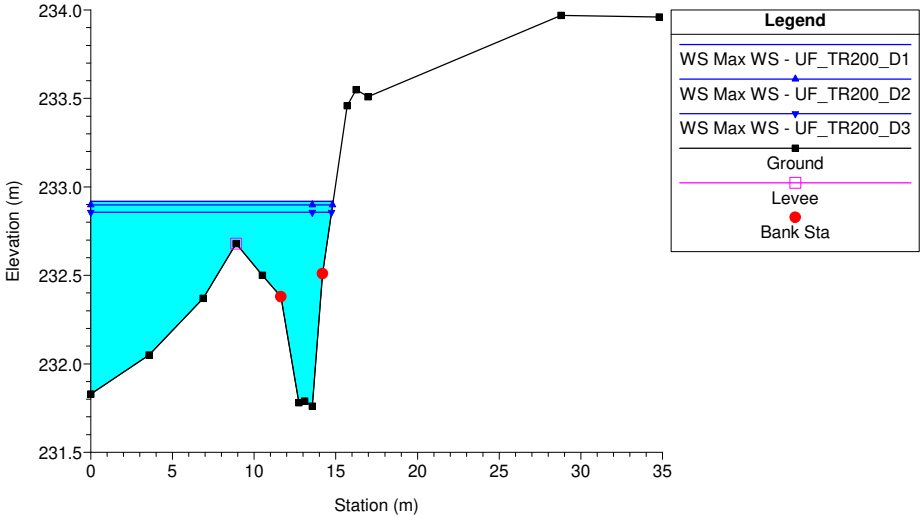
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

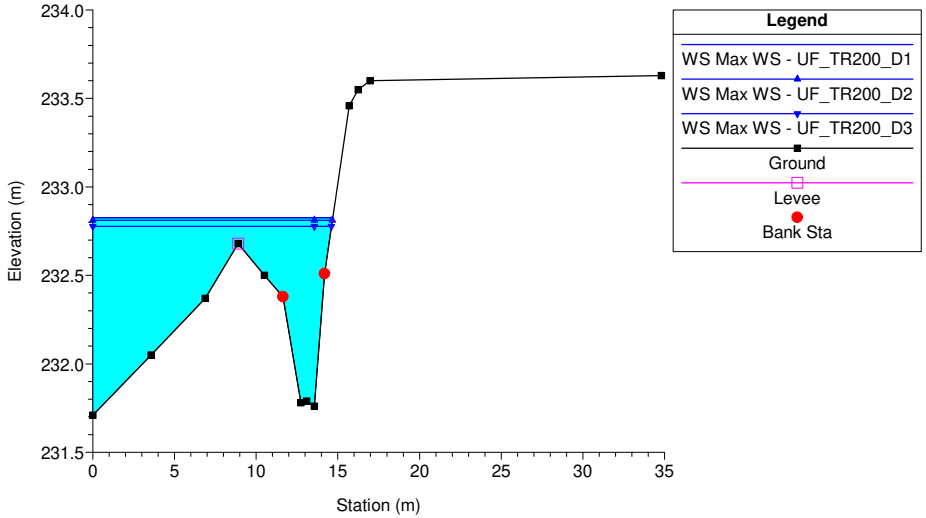
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 110 AMB_33



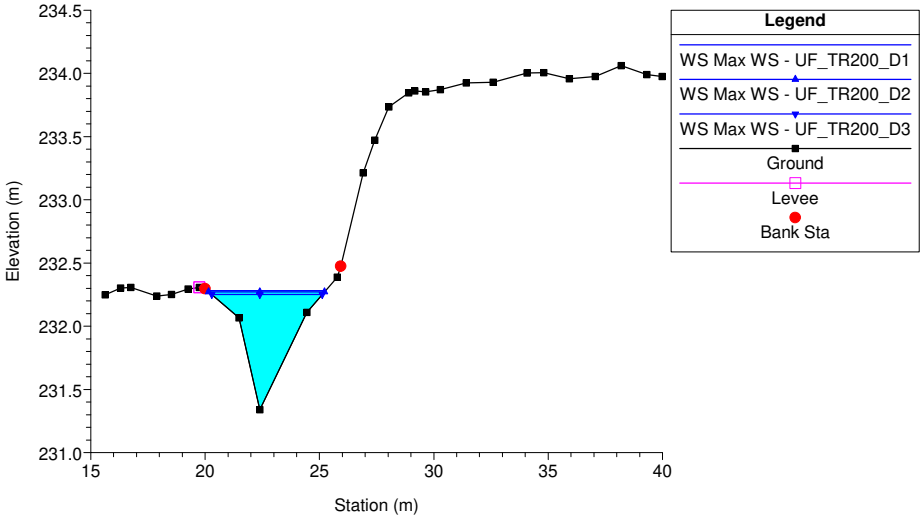
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 100 AMB_32



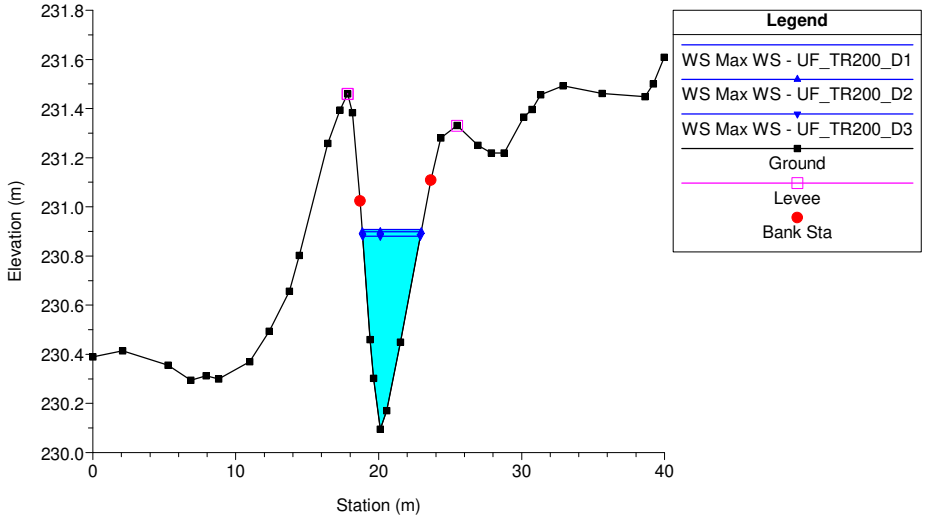
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99.8 AMB_31



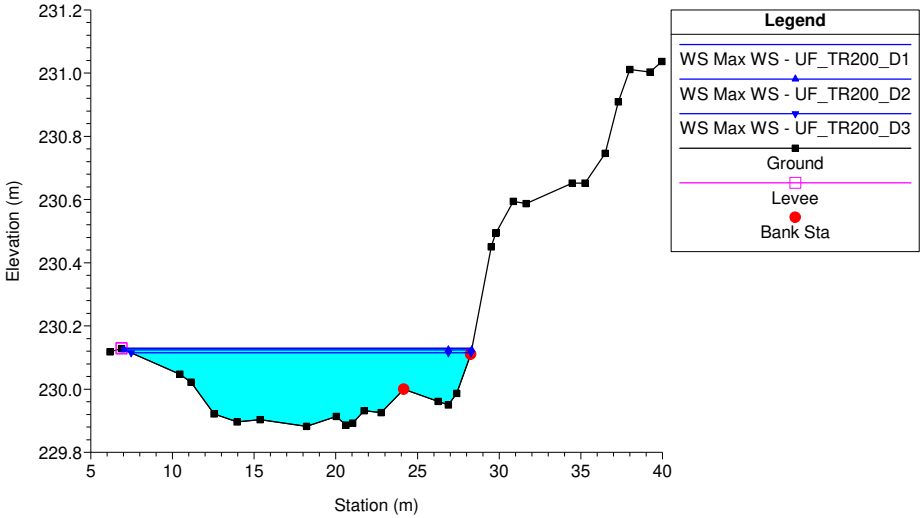
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99.6 AMB_30



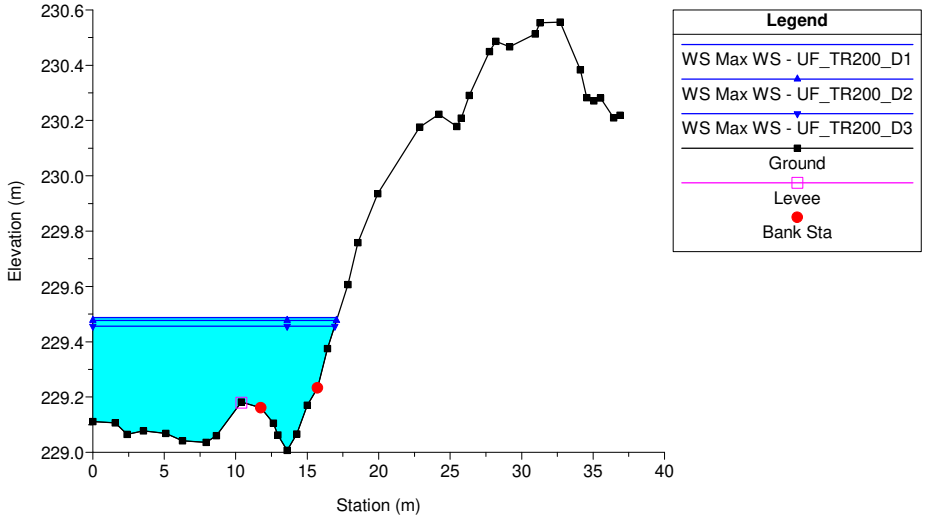
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99.4 AMB_29



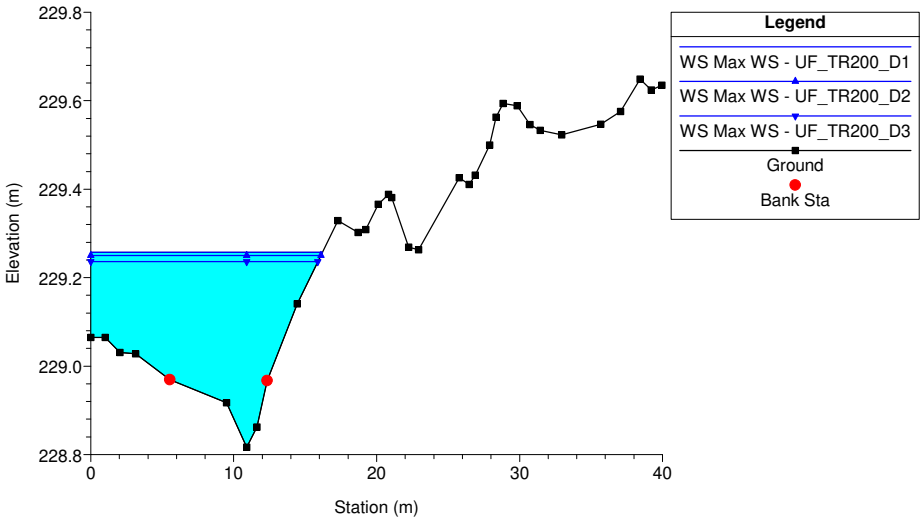
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99.300 AMB_28



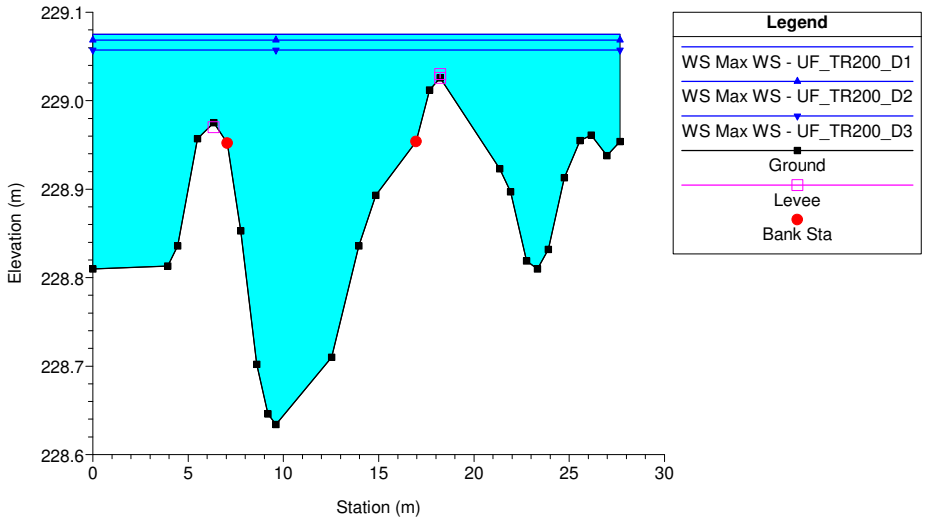
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99.2 AMB_27



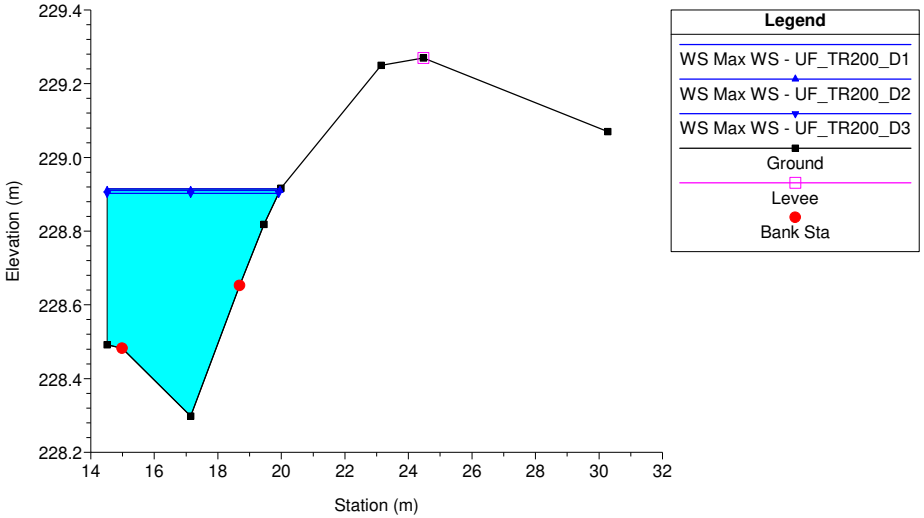
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99.100 AMB_26



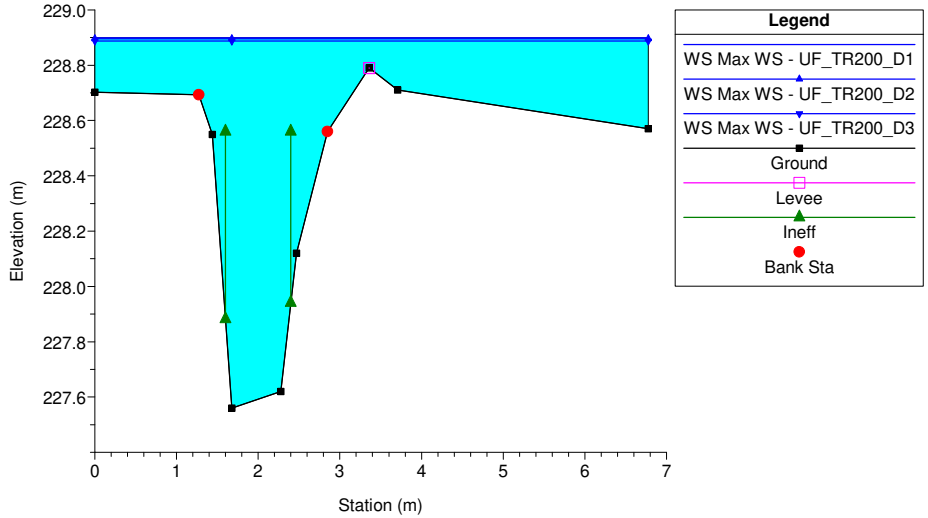
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 99 AMB_25



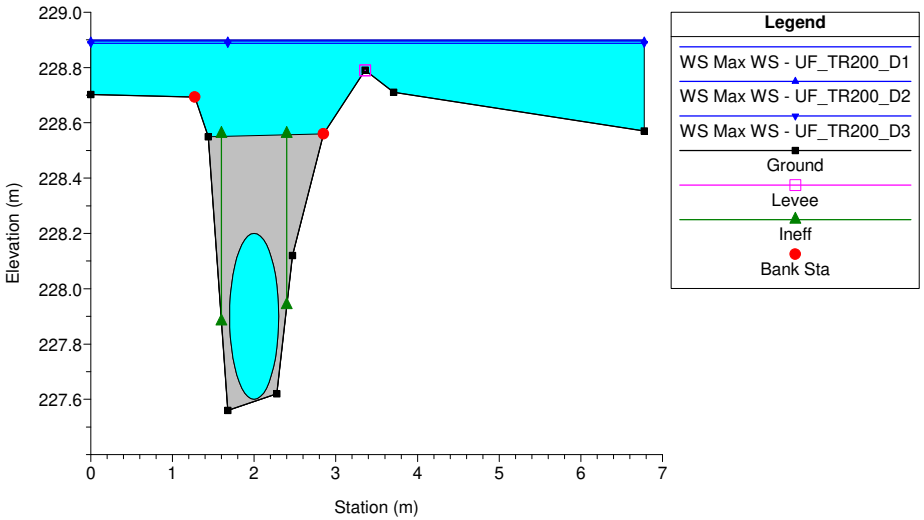
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 98.6 AMB_24



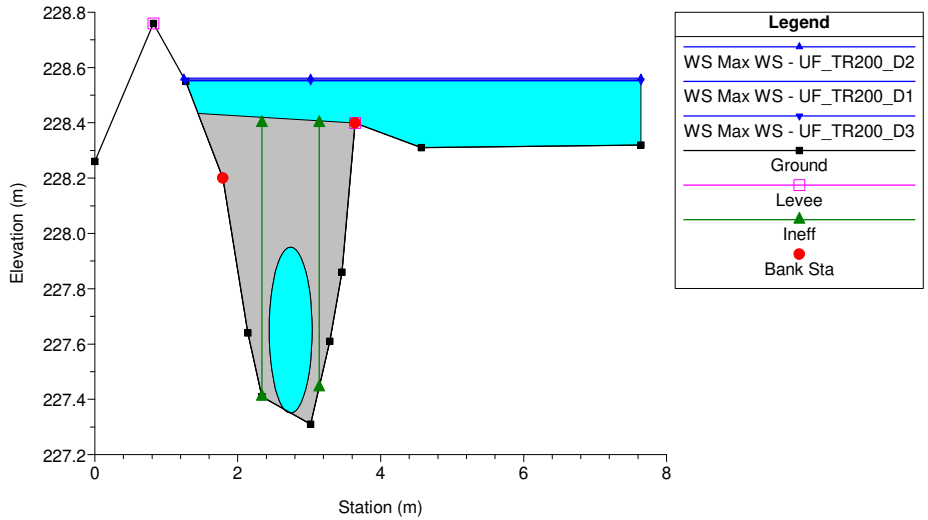
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 98.5 Culv



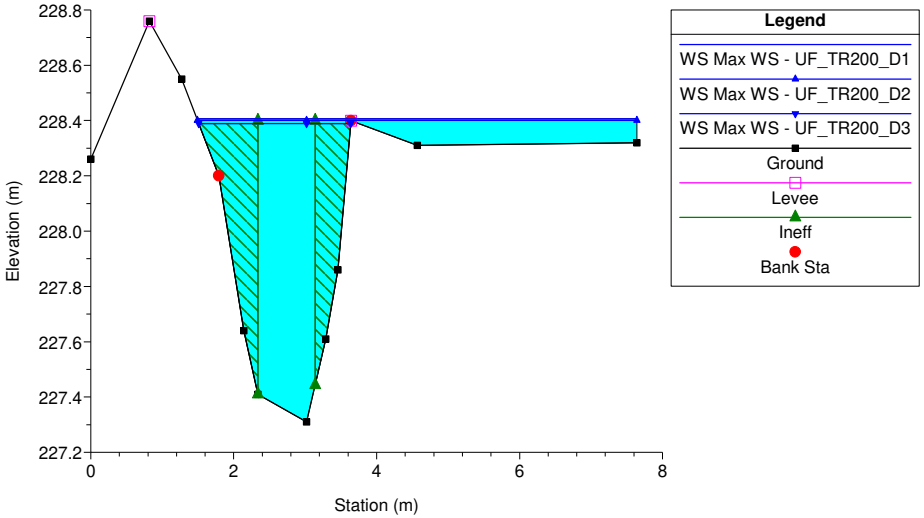
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 98.5 Culv



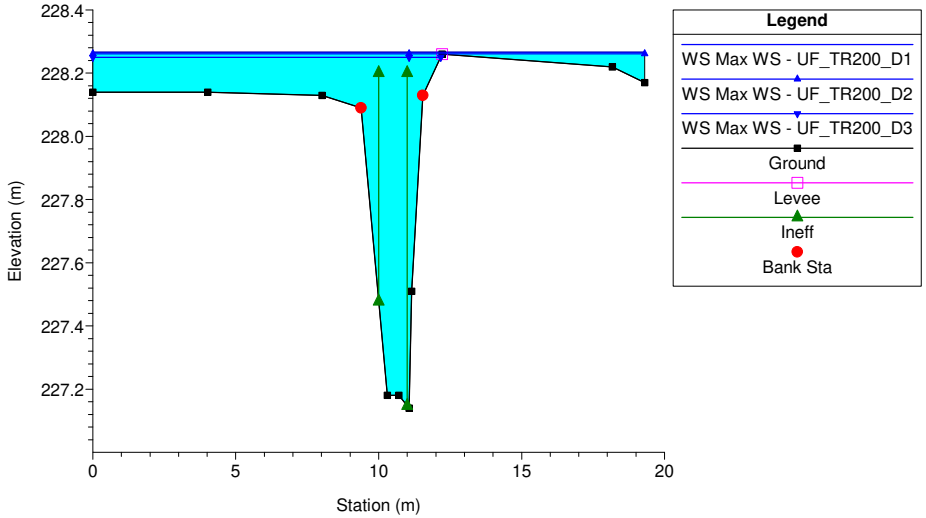
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 98.4 AMB_23



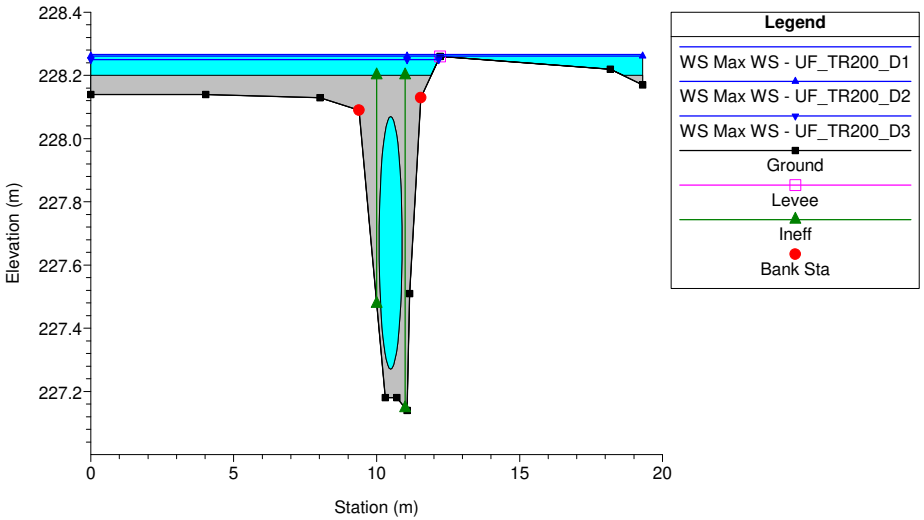
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 98 AMB_22



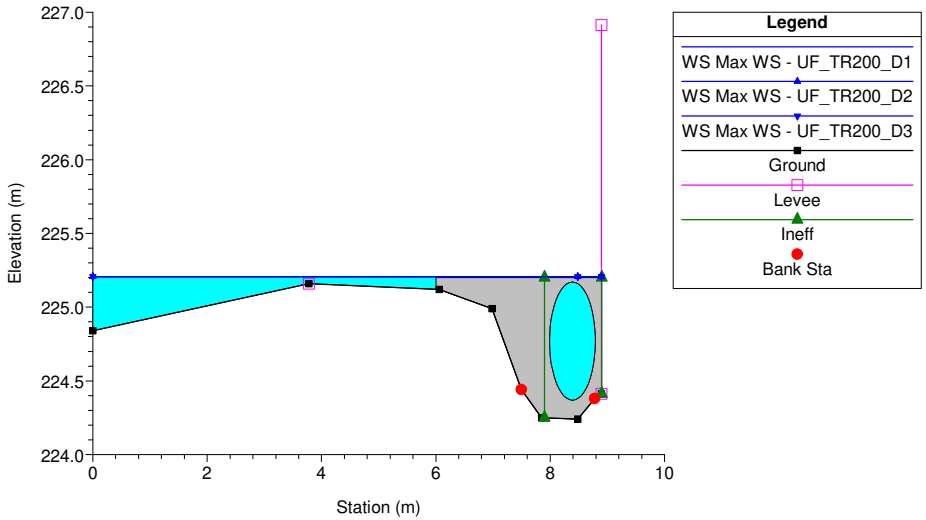
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 97.5 Culv



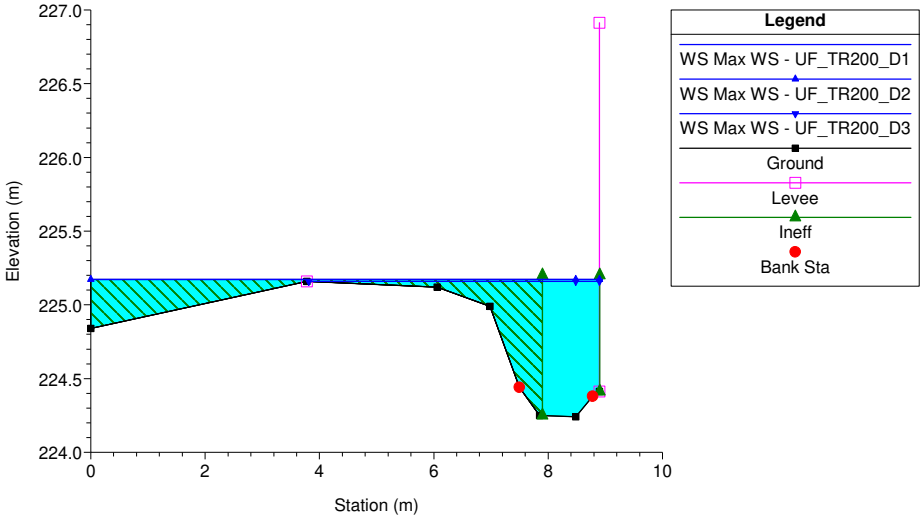
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 97.5 Culv



Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 96 AMB_21



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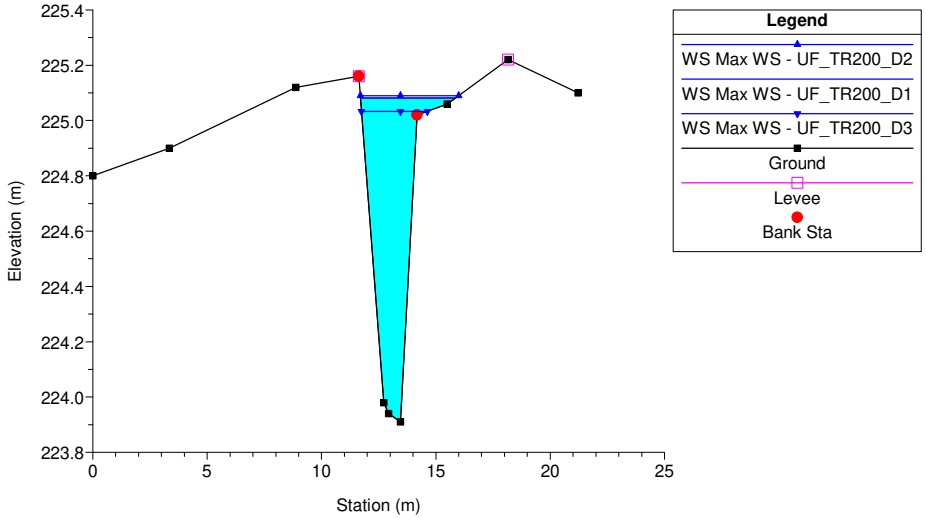
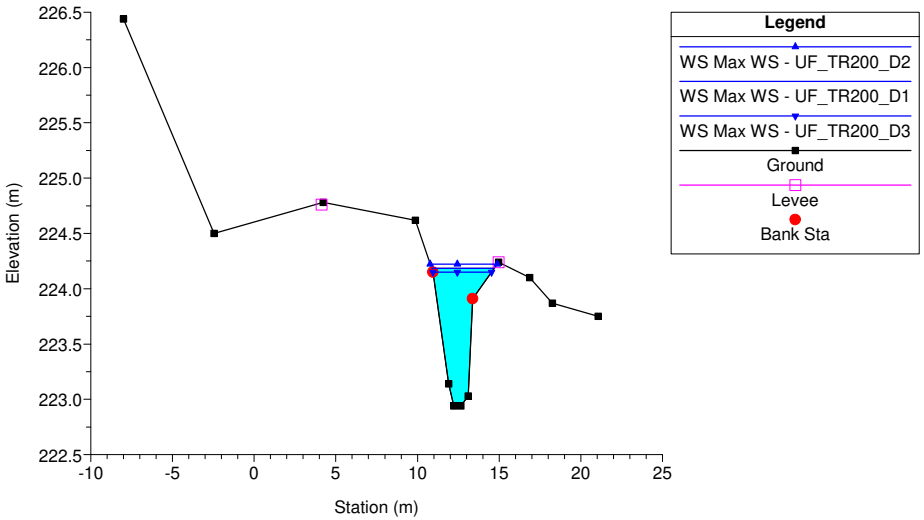
River = Amboiana Reach = amboiana RS = 90 AMB_20



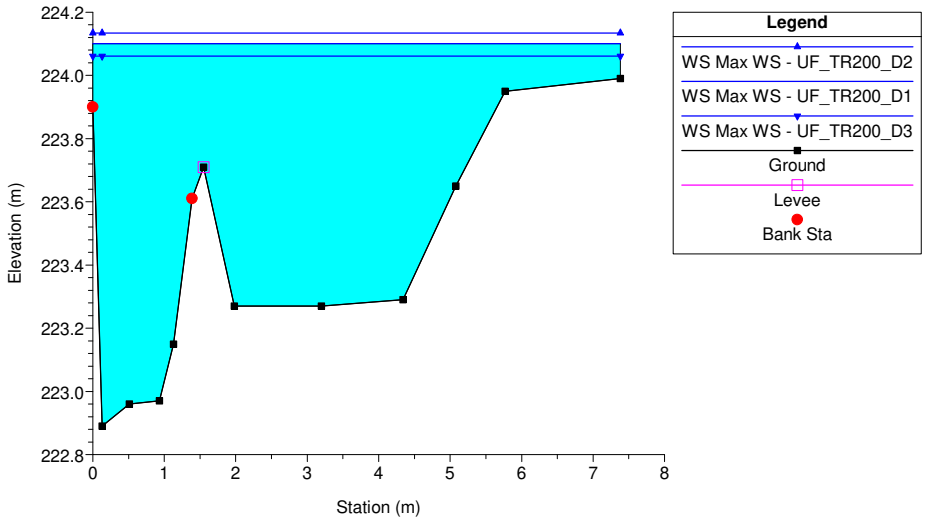
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 80 AMB_19



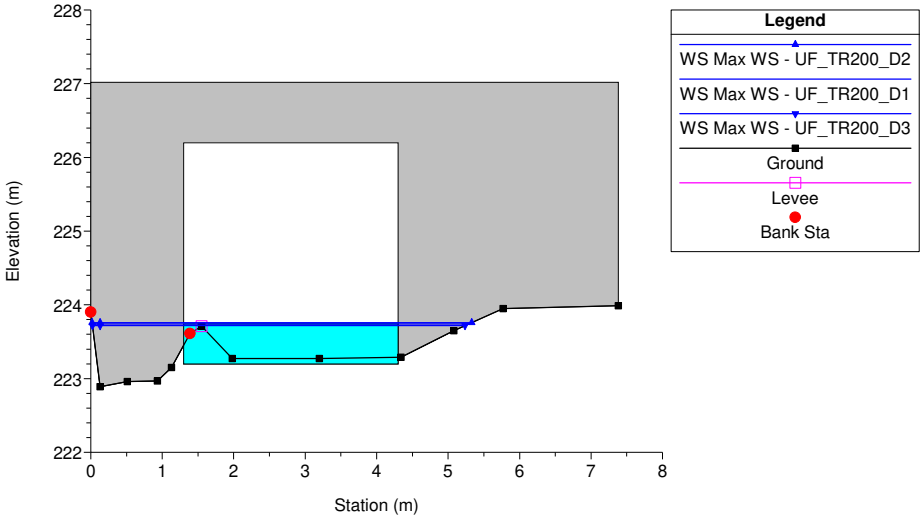
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 76 AMB_18



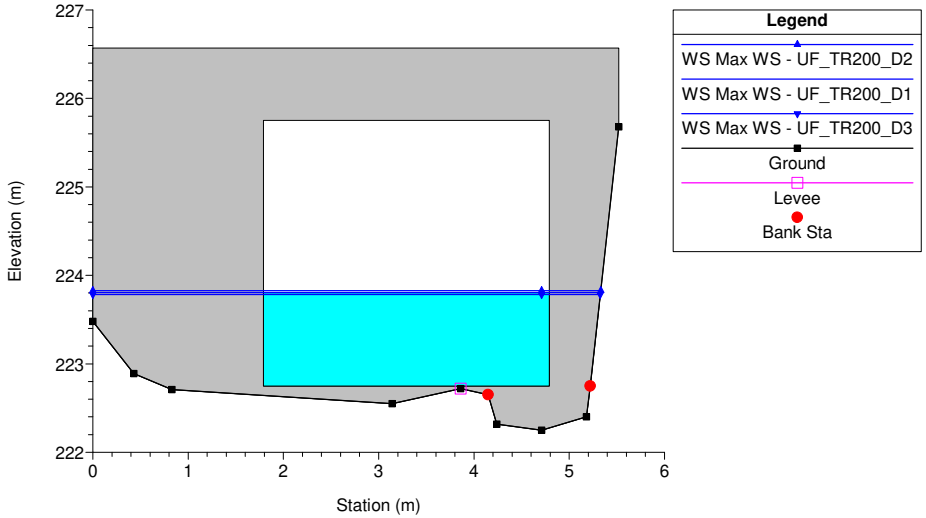
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 75 Culv



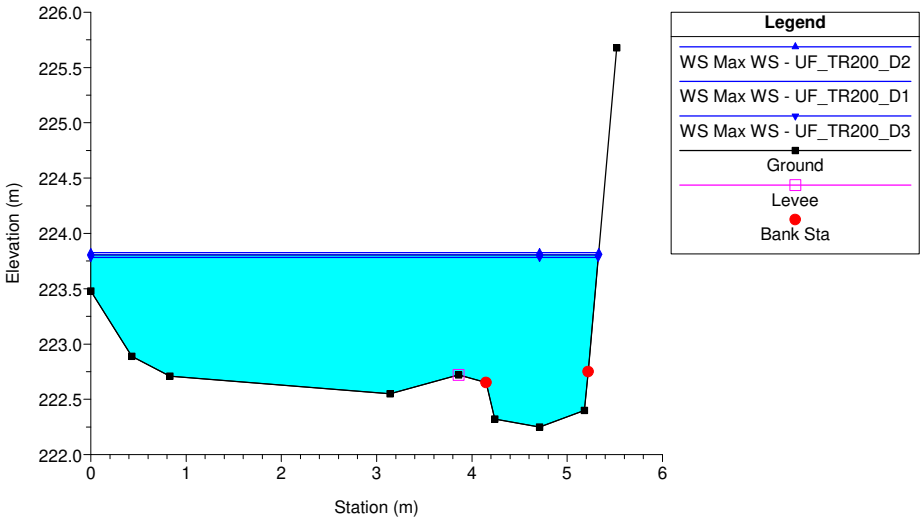
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 75 Culv



Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 73 AMB_17



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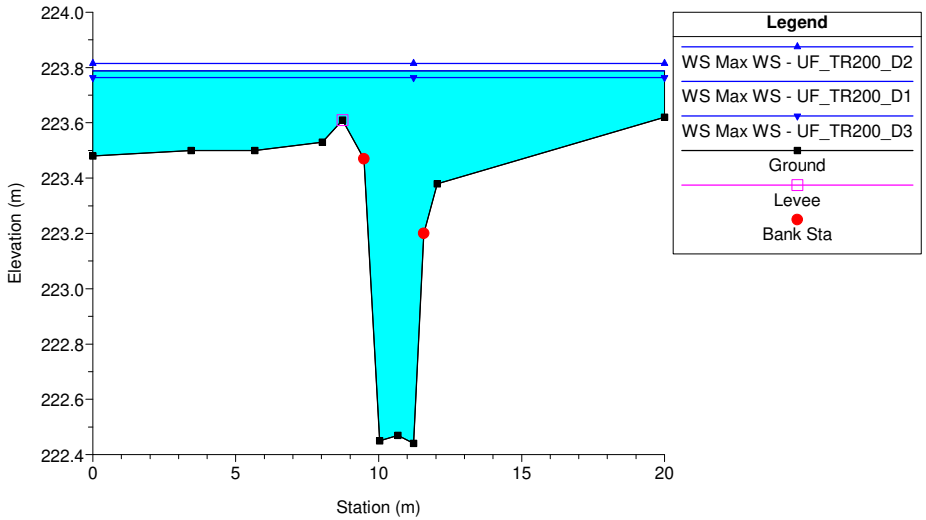
River = Amboiana Reach = amboiana RS = 70 AMB_16



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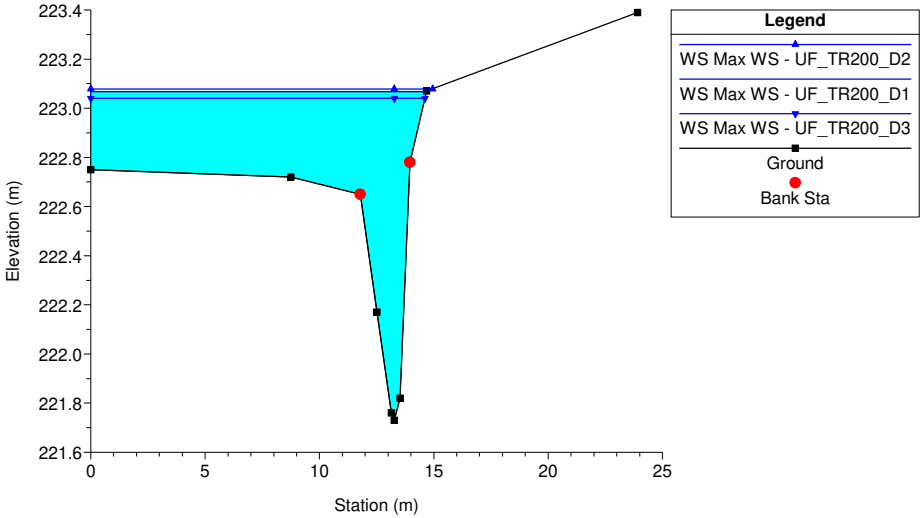
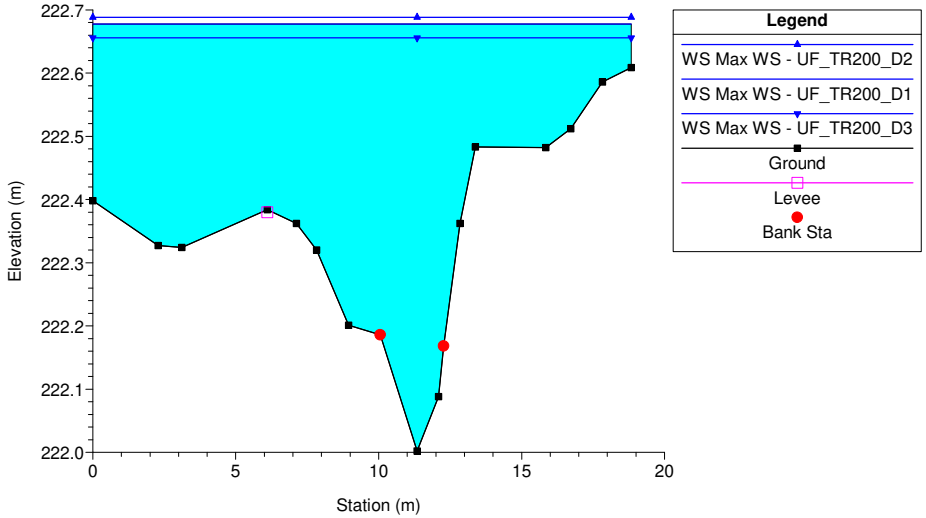
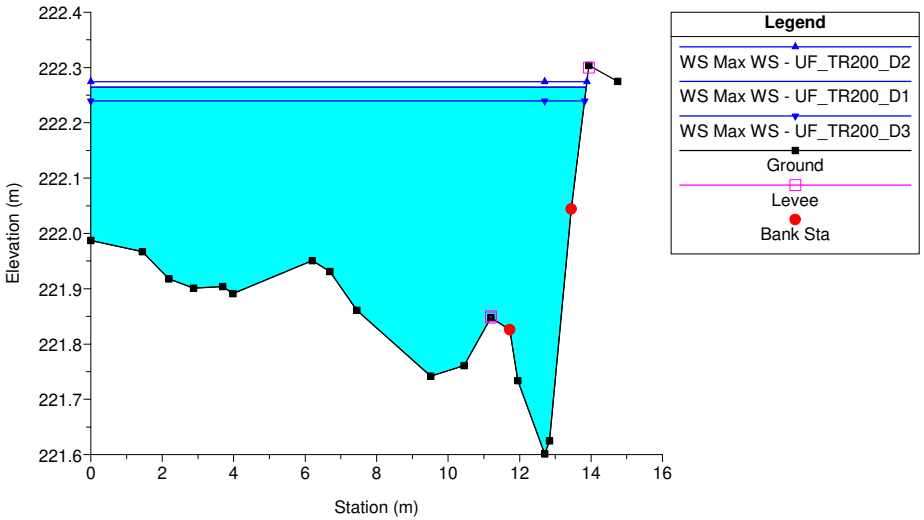
River = Amboiana Reach = amboiana RS = 60 AMB_15



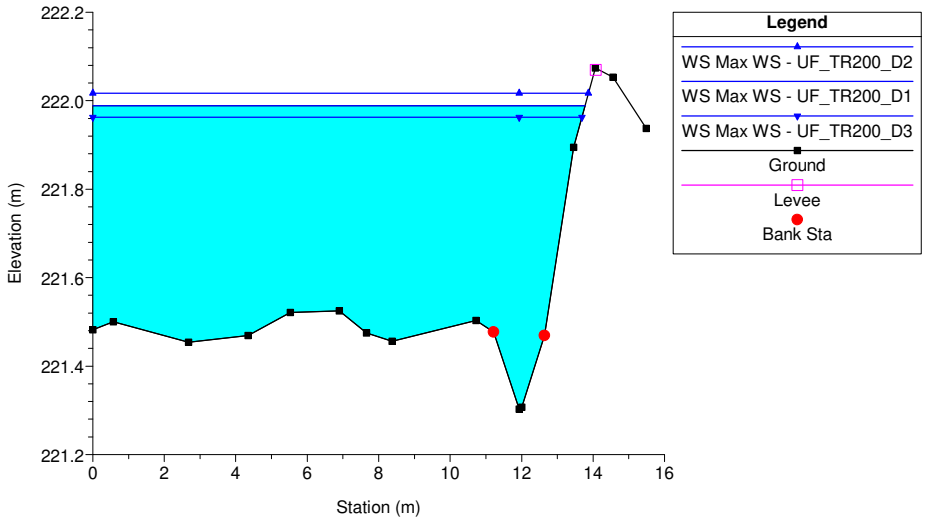
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 56 AMB_14



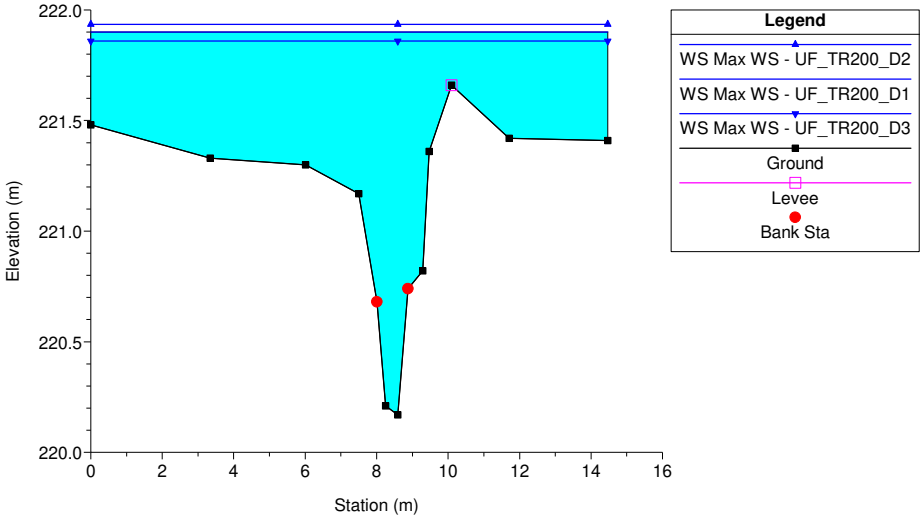
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 54 AMB_13



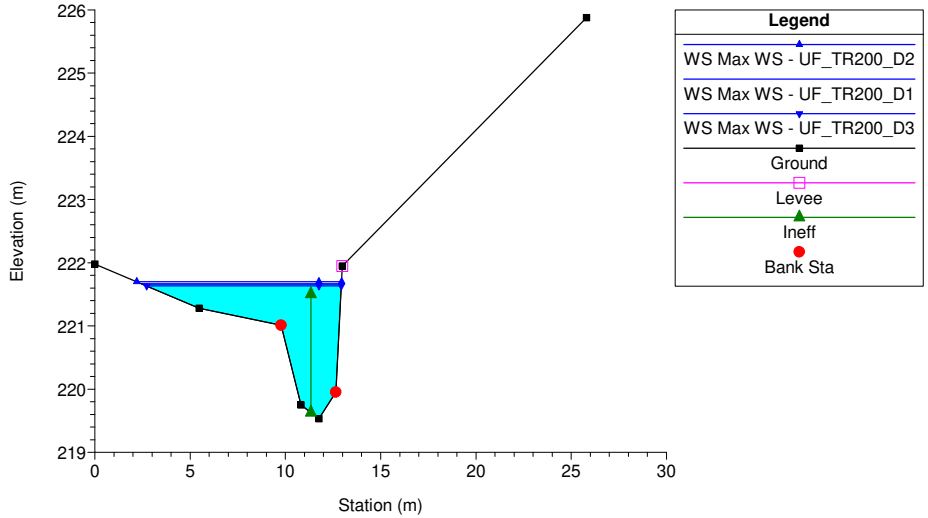
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 52 AMB_12



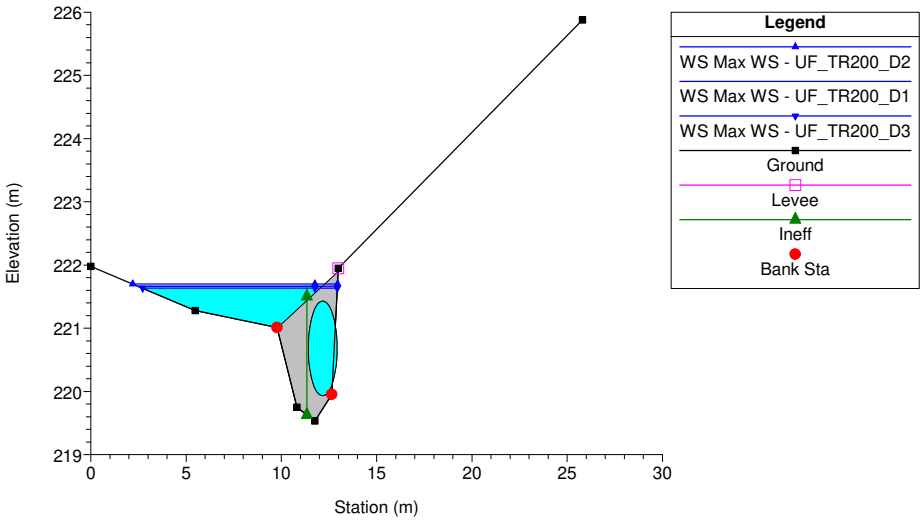
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 50 AMB_11



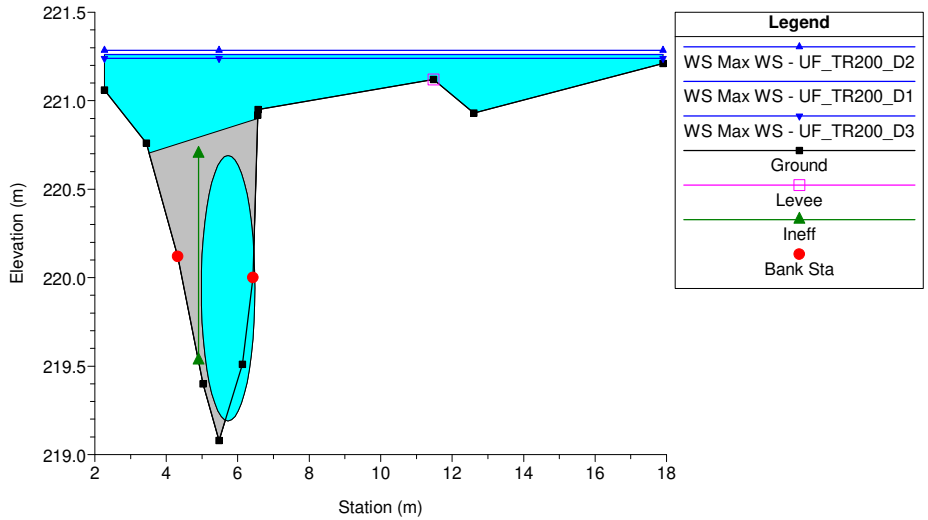
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 40 AMB_10



Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 35 Culv deck?

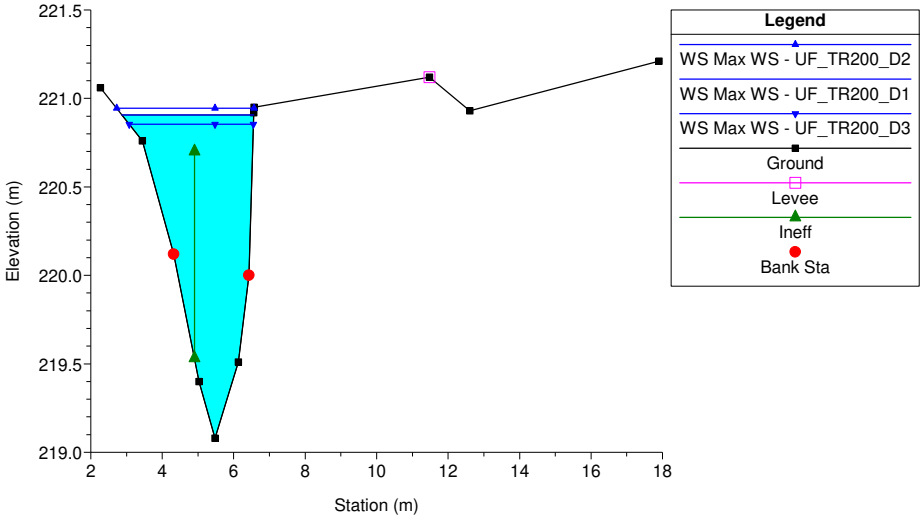


Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 35 Culv deck?



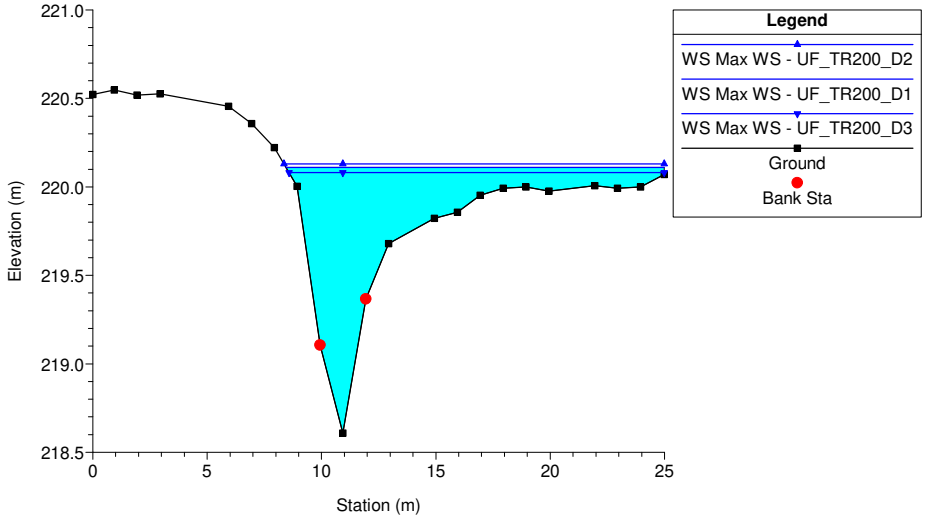
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 30 AMB_09



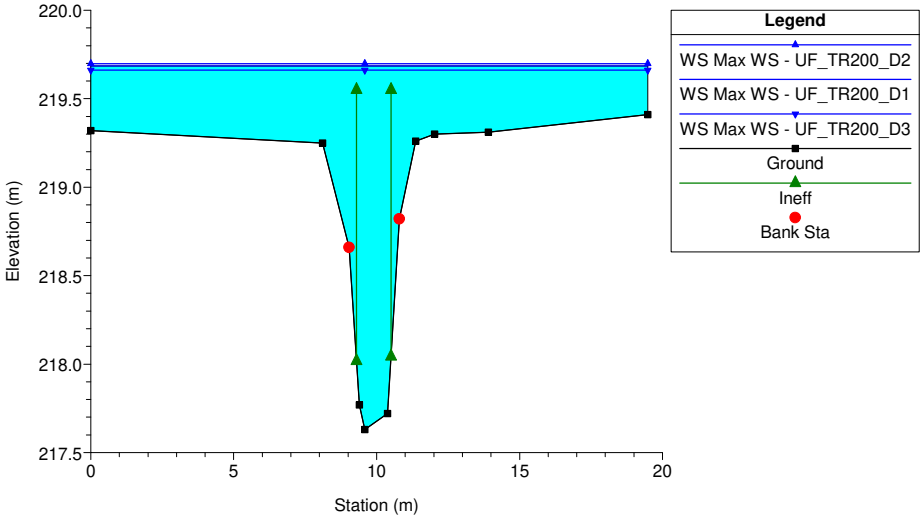
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 25 AMB_08



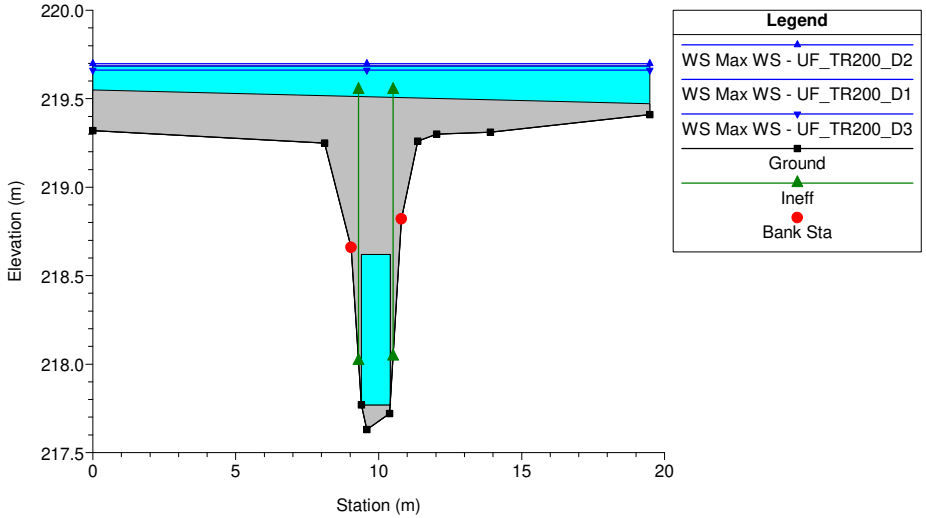
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 20 AMB_07



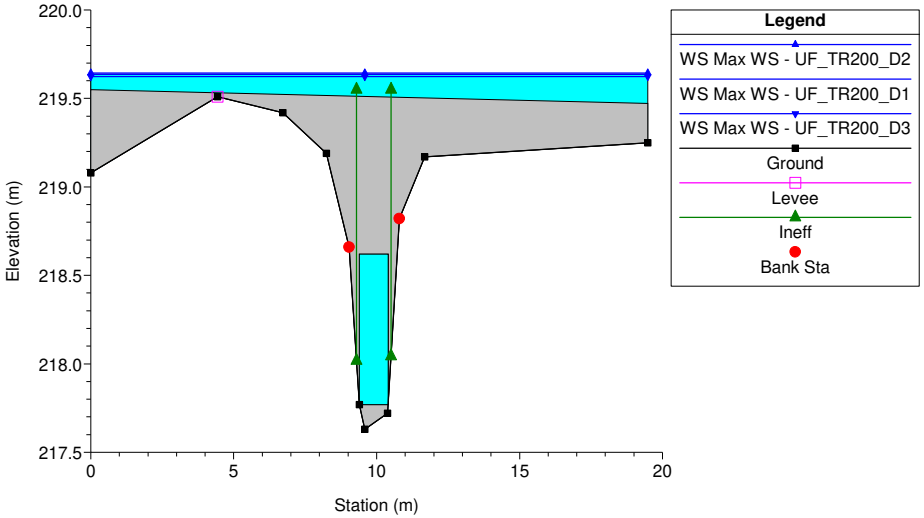
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 17.5 Culv



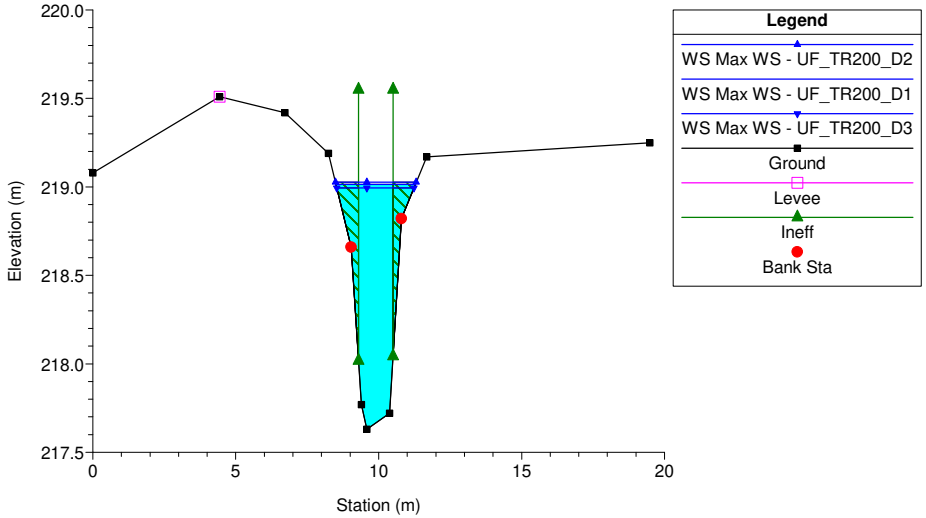
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 17.5 Culv



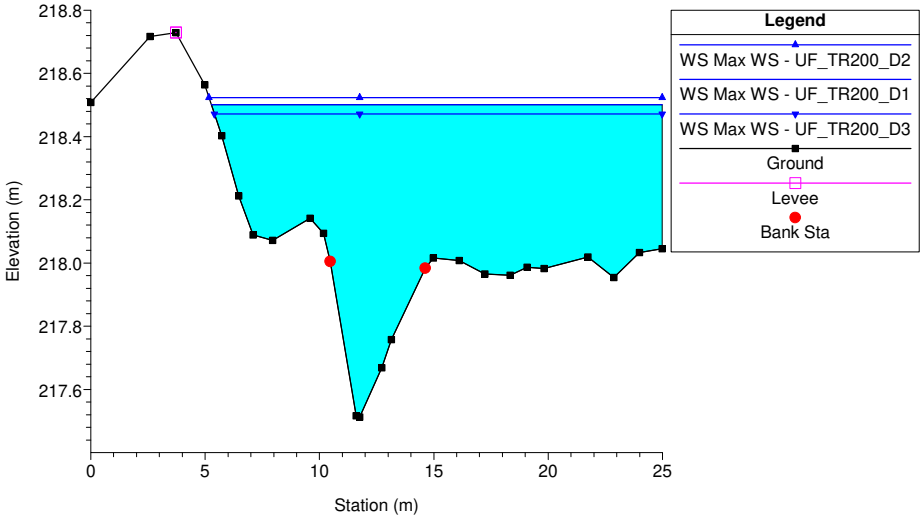
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 15 AMB_06



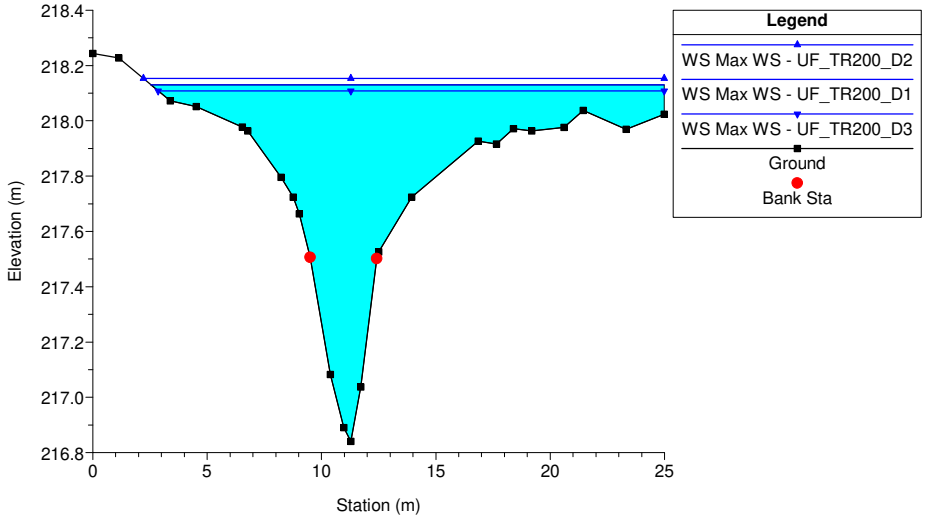
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 14 AMB_05

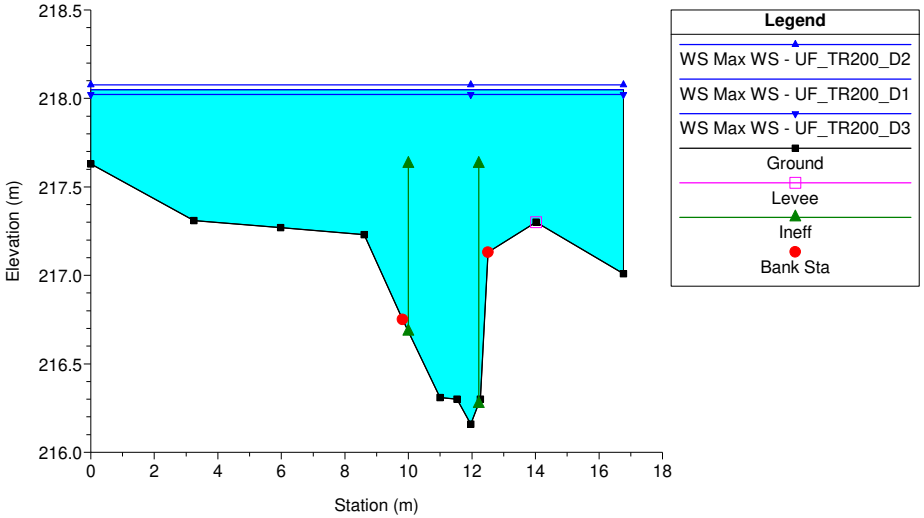


Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

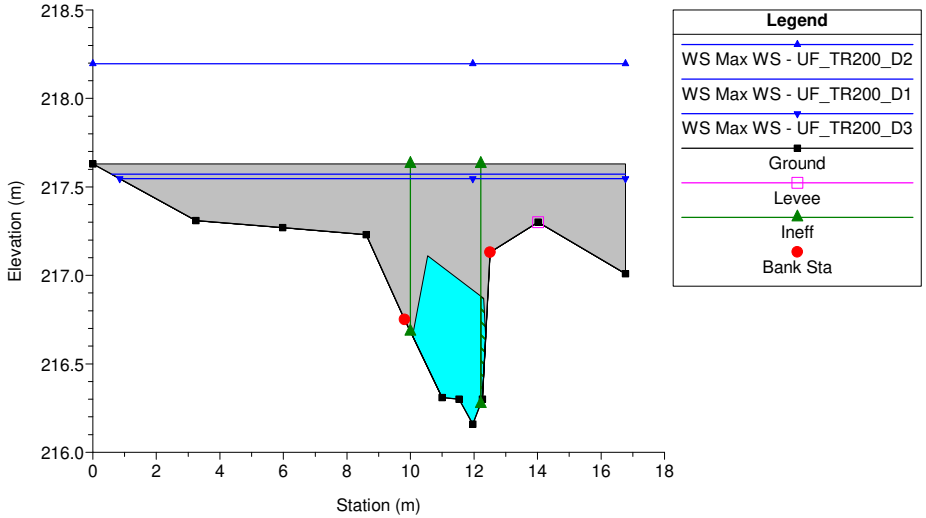
River = Amboiana Reach = amboiana RS = 13 AMB_04



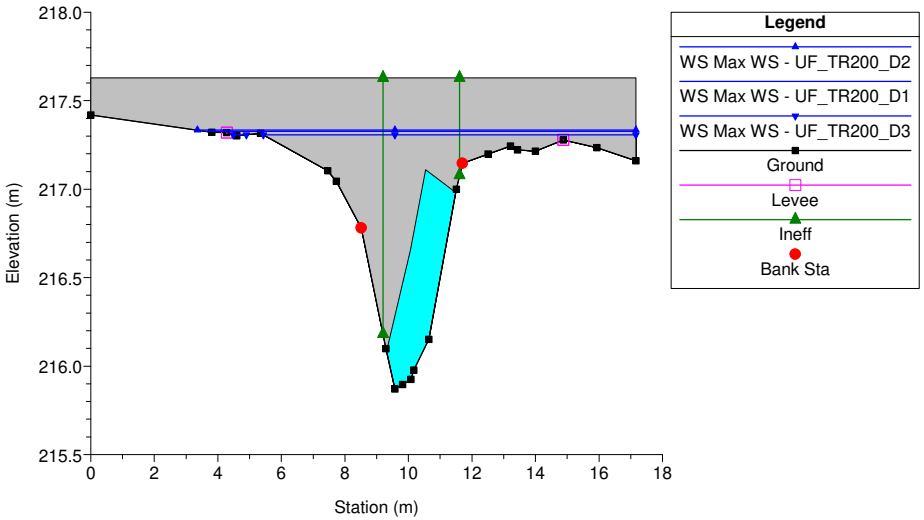
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 10 AMB_03



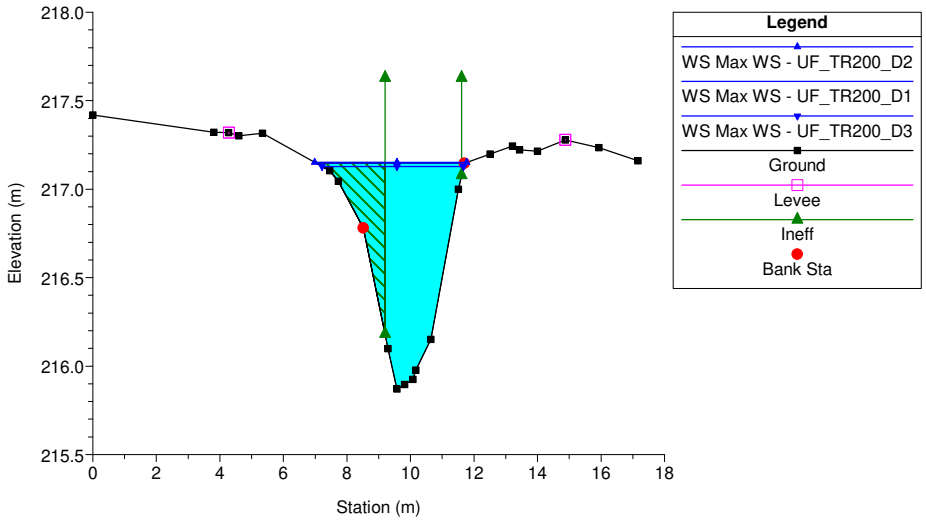
Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 7.5 BR



Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 7.5 BR

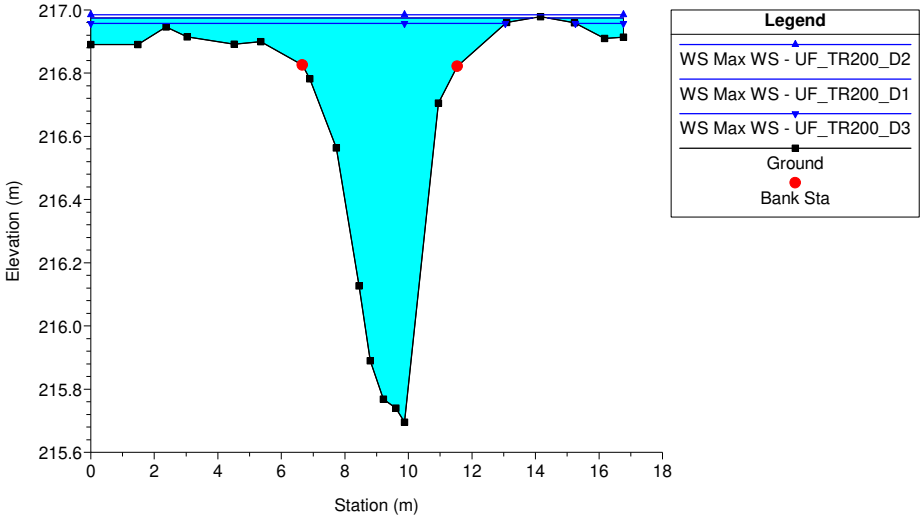


Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3
River = Amboiana Reach = amboiana RS = 5 AMB_02



Amboiana Plan: 1) UF_TR200_D1 2) UF_TR200_D2 3) UF_TR200_D3

River = Amboiana Reach = amboiana RS = 2 AMB_01



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Amboiana"

FOSSO AMBOIANA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Amboiana Reach: amboiana Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
amboiana	110	Max WS	UF_TR200_D1	11.40	231.76	232.92		233.01	0.005925	1.84	0.91	0.40	10.17	14.83	0.61
amboiana	110	Max WS	UF_TR200_D2	10.50	231.76	232.90		232.98	0.005476	1.75	0.86	0.37	9.89	14.80	0.59
amboiana	110	Max WS	UF_TR200_D3	8.60	231.76	232.86		232.92	0.004508	1.54	0.75	0.31	9.25	14.73	0.53
amboiana	109			Lat Struct											
amboiana	100	Max WS	UF_TR200_D1	9.51	231.76	232.83		232.91	0.006061	1.74	0.85	0.34	9.02	14.68	0.61
amboiana	100	Max WS	UF_TR200_D2	8.85	231.76	232.81		232.89	0.005655	1.66	0.81	0.32	8.80	14.66	0.59
amboiana	100	Max WS	UF_TR200_D3	7.47	231.76	232.78		232.84	0.004803	1.49	0.72	0.27	8.31	14.60	0.54
amboiana	99.8	Max WS	UF_TR200_D1	4.52	231.34	232.28	232.38	232.57	0.029748	2.39			1.89	5.18	1.26
amboiana	99.8	Max WS	UF_TR200_D2	4.34	231.34	232.27	232.37	232.56	0.029264	2.36			1.84	5.07	1.25
amboiana	99.8	Max WS	UF_TR200_D3	3.98	231.34	232.25	232.34	232.52	0.028204	2.29			1.73	4.83	1.22
amboiana	99.6	Max WS	UF_TR200_D1	4.51	230.10	230.91	230.96	231.21	0.024000	2.44			1.85	4.16	1.17
amboiana	99.6	Max WS	UF_TR200_D2	4.34	230.10	230.90	230.95	231.19	0.023431	2.39			1.81	4.12	1.15
amboiana	99.6	Max WS	UF_TR200_D3	3.98	230.10	230.88	230.92	231.15	0.022082	2.29			1.74	4.04	1.11
amboiana	99.4	Max WS	UF_TR200_D1	4.21	229.95	230.13	230.12	230.21	0.044434	1.62	1.09	0.16	3.57	21.46	1.38
amboiana	99.4	Max WS	UF_TR200_D2	4.05	229.95	230.12	230.11	230.20	0.045118	1.60	1.09	0.13	3.47	21.29	1.39
amboiana	99.4	Max WS	UF_TR200_D3	3.72	229.95	230.11	230.11	230.19	0.045610	1.53	1.07	0.06	3.26	20.82	1.38
amboiana	99.300	Max WS	UF_TR200_D1	3.94	229.01	229.49		229.51	0.003727	0.91	0.54	0.25	6.36	17.11	0.47
amboiana	99.300	Max WS	UF_TR200_D2	3.78	229.01	229.48		229.50	0.003760	0.90	0.53	0.24	6.18	17.04	0.47
amboiana	99.300	Max WS	UF_TR200_D3	3.51	229.01	229.46		229.48	0.003882	0.88	0.52	0.23	5.84	16.92	0.48
amboiana	99.2	Max WS	UF_TR200_D1	4.51	228.82	229.26		229.35	0.011023	1.47	0.64	0.47	4.15	16.21	0.80
amboiana	99.2	Max WS	UF_TR200_D2	4.30	228.82	229.25		229.34	0.010864	1.44	0.63	0.45	4.03	16.10	0.79
amboiana	99.2	Max WS	UF_TR200_D3	3.89	228.82	229.24		229.31	0.010455	1.37	0.59	0.43	3.81	15.89	0.77
amboiana	99.199			Lat Struct											
amboiana	99.100	Max WS	UF_TR200_D1	3.95	228.63	229.07		229.11	0.005693	0.95	0.44	0.34	5.95	27.67	0.56
amboiana	99.100	Max WS	UF_TR200_D2	3.77	228.63	229.07		229.10	0.005687	0.93	0.43	0.33	5.78	27.67	0.56
amboiana	99.100	Max WS	UF_TR200_D3	3.49	228.63	229.06		229.09	0.005726	0.91	0.42	0.31	5.46	27.67	0.56
amboiana	99	Max WS	UF_TR200_D1	2.73	228.30	228.91		229.01	0.006506	1.42	0.50	0.33	2.18	5.47	0.65
amboiana	99	Max WS	UF_TR200_D2	2.64	228.30	228.91		229.00	0.006309	1.39	0.49	0.32	2.15	5.45	0.64
amboiana	99	Max WS	UF_TR200_D3	2.49	228.30	228.90		228.99	0.005963	1.33	0.47	0.31	2.11	5.40	0.62
amboiana	98.99			Lat Struct											
amboiana	98.6	Max WS	UF_TR200_D1	2.25	227.56	228.90		228.96	0.004727	1.22	0.36	0.42	2.66	6.78	0.41
amboiana	98.6	Max WS	UF_TR200_D2	2.20	227.56	228.90		228.95	0.004605	1.20	0.35	0.41	2.63	6.78	0.40
amboiana	98.6	Max WS	UF_TR200_D3	2.10	227.56	228.89		228.94	0.004380	1.16	0.33	0.39	2.59	6.78	0.39
amboiana	98.5			Culvert											
amboiana	98.4	Max WS	UF_TR200_D1	2.25	227.31	228.41		228.51	0.006514	1.46	0.26	0.25	1.84	6.16	0.52
amboiana	98.4	Max WS	UF_TR200_D2	2.20	227.31	228.40		228.76	0.009095	2.65			0.83	2.15	0.83
amboiana	98.4	Max WS	UF_TR200_D3	2.10	227.31	228.39		228.72	0.008603	2.56			0.82	2.13	0.81
amboiana	98.39			Lat Struct											
amboiana	98	Max WS	UF_TR200_D1	1.46	227.14	228.27		228.29	0.001559	0.74	0.17	0.07	3.20	19.31	0.27
amboiana	98	Max WS	UF_TR200_D2	1.37	227.14	228.26		228.28	0.001419	0.70	0.16	0.06	3.10	19.31	0.25
amboiana	98	Max WS	UF_TR200_D3	1.16	227.14	228.25		228.27	0.001125	0.62	0.13	0.08	2.77	12.17	0.23
amboiana	97.5			Culvert											
amboiana	96	Max WS	UF_TR200_D1	1.31	224.24	225.17		225.30	0.003835	1.62		0.23	0.89	8.90	0.54
amboiana	96	Max WS	UF_TR200_D2	1.33	224.24	225.17		225.31	0.003959	1.64		0.23	0.89	8.90	0.55
amboiana	96	Max WS	UF_TR200_D3	1.18	224.24	225.16		225.27	0.003289	1.48		0.21	0.88	5.08	0.50
amboiana	95			Lat Struct											
amboiana	90	Max WS	UF_TR200_D1	2.36	223.91	225.08		225.16	0.004828	1.28		0.12	1.90	4.15	0.47
amboiana	90	Max WS	UF_TR200_D2	2.38	223.91	225.09		225.17	0.004740	1.27		0.13	1.93	4.30	0.47
amboiana	90	Max WS	UF_TR200_D3	2.09	223.91	225.03		225.11	0.004638	1.21		0.04	1.73	2.88	0.46
amboiana	89.99			Lat Struct											
amboiana	80	Max WS	UF_TR200_D1	3.86	222.94	224.18		224.34	0.007586	1.77	0.09	0.38	2.33	3.82	0.60
amboiana	80	Max WS	UF_TR200_D2	3.95	222.94	224.22		224.37	0.006788	1.72	0.14	0.39	2.48	4.11	0.57
amboiana	80	Max WS	UF_TR200_D3	3.51	222.94	224.15		224.29	0.007233	1.68		0.34	2.20	3.58	0.58
amboiana	76	Max WS	UF_TR200_D1	3.73	222.89	224.10		224.14	0.004099	1.15		0.66	4.58	7.38	0.37
amboiana	76	Max WS	UF_TR200_D2	3.92	222.89	224.13		224.18	0.003906	1.14		0.67	4.82	7.38	0.36
amboiana	76	Max WS	UF_TR200_D3	3.50	222.89	224.06		224.10	0.004361	1.17		0.65	4.29	7.38	0.38
amboiana	75			Culvert											
amboiana	73	Max WS	UF_TR200_D1	3.70	222.25	223.81		223.83	0.001007	0.88	0.51	0.08	6.19	5.33	0.23
amboiana	73	Max WS	UF_TR200_D2	3.91	222.25	223.83		223.85	0.001070	0.91	0.53	0.08	6.30	5.33	0.24
amboiana	73	Max WS	UF_TR200_D3	3.50	222.25	223.78		223.80	0.000956	0.84	0.49	0.07	6.07	5.33	0.22
amboiana	72.9			Lat Struct											
amboiana	72.8			Lat Struct											
amboiana	70	Max WS	UF_TR200_D1	3.98	222.44	223.79		223.82	0.001821	1.00	0.30	0.31	7.56	20.00	0.30
amboiana	70	Max WS	UF_TR200_D2	3.94	222.44	223.82		223.84	0.001512	0.93	0.29	0.30	8.10	20.00	0.28
amboiana	70	Max WS	UF_TR200_D3	3.70	222.44	223.76		223.80	0.001836	0.99	0.28	0.30	7.08	20.00	0.30
amboiana	60	Max WS	UF_TR200_D1	7.20	221.73	223.07		223.20	0.008863	2.02	0.76	0.41	6.19	14.69	0.67
amboiana	60	Max WS	UF_TR200_D2	7.44	221.73	223.08		223.21	0.008904	2.04	0.78	0.36	6.34	14.94	0.68
amboiana	60	Max WS	UF_TR200_D3	6.25	221.73	223.04		223.16	0.007990	1.88	0.68	0.36	5.78	14.62	0.63
amboiana	56	Max WS	UF_TR200_D1	6.17	222.00	222.68		222.78	0.009875	1.99	0.81	0.54	6.09	18.84	0.82
amboiana	56	Max WS	UF_TR200_D2	6.42	222.00	222.69		222.79	0.009795	2.01	0.82	0.55	6.29	18.84	0.82
amboiana	56	Max WS	UF_TR200_D3	5.38	222.00	222.66		222.75	0.009099	1.87	0.75	0.48	5.69	18.84	0.79
amboiana	54	Max WS	UF_TR200_D1	5.65	221.60	222.26		222.34	0.010498	1.80	0.89	0.36	5.46	13.87	0.79
amboiana	54	Max WS	UF_TR200_D2	5.83	221.60	222.27		222.35	0.010342	1.81	0.90	0.37	5.60	13.89	0.79
amboiana	54	Max WS	UF_TR200_D3	5.23	221.60	222.24		222.31	0.011003	1.78	0.87	0.34	5.12	13.82	0.80
amboiana	52	Max WS	UF_TR200_D1	4.39	221.30	221.99		222.02	0.003269	1.15	0.59	0.34	6.78	13.78	0.47
amboiana	52	Max WS	UF_TR200_D2	4.46	221.30	222.02		222.04	0.002837	1.10	0.56	0.32	7.17	13.87	0.44
amboiana	52	Max WS	UF_TR200_D3	4.01	221.30	221.96		221.99	0.003235	1.11	0.56	0.33	6.42	13.69	0.46
amboiana	50	Max WS	UF_TR200_D1	4.19	220.17	221.90		221.92	0.001352	0.97	0.41	0.34	8.82	14.47	0.25

HEC-RAS River: Amboiana Reach: amboiana Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
amboiana	50	Max WS	UF_TR200_D2	4.17	220.17	221.93		221.95	0.001141	0.91	0.39	0.33	9.32	14.47	0.23
amboiana	50	Max WS	UF_TR200_D3	4.38	220.17	221.86		221.89	0.001796	1.10	0.45	0.38	8.23	14.47	0.29
amboiana	40	Max WS	UF_TR200_D1	9.32	219.53	221.67		221.79	0.002129	1.64	0.41	0.21	8.04	10.49	0.40
amboiana	40	Max WS	UF_TR200_D2	9.86	219.53	221.70		221.82	0.002193	1.68	0.43	0.22	8.38	10.74	0.40
amboiana	40	Max WS	UF_TR200_D3	8.59	219.53	221.63		221.74	0.001977	1.56	0.38	0.20	7.68	10.21	0.38
amboiana	35			Culvert											
amboiana	30	Max WS	UF_TR200_D1	9.32	219.08	220.91	220.76	221.36	0.011053	3.03	0.73	0.28	3.47	3.69	0.82
amboiana	30	Max WS	UF_TR200_D2	9.86	219.08	220.94	220.83	221.42	0.011265	3.11	0.75	0.29	3.61	3.85	0.83
amboiana	30	Max WS	UF_TR200_D3	8.58	219.08	220.85	220.72	221.27	0.010760	2.92	0.70	0.26	3.28	3.48	0.80
amboiana	29			Lat Struct											
amboiana	28			Lat Struct											
amboiana	25	Max WS	UF_TR200_D1	8.89	218.61	220.11	220.20	220.44	0.010146	2.88	0.78	0.58	5.66	16.55	0.84
amboiana	25	Max WS	UF_TR200_D2	9.30	218.61	220.13	220.21	220.46	0.010005	2.89	0.77	0.62	5.99	16.64	0.84
amboiana	25	Max WS	UF_TR200_D3	8.34	218.61	220.08	220.18	220.42	0.010425	2.87	0.79	0.54	5.18	16.41	0.85
amboiana	20	Max WS	UF_TR200_D1	5.17	217.63	219.69		219.72	0.001212	0.98	0.32	0.29	10.17	19.49	0.24
amboiana	20	Max WS	UF_TR200_D2	5.26	217.63	219.70		219.73	0.001190	0.97	0.32	0.29	10.41	19.49	0.23
amboiana	20	Max WS	UF_TR200_D3	4.95	217.63	219.66		219.69	0.001237	0.98	0.31	0.28	9.73	19.49	0.24
amboiana	17.5			Culvert											
amboiana	15	Max WS	UF_TR200_D1	5.17	217.63	219.01		219.58	0.014499	3.32			1.56	2.78	0.93
amboiana	15	Max WS	UF_TR200_D2	5.26	217.63	219.03		219.60	0.014575	3.35			1.57	2.83	0.93
amboiana	15	Max WS	UF_TR200_D3	4.95	217.63	218.99		219.53	0.014087	3.24			1.53	2.69	0.92
amboiana	14	Max WS	UF_TR200_D1	8.40	217.51	218.50		218.56	0.003564	1.38	0.48	0.61	10.14	19.72	0.51
amboiana	14	Max WS	UF_TR200_D2	8.83	217.51	218.52		218.58	0.003488	1.39	0.49	0.62	10.57	19.82	0.51
amboiana	14	Max WS	UF_TR200_D3	7.95	217.51	218.47		218.53	0.003793	1.39	0.47	0.61	9.55	19.59	0.52
amboiana	13	Max WS	UF_TR200_D1	9.03	216.84	218.13	218.16	218.34	0.007632	2.34	0.48	0.54	7.14	22.46	0.75
amboiana	13	Max WS	UF_TR200_D2	9.58	216.84	218.15	218.17	218.36	0.007521	2.35	0.49	0.57	7.64	22.79	0.74
amboiana	13	Max WS	UF_TR200_D3	8.41	216.84	218.11	218.14	218.32	0.007568	2.29	0.45	0.51	6.65	22.14	0.74
amboiana	10	Max WS	UF_TR200_D1	4.19	216.16	218.05	217.08	218.06	0.000204	0.48	0.19	0.19	15.44	16.77	0.12
amboiana	10	Max WS	UF_TR200_D2	4.24	216.16	218.08	217.09	218.08	0.000192	0.47	0.19	0.19	15.91	16.77	0.12
amboiana	10	Max WS	UF_TR200_D3	4.13	216.16	218.02	217.08	218.03	0.000216	0.49	0.19	0.19	14.98	16.77	0.12
amboiana	7.5			Bridge											
amboiana	5	Max WS	UF_TR200_D1	4.34	215.87	217.15		217.35	0.007301	2.00			2.18	4.68	0.67
amboiana	5	Max WS	UF_TR200_D2	4.24	215.87	217.15		217.34	0.006848	1.94			2.19	4.80	0.65
amboiana	5	Max WS	UF_TR200_D3	4.13	215.87	217.13		217.32	0.007097	1.94			2.13	4.46	0.66
amboiana	2	Max WS	UF_TR200_D1	5.88	215.70	216.97	216.81	217.12	0.007097	1.71	0.26	0.18	4.07	16.32	0.66
amboiana	2	Max WS	UF_TR200_D2	6.05	215.70	216.98	216.82	217.13	0.007094	1.73	0.27	0.19	4.23	16.77	0.66
amboiana	2	Max WS	UF_TR200_D3	5.58	215.70	216.96	216.79	217.10	0.007064	1.68	0.22	0.20	3.81	14.56	0.66

ALLEGATI

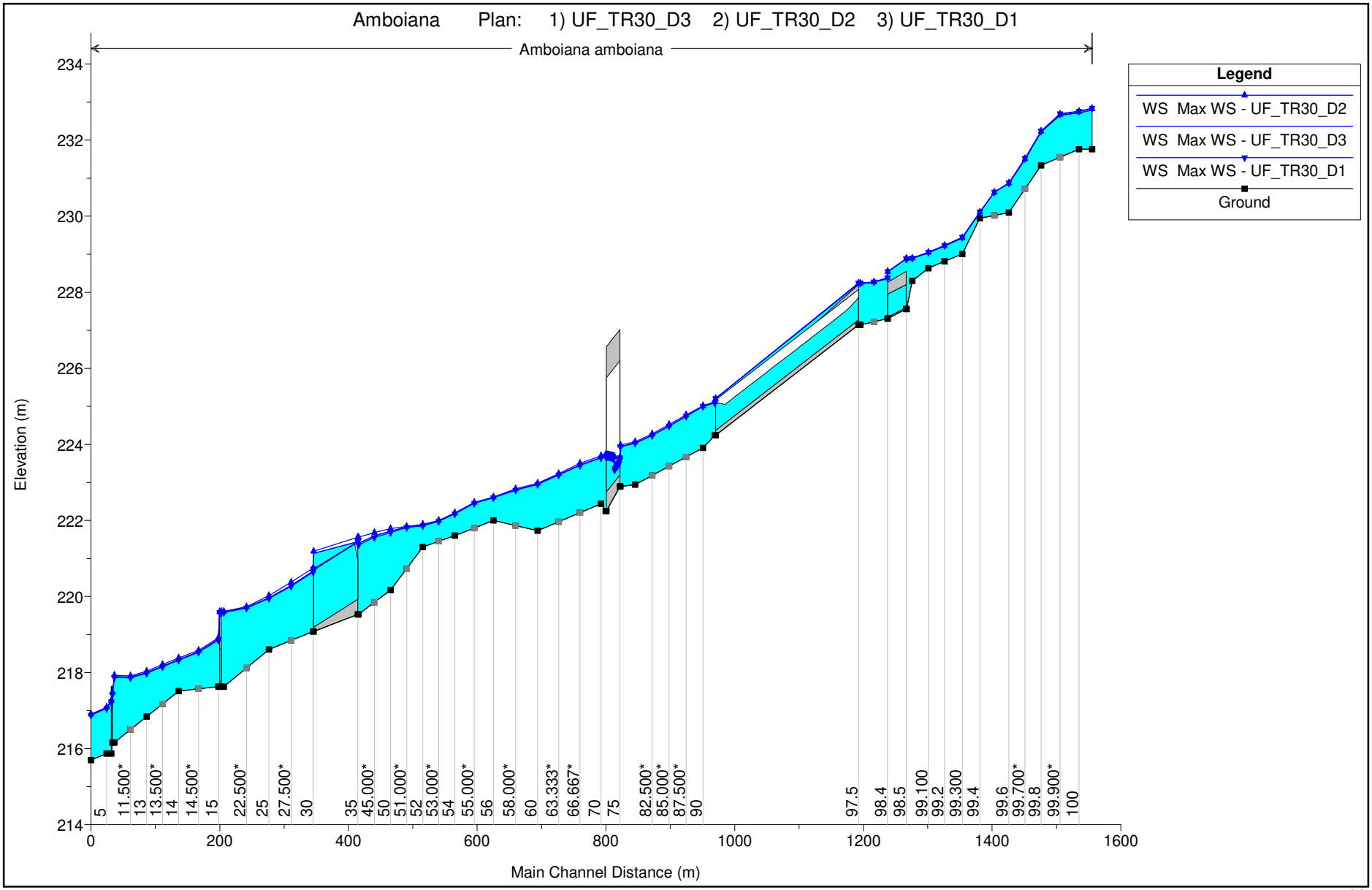
MODELLAZIONE HEC-RAS 5.0.7 "Amboiana"

FOSSO AMBOIANA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
Amboiana amboiana
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
234
232
230
228
226
224
222
220
218
216
214
0
200
400
600
800
1000
1200
1400
1600
5
11.500*
13
13.500*
14
14.500*
15
22.500*
25
27.500*
30
35
45.000*
50
51.000*
52
53.000*
54
55.000*
56
58.000*
60
63.333*
66.667*
70
75
82.500*
85.000*
87.500*
90
97.5
98.4
98.5
99.100
99.2
99.300
99.4
99.6
99.700*
99.8
99.900*
100

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Amboiana"

FOSSO AMBOIANA

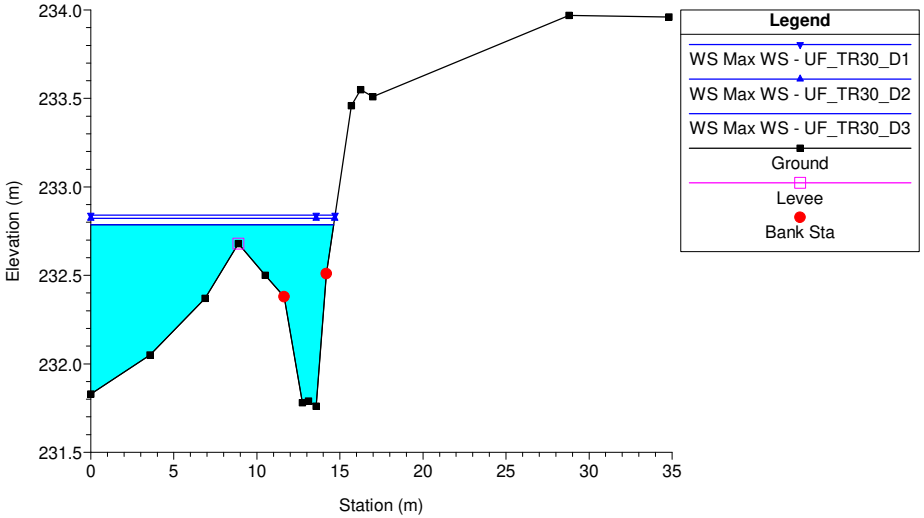
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

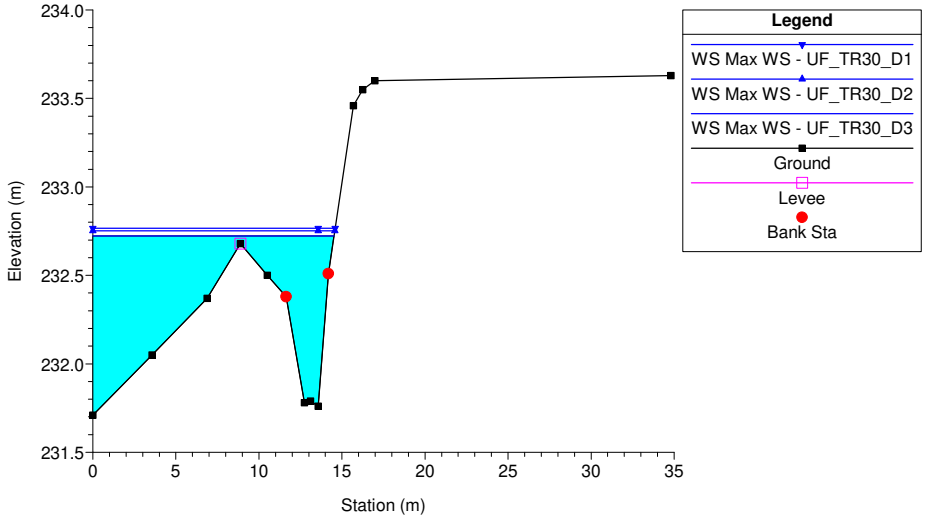
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 110 AMB_33



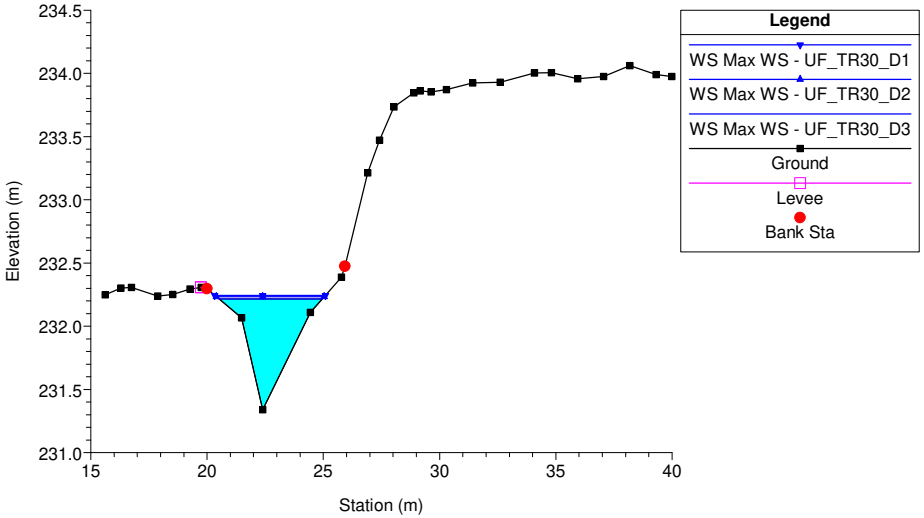
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 100 AMB_32



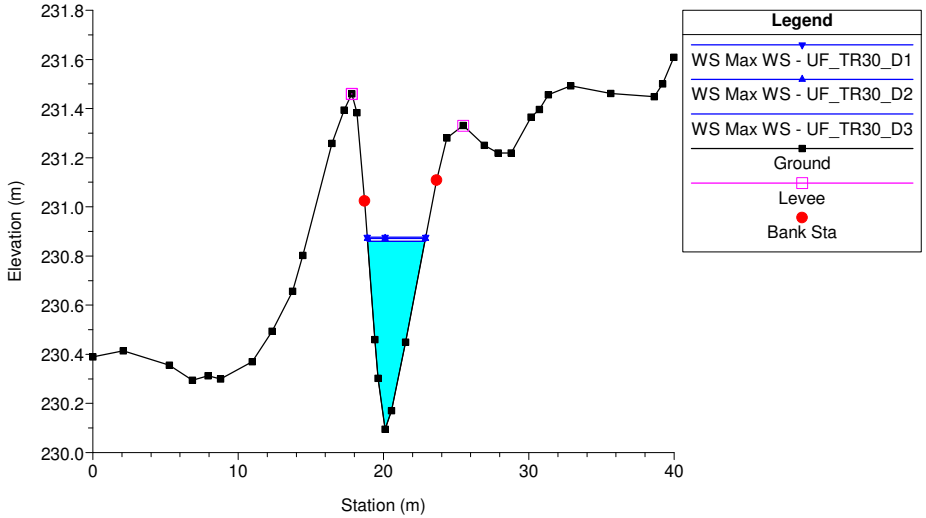
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 99.8 AMB_31

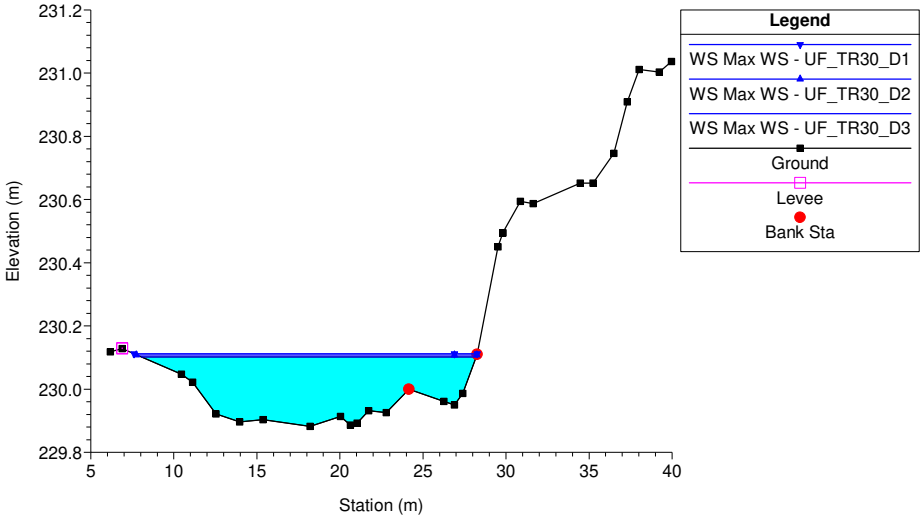


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

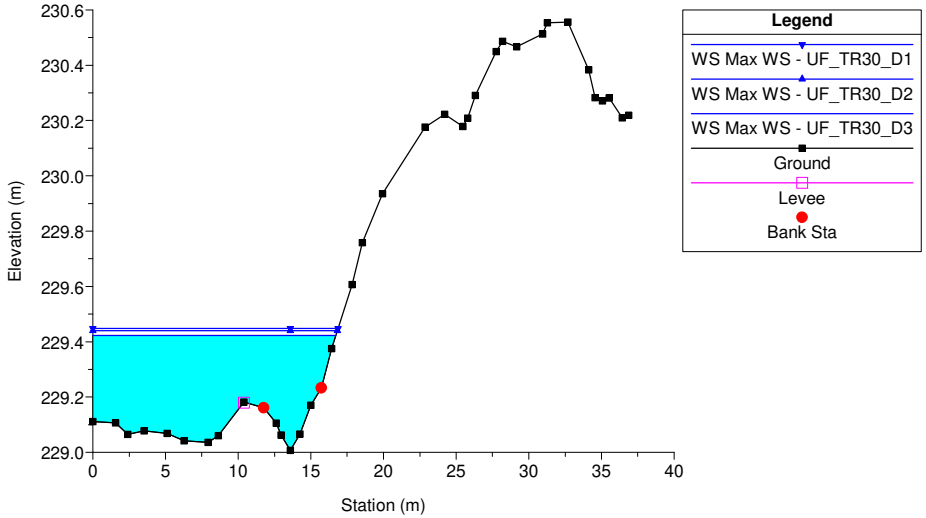
River = Amboiana Reach = amboiana RS = 99.6 AMB_30



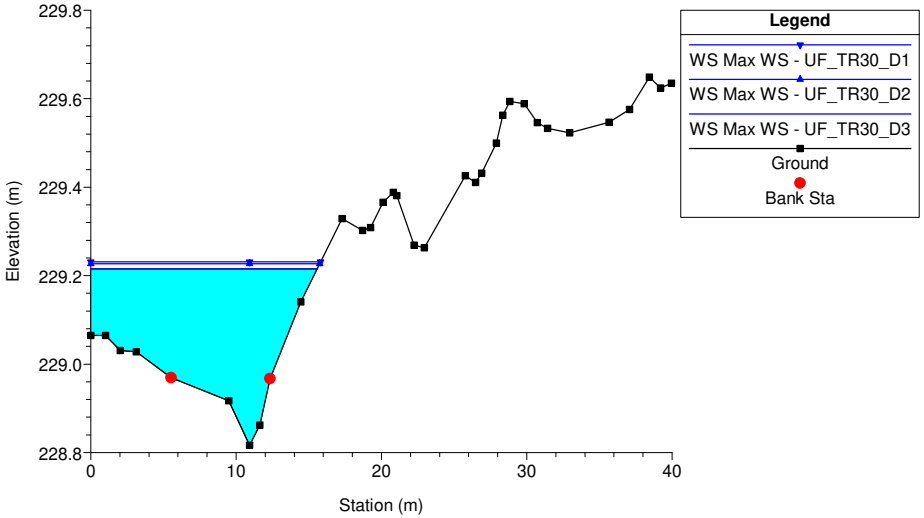
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 99.4 AMB_29



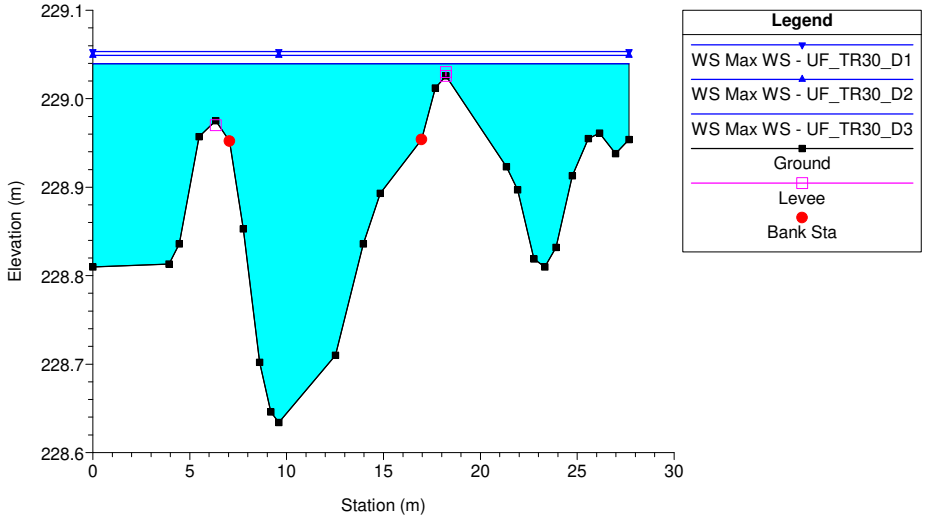
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 99.300 AMB_28



Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 99.2 AMB_27

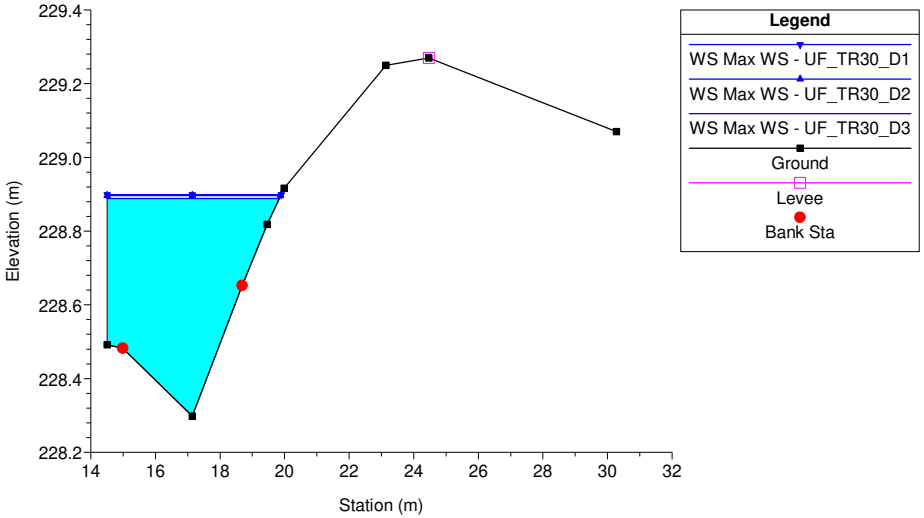


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 99.100 AMB_26



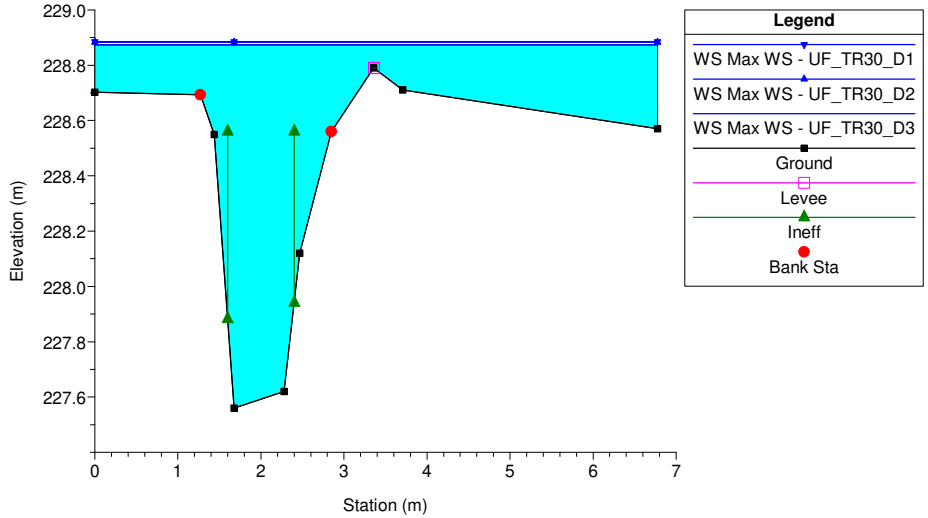
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 99 AMB_25



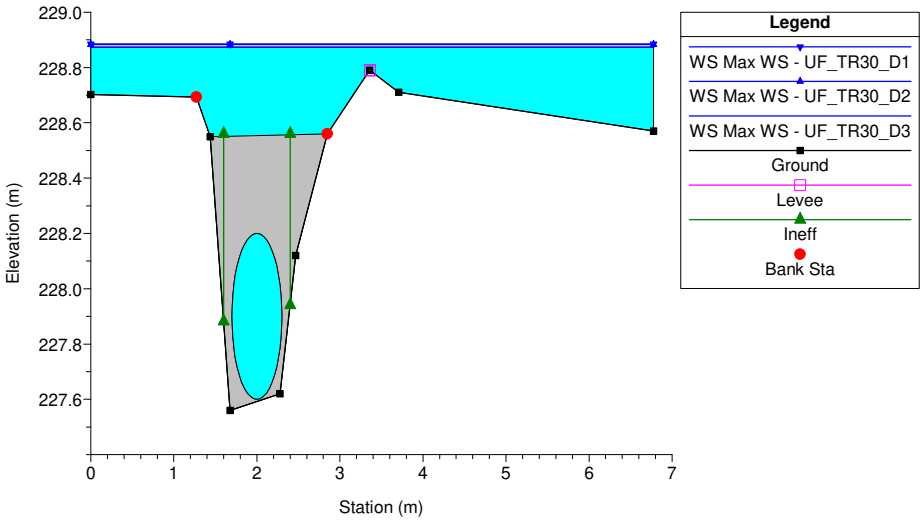
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 98.6 AMB_24



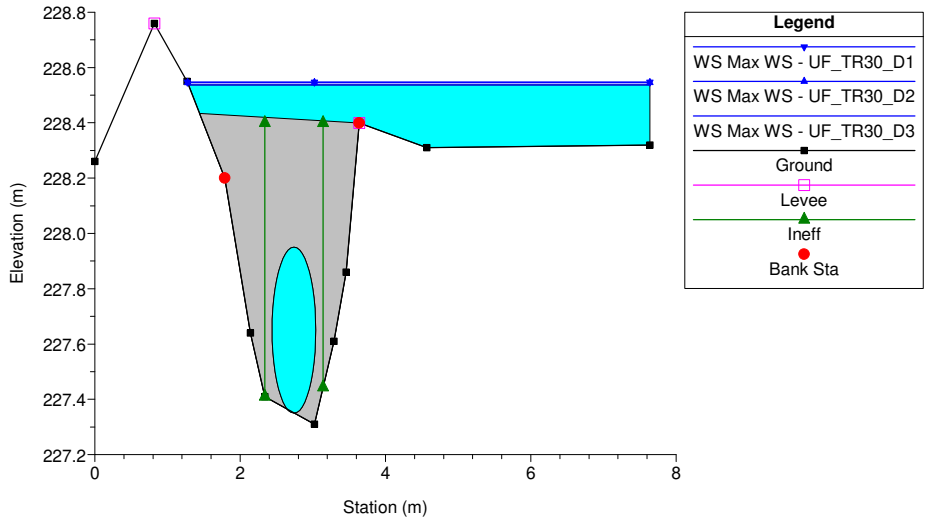
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 98.5 Culv



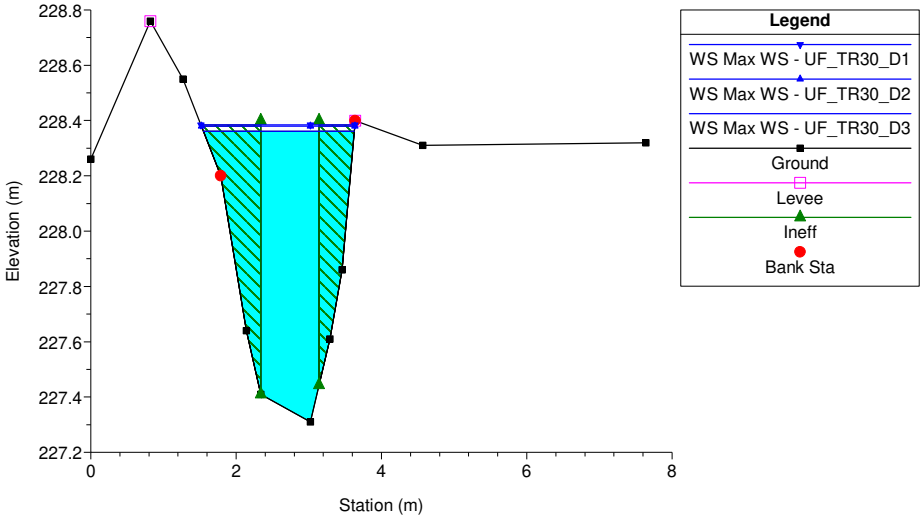
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 98.5 Culv



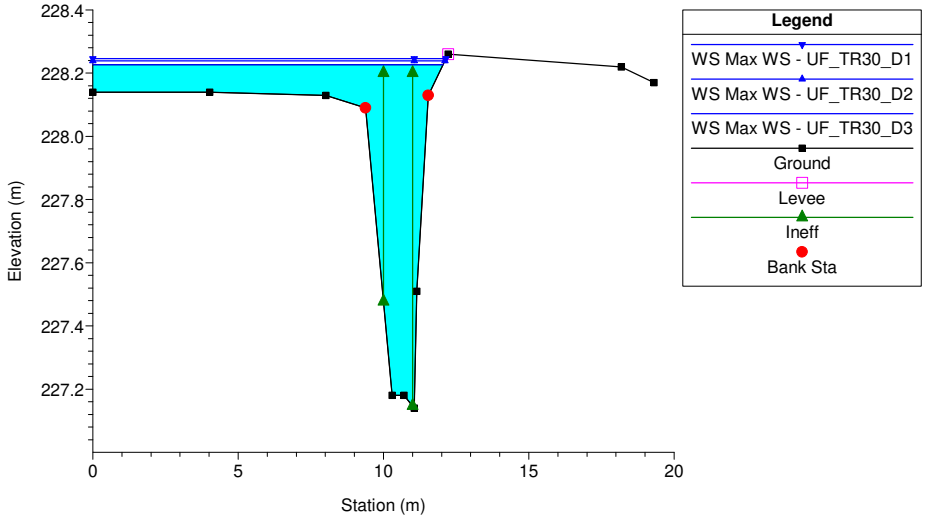
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 98.4 AMB_23



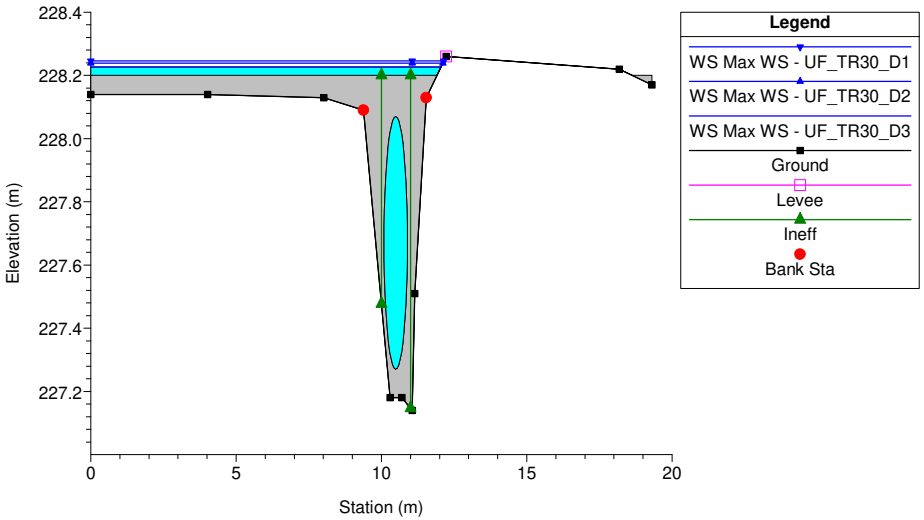
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 98 AMB_22



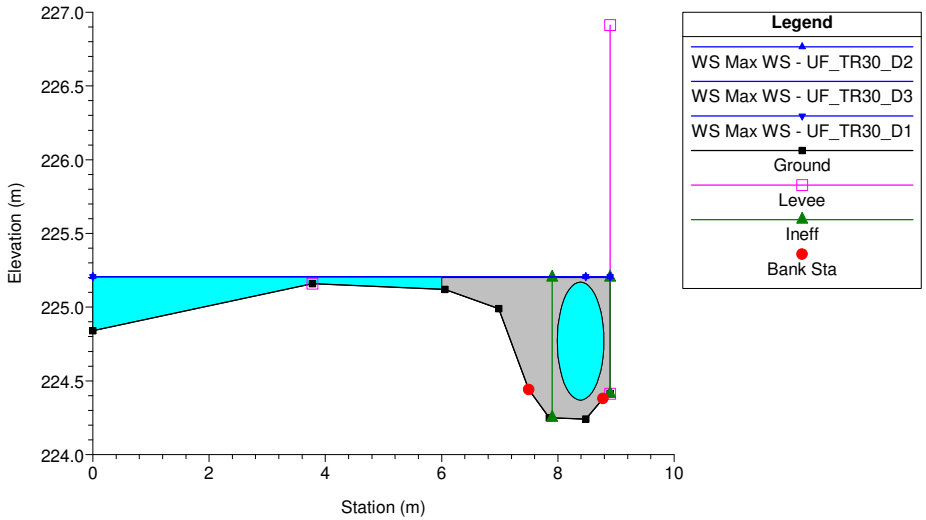
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 97.5 Culv

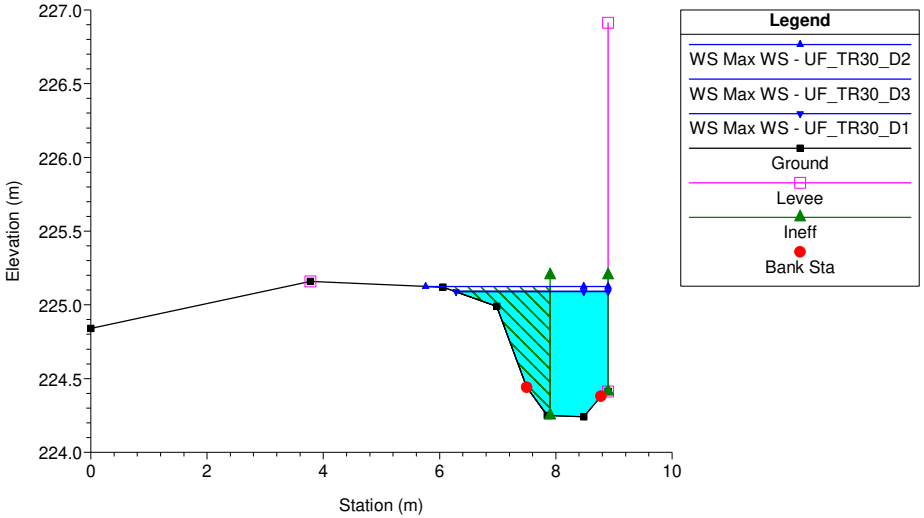


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

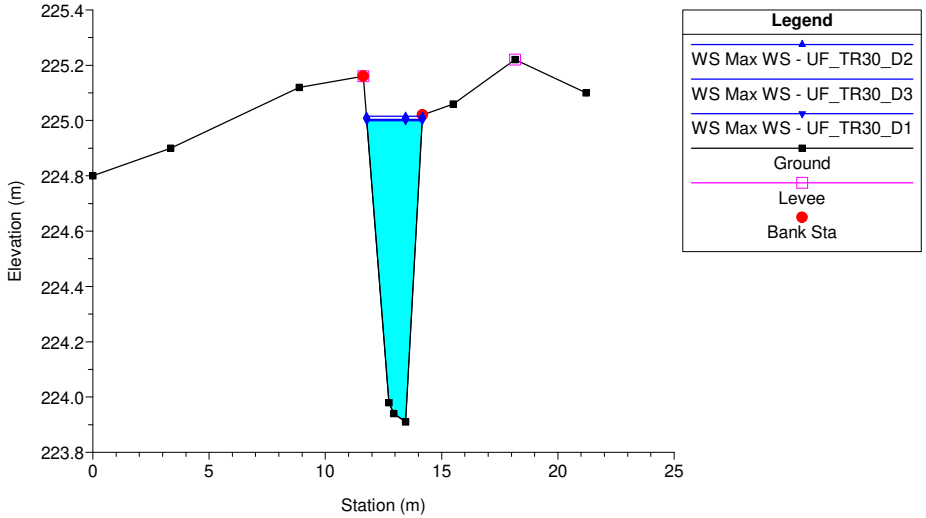
River = Amboiana Reach = amboiana RS = 97.5 Culv



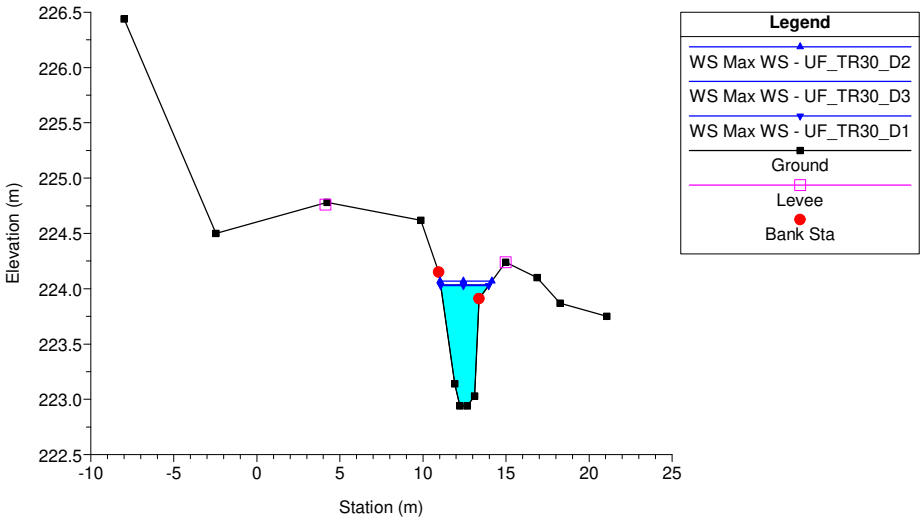
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 96 AMB_21



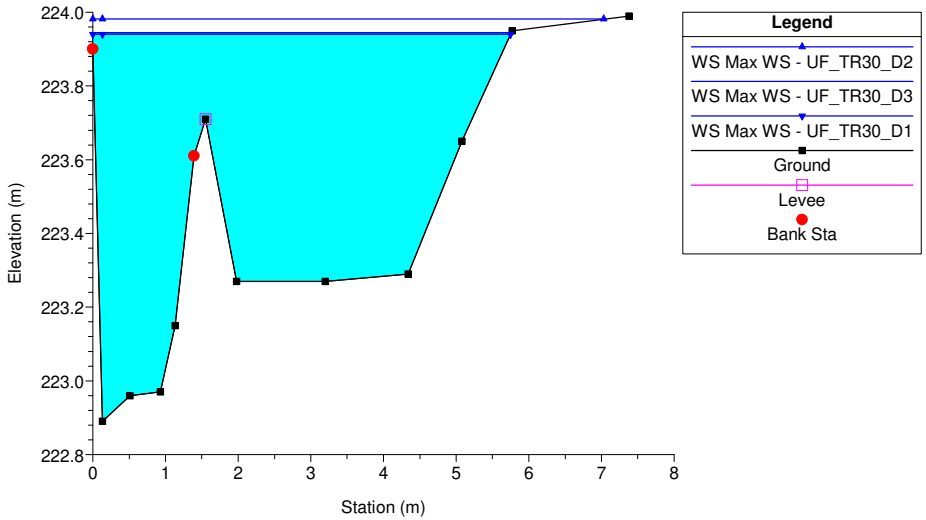
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 90 AMB_20



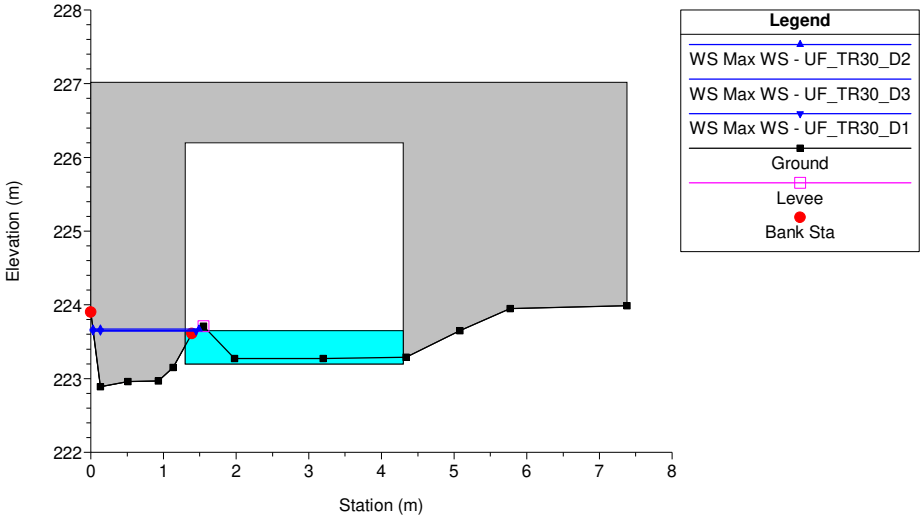
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 80 AMB_19



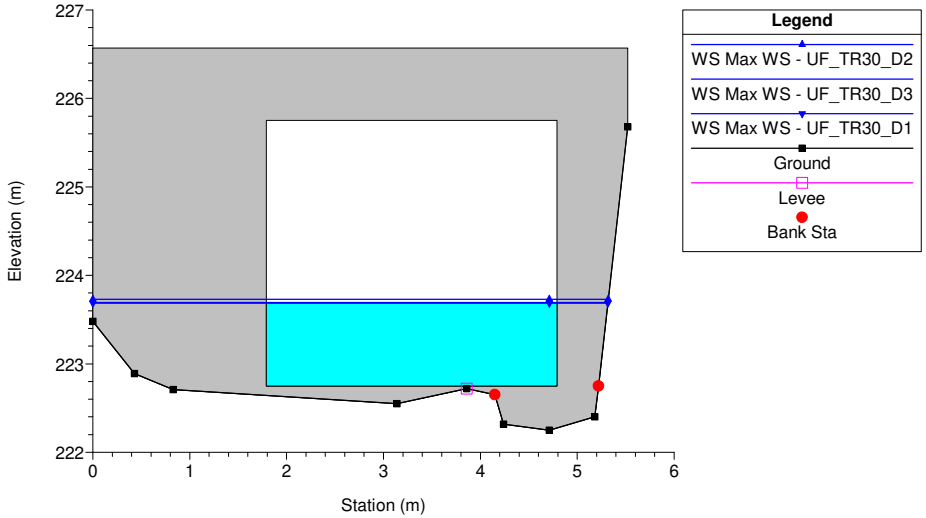
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 76 AMB_18



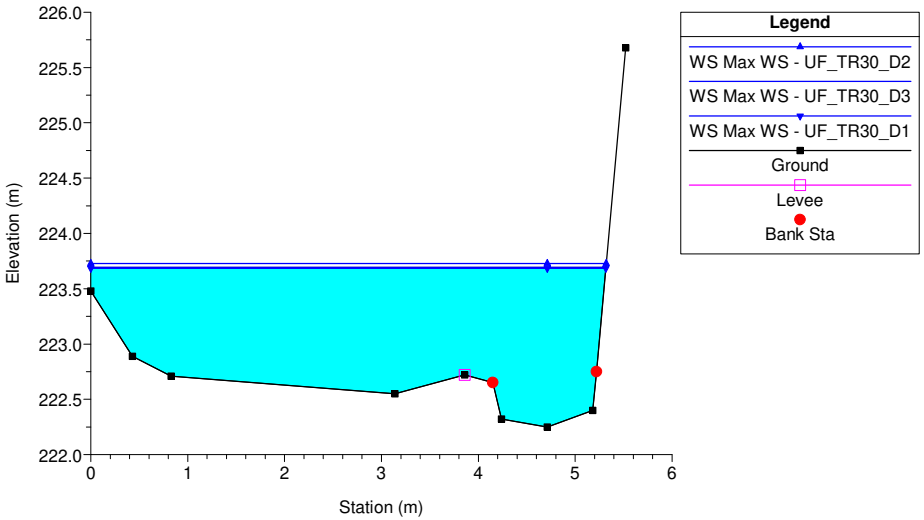
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 75 Culv



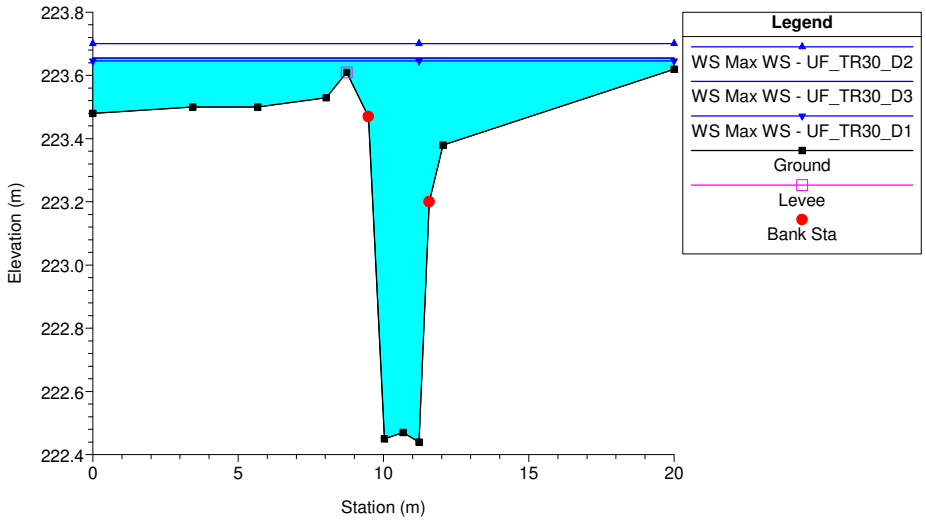
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 75 Culv



Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 73 AMB_17

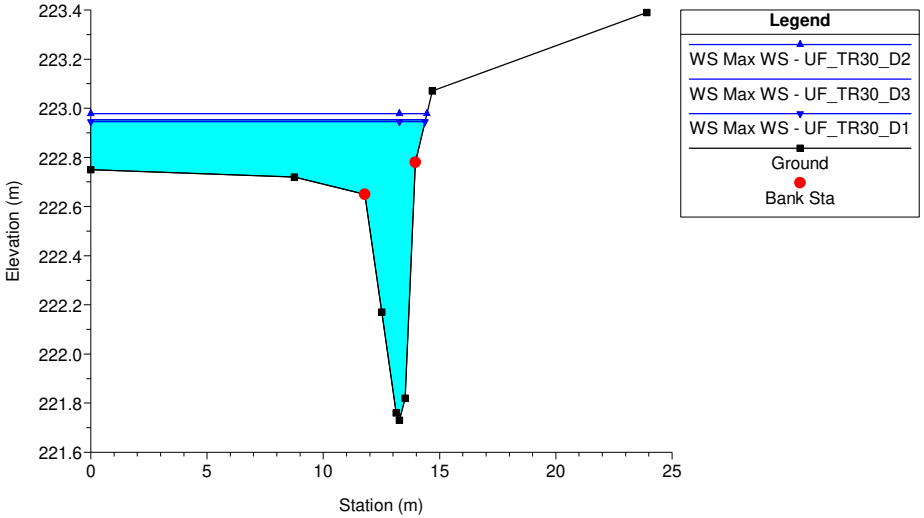


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 70 AMB_16



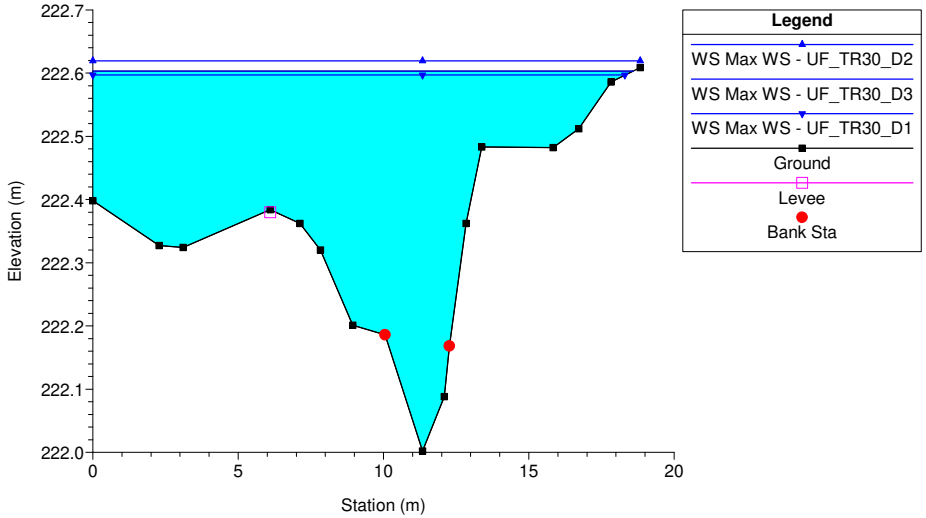
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 60 AMB_15



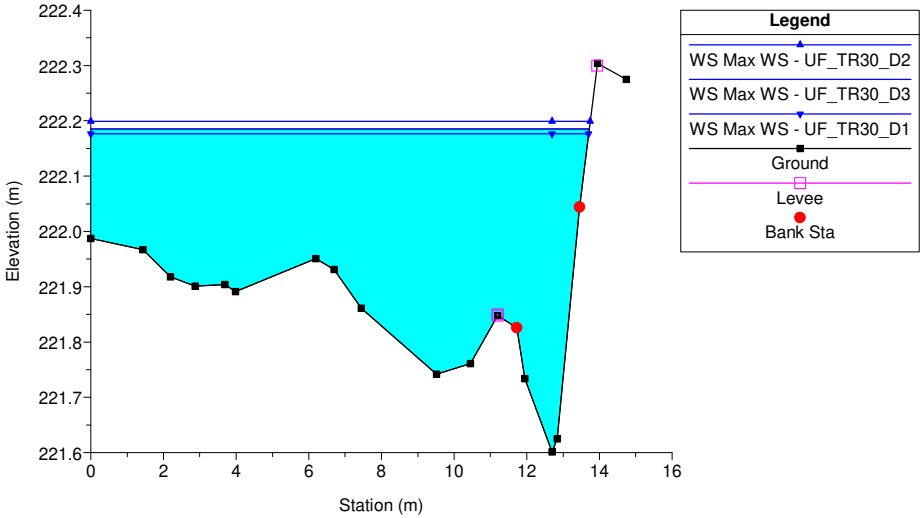
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 56 AMB_14



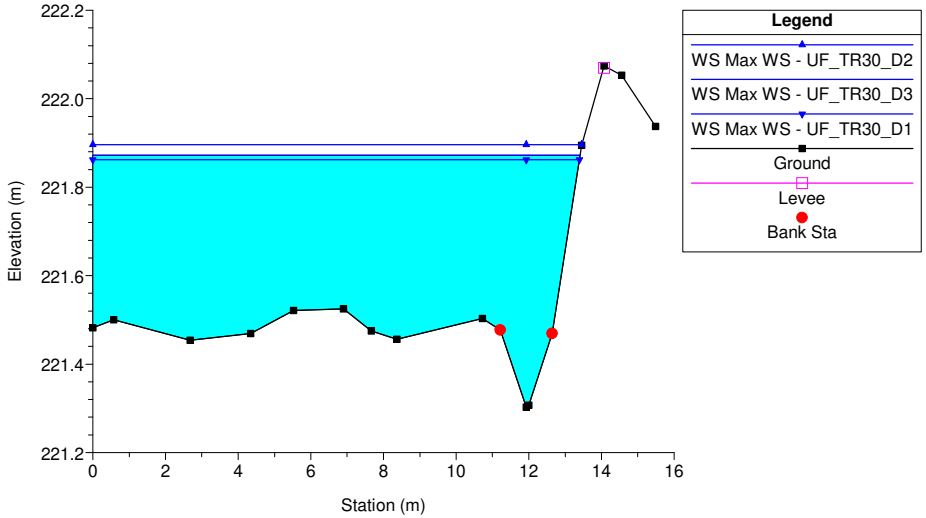
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 54 AMB_13

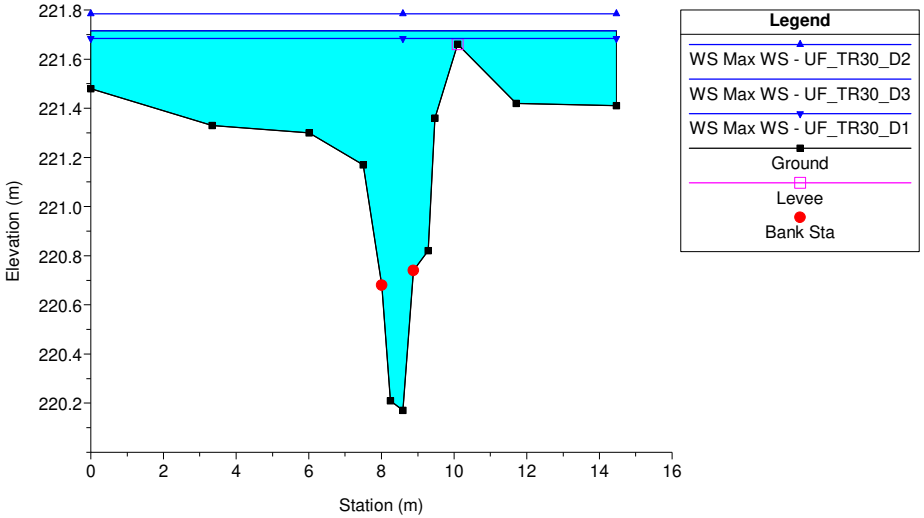


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

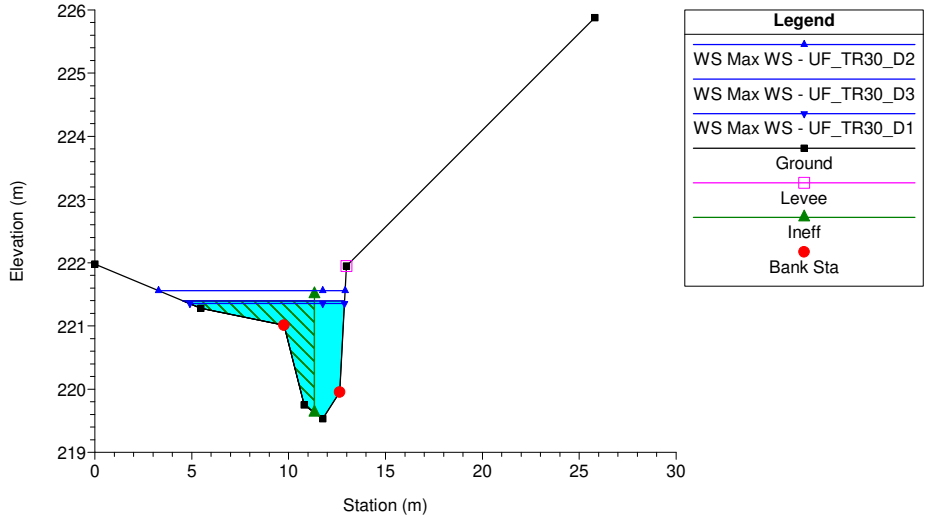
River = Amboiana Reach = amboiana RS = 52 AMB_12



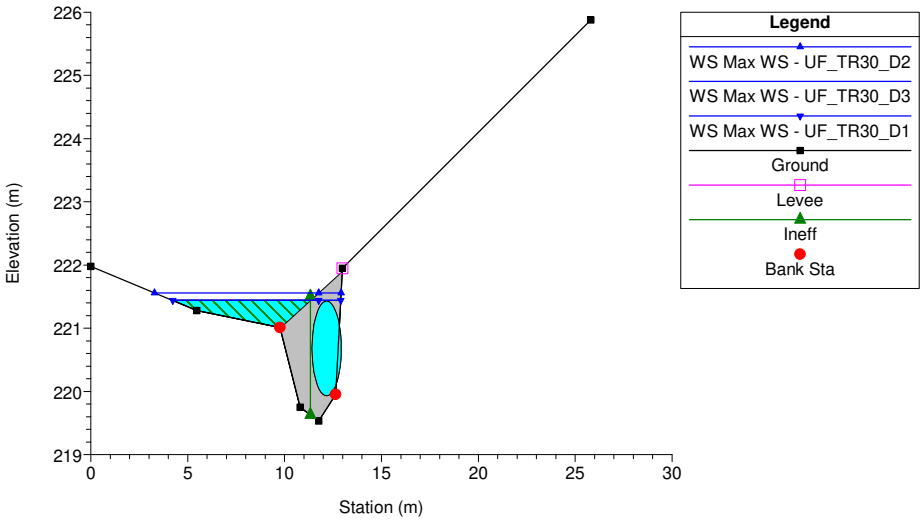
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 50 AMB_11



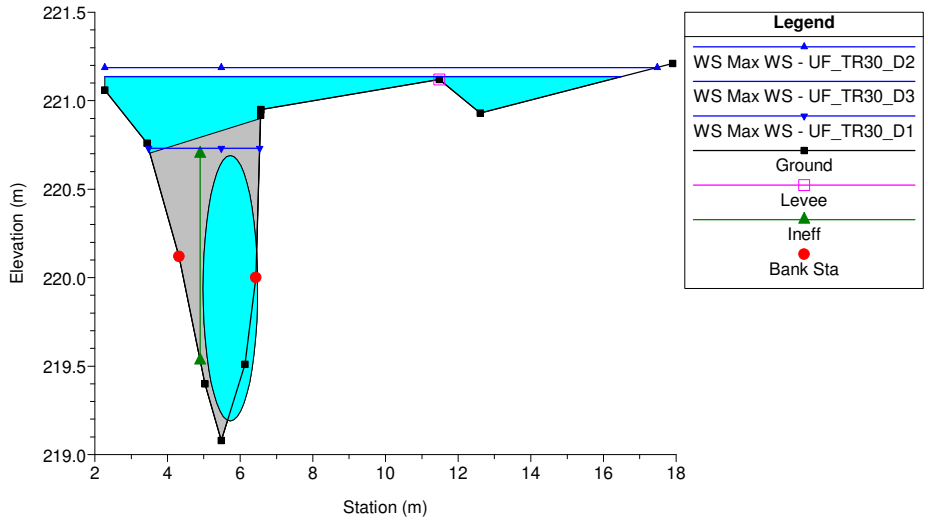
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 40 AMB_10



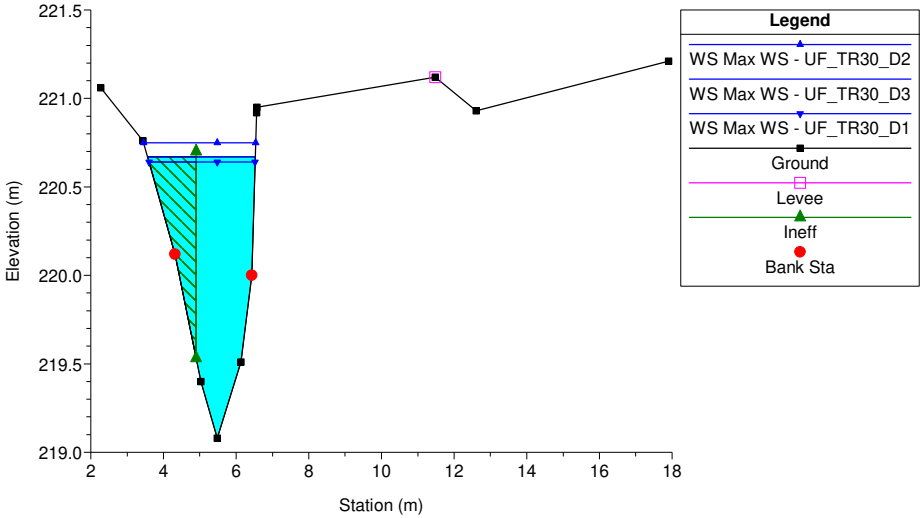
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 35 Culv deck?



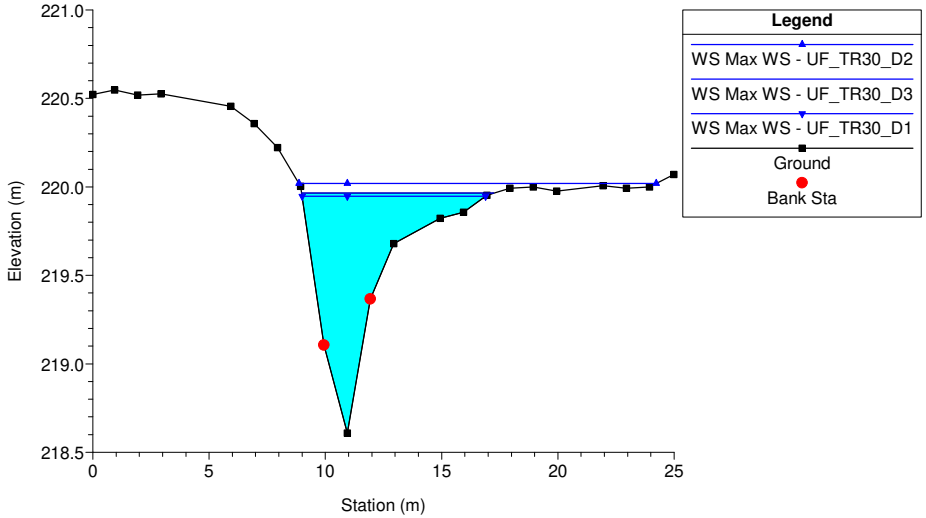
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 35 Culv deck?



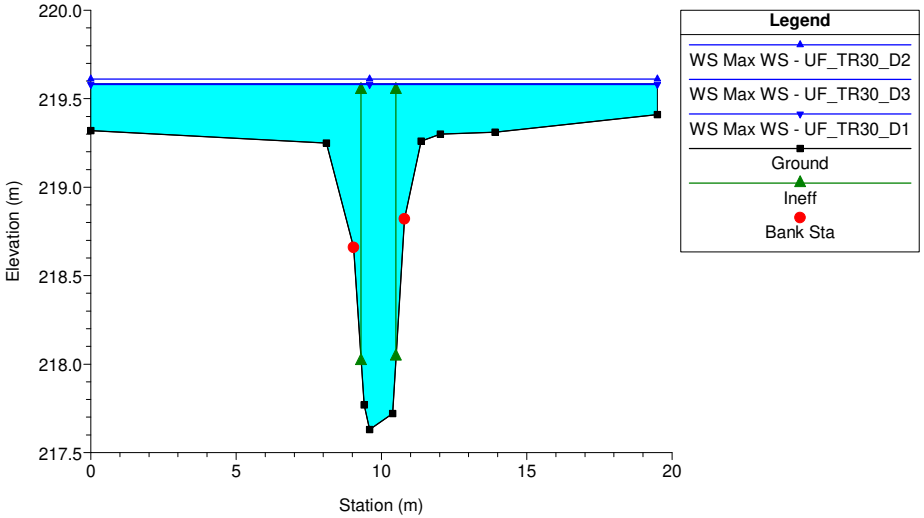
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 30 AMB_09



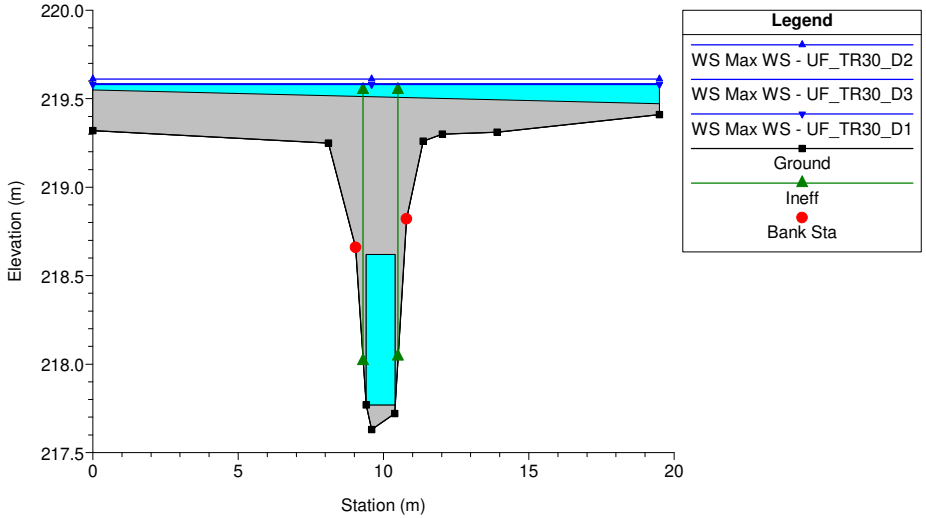
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 25 AMB_08



Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 20 AMB_07

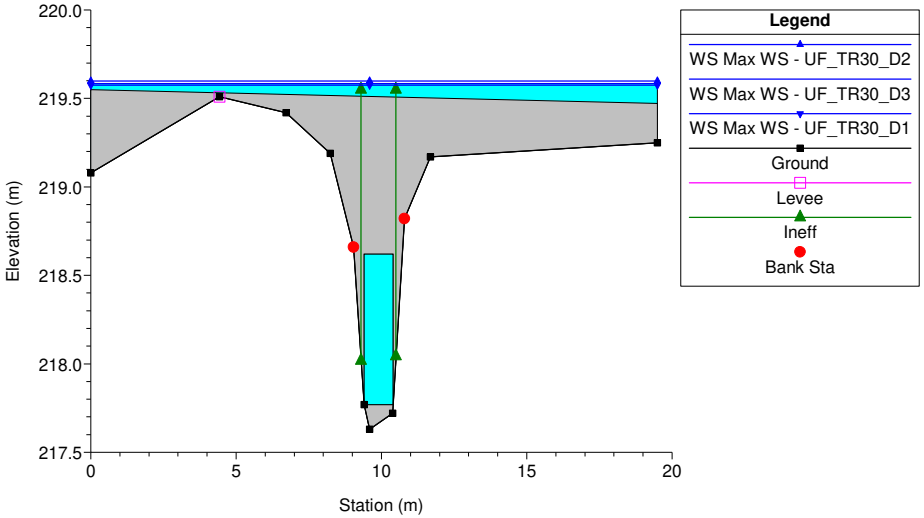


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 17.5 Culv



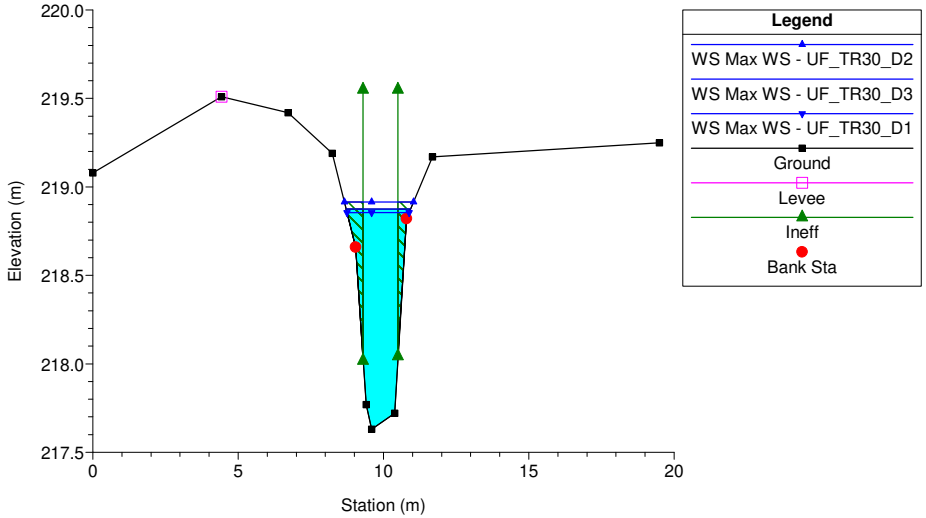
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 17.5 Culv



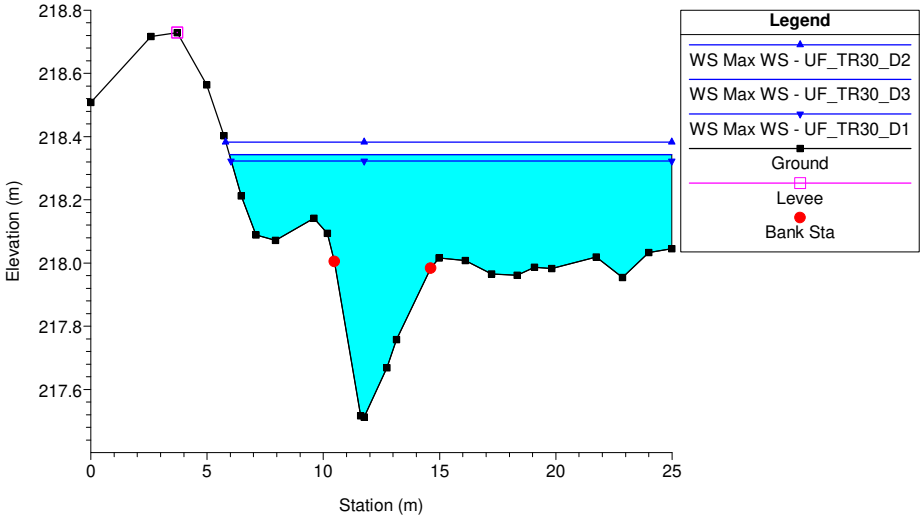
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 15 AMB_06



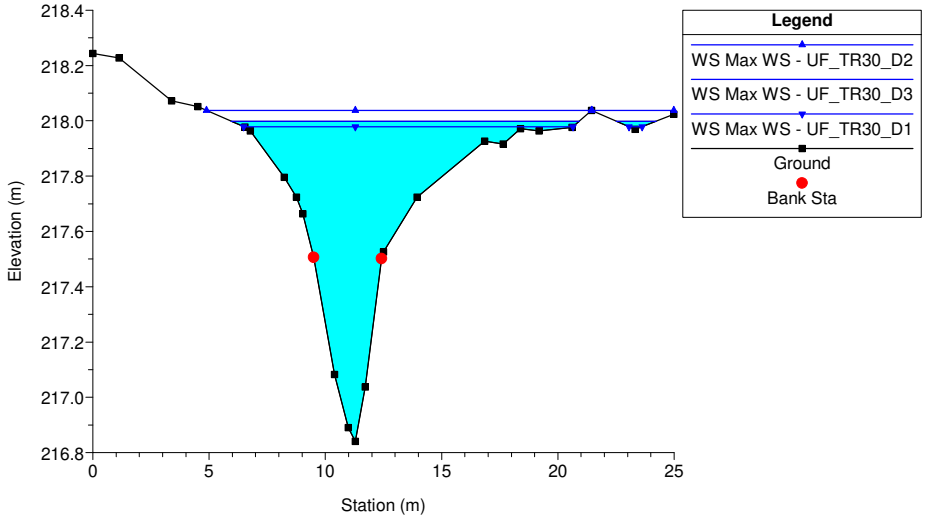
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 14 AMB_05

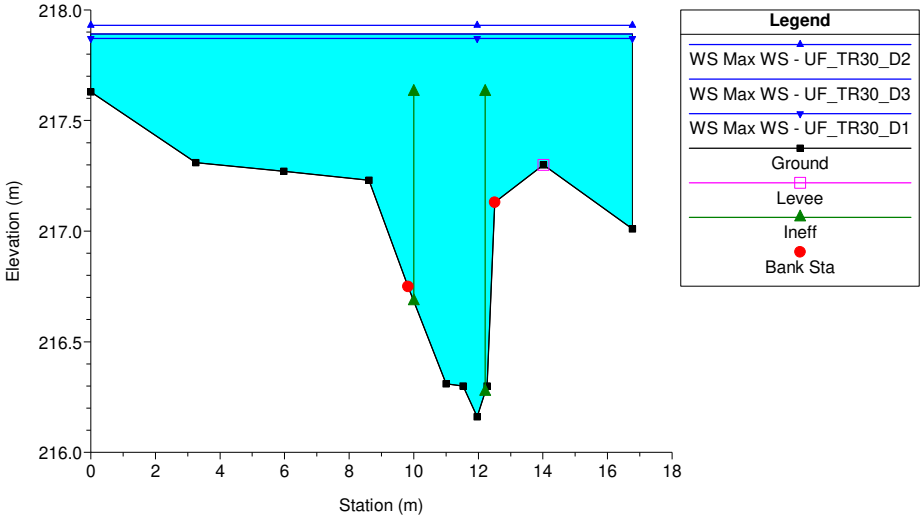


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

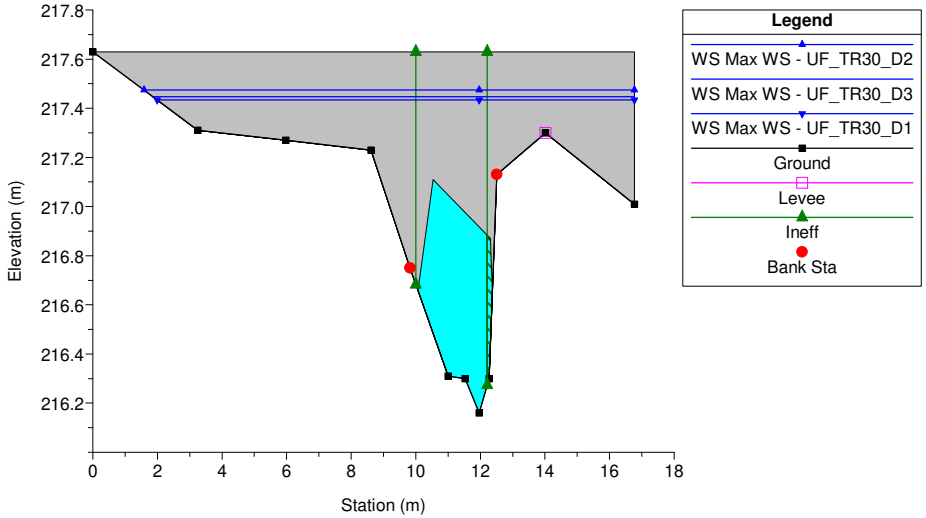
River = Amboiana Reach = amboiana RS = 13 AMB_04



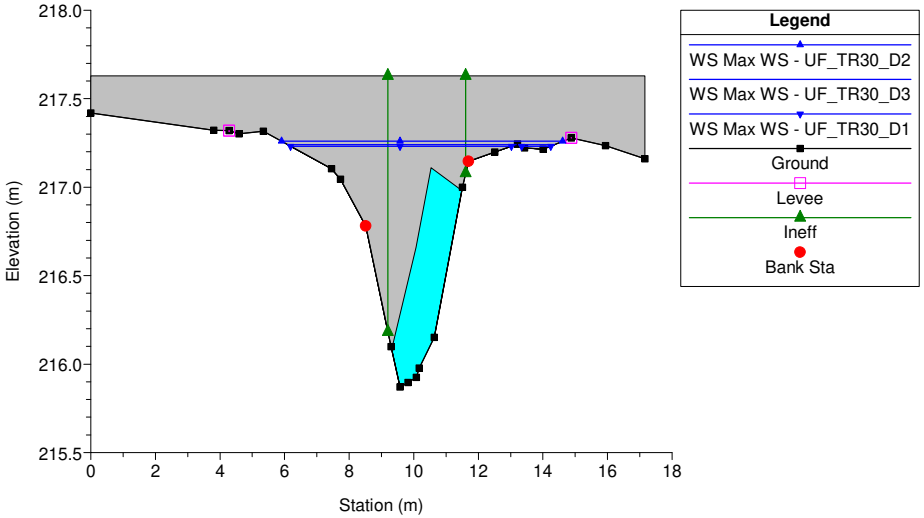
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 10 AMB_03



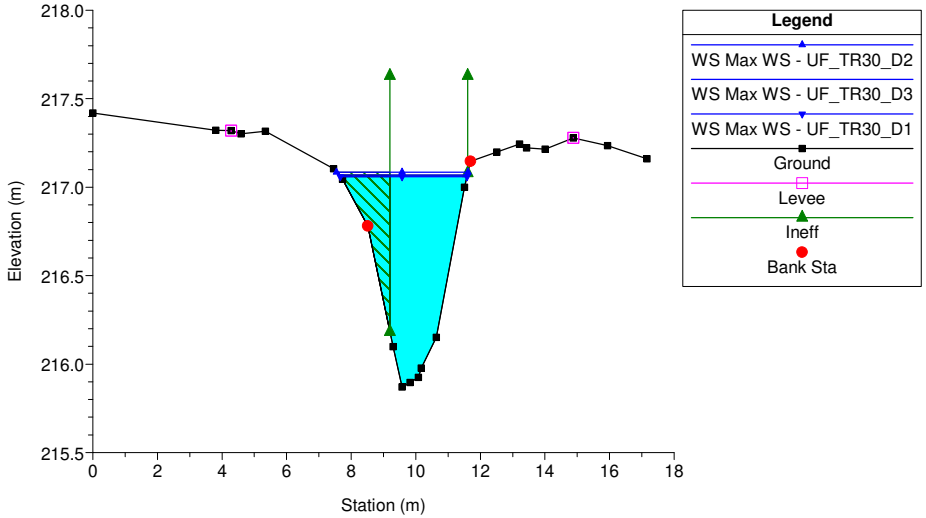
Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 7.5 BR



Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 7.5 BR

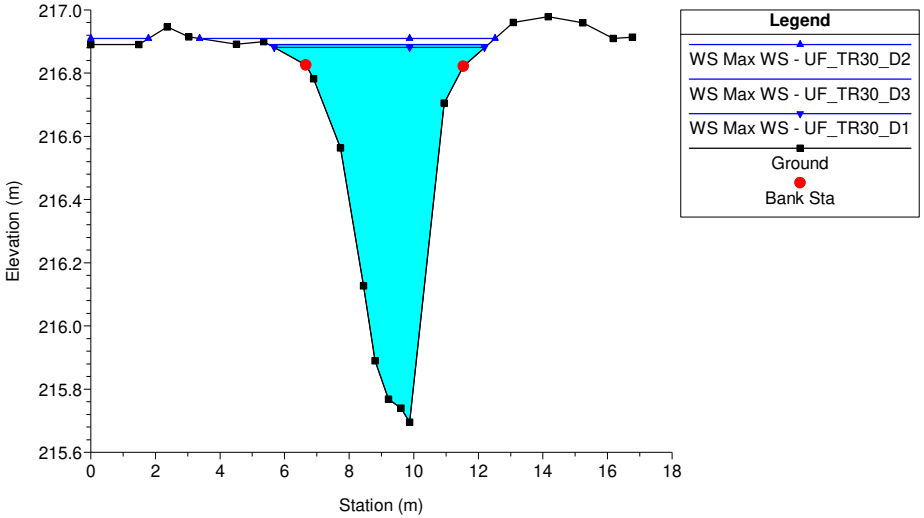


Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1
River = Amboiana Reach = amboiana RS = 5 AMB_02



Amboiana Plan: 1) UF_TR30_D3 2) UF_TR30_D2 3) UF_TR30_D1

River = Amboiana Reach = amboiana RS = 2 AMB_01



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Amboiana"

FOSSO AMBOIANA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Amboiana Reach: amboiana Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
amboiana	110	Max WS	UF_TR30_D3	6.00	231.76	232.79		232.83	0.003126	1.21	0.58	0.22	8.24	14.62	0.43
amboiana	110	Max WS	UF_TR30_D2	7.30	231.76	232.82		232.88	0.003829	1.38	0.67	0.27	8.76	14.68	0.48
amboiana	110	Max WS	UF_TR30_D1	8.00	231.76	232.84		232.90	0.004199	1.47	0.71	0.29	9.03	14.71	0.51
amboiana	109			Lat Struct											
amboiana	100	Max WS	UF_TR30_D3	5.54	231.76	232.72		232.76	0.003593	1.23	0.58	0.20	7.51	14.52	0.46
amboiana	100	Max WS	UF_TR30_D2	6.51	231.76	232.75		232.80	0.004207	1.36	0.65	0.24	7.93	14.56	0.50
amboiana	100	Max WS	UF_TR30_D1	7.02	231.76	232.77		232.82	0.004535	1.43	0.69	0.25	8.14	14.59	0.52
amboiana	99.8	Max WS	UF_TR30_D3	3.55	231.34	232.21	232.28	232.48	0.028204	2.26			1.57	4.43	1.21
amboiana	99.8	Max WS	UF_TR30_D2	3.78	231.34	232.23	232.33	232.50	0.028238	2.28			1.66	4.65	1.22
amboiana	99.8	Max WS	UF_TR30_D1	3.89	231.34	232.24	232.33	232.51	0.028180	2.29			1.70	4.75	1.22
amboiana	99.6	Max WS	UF_TR30_D3	3.55	230.10	230.86	230.88	231.09	0.020123	2.15			1.65	3.94	1.06
amboiana	99.6	Max WS	UF_TR30_D2	3.78	230.10	230.87	230.90	231.12	0.021165	2.22			1.70	3.99	1.09
amboiana	99.6	Max WS	UF_TR30_D1	3.89	230.10	230.88	230.91	231.14	0.021625	2.26			1.72	4.02	1.10
amboiana	99.4	Max WS	UF_TR30_D3	3.30	229.95	230.10	230.09	230.17	0.046010	1.44	1.04		2.99	20.17	1.36
amboiana	99.4	Max WS	UF_TR30_D2	3.52	229.95	230.11	230.10	230.18	0.046105	1.49	1.06		3.13	20.51	1.37
amboiana	99.4	Max WS	UF_TR30_D1	3.63	229.95	230.11	230.10	230.18	0.045986	1.51	1.07		3.20	20.68	1.38
amboiana	99.300	Max WS	UF_TR30_D3	3.12	229.01	229.42		229.44	0.004290	0.86	0.52	0.22	5.26	16.71	0.49
amboiana	99.300	Max WS	UF_TR30_D2	3.32	229.01	229.44		229.46	0.004080	0.87	0.52	0.22	5.55	16.82	0.48
amboiana	99.300	Max WS	UF_TR30_D1	3.42	229.01	229.45		229.47	0.003968	0.88	0.52	0.23	5.70	16.87	0.48
amboiana	99.2	Max WS	UF_TR30_D3	3.33	228.82	229.22		229.28	0.009827	1.27	0.54	0.40	3.48	15.58	0.74
amboiana	99.2	Max WS	UF_TR30_D2	3.62	228.82	229.23		229.30	0.010110	1.32	0.56	0.42	3.66	15.74	0.76
amboiana	99.2	Max WS	UF_TR30_D1	3.76	228.82	229.23		229.31	0.010310	1.35	0.58	0.42	3.74	15.82	0.76
amboiana	99.199			Lat Struct											
amboiana	99.100	Max WS	UF_TR30_D3	3.07	228.63	229.04		229.07	0.005787	0.88	0.40	0.28	4.97	27.67	0.55
amboiana	99.100	Max WS	UF_TR30_D2	3.29	228.63	229.05		229.08	0.005731	0.90	0.41	0.30	5.24	27.67	0.55
amboiana	99.100	Max WS	UF_TR30_D1	3.40	228.63	229.05		229.09	0.005736	0.91	0.41	0.31	5.35	27.67	0.55
amboiana	99	Max WS	UF_TR30_D3	2.28	228.30	228.89		228.97	0.005489	1.26	0.45	0.29	2.04	5.33	0.59
amboiana	99	Max WS	UF_TR30_D2	2.39	228.30	228.90		228.98	0.005712	1.30	0.46	0.30	2.08	5.37	0.60
amboiana	99	Max WS	UF_TR30_D1	2.44	228.30	228.90		228.98	0.005840	1.32	0.47	0.30	2.10	5.39	0.61
amboiana	98.99			Lat Struct											
amboiana	98.6	Max WS	UF_TR30_D3	1.96	227.56	228.87		228.93	0.004155	1.12	0.31	0.37	2.49	6.78	0.38
amboiana	98.6	Max WS	UF_TR30_D2	2.02	227.56	228.88		228.94	0.004201	1.13	0.32	0.38	2.55	6.78	0.38
amboiana	98.6	Max WS	UF_TR30_D1	2.06	227.56	228.89		228.94	0.004292	1.15	0.33	0.39	2.57	6.78	0.39
amboiana	98.5			Culvert											
amboiana	98.4	Max WS	UF_TR30_D3	1.89	227.31	228.36		228.65	0.007674	2.37			0.80	2.08	0.76
amboiana	98.4	Max WS	UF_TR30_D2	2.02	227.31	228.38		228.69	0.008212	2.48			0.81	2.11	0.79
amboiana	98.4	Max WS	UF_TR30_D1	2.06	227.31	228.38		228.71	0.008425	2.52			0.82	2.12	0.80
amboiana	98.39			Lat Struct											
amboiana	98	Max WS	UF_TR30_D3	1.01	227.14	228.23		228.24	0.001030	0.58	0.11	0.07	2.48	12.04	0.22
amboiana	98	Max WS	UF_TR30_D2	1.08	227.14	228.24		228.26	0.001066	0.59	0.12	0.08	2.64	12.11	0.22
amboiana	98	Max WS	UF_TR30_D1	1.13	227.14	228.25		228.26	0.001116	0.61	0.13	0.08	2.71	12.14	0.23
amboiana	97.5			Culvert											
amboiana	96	Max WS	UF_TR30_D3	1.01	224.24	225.09		225.19	0.003081	1.36		0.20	0.81	2.64	0.48
amboiana	96	Max WS	UF_TR30_D2	1.07	224.24	225.13		225.22	0.003038	1.39		0.20	0.84	3.13	0.48
amboiana	96	Max WS	UF_TR30_D1	0.98	224.24	225.09		225.18	0.002975	1.34		0.20	0.80	2.62	0.47
amboiana	95			Lat Struct											
amboiana	90	Max WS	UF_TR30_D3	1.69	223.91	225.00		225.06	0.003428	1.03			1.65	2.39	0.39
amboiana	90	Max WS	UF_TR30_D2	1.76	223.91	225.02		225.07	0.003515	1.05			1.68	2.41	0.40
amboiana	90	Max WS	UF_TR30_D1	1.67	223.91	225.00		225.05	0.003391	1.02			1.64	2.39	0.39
amboiana	89.99			Lat Struct											
amboiana	80	Max WS	UF_TR30_D3	2.83	222.94	224.03		224.16	0.007250	1.58		0.22	1.82	2.91	0.57
amboiana	80	Max WS	UF_TR30_D2	3.04	222.94	224.07		224.20	0.007292	1.62		0.26	1.93	3.11	0.58
amboiana	80	Max WS	UF_TR30_D1	2.81	222.94	224.03		224.16	0.007249	1.57		0.21	1.81	2.88	0.57
amboiana	76	Max WS	UF_TR30_D3	2.83	222.89	223.94		223.99	0.004283	1.09		0.67	3.47	5.76	0.38
amboiana	76	Max WS	UF_TR30_D2	3.04	222.89	223.98		224.03	0.004822	1.18		0.64	3.70	7.04	0.40
amboiana	76	Max WS	UF_TR30_D1	2.81	222.89	223.94		223.98	0.004302	1.09		0.67	3.44	5.75	0.38
amboiana	75			Culvert											
amboiana	73	Max WS	UF_TR30_D3	2.82	222.25	223.69		223.71	0.000796	0.74	0.43	0.06	5.59	5.32	0.20
amboiana	73	Max WS	UF_TR30_D2	3.01	222.25	223.73		223.75	0.000821	0.76	0.44	0.06	5.78	5.32	0.21
amboiana	73	Max WS	UF_TR30_D1	2.75	222.25	223.69		223.70	0.000775	0.73	0.42	0.06	5.55	5.32	0.20
amboiana	72.9			Lat Struct											
amboiana	72.8			Lat Struct											
amboiana	70	Max WS	UF_TR30_D3	3.13	222.44	223.66		223.71	0.002798	1.15	0.24	0.27	4.91	20.00	0.37
amboiana	70	Max WS	UF_TR30_D2	3.30	222.44	223.70		223.74	0.002251	1.06	0.26	0.28	5.81	20.00	0.33
amboiana	70	Max WS	UF_TR30_D1	3.07	222.44	223.65		223.70	0.002881	1.16	0.24	0.26	4.72	20.00	0.37
amboiana	60	Max WS	UF_TR30_D3	4.65	221.73	222.95		223.07	0.008211	1.78	0.56	0.28	4.51	14.39	0.63
amboiana	60	Max WS	UF_TR30_D2	5.29	221.73	222.98		223.10	0.008779	1.88	0.62	0.32	4.88	14.46	0.66
amboiana	60	Max WS	UF_TR30_D1	4.68	221.73	222.95		223.07	0.008783	1.83	0.57	0.28	4.40	14.38	0.65
amboiana	56	Max WS	UF_TR30_D3	3.94	222.00	222.60		222.68	0.008097	1.65	0.63	0.36	4.69	18.59	0.73
amboiana	56	Max WS	UF_TR30_D2	4.28	222.00	222.62		222.70	0.008186	1.69	0.65	0.38	4.99	18.84	0.74
amboiana	56	Max WS	UF_TR30_D1	3.74	222.00	222.60		222.67	0.007766	1.60	0.61	0.35	4.57	18.31	0.71
amboiana	54	Max WS	UF_TR30_D3	4.02	221.60	222.19		222.25	0.010706	1.63	0.77	0.27	4.37	13.72	0.78
amboiana	54	Max WS	UF_TR30_D2	4.35	221.60	222.20		222.27	0.010970	1.68	0.80	0.29	4.56	13.74	0.79
amboiana	54	Max WS	UF_TR30_D1	3.91	221.60	222.18		222.24	0.011037	1.63	0.77	0.26	4.25	13.70	0.79

HEC-RAS River: Amboiana Reach: amboiana Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
amboiana	52	Max WS	UF_TR30_D3	2.80	221.30	221.87		221.89	0.003085	0.96	0.48	0.29	5.19	13.41	0.44
amboiana	52	Max WS	UF_TR30_D2	2.98	221.30	221.90		221.92	0.002895	0.96	0.48	0.29	5.51	13.46	0.43
amboiana	52	Max WS	UF_TR30_D1	2.89	221.30	221.86		221.88	0.003565	1.02	0.51	0.31	5.05	13.39	0.47
amboiana	50	Max WS	UF_TR30_D3	4.36	220.17	221.72		221.77	0.003943	1.53	0.55	0.44	6.15	14.47	0.42
amboiana	50	Max WS	UF_TR30_D2	3.81	220.17	221.78		221.81	0.002014	1.13	0.44	0.36	7.15	14.47	0.30
amboiana	50	Max WS	UF_TR30_D1	4.34	220.17	221.68		221.75	0.004767	1.66	0.58	0.45	5.70	14.47	0.46
amboiana	40	Max WS	UF_TR30_D3	5.93	219.53	221.40		221.75	0.004578	2.62		0.28	2.42	8.34	0.64
amboiana	40	Max WS	UF_TR30_D2	7.19	219.53	221.56		221.65	0.001677	1.39	0.32	0.18	6.97	9.64	0.35
amboiana	40	Max WS	UF_TR30_D1	3.78	219.53	221.35		221.50	0.002030	1.72		0.18	2.35	7.98	0.42
amboiana	35			Culvert											
amboiana	30	Max WS	UF_TR30_D3	5.93	219.08	220.67		221.13	0.012033	3.01		0.24	2.00	2.96	0.85
amboiana	30	Max WS	UF_TR30_D2	7.15	219.08	220.75		221.10	0.009917	2.65	0.67	0.23	2.94	3.08	0.76
amboiana	30	Max WS	UF_TR30_D1	5.69	219.08	220.64		221.09	0.011951	2.95		0.23	1.95	2.92	0.84
amboiana	29			Lat Struct											
amboiana	28			Lat Struct											
amboiana	25	Max WS	UF_TR30_D3	5.91	218.61	219.96	219.93	220.22	0.008550	2.42	0.72	0.52	3.55	8.26	0.76
amboiana	25	Max WS	UF_TR30_D2	6.94	218.61	220.02	219.95	220.34	0.009939	2.71	0.79	0.41	4.19	15.37	0.82
amboiana	25	Max WS	UF_TR30_D1	5.64	218.61	219.95	219.92	220.20	0.008349	2.37	0.70	0.51	3.42	7.89	0.75
amboiana	20	Max WS	UF_TR30_D3	3.97	217.63	219.58		219.61	0.001156	0.92	0.26	0.23	8.19	19.49	0.23
amboiana	20	Max WS	UF_TR30_D2	4.31	217.63	219.61		219.64	0.001194	0.94	0.28	0.25	8.73	19.49	0.23
amboiana	20	Max WS	UF_TR30_D1	3.83	217.63	219.58		219.61	0.001100	0.89	0.26	0.22	8.11	19.49	0.22
amboiana	17.5			Culvert											
amboiana	15	Max WS	UF_TR30_D3	4.00	217.63	218.88		219.30	0.012714	2.88			1.39	2.21	0.86
amboiana	15	Max WS	UF_TR30_D2	4.31	217.63	218.92		219.37	0.013169	3.00			1.44	2.38	0.88
amboiana	15	Max WS	UF_TR30_D1	3.83	217.63	218.85		219.26	0.012325	2.80			1.36	2.13	0.84
amboiana	14	Max WS	UF_TR30_D3	5.75	217.51	218.34		218.40	0.004666	1.35	0.41	0.55	7.07	19.04	0.56
amboiana	14	Max WS	UF_TR30_D2	6.44	217.51	218.38		218.44	0.004387	1.37	0.44	0.58	7.84	19.19	0.55
amboiana	14	Max WS	UF_TR30_D1	5.49	217.51	218.32		218.39	0.004938	1.36	0.40	0.55	6.70	18.96	0.57
amboiana	13	Max WS	UF_TR30_D3	5.89	216.84	218.00	217.91	218.18	0.006972	2.03	0.42	0.38	4.41	16.69	0.70
amboiana	13	Max WS	UF_TR30_D2	6.62	216.84	218.04	217.95	218.23	0.007077	2.11	0.41	0.42	5.12	20.08	0.71
amboiana	13	Max WS	UF_TR30_D1	5.59	216.84	217.98	217.88	218.16	0.006981	2.00	0.43	0.36	4.10	14.74	0.69
amboiana	10	Max WS	UF_TR30_D3	3.84	216.16	217.89	217.04	217.90	0.000287	0.53	0.19	0.20	12.81	16.77	0.14
amboiana	10	Max WS	UF_TR30_D2	3.91	216.16	217.93	217.05	217.94	0.000261	0.52	0.19	0.20	13.46	16.77	0.13
amboiana	10	Max WS	UF_TR30_D1	3.80	216.16	217.87	217.04	217.88	0.000304	0.54	0.20	0.20	12.45	16.77	0.14
amboiana	7.5			Bridge											
amboiana	5	Max WS	UF_TR30_D3	3.84	215.87	217.07		217.26	0.007689	1.93			1.98	3.98	0.68
amboiana	5	Max WS	UF_TR30_D2	3.91	215.87	217.09		217.28	0.007516	1.93			2.03	4.08	0.67
amboiana	5	Max WS	UF_TR30_D1	3.80	215.87	217.06		217.25	0.007758	1.94			1.96	3.93	0.68
amboiana	2	Max WS	UF_TR30_D3	4.58	215.70	216.89	216.68	217.02	0.007063	1.57	0.14	0.15	2.98	6.79	0.65
amboiana	2	Max WS	UF_TR30_D2	4.85	215.70	216.91	216.70	217.04	0.007080	1.60	0.11	0.17	3.17	10.93	0.65
amboiana	2	Max WS	UF_TR30_D1	4.45	215.70	216.88	216.66	217.00	0.007035	1.55	0.13	0.13	2.92	6.51	0.64

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

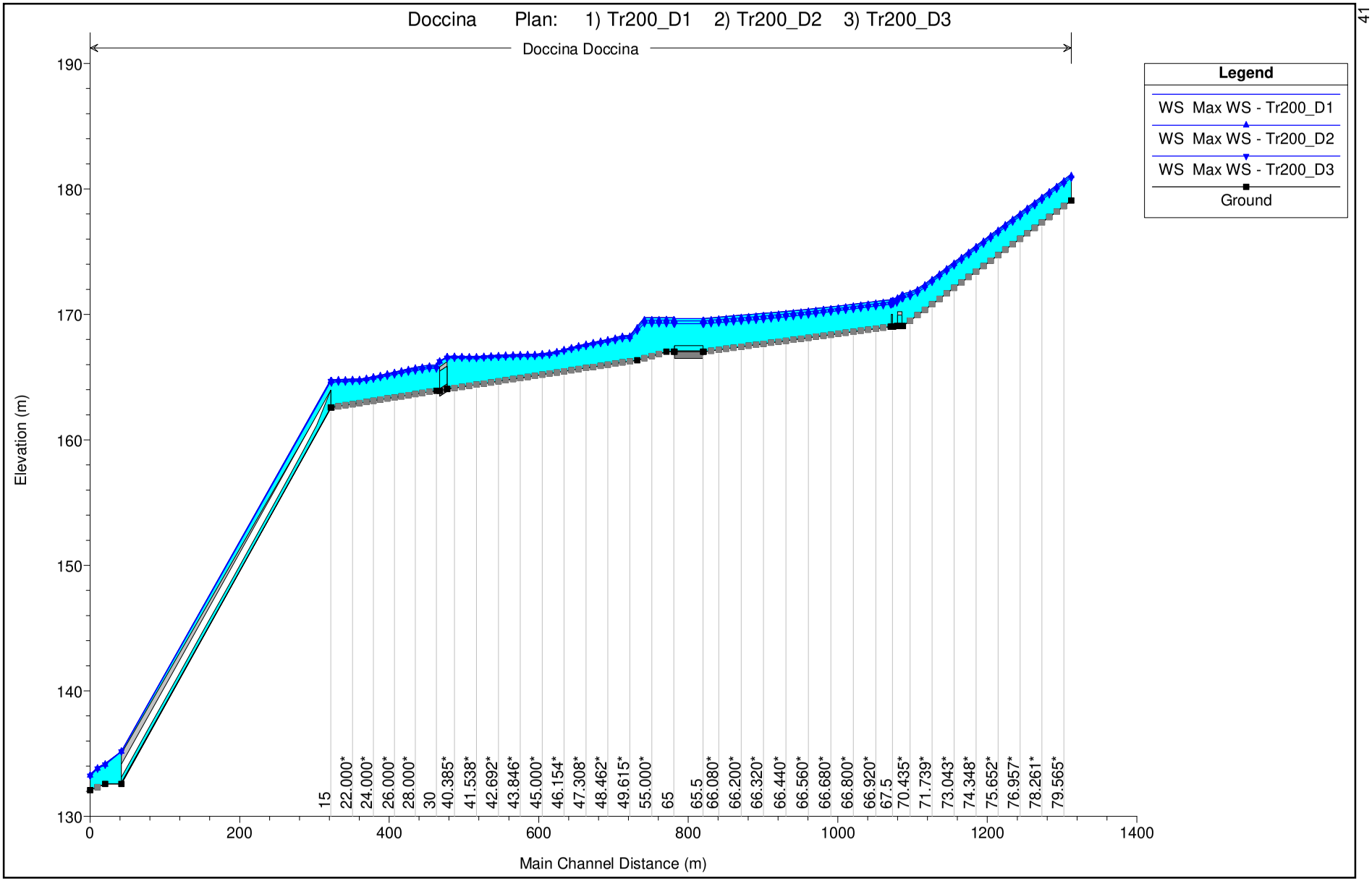
MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
Doccina Doccina
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Elevation (m)
Main Channel Distance (m)
190
180
170
160
150
140
130
0
200
400
600
800
1000
1200
1400
15
22.000*
24.000*
26.000*
28.000*
30
40.385*
41.538*
42.692*
43.846*
45.000*
46.154*
47.308*
48.462*
49.615*
55.000*
65
65.5
66.080*
66.200*
66.320*
66.440*
66.560*
66.680*
66.800*
66.920*
67.5
70.435*
71.739*
73.043*
74.348*
75.652*
76.957*
78.261*
79.565*

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

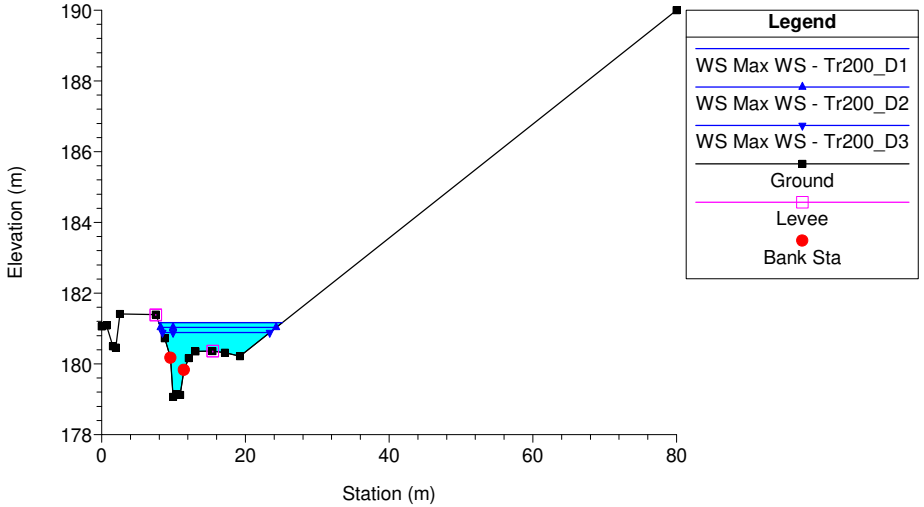
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

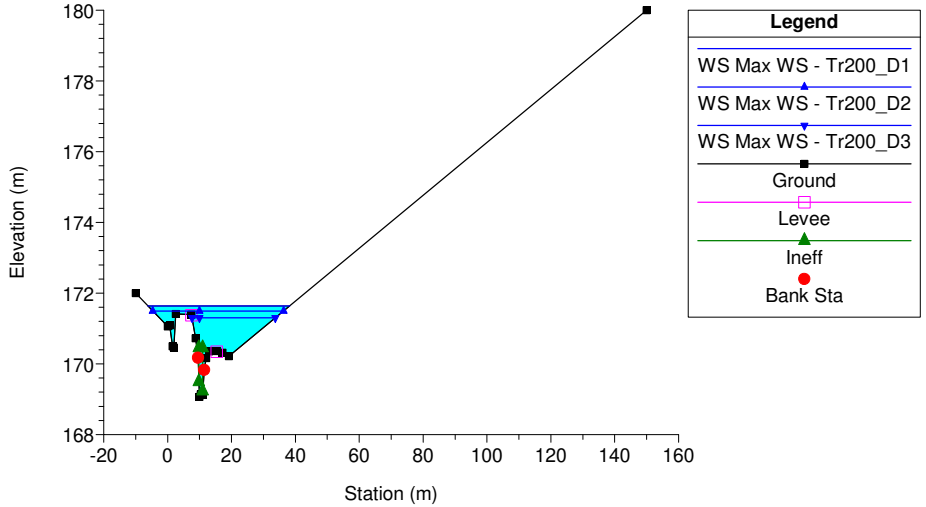
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 80 DOC_11



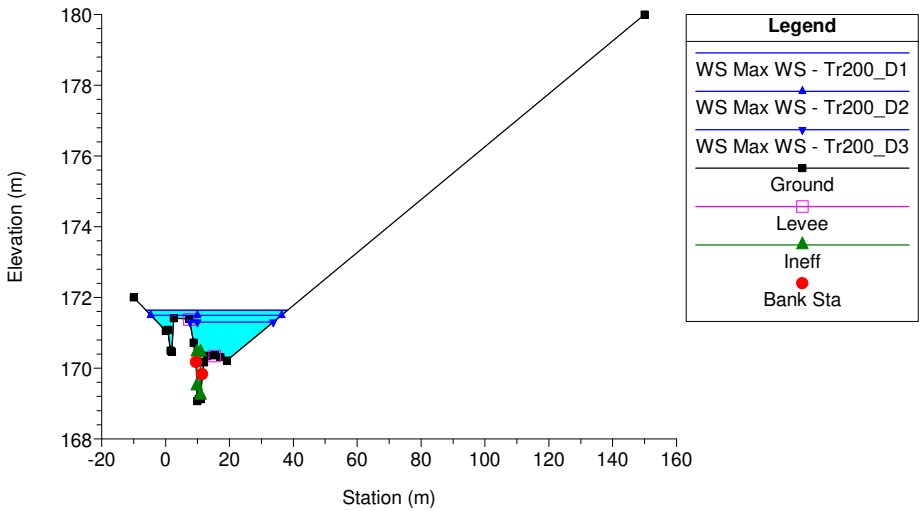
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 70 DOC_10



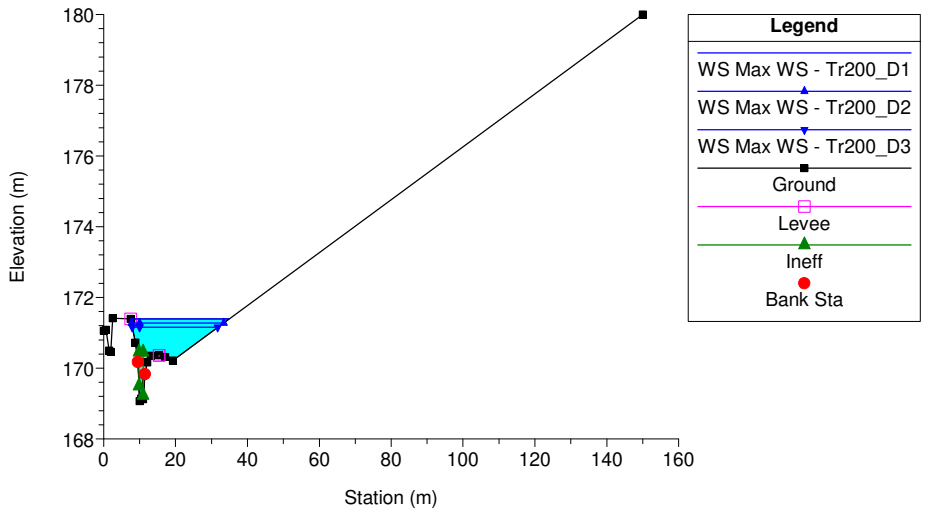
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 69.5 Culv



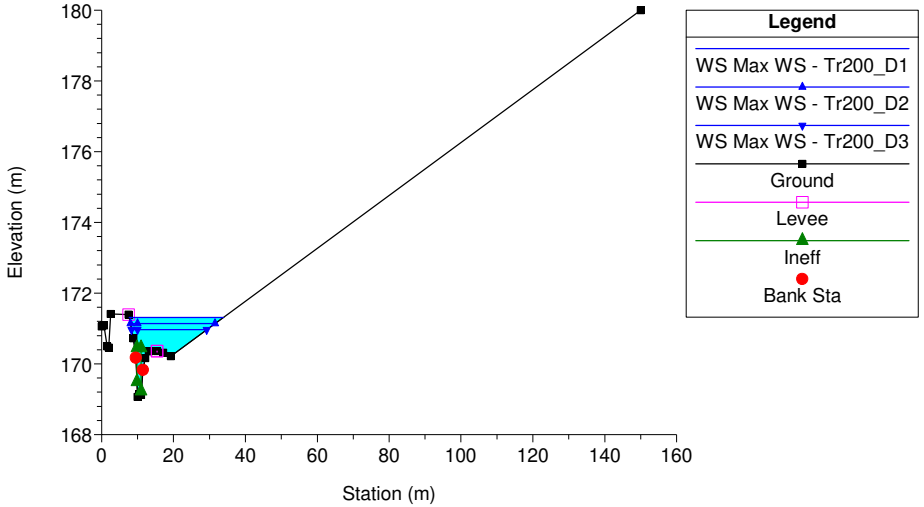
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 69.5 Culv



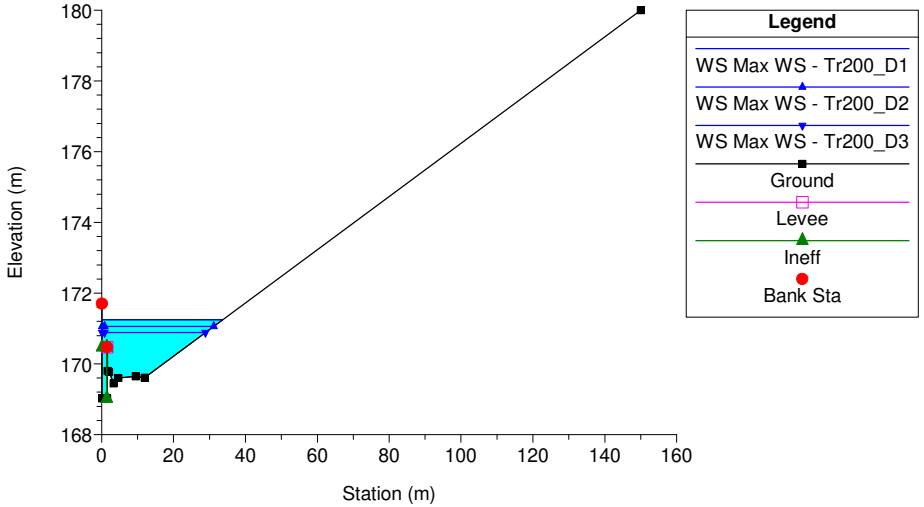
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 69 DOC_09



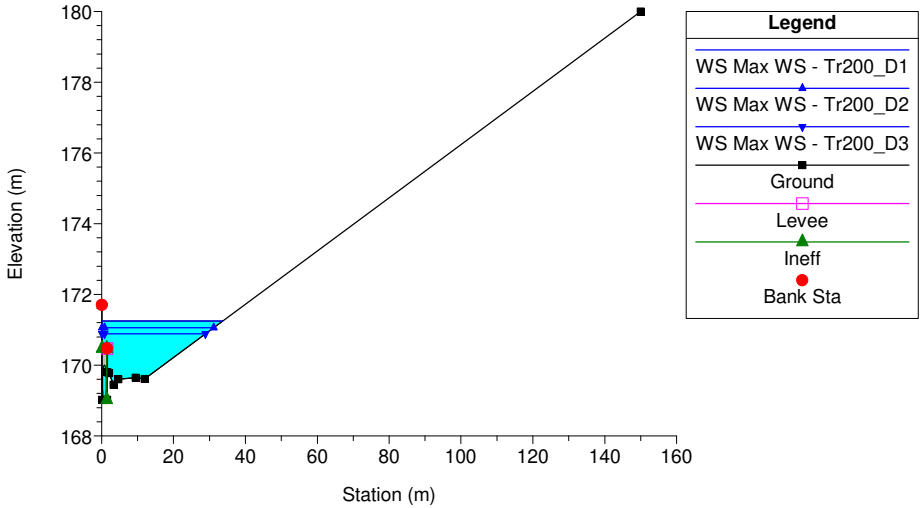
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 68 DOC_08



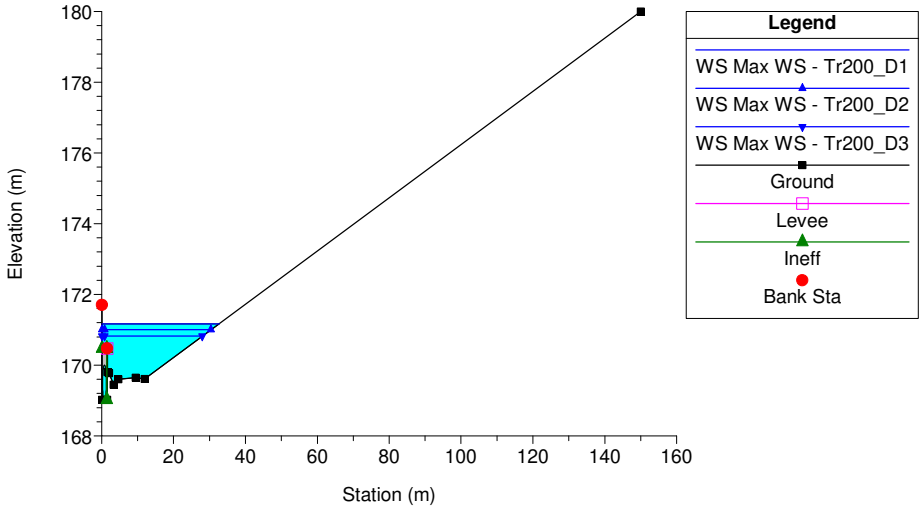
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

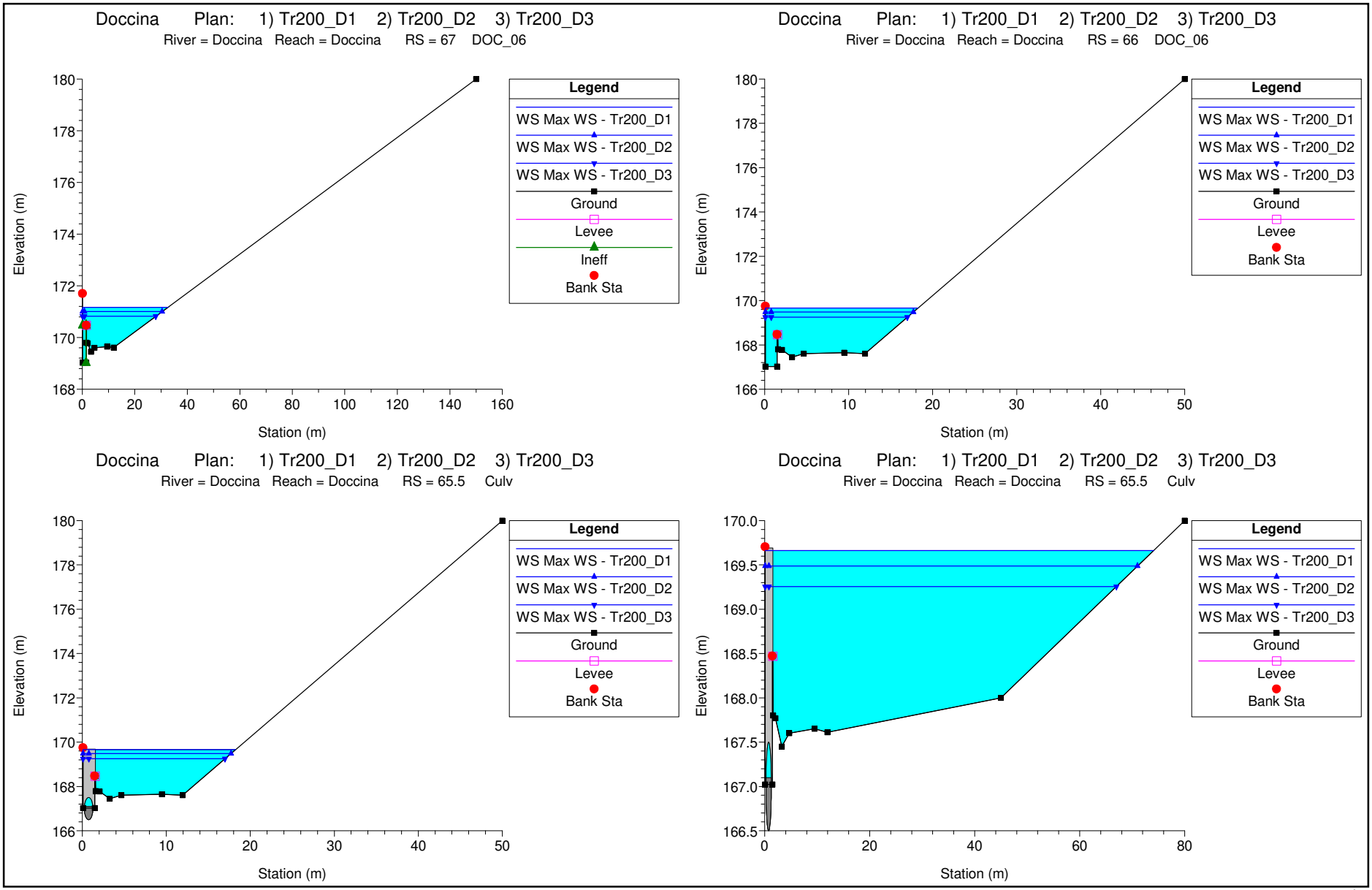
River = Doccina Reach = Doccina RS = 67.5 Culv



Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

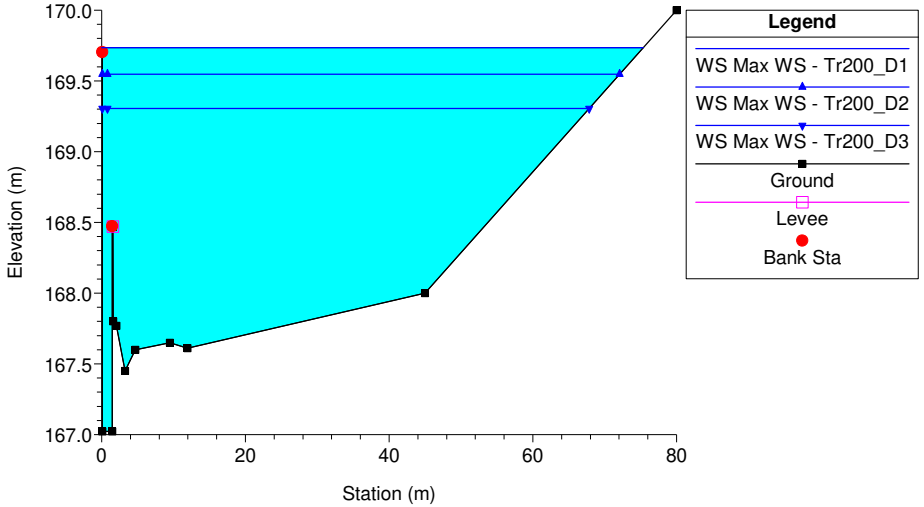
River = Doccina Reach = Doccina RS = 67.5 Culv




Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 67 DOC_06
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 66 DOC_06
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 65.5 Culv
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 65.5 Culv
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

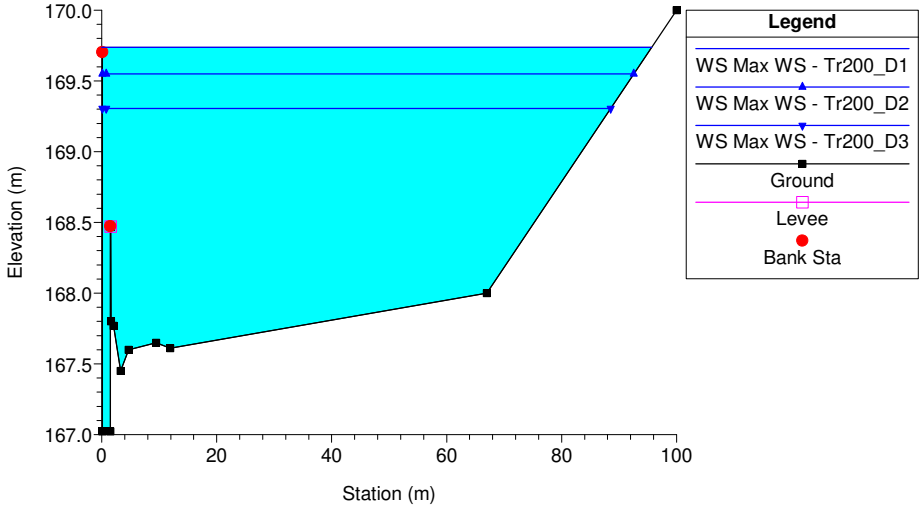
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 65 DOC_05



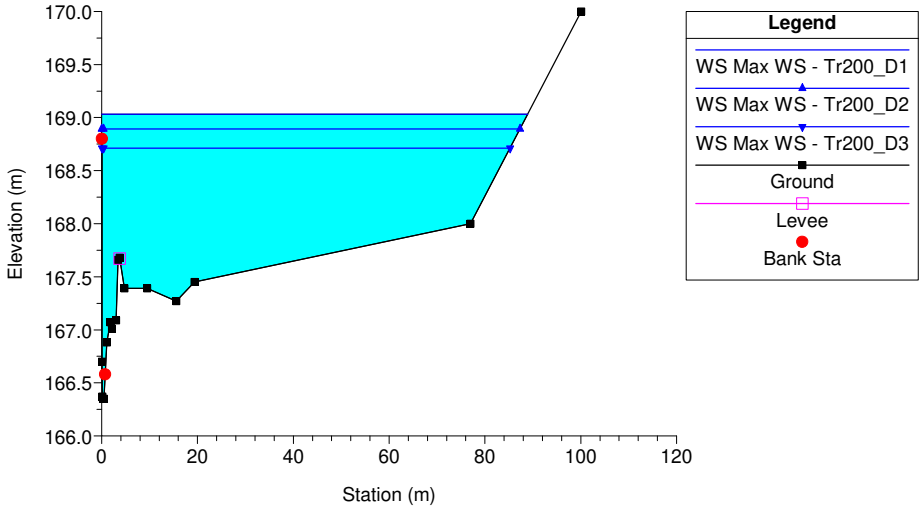
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 60



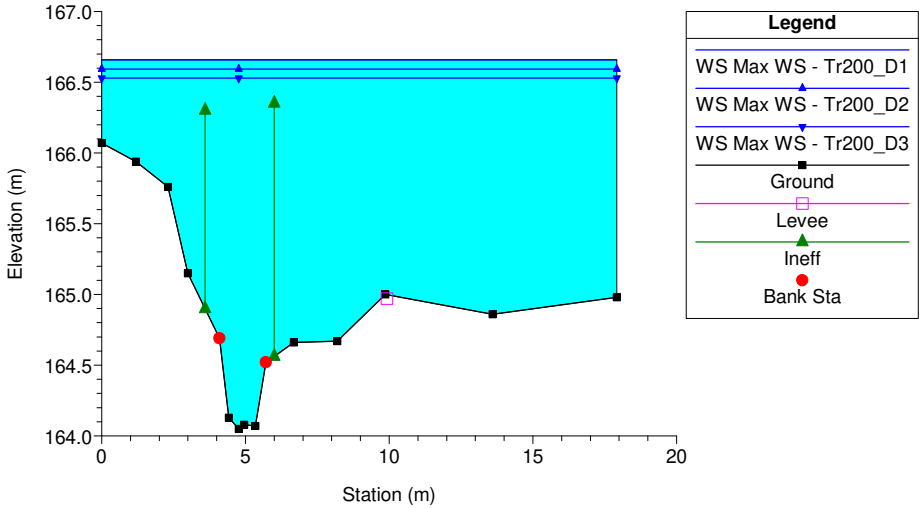
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

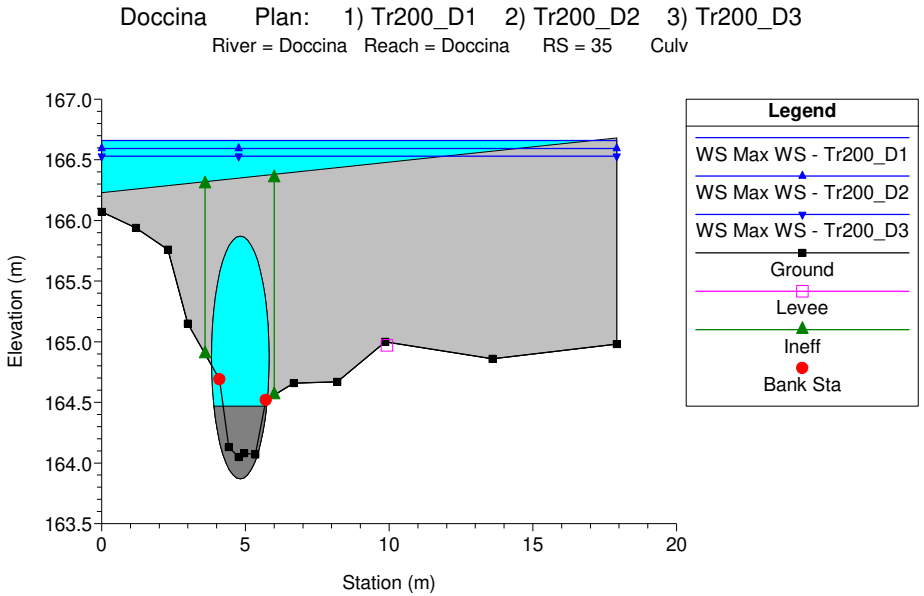
River = Doccina Reach = Doccina RS = 50 DOC_04 muro a sx

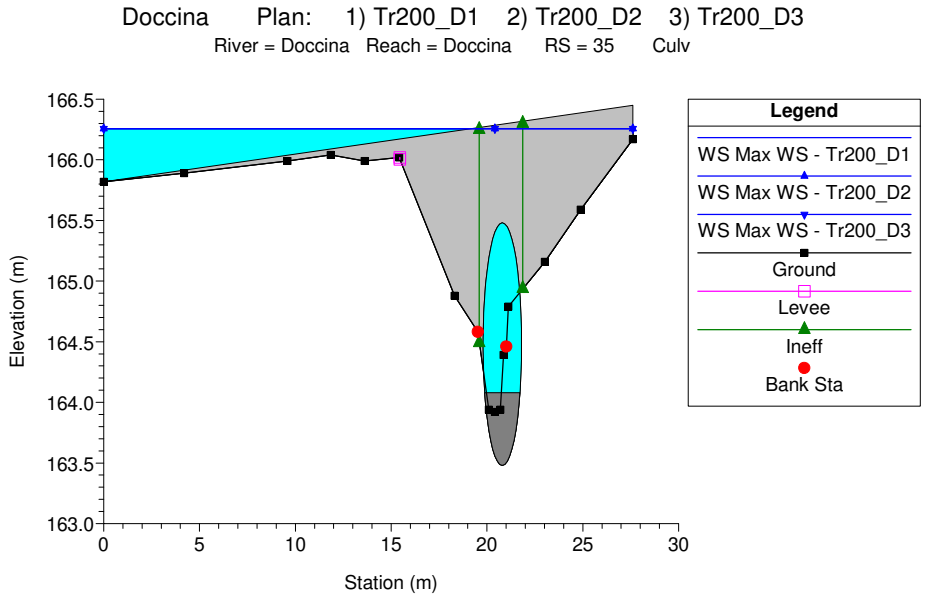


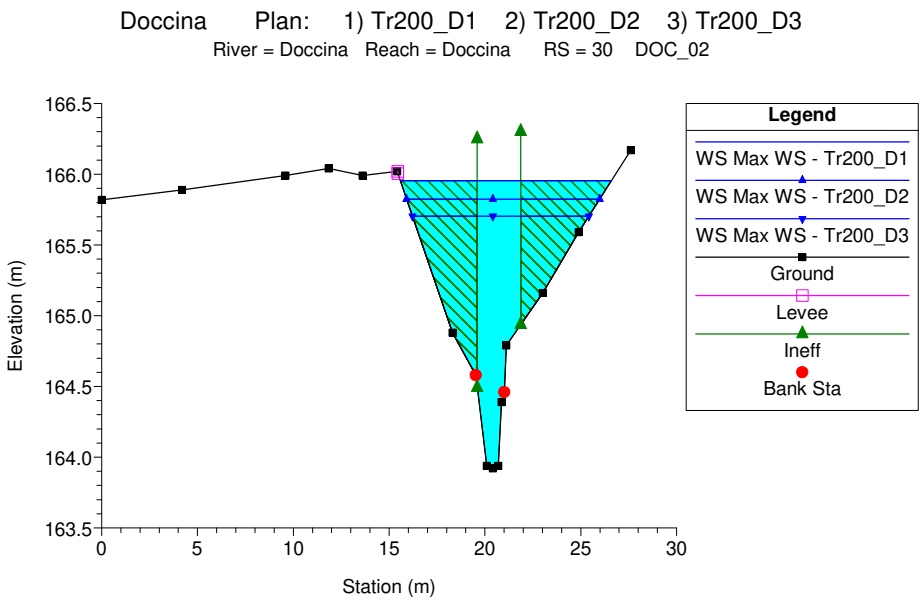
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

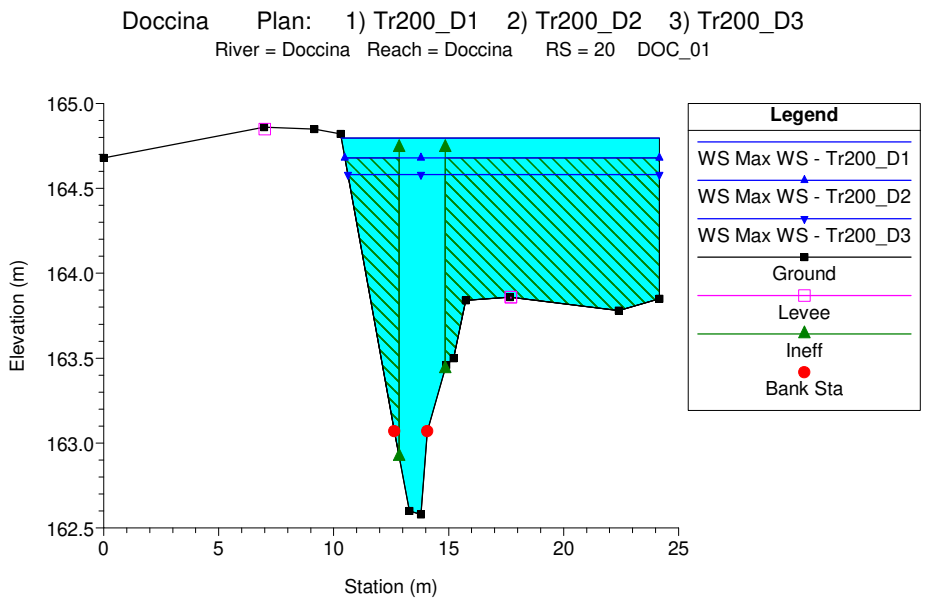
River = Doccina Reach = Doccina RS = 40 DOC_03




Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 35 Culv
Elevation (m)
Station (m)
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Levee
Ineff
Bank Sta

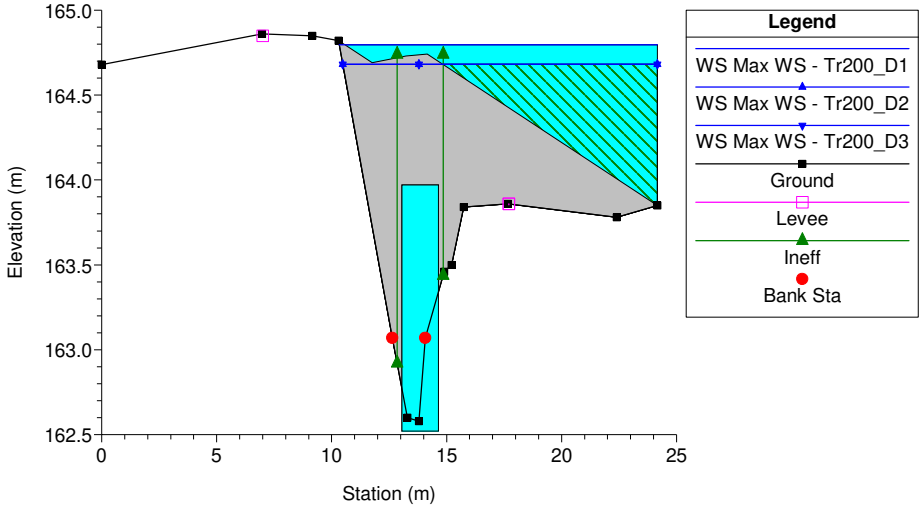

Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 35 Culv
Elevation (m)
Station (m)
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Levee
Ineff
Bank Sta


Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 30 DOC_02
Elevation (m)
Station (m)
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Levee
Ineff
Bank Sta


Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Doccina Reach = Doccina RS = 20 DOC_01
Elevation (m)
Station (m)
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Levee
Ineff
Bank Sta

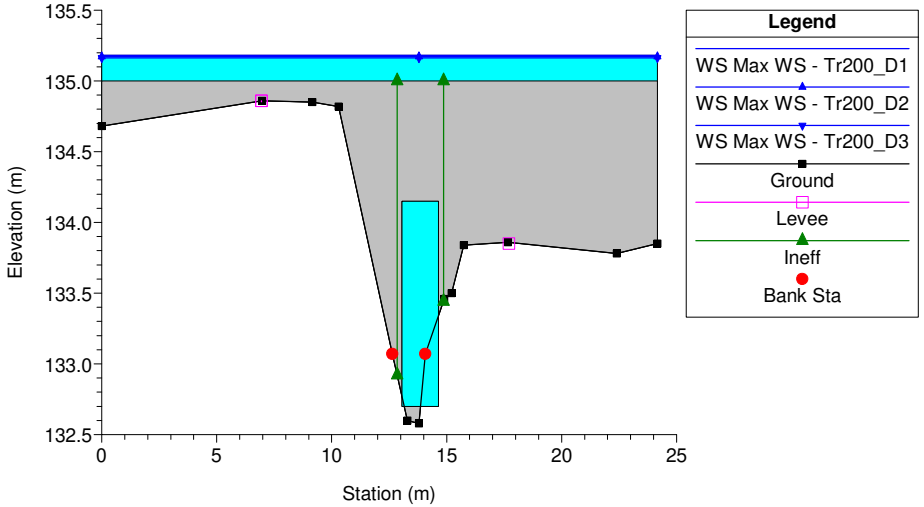
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 15 Culv



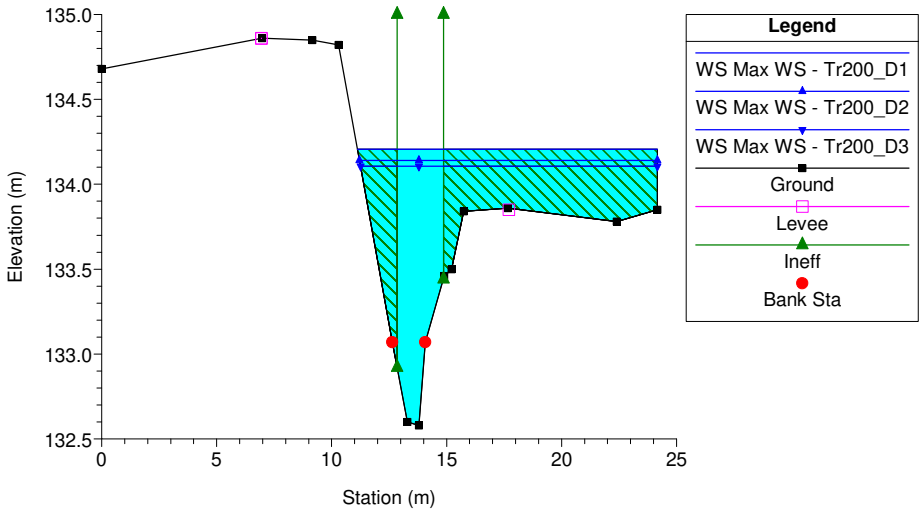
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 15 Culv



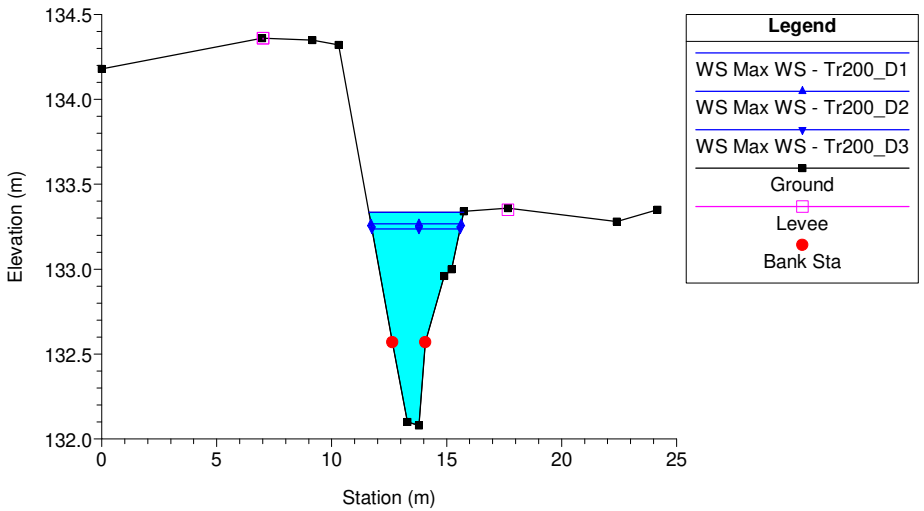
Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 10 copia di 20



Doccina Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Doccina Reach = Doccina RS = 5 copia di 20



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Doccina Reach: Doccina Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Doccina	80	Max WS	Tr200_D1	51.90	179.07	181.17	181.39	182.41	0.045211	6.68	1.91	2.79	13.96	17.22	1.57
Doccina	80	Max WS	Tr200_D2	41.40	179.07	181.03	181.39	182.21	0.045088	6.34	1.72	2.53	11.66	16.10	1.55
Doccina	80	Max WS	Tr200_D3	31.70	179.07	180.89	181.24	182.00	0.044807	5.95	1.52	2.23	9.40	14.92	1.52
Doccina	70	Max WS	Tr200_D1	51.85	169.07	171.64		171.84	0.007687	3.20	0.79	1.35	35.09	44.40	0.67
Doccina	70	Max WS	Tr200_D2	41.38	169.07	171.50		171.70	0.007711	3.07	0.65	1.27	28.90	40.92	0.67
Doccina	70	Max WS	Tr200_D3	31.70	169.07	171.30		171.52	0.008719	3.07	0.91	1.23	20.44	26.01	0.70
Doccina	69.5			Culvert											
Doccina	69	Max WS	Tr200_D1	51.85	169.07	171.32	171.39	171.89	0.022300	4.93	1.47	1.98	20.81	26.23	1.12
Doccina	69	Max WS	Tr200_D2	41.38	169.07	171.14	171.32	171.76	0.025407	4.95	1.40	1.91	16.41	23.53	1.17
Doccina	69	Max WS	Tr200_D3	31.70	169.07	170.97	171.18	171.63	0.028074	4.87	1.29	1.77	12.60	20.90	1.21
Doccina	68.5			Lat Struct											
Doccina	68	Max WS	Tr200_D1	51.85	169.02	171.24		171.34	0.006144	1.61		1.35	37.76	33.57	0.35
Doccina	68	Max WS	Tr200_D2	41.38	169.02	171.06		171.15	0.006262	1.58		1.27	31.79	31.12	0.35
Doccina	68	Max WS	Tr200_D3	5.90	169.02	170.88		170.89	0.000210	0.28		0.22	26.48	28.76	0.07
Doccina	67.5			Culvert											
Doccina	67	Max WS	Tr200_D1	51.84	169.02	171.17		171.28	0.007361	1.74		1.44	35.34	32.59	0.38
Doccina	67	Max WS	Tr200_D2	41.38	169.02	171.00		171.10	0.007357	1.69		1.35	29.98	30.33	0.38
Doccina	67	Max WS	Tr200_D3	31.70	169.02	170.82		170.91	0.007342	1.62		1.24	24.70	27.92	0.39
Doccina	66	Max WS	Tr200_D1	51.56	167.02	169.66		169.80	0.005393	1.61		1.65	31.41	18.15	0.32
Doccina	66	Max WS	Tr200_D2	41.25	167.02	169.49		169.60	0.004687	1.46		1.46	28.29	17.61	0.30
Doccina	66	Max WS	Tr200_D3	31.70	167.02	169.26		169.34	0.004324	1.36		1.30	24.30	16.90	0.29
Doccina	65.5			Culvert											
Doccina	65	Max WS	Tr200_D1	51.58	167.02	169.74		169.75	0.000412	0.45	0.03	0.44	116.08	75.39	0.09
Doccina	65	Max WS	Tr200_D2	41.26	167.02	169.55		169.56	0.000380	0.42		0.40	102.18	72.00	0.08
Doccina	65	Max WS	Tr200_D3	31.70	167.02	169.31		169.31	0.000378	0.40		0.37	85.27	67.76	0.09
Doccina	60	Max WS	Tr200_D1	51.50	167.02	169.74		169.74	0.000204	0.32	0.02	0.33	157.18	95.67	0.06
Doccina	60	Max WS	Tr200_D2	41.27	167.02	169.55		169.55	0.000187	0.29		0.30	139.41	92.47	0.06
Doccina	60	Max WS	Tr200_D3	31.70	167.02	169.31		169.31	0.000184	0.28		0.27	117.46	88.46	0.06
Doccina	50	Max WS	Tr200_D1	39.82	166.35	169.03		169.04	0.000312	0.34	0.05	0.35	114.95	88.91	0.07
Doccina	50	Max WS	Tr200_D2	35.61	166.35	168.89		168.90	0.000355	0.35	0.04	0.35	102.68	87.30	0.07
Doccina	50	Max WS	Tr200_D3	30.46	166.35	168.71		168.72	0.000434	0.37		0.35	87.17	85.14	0.08
Doccina	49.9			Lat Struct											
Doccina	40	Max WS	Tr200_D1	7.22	164.05	166.66		166.66	0.000096	0.42	0.15	0.22	30.44	17.92	0.09
Doccina	40	Max WS	Tr200_D2	7.14	164.05	166.59		166.60	0.000106	0.43	0.15	0.23	29.27	17.92	0.09
Doccina	40	Max WS	Tr200_D3	7.20	164.05	166.53		166.53	0.000121	0.45	0.16	0.24	28.11	17.92	0.10
Doccina	35			Culvert											
Doccina	30	Max WS	Tr200_D1	7.22	163.92	165.95		166.21	0.004855	2.38		1.04	3.56	11.02	0.56
Doccina	30	Max WS	Tr200_D2	7.10	163.92	165.82		166.12	0.006145	2.55		1.08	3.27	10.08	0.62
Doccina	30	Max WS	Tr200_D3	7.80	163.92	165.70		166.13	0.009697	3.05		1.24	2.99	9.20	0.77
Doccina	20	Max WS	Tr200_D1	13.49	162.58	164.80		164.87	0.001954	1.70	0.58	0.70	15.39	13.84	0.38
Doccina	20	Max WS	Tr200_D2	12.64	162.58	164.68		165.46	0.012747	4.22		2.23	3.52	13.68	0.96
Doccina	20	Max WS	Tr200_D3	11.92	162.58	164.58		165.36	0.013635	4.21		2.20	3.32	13.55	0.98
Doccina	15			Culvert											
Doccina	10	Max WS	Tr200_D1	14.23	132.58	134.21	134.76	136.07	0.043290	6.48		3.14	2.58	13.05	1.69
Doccina	10	Max WS	Tr200_D2	12.64	132.58	134.14	134.63	135.79	0.040466	6.07		2.89	2.45	12.96	1.62
Doccina	10	Max WS	Tr200_D3	11.92	132.58	134.11	134.56	135.66	0.039213	5.88		2.77	2.38	12.92	1.59
Doccina	5	Max WS	Tr200_D1	14.22	132.08	133.33	133.82	135.73	0.088023	7.49	2.25	2.51	2.62	4.12	2.30
Doccina	5	Max WS	Tr200_D2	12.64	132.08	133.27	133.78	135.57	0.090291	7.27	2.14	2.37	2.35	3.93	2.30
Doccina	5	Max WS	Tr200_D3	11.92	132.08	133.24	133.76	135.48	0.090601	7.14	2.08	2.29	2.23	3.84	2.29

ALLEGATI

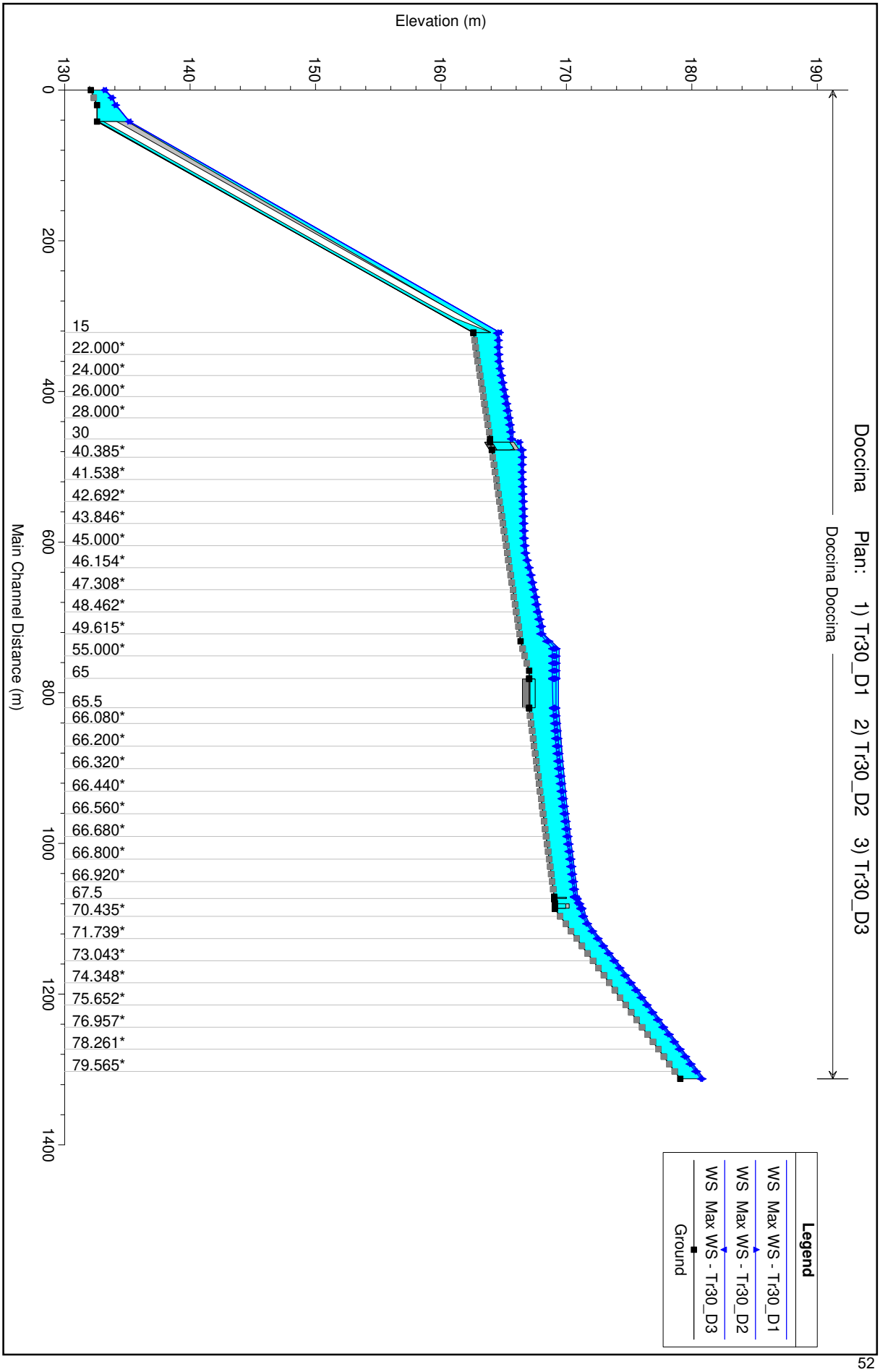
MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
Doccina Doccina
Elevation (m)
190
180
170
160
150
140
130
0
200
400
600
800
1000
1200
1400
Main Channel Distance (m)
15
22.000*
24.000*
26.000*
28.000*
30
40.385*
41.538*
42.692*
43.846*
45.000*
46.154*
47.308*
48.462*
49.615*
55.000*
65
65.5
66.080*
66.200*
66.320*
66.440*
66.560*
66.680*
66.800*
66.920*
67.5
70.435*
71.739*
73.043*
74.348*
75.652*
76.957*
78.261*
79.565*
Legend
WS Max WS - Tr30_D1
WS Max WS - Tr30_D2
WS Max WS - Tr30_D3
Ground

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

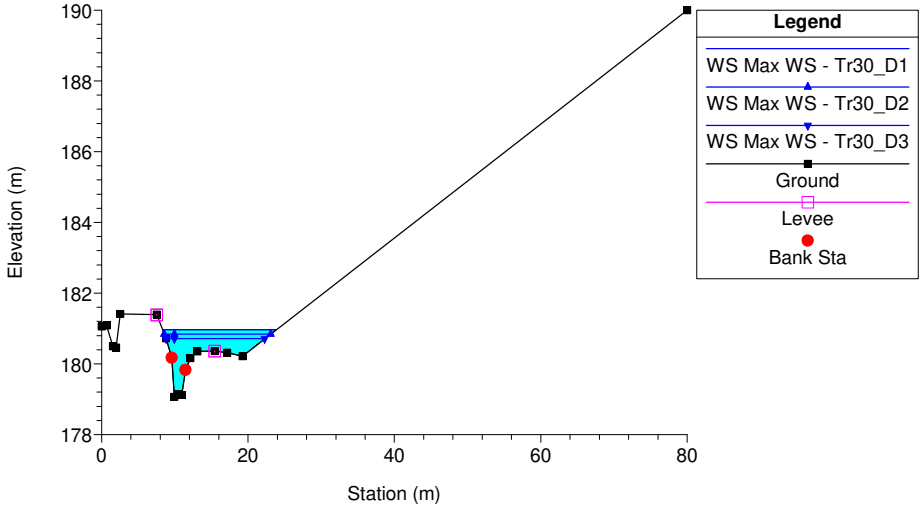
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

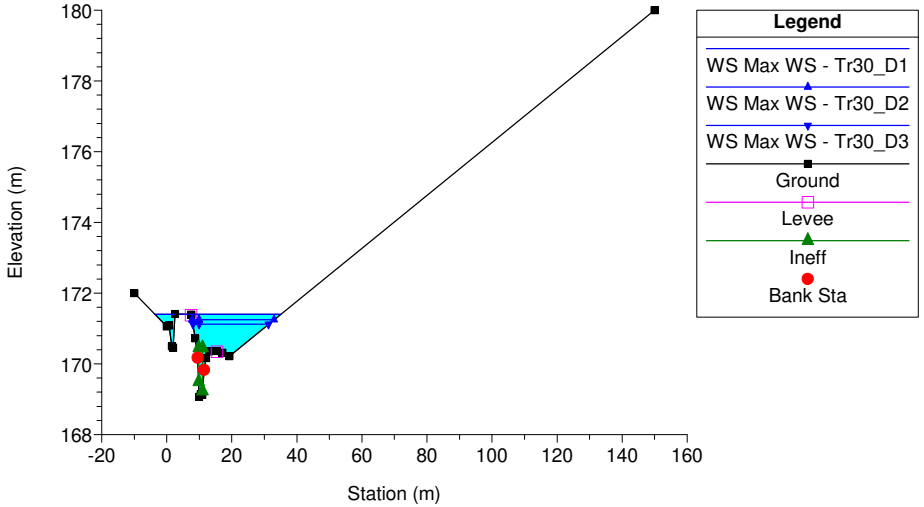
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 80 DOC_11



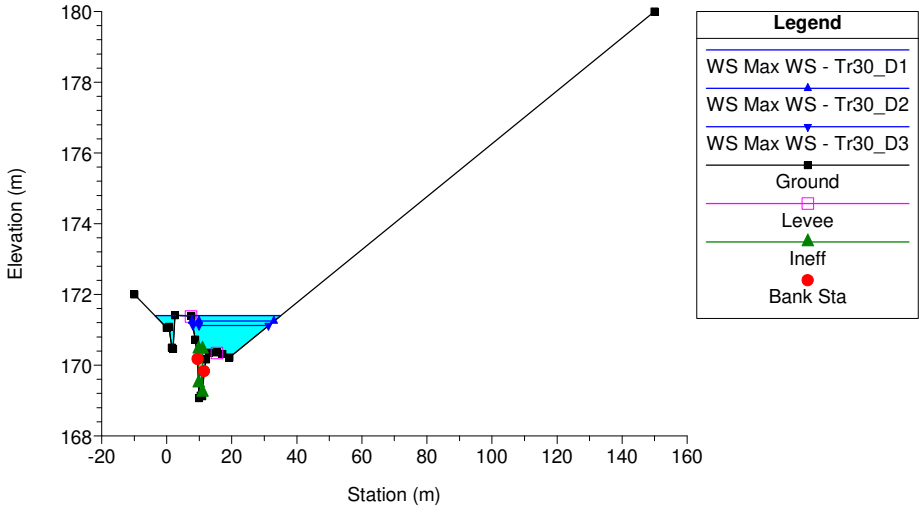
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 70 DOC_10



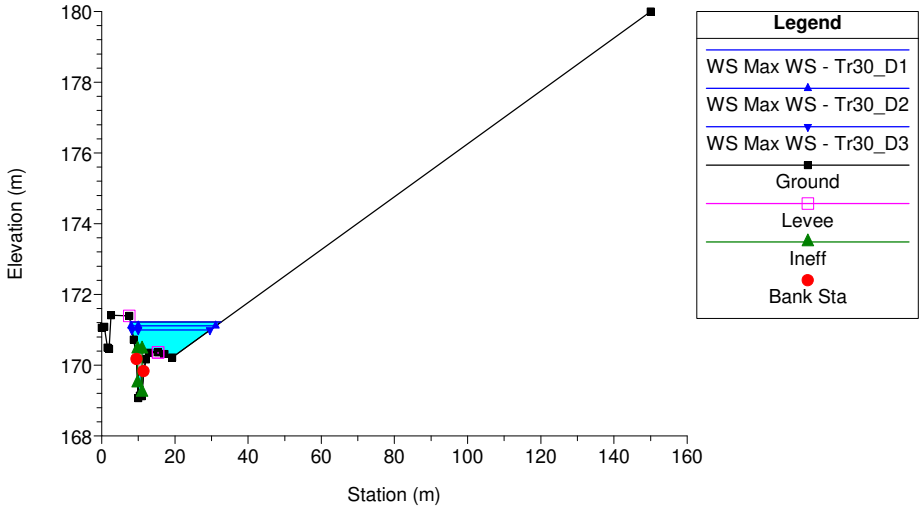
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 69.5 Culv



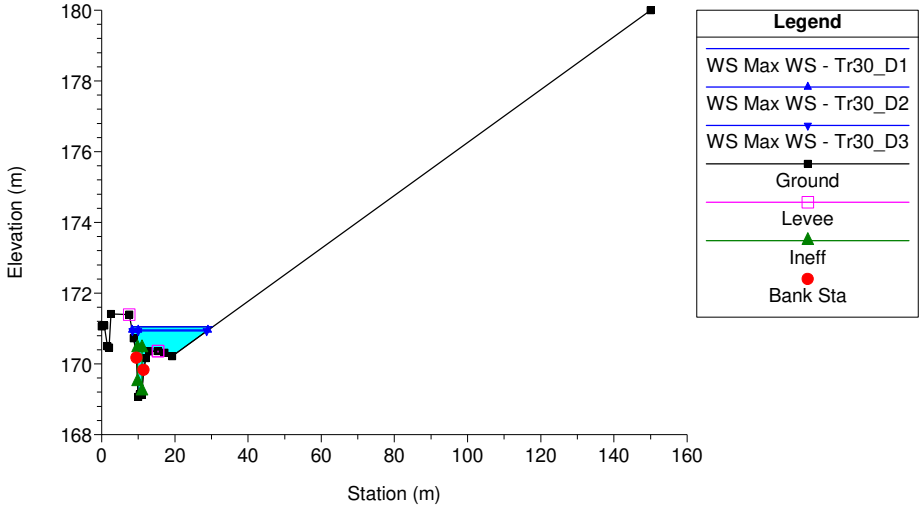
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 69.5 Culv



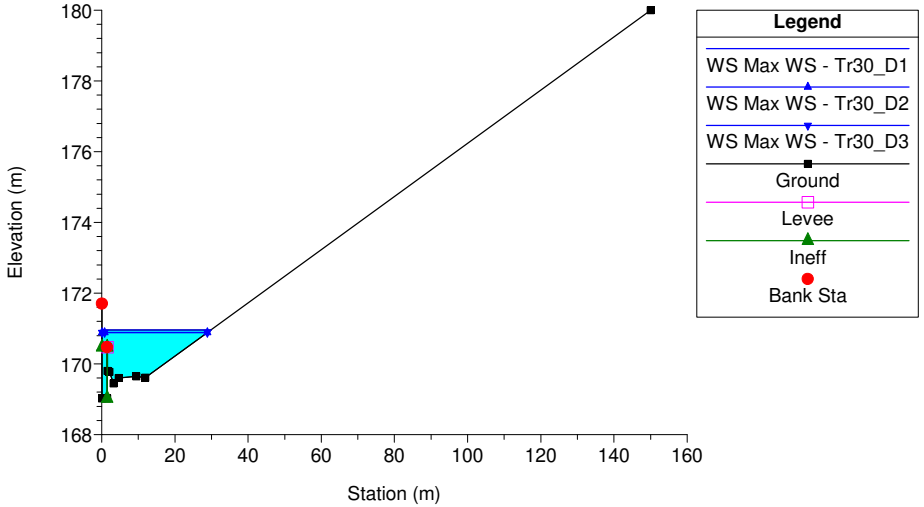
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 69 DOC_09



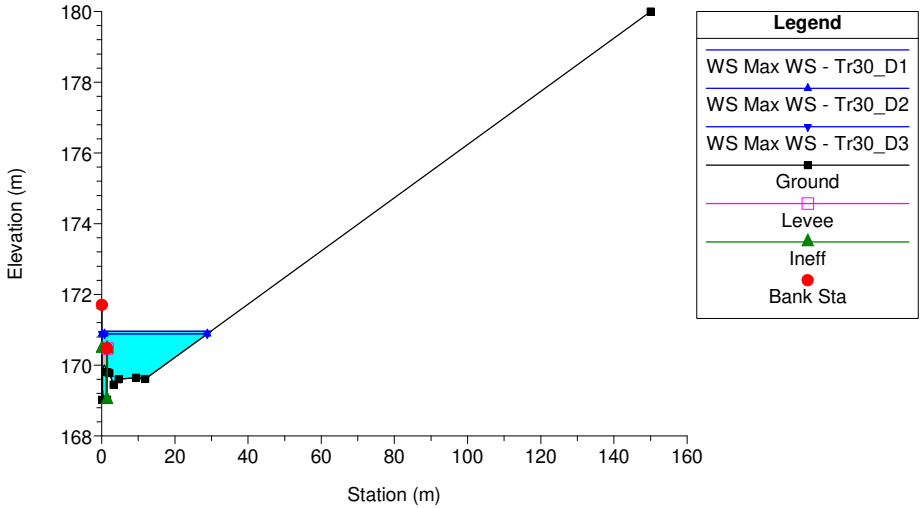
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 68 DOC_08



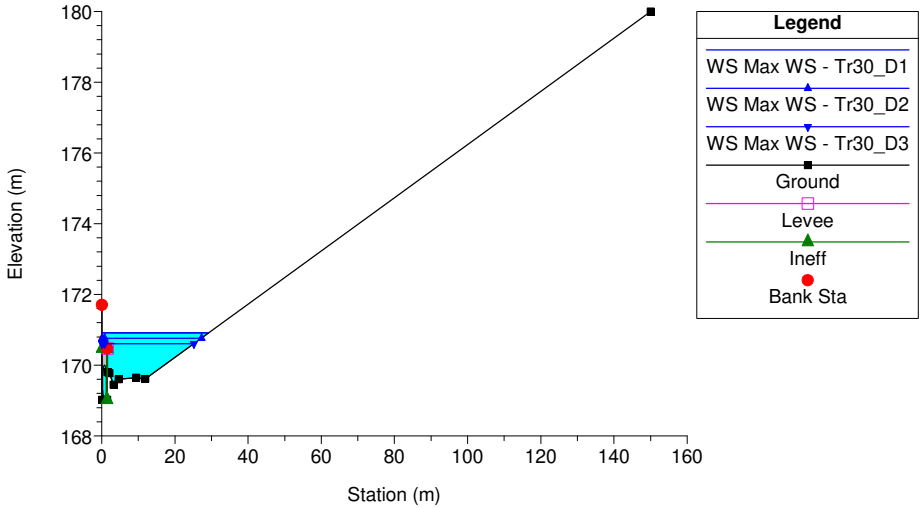
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 67.5 Culv



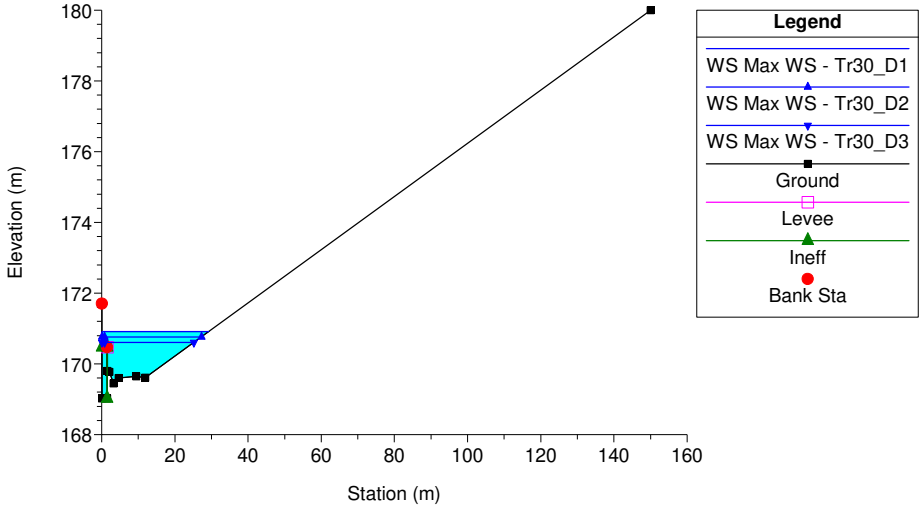
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 67.5 Culv



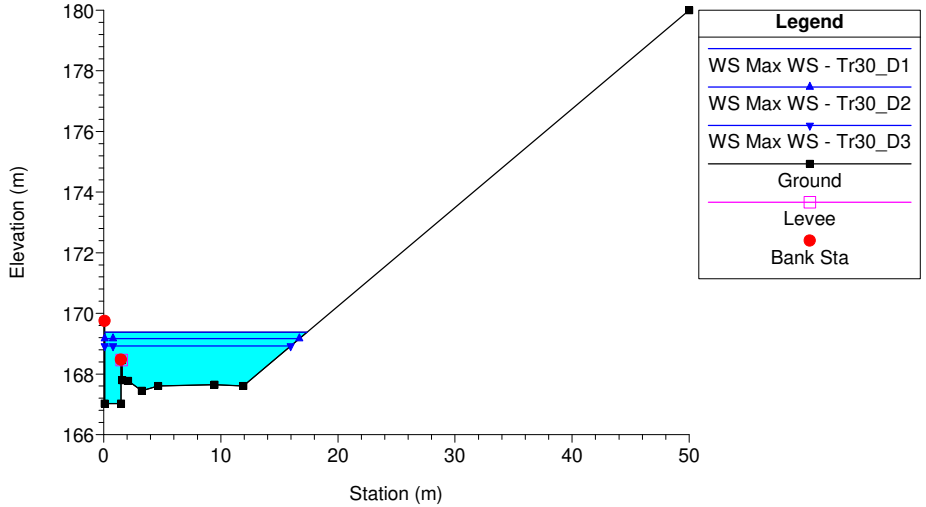
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 67 DOC_06



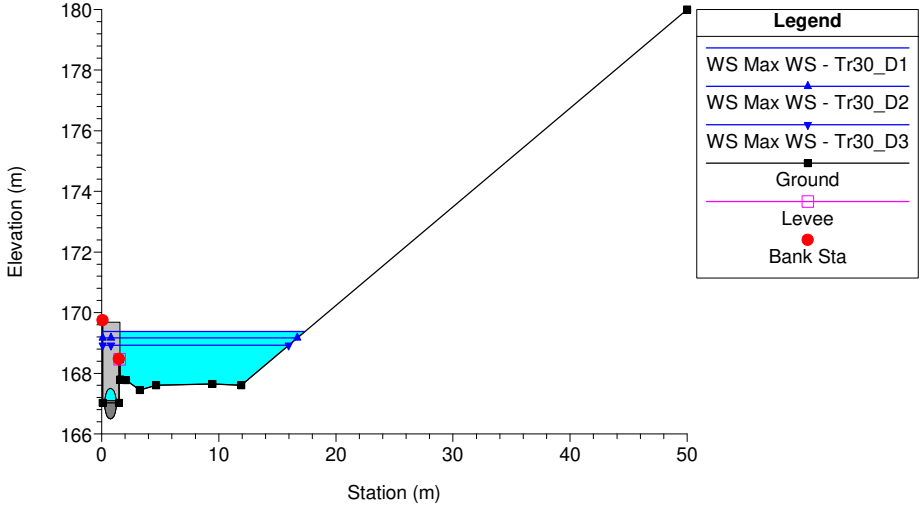
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 66 DOC_06



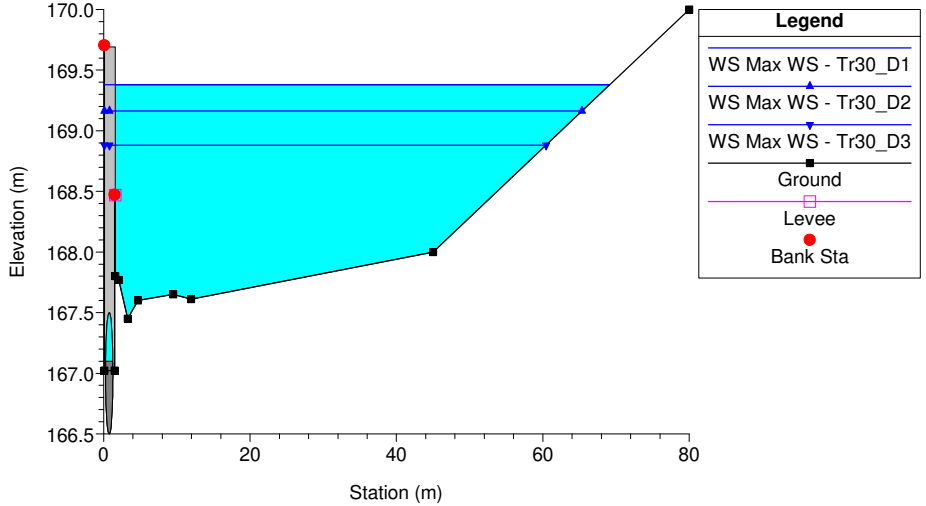
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 65.5 Culv



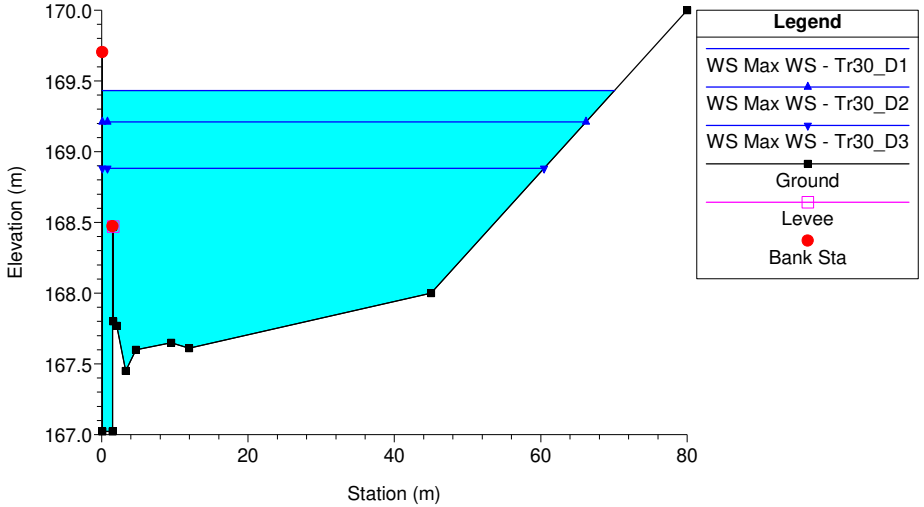
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 65.5 Culv



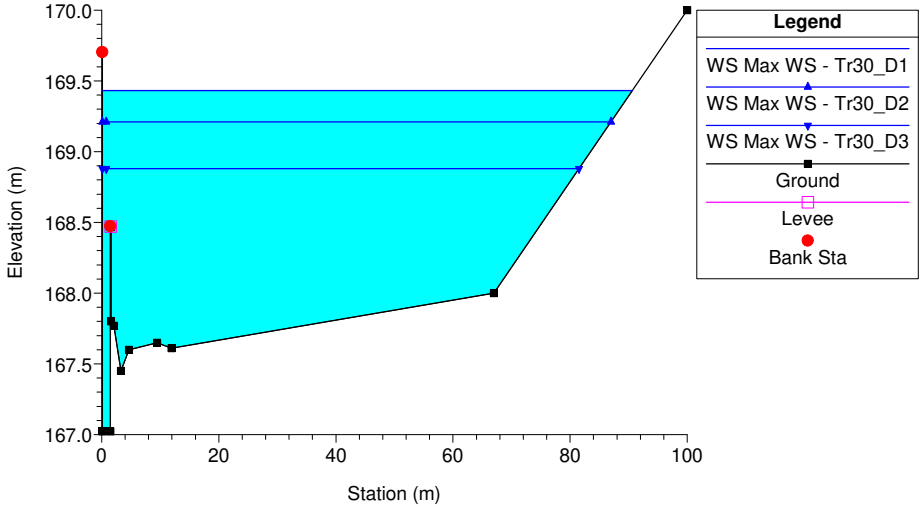
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 65 DOC_05



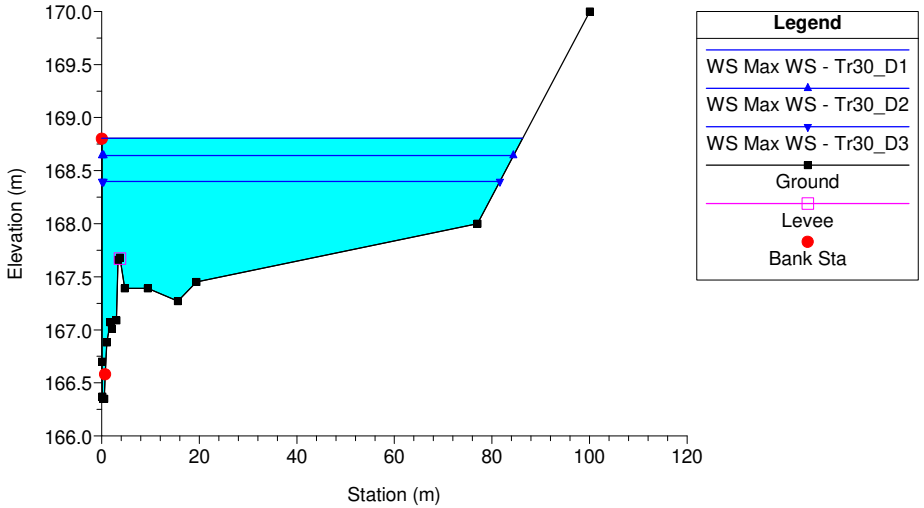
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 60



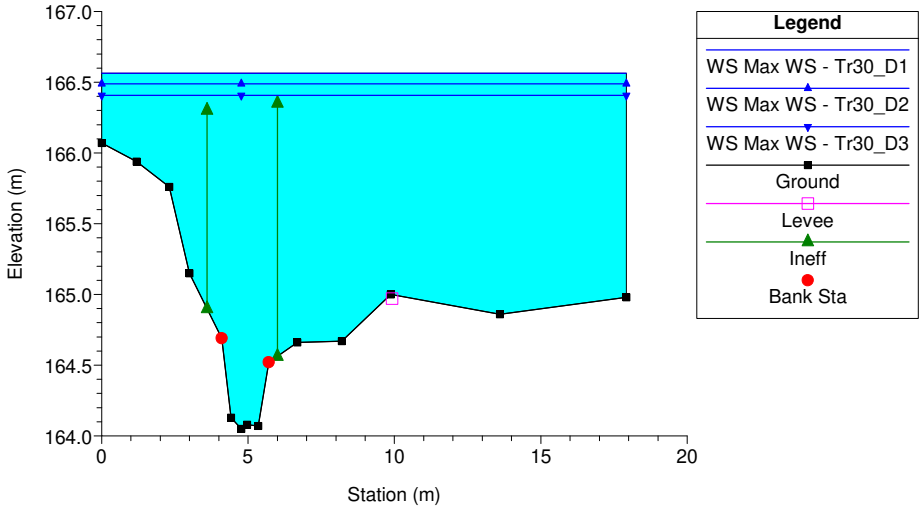
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 50 DOC_04 muro a sx

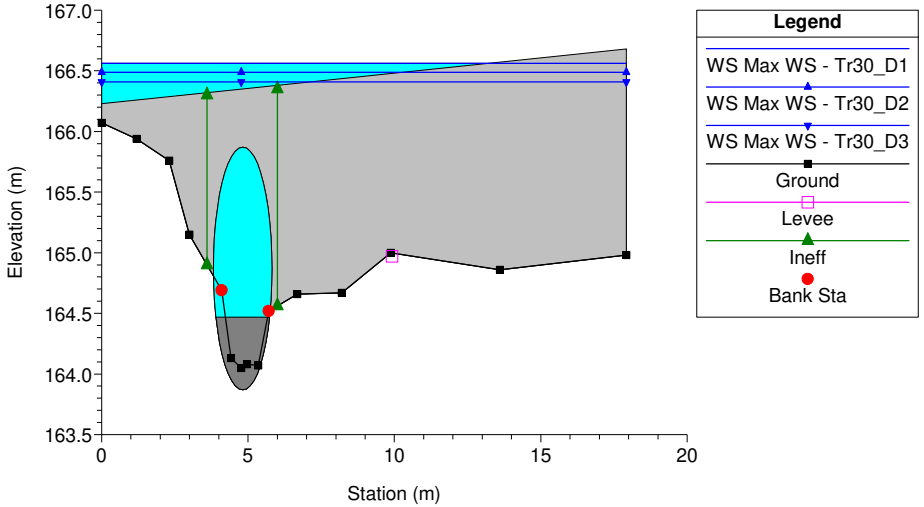


Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

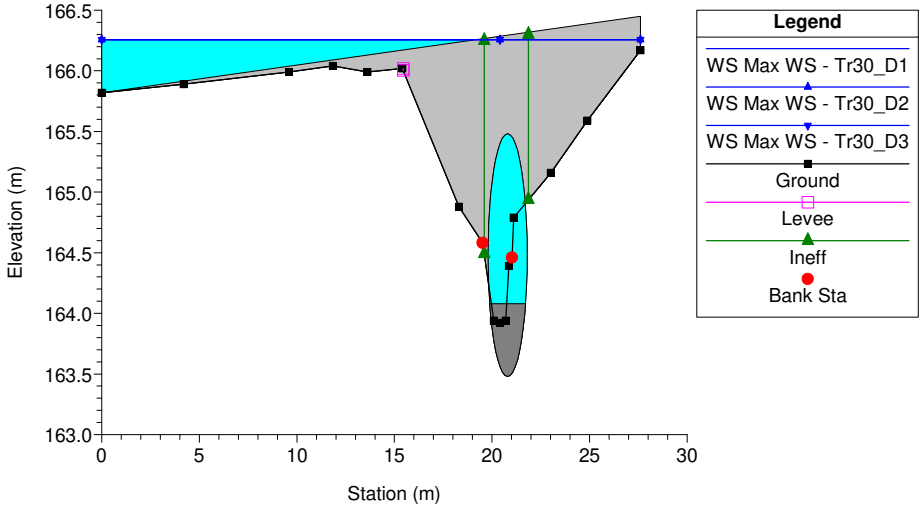
River = Doccina Reach = Doccina RS = 40 DOC_03



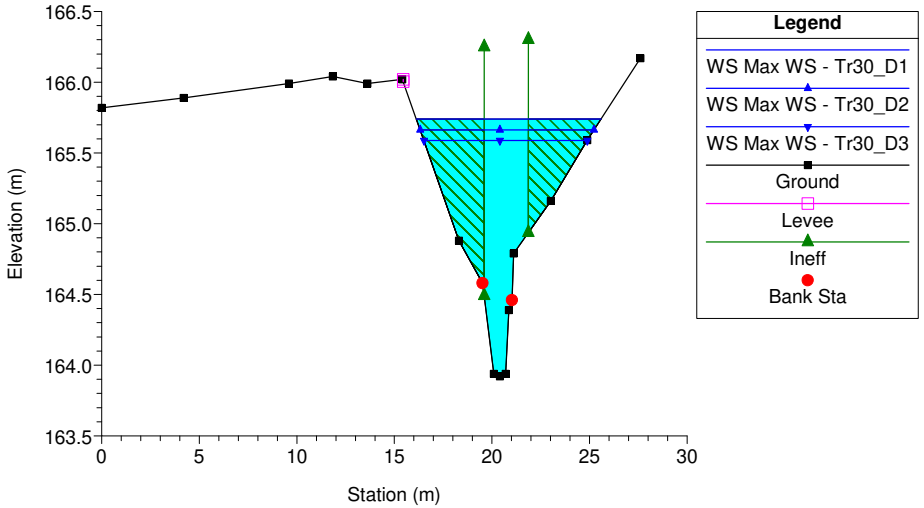
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Doccina Reach = Doccina RS = 35 Culv



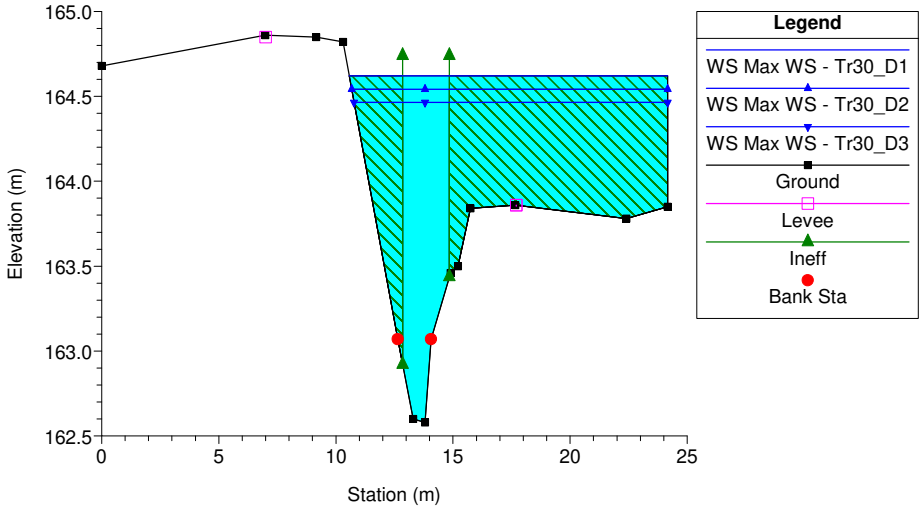
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Doccina Reach = Doccina RS = 35 Culv



Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Doccina Reach = Doccina RS = 30 DOC_02

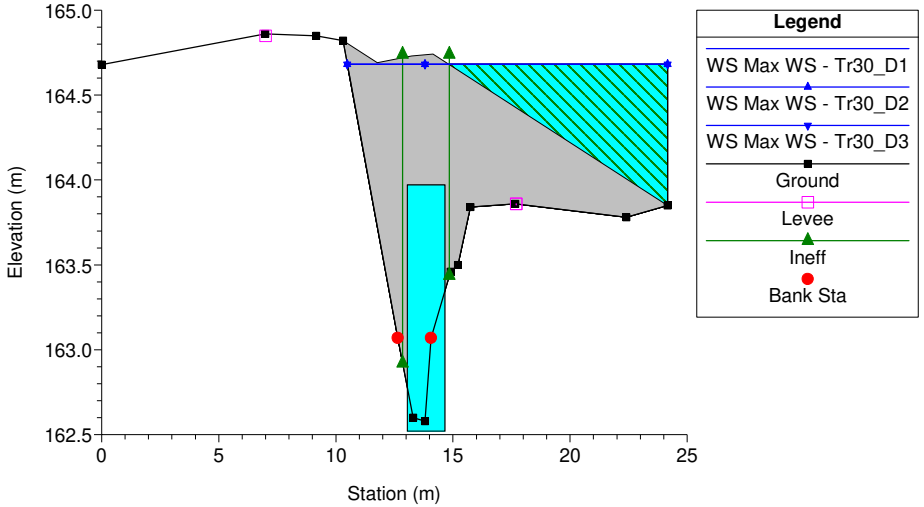


Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Doccina Reach = Doccina RS = 20 DOC_01



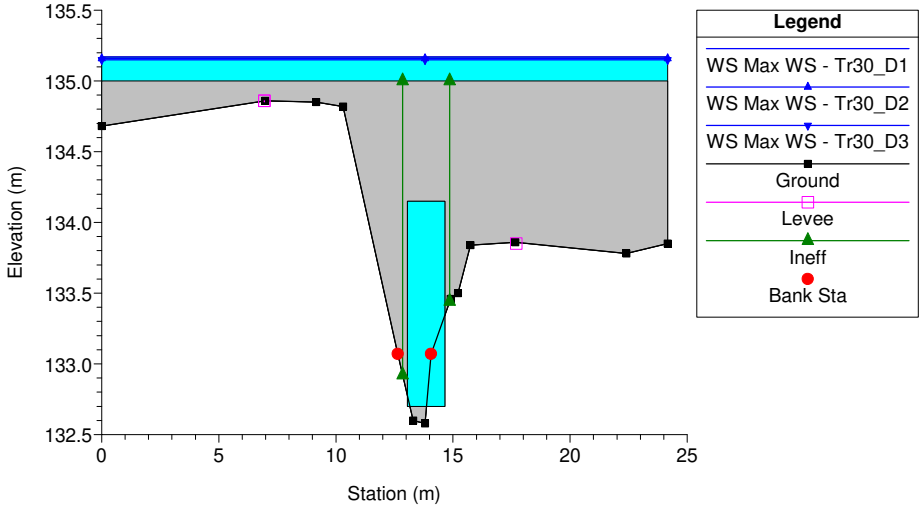
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 15 Culv



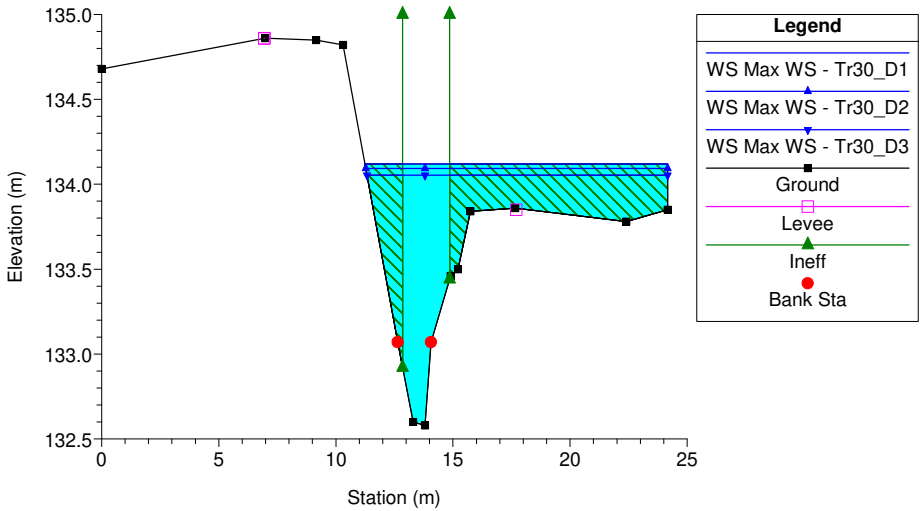
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 15 Culv



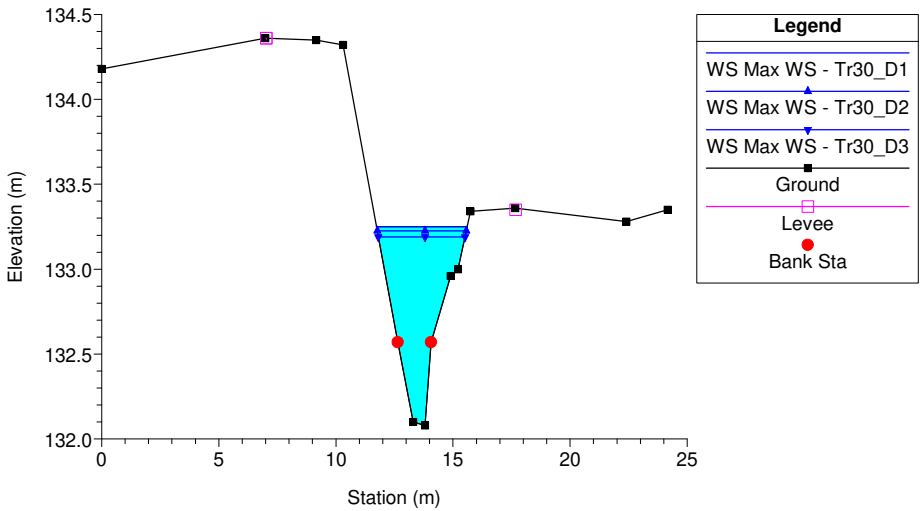
Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 10 copia di 20



Doccina Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Doccina Reach = Doccina RS = 5 copia di 20



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Doccina"

FOSSO DELLA DOCCINA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Doccina Reach: Doccina Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Doccina	80	Max WS	Tr30_D1	36.60	179.07	180.96	181.33	182.11	0.044973	6.16	1.63	2.39	10.56	15.54	1.53
Doccina	80	Max WS	Tr30_D2	29.10	179.07	180.84	181.19	181.95	0.044888	5.85	1.46	2.13	8.74	14.56	1.51
Doccina	80	Max WS	Tr30_D3	22.10	179.07	180.71	181.04	181.78	0.044904	5.50	1.29	1.82	6.89	13.49	1.49
Doccina	70	Max WS	Tr30_D1	36.56	169.07	171.40		171.61	0.008059	3.05	0.61	1.25	25.28	37.37	0.68
Doccina	70	Max WS	Tr30_D2	29.08	169.07	171.25		171.47	0.008762	3.02	0.88	1.19	19.02	25.16	0.70
Doccina	70	Max WS	Tr30_D3	22.09	169.07	171.12		171.31	0.007656	2.70	0.76	1.04	16.04	23.29	0.64
Doccina	69.5			Culvert											
Doccina	69	Max WS	Tr30_D1	36.55	169.07	171.05	171.25	171.71	0.027686	4.99	1.36	1.87	14.29	22.10	1.21
Doccina	69	Max WS	Tr30_D2	29.08	169.07	170.96	171.13	171.53	0.024661	4.55	1.20	1.64	12.37	20.74	1.14
Doccina	69	Max WS	Tr30_D3	22.09	169.07	170.93	171.00	171.30	0.015874	3.61	0.94	1.29	11.80	20.32	0.91
Doccina	68.5			Lat Struct											
Doccina	68	Max WS	Tr30_D1	36.55	169.02	170.96		171.04	0.006425	1.57		1.24	28.77	29.80	0.36
Doccina	68	Max WS	Tr30_D2	5.90	169.02	170.88		170.89	0.000210	0.28		0.22	26.48	28.76	0.07
Doccina	68	Max WS	Tr30_D3	5.90	169.02	170.88		170.89	0.000210	0.28		0.22	26.47	28.75	0.07
Doccina	67.5			Culvert											
Doccina	67	Max WS	Tr30_D1	36.55	169.02	170.91		171.01	0.007381	1.66		1.30	27.35	29.16	0.39
Doccina	67	Max WS	Tr30_D2	29.08	169.02	170.76		170.85	0.007366	1.60		1.21	23.17	27.19	0.39
Doccina	67	Max WS	Tr30_D3	22.22	169.02	170.61		170.68	0.007371	1.54		1.12	19.05	25.09	0.39
Doccina	66	Max WS	Tr30_D1	36.23	167.02	169.38		169.47	0.004431	1.40		1.37	26.39	17.28	0.29
Doccina	66	Max WS	Tr30_D2	28.94	167.02	169.16		169.25	0.004379	1.34		1.26	22.75	16.62	0.29
Doccina	66	Max WS	Tr30_D3	6.25	167.02	168.93		168.93	0.000354	0.36		0.32	18.91	15.89	0.08
Doccina	65.5			Culvert											
Doccina	65	Max WS	Tr30_D1	36.24	167.02	169.43		169.44	0.000373	0.41		0.38	94.00	69.98	0.08
Doccina	65	Max WS	Tr30_D2	28.94	167.02	169.21		169.22	0.000395	0.41		0.37	78.85	66.08	0.09
Doccina	65	Max WS	Tr30_D3	22.09	167.02	168.88		168.89	0.000562	0.46		0.38	58.11	60.34	0.11
Doccina	60	Max WS	Tr30_D1	36.24	167.02	169.43		169.44	0.000182	0.29		0.28	128.84	90.56	0.06
Doccina	60	Max WS	Tr30_D2	28.94	167.02	169.21		169.21	0.000192	0.28		0.26	109.04	86.88	0.06
Doccina	60	Max WS	Tr30_D3	22.08	167.02	168.88		168.88	0.000271	0.32		0.27	81.36	81.45	0.07
Doccina	50	Max WS	Tr30_D1	33.13	166.35	168.81		168.81	0.000390	0.35	0.01	0.35	95.19	86.31	0.07
Doccina	50	Max WS	Tr30_D2	28.49	166.35	168.64		168.65	0.000476	0.39		0.35	81.13	84.32	0.08
Doccina	50	Max WS	Tr30_D3	22.08	166.35	168.40		168.41	0.000701	0.46		0.36	61.08	81.53	0.10
Doccina	49.9			Lat Struct											
Doccina	40	Max WS	Tr30_D1	7.13	164.05	166.56		166.57	0.000111	0.44	0.15	0.23	28.71	17.92	0.09
Doccina	40	Max WS	Tr30_D2	7.76	164.05	166.49		166.49	0.000152	0.50	0.17	0.26	27.39	17.92	0.11
Doccina	40	Max WS	Tr30_D3	7.39	164.05	166.41		166.41	0.000162	0.51	0.17	0.26	25.95	17.92	0.11
Doccina	35			Culvert											
Doccina	30	Max WS	Tr30_D1	7.12	163.92	165.74		166.08	0.007415	2.71		1.12	3.08	9.48	0.68
Doccina	30	Max WS	Tr30_D2	7.75	163.92	165.66		166.11	0.010505	3.12		1.25	2.90	8.91	0.80
Doccina	30	Max WS	Tr30_D3	7.39	163.92	165.59		166.05	0.011472	3.16		1.23	2.73	8.37	0.83
Doccina	20	Max WS	Tr30_D1	12.21	162.58	164.62		165.40	0.013261	4.21		2.21	3.40	13.60	0.97
Doccina	20	Max WS	Tr30_D2	11.64	162.58	164.54		165.32	0.014014	4.21		2.19	3.25	13.50	0.99
Doccina	20	Max WS	Tr30_D3	10.76	162.58	164.46		165.20	0.014004	4.09		2.10	3.09	13.39	0.98
Doccina	15			Culvert											
Doccina	10	Max WS	Tr30_D1	12.21	132.58	134.12	134.59	135.71	0.039744	5.96		2.82	2.41	12.93	1.60
Doccina	10	Max WS	Tr30_D2	11.64	132.58	134.09	134.54	135.61	0.038668	5.81		2.73	2.36	12.90	1.57
Doccina	10	Max WS	Tr30_D3	10.76	132.58	134.05	134.45	135.44	0.036871	5.56		2.57	2.27	12.84	1.53
Doccina	5	Max WS	Tr30_D1	12.21	132.08	133.25	133.76	135.52	0.090489	7.20	2.11	2.32	2.28	3.88	2.30
Doccina	5	Max WS	Tr30_D2	11.64	132.08	133.23	133.74	135.44	0.090611	7.09	2.06	2.26	2.19	3.81	2.29
Doccina	5	Max WS	Tr30_D3	10.76	132.08	133.19	133.72	135.32	0.090392	6.90	1.98	2.15	2.05	3.70	2.27

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO AI COLLI

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

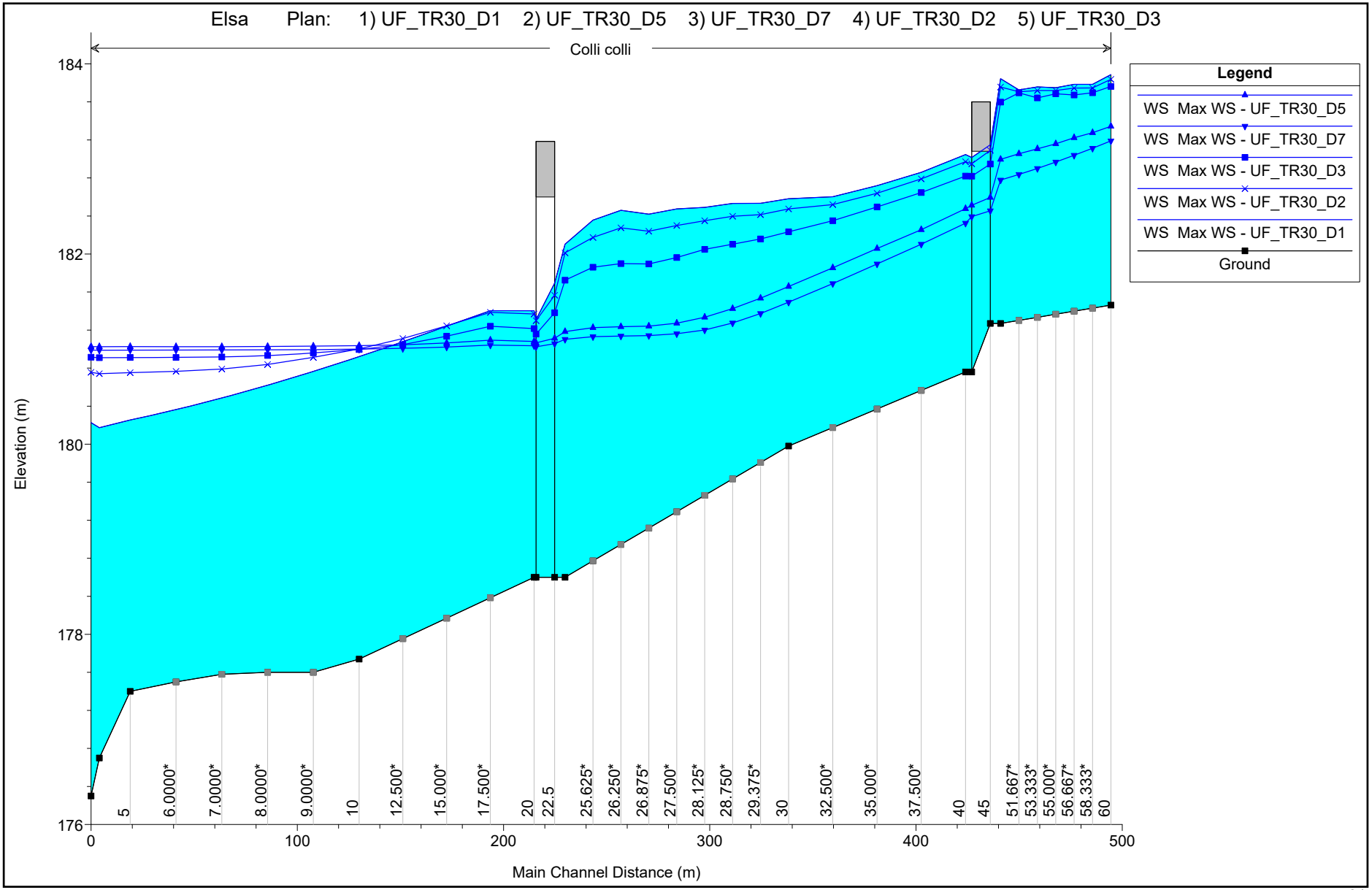
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO AI COLLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
Colli colli
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
184
182
180
178
176
0
100
200
300
400
500
Main Channel Distance (m)
5
6.0000*
7.0000*
8.0000*
9.0000*
10
12.500*
15.000*
17.500*
20
22.5
25.625*
26.250*
26.875*
27.500*
28.125*
28.750*
29.375*
30
32.500*
35.000*
37.500*
40
45
51.667*
53.333*
55.000*
56.667*
58.333*
60

ALLEGATI

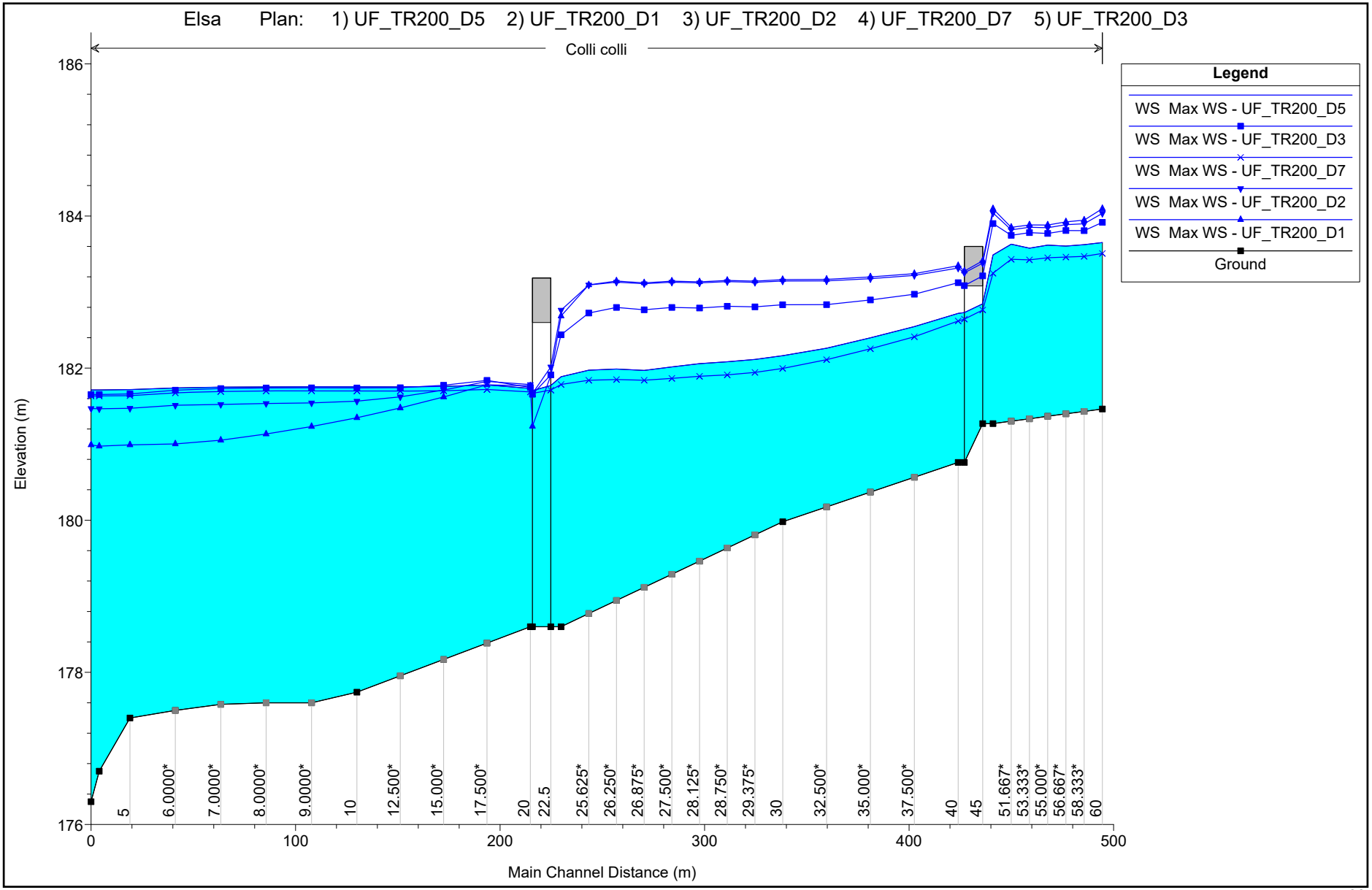
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO AI COLLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
Colli colli
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
Main Channel Distance (m)
186
184
182
180
178
176
0
100
200
300
400
500
5
6.0000*
7.0000*
8.0000*
9.0000*
10
12.500*
15.000*
17.500*
20
22.5
25.625*
26.250*
26.875*
27.500*
28.125*
28.750*
29.375*
30
32.500*
35.000*
37.500*
40
45
51.667*
53.333*
55.000*
56.667*
58.333*
60

ALLEGATI

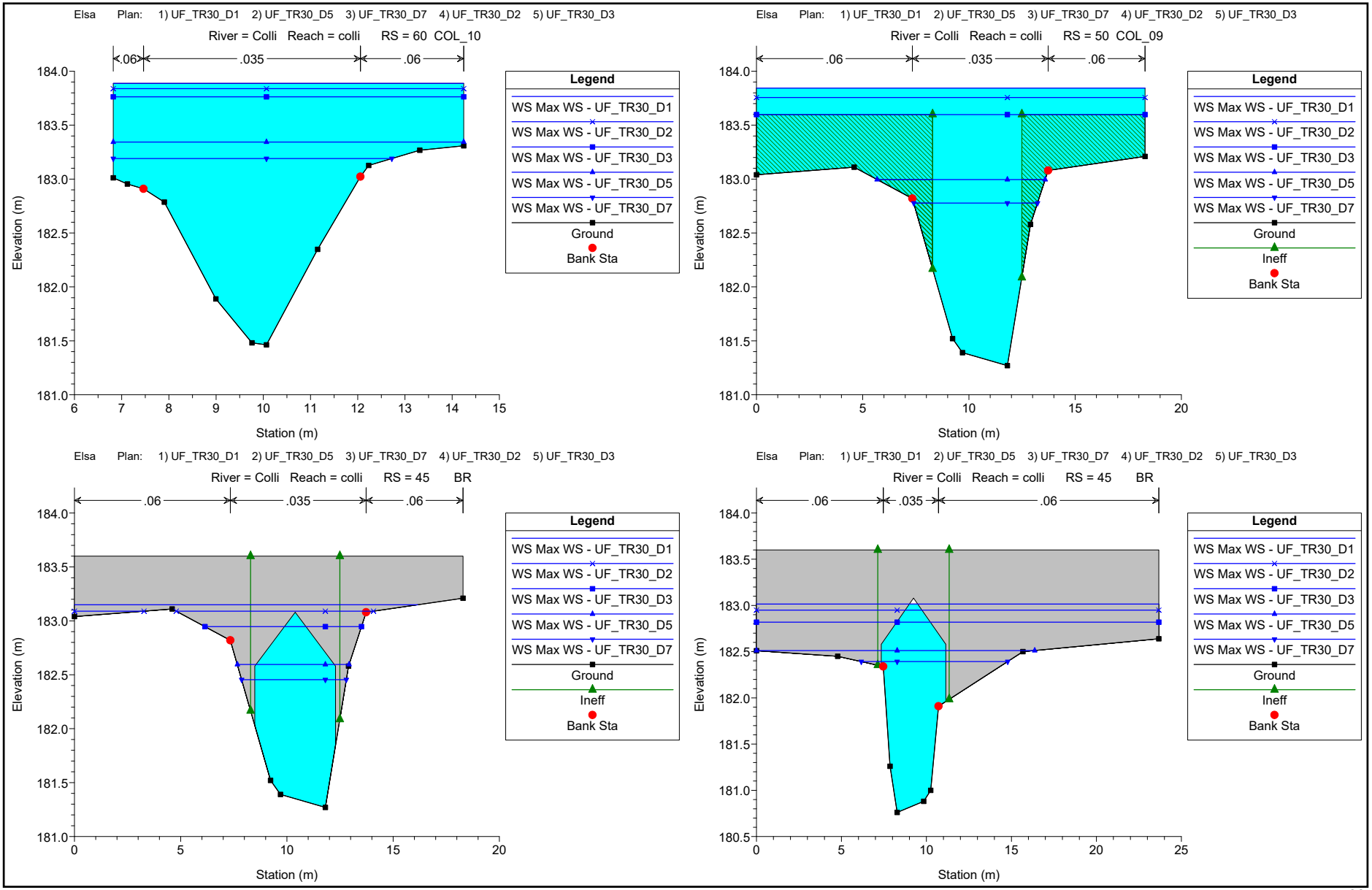
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

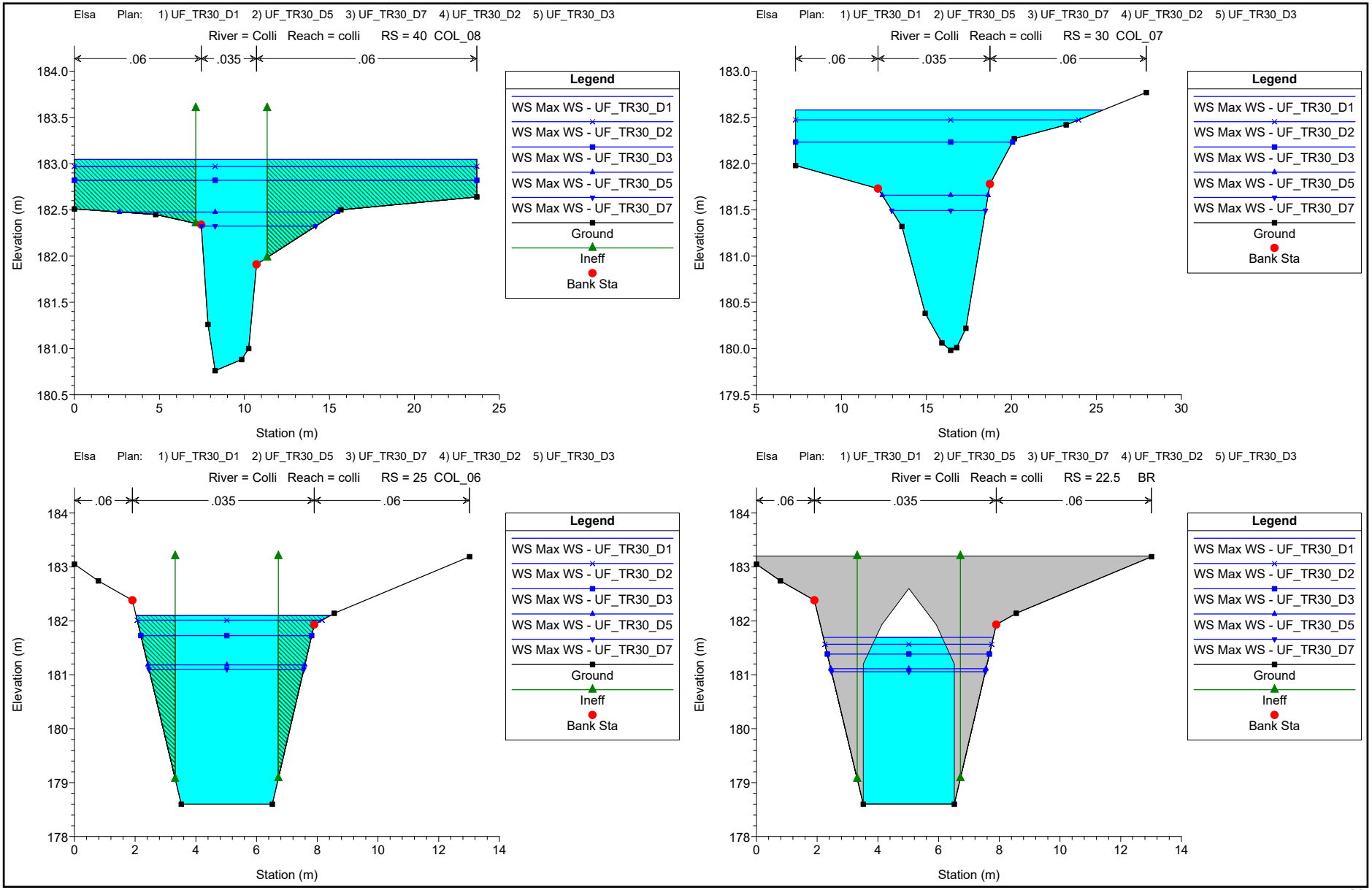
BOTRO AI COLLI

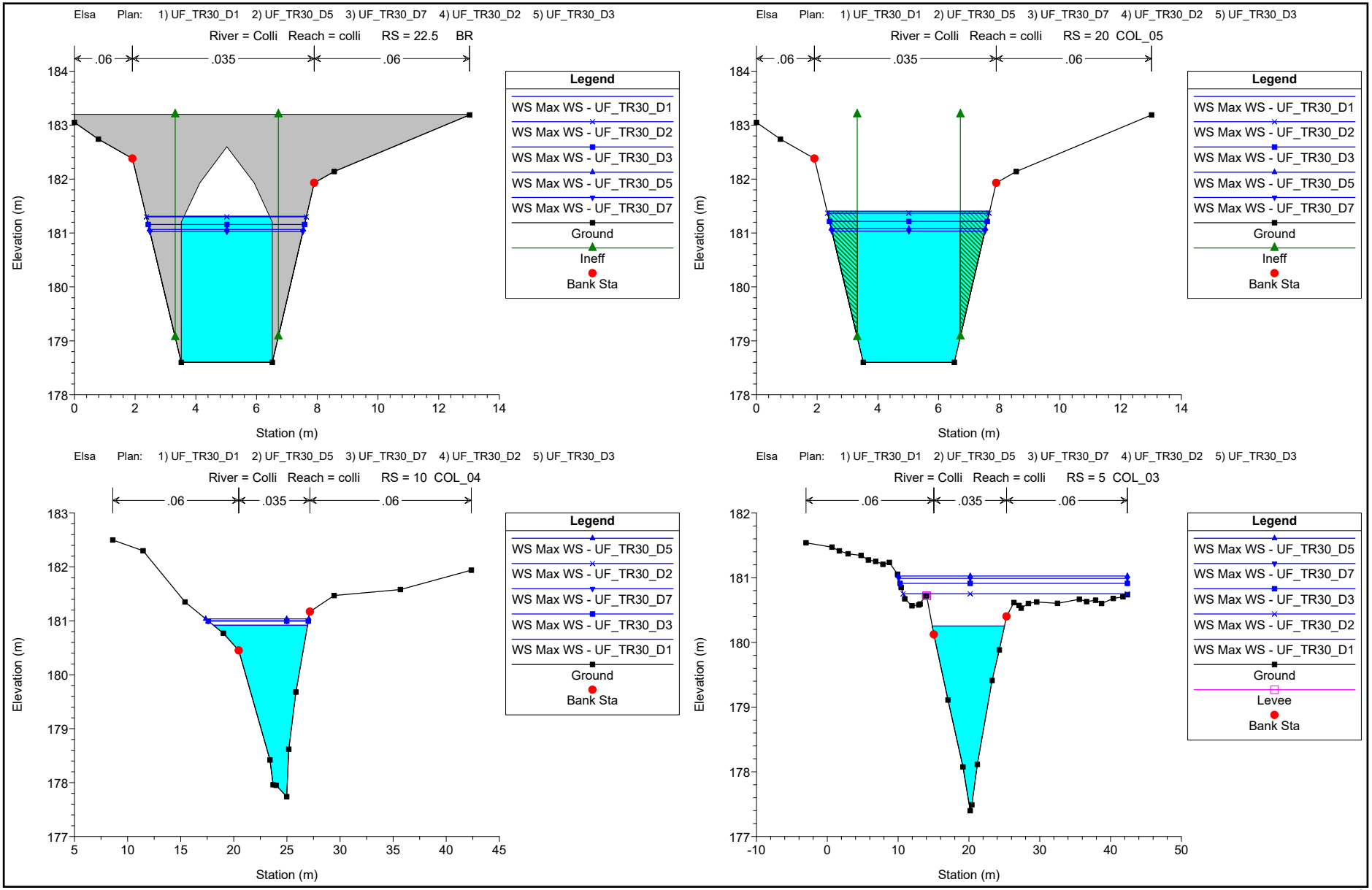
MODELLAZIONE PER TR=30 anni

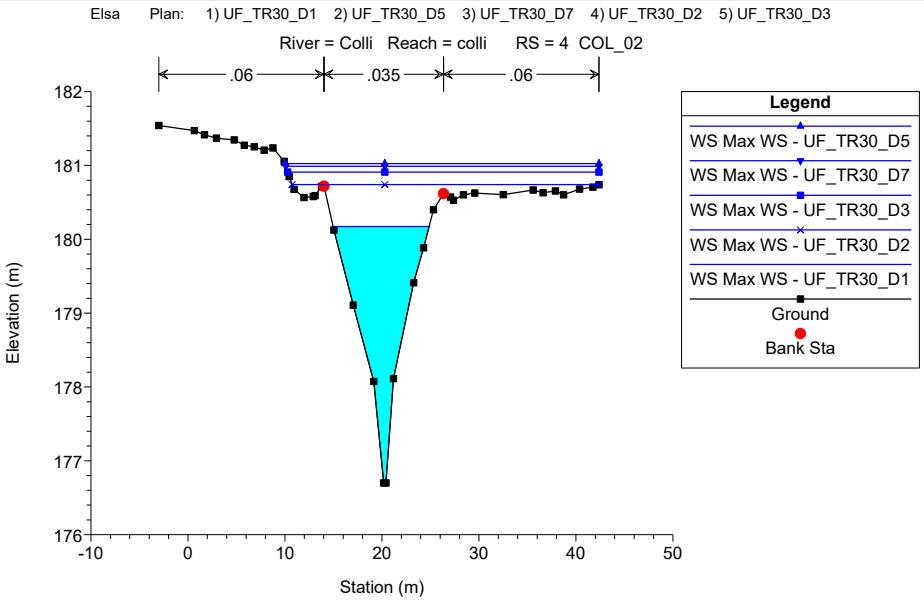
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

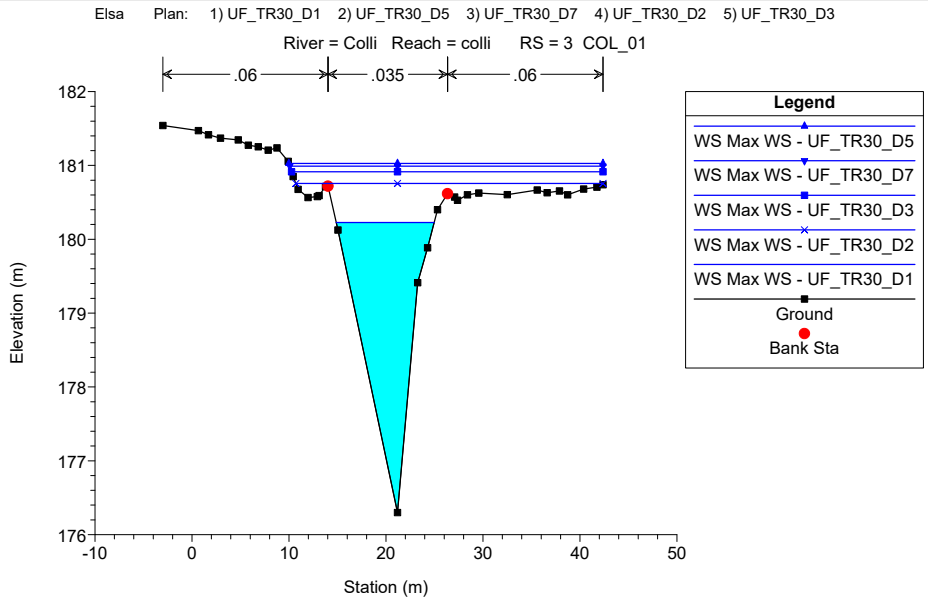
Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 60 COL_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 50 COL_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 45 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 45 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 40 COL_08
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 30 COL_07
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 25 COL_06
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 22.5 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 22.5 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 20 COL_05
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 10 COL_04
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 5 COL_03
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 4 COL_02
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Colli Reach = colli RS = 3 COL_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

ALLEGATI

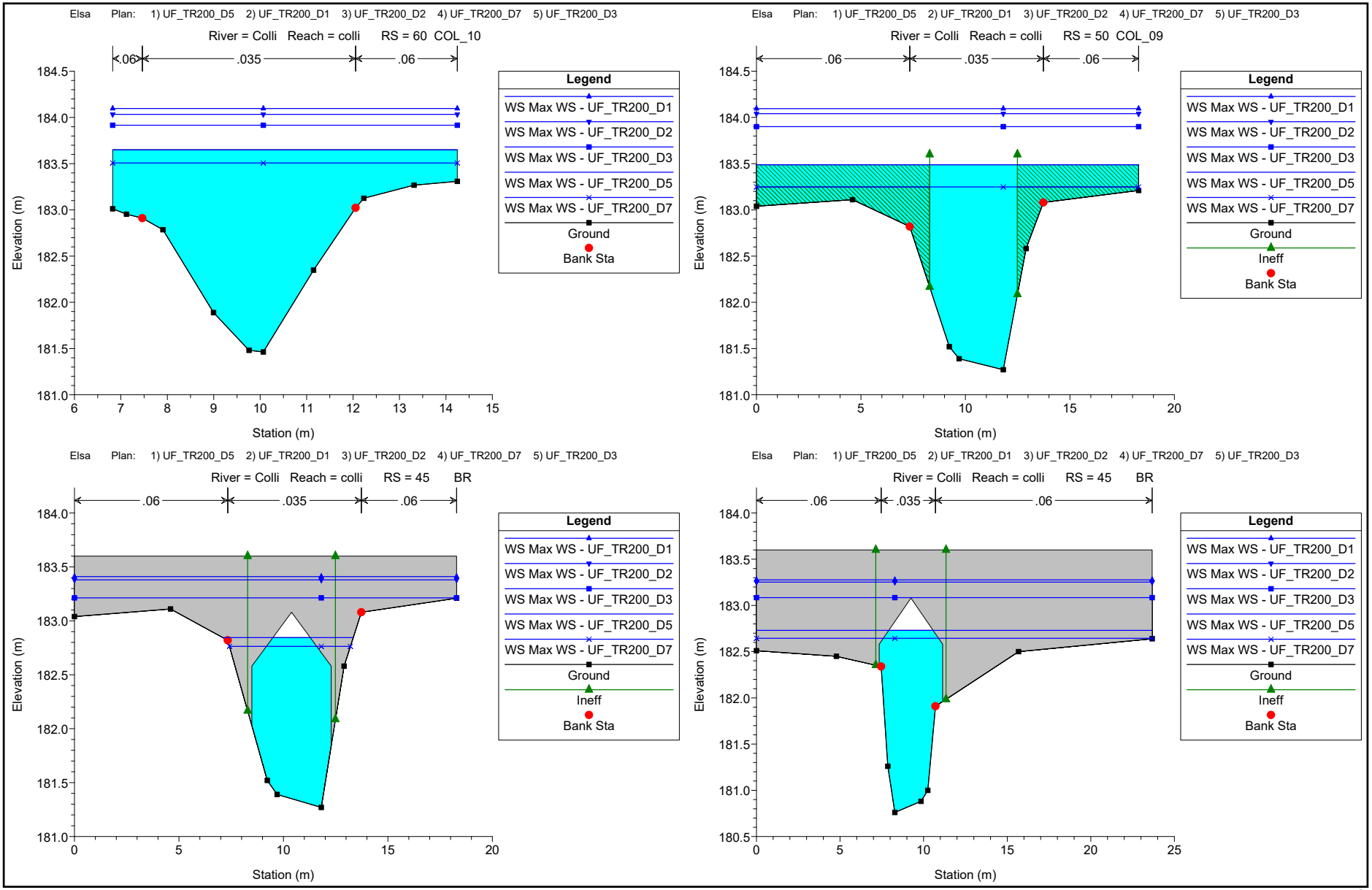
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

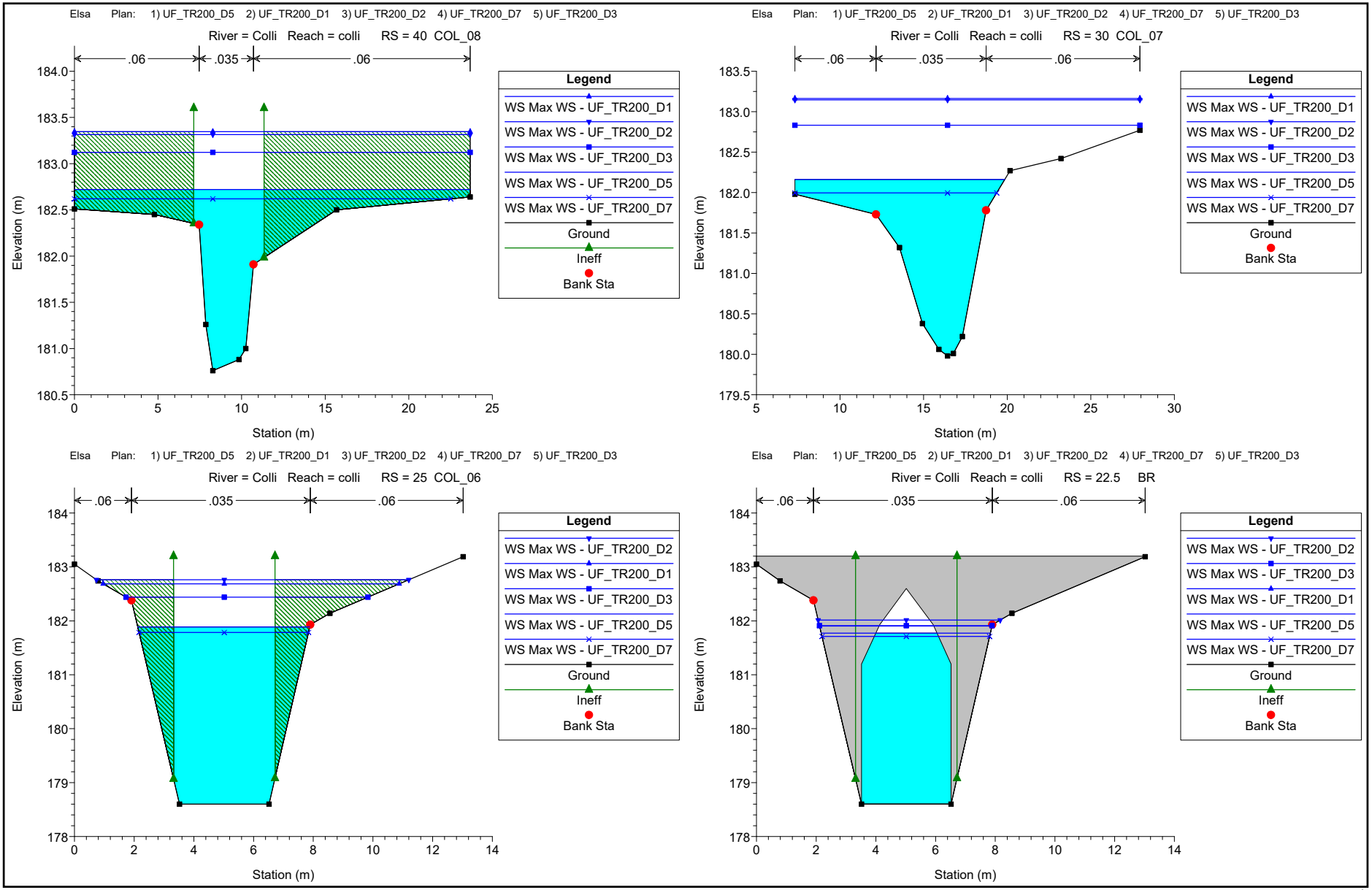
BOTRO AI COLLI

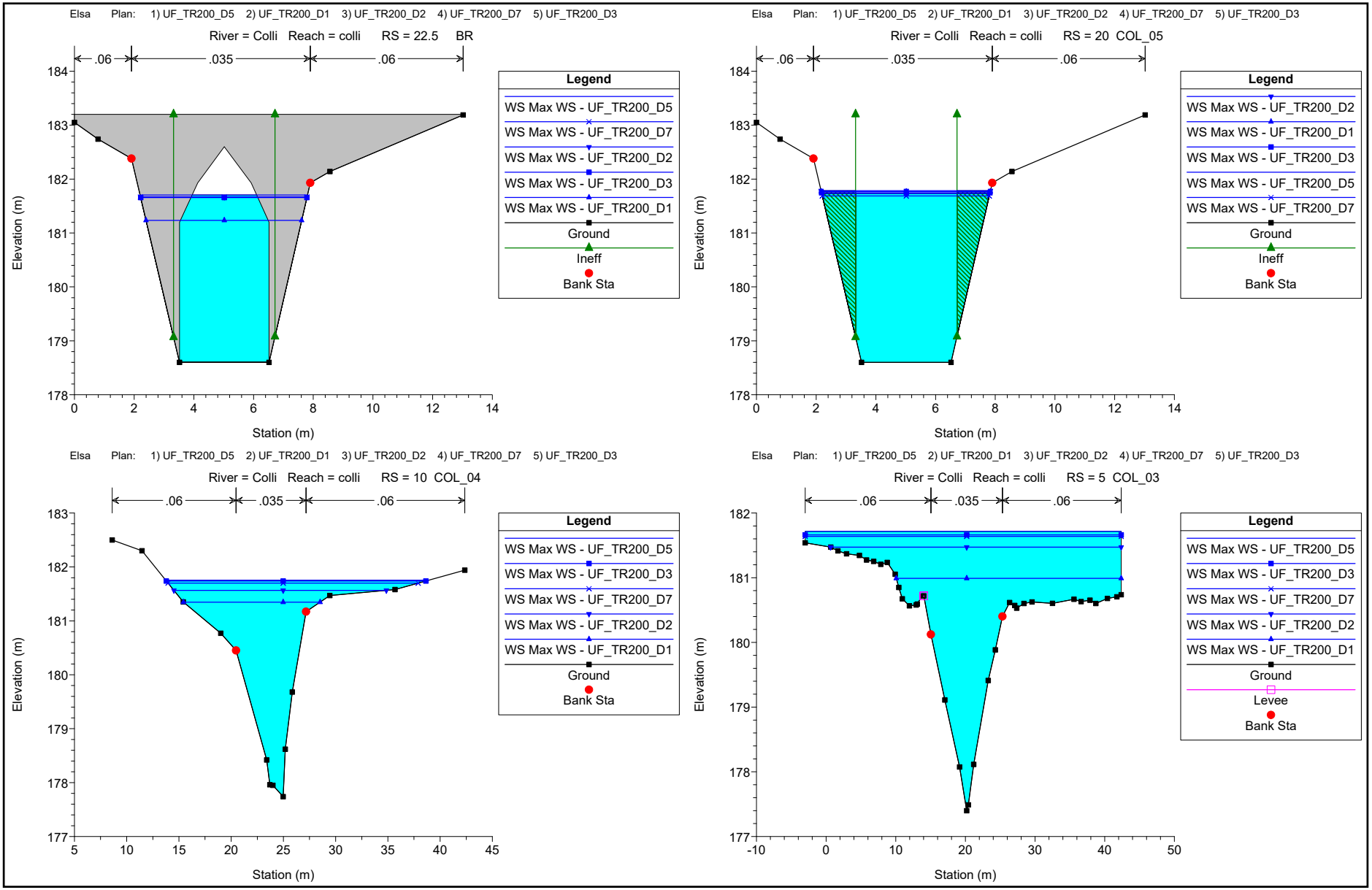
MODELLAZIONE PER TR=200 anni

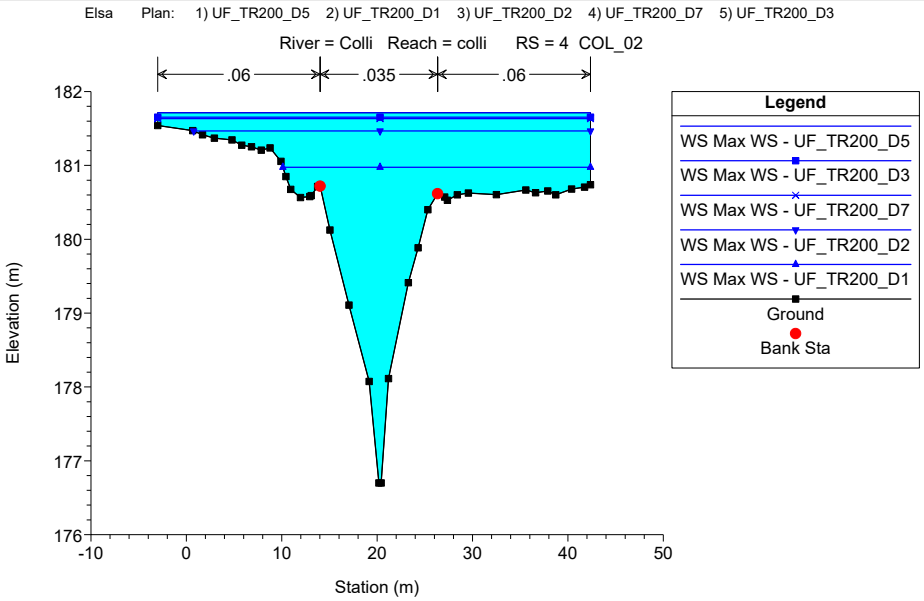
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

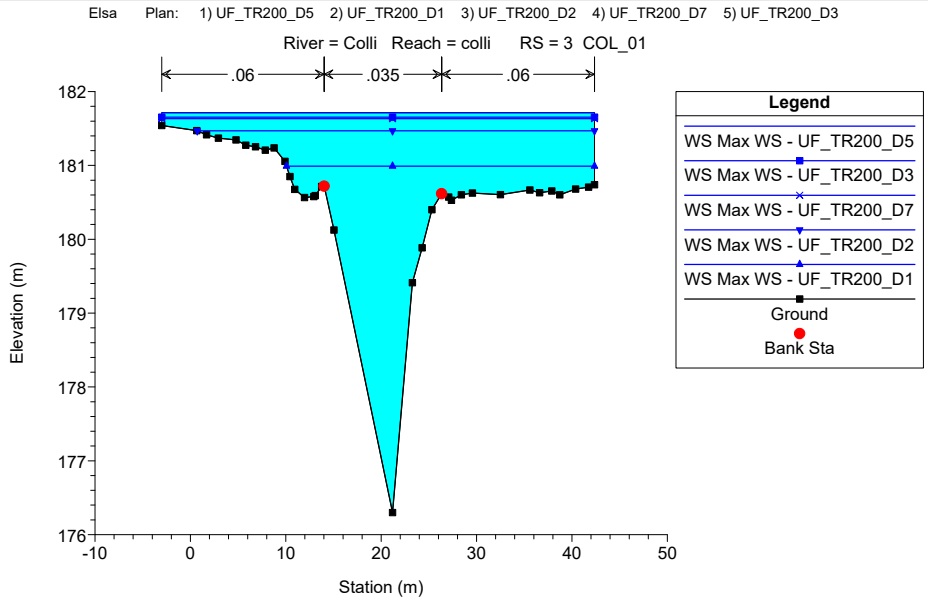
Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 60 COL_10
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 50 COL_09
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 45 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 45 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 40 COL_08
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 30 COL_07
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 25 COL_06
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 22.5 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 22.5 BR
.06 .035 .06
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 20 COL_05
.06 .035 .06
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 10 COL_04
.06 .035 .06
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 5 COL_03
.06 .035 .06
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 4 COL_02
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Colli Reach = colli RS = 3 COL_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO AI COLLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Colli Reach: colli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
colli	60	Max WS	UF_TR30_D1	34.92	181.46	183.89	183.96	184.71	0.013508	1.04	4.16	1.25	9.86	7.42	1.02
colli	60	Max WS	UF_TR30_D5	14.00	181.46	183.34		183.68	0.008737	0.62	2.59	0.37	5.82	7.42	0.77
colli	60	Max WS	UF_TR30_D7	11.20	181.46	183.19		183.48	0.009179	0.51	2.41	0.22	4.80	5.90	0.77
colli	60	Max WS	UF_TR30_D2	31.63	181.46	183.84	183.86	184.56	0.012317	0.98	3.89	1.14	9.49	7.42	0.97
colli	60	Max WS	UF_TR30_D3	25.47	181.46	183.76		184.29	0.009449	0.83	3.31	0.94	8.93	7.42	0.84
colli	59.9			Lat Struct											
colli	59.8			Lat Struct											
colli	50	Max WS	UF_TR30_D1	16.96	181.27	183.84	182.69	183.89	0.000751	0.37	1.10	0.33	21.65	18.29	0.25
colli	50	Max WS	UF_TR30_D5	14.00	181.27	183.00	182.56	183.25	0.004404		2.25		6.22	7.91	0.59
colli	50	Max WS	UF_TR30_D7	11.20	181.27	182.78	182.41	183.01	0.004792		2.11		5.30	5.83	0.60
colli	50	Max WS	UF_TR30_D2	17.42	181.27	183.76	182.72	183.82	0.000962	0.39	1.20	0.35	20.05	18.29	0.28
colli	50	Max WS	UF_TR30_D3	17.33	181.27	183.60	182.72	183.80	0.002164		1.98		8.75	18.29	0.44
colli	45			Bridge											
colli	40	Max WS	UF_TR30_D1	16.93	180.76	183.05		183.34	0.005086	0.94	2.47	1.26	7.34	23.67	0.56
colli	40	Max WS	UF_TR30_D5	14.00	180.76	182.48		182.92	0.011607	0.46	2.97	1.17	4.95	12.84	0.80
colli	40	Max WS	UF_TR30_D7	11.20	180.76	182.32		182.69	0.011059		2.69	0.91	4.31	6.73	0.77
colli	40	Max WS	UF_TR30_D2	17.40	180.76	182.97		183.31	0.006157	0.96	2.65	1.32	7.02	23.67	0.61
colli	40	Max WS	UF_TR30_D3	17.29	180.76	182.82		183.23	0.008160	0.91	2.88	1.37	6.39	23.67	0.70
colli	39			Lat Struct											
colli	30	Max WS	UF_TR30_D1	25.77	179.98	182.58		182.75	0.002509	0.62	1.92	0.33	17.21	18.10	0.45
colli	30	Max WS	UF_TR30_D5	13.98	179.98	181.66		181.94	0.009027		2.36		5.92	6.23	0.77
colli	30	Max WS	UF_TR30_D7	11.20	179.98	181.49		181.75	0.008983		2.26		4.95	5.51	0.76
colli	30	Max WS	UF_TR30_D2	24.46	179.98	182.47		182.66	0.002891	0.61	1.98	0.31	15.34	16.65	0.48
colli	30	Max WS	UF_TR30_D3	22.65	179.98	182.23		182.47	0.004440	0.56	2.22	0.40	11.84	12.77	0.58
colli	25	Max WS	UF_TR30_D1	32.65	178.60	182.10	180.74	182.49	0.002232		2.76		11.82	6.42	0.47
colli	25	Max WS	UF_TR30_D5	13.52	178.60	181.18	179.80	181.31	0.001066		1.56		8.69	5.17	0.31
colli	25	Max WS	UF_TR30_D7	11.18	178.60	181.10	179.66	181.19	0.000812		1.33		8.41	5.10	0.27
colli	25	Max WS	UF_TR30_D2	28.91	178.60	182.01	180.58	182.33	0.001911		2.51		11.51	6.09	0.44
colli	25	Max WS	UF_TR30_D3	25.23	178.60	181.73	180.40	182.02	0.001956		2.40		10.53	5.63	0.43
colli	22.5			Bridge											
colli	20	Max WS	UF_TR30_D1	32.65	178.60	181.40		182.01	0.004718		3.46		9.44	5.36	0.66
colli	20	Max WS	UF_TR30_D5	13.42	178.60	181.08		181.21	0.001204		1.61		8.34	5.08	0.33
colli	20	Max WS	UF_TR30_D7	10.95	178.60	181.04		181.13	0.000853		1.34		8.18	5.05	0.28
colli	20	Max WS	UF_TR30_D2	30.64	178.60	181.37		181.92	0.004331		3.29		9.32	5.33	0.63
colli	20	Max WS	UF_TR30_D3	24.95	178.60	181.22		181.63	0.003483		2.84		8.80	5.20	0.56
colli	19			Lat Struct											
colli	18			Lat Struct											
colli	10	Max WS	UF_TR30_D1	32.62	177.74	180.92		181.32	0.007254	0.51	2.82		12.01	8.87	0.68
colli	10	Max WS	UF_TR30_D5	12.21	177.74	181.04		181.09	0.000829	0.20	0.98		13.09	9.70	0.23
colli	10	Max WS	UF_TR30_D7	10.76	177.74	181.00		181.04	0.000687	0.17	0.89		12.74	9.44	0.21
colli	10	Max WS	UF_TR30_D2	30.30	177.74	181.00		181.31	0.005422	0.49	2.49		12.76	9.45	0.59
colli	10	Max WS	UF_TR30_D3	24.07	177.74	181.00		181.19	0.003462	0.39	1.99		12.70	9.41	0.47
colli	5	Max WS	UF_TR30_D1	32.13	177.40	180.25		180.53	0.005213	0.18	2.33		13.79	10.20	0.63
colli	5	Max WS	UF_TR30_D5	12.16	177.40	181.03		181.04	0.000145	0.11	0.52	0.11	30.58	32.39	0.11
colli	5	Max WS	UF_TR30_D7	10.76	177.40	180.99		181.00	0.000123	0.09	0.47	0.09	29.40	32.30	0.10
colli	5	Max WS	UF_TR30_D2	25.90	177.40	180.75		180.84	0.001190	0.18	1.35	0.15	21.82	31.66	0.32
colli	5	Max WS	UF_TR30_D3	20.68	177.40	180.91		180.96	0.000534	0.17	0.96	0.17	26.92	32.10	0.22
colli	4	Max WS	UF_TR30_D1	32.01	176.70	180.17		180.45	0.005733		2.32		13.82	9.90	0.63
colli	4	Max WS	UF_TR30_D5	12.16	176.70	181.03		181.04	0.000155	0.10	0.48	0.11	31.39	32.39	0.11
colli	4	Max WS	UF_TR30_D7	10.76	176.70	180.99		181.00	0.000131	0.09	0.44	0.09	30.21	32.29	0.10
colli	4	Max WS	UF_TR30_D2	25.95	176.70	180.74		180.82	0.001350	0.15	1.27	0.14	22.30	31.62	0.32
colli	4	Max WS	UF_TR30_D3	19.05	176.70	180.91		180.94	0.000491	0.15	0.82	0.16	27.66	32.09	0.19
colli	3	Max WS	UF_TR30_D1	31.98	176.30	180.23		180.39	0.002520		1.78		18.01	10.10	0.42
colli	3	Max WS	UF_TR30_D5	12.16	176.30	181.03		181.04	0.000101	0.08	0.42	0.09	35.10	32.39	0.09
colli	3	Max WS	UF_TR30_D7	10.76	176.30	180.99		181.00	0.000085	0.07	0.38	0.08	33.92	32.30	0.08
colli	3	Max WS	UF_TR30_D2	25.97	176.30	180.76		180.81	0.000781	0.12	1.07	0.12	26.45	31.67	0.24
colli	3	Max WS	UF_TR30_D3	20.57	176.30	180.91		180.94	0.000359	0.13	0.76	0.13	31.49	32.10	0.17

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO AI COLLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Colli Reach: colli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
colli	60	Max WS	UF_TR200_D5	20.60	181.46	183.65		184.06	0.008079	0.74	2.91	0.76	8.10	7.42	0.77
colli	60	Max WS	UF_TR200_D1	50.27	181.46	184.10	184.36	185.40	0.018519	1.28	5.26	1.67	11.41	7.42	1.22
colli	60	Max WS	UF_TR200_D2	45.49	181.46	184.03	184.24	185.19	0.017069	1.21	4.94	1.55	10.95	7.42	1.16
colli	60	Max WS	UF_TR200_D7	16.70	181.46	183.51		183.85	0.007715	0.67	2.65	0.59	7.03	7.42	0.74
colli	60	Max WS	UF_TR200_D3	36.80	181.46	183.92	184.01	184.80	0.014124	1.07	4.30	1.30	10.07	7.42	1.04
colli	59.9			Lat Struct											
colli	59.8			Lat Struct											
colli	50	Max WS	UF_TR200_D5	16.68	181.27	183.49	182.69	183.69	0.002401		2.01		8.29	18.29	0.46
colli	50	Max WS	UF_TR200_D1	16.76	181.27	184.10	182.69	184.13	0.000442	0.33	0.91	0.30	26.25	18.29	0.20
colli	50	Max WS	UF_TR200_D2	16.37	181.27	184.04	182.67	184.08	0.000466	0.33	0.92	0.30	25.27	18.29	0.20
colli	50	Max WS	UF_TR200_D7	16.68	181.27	183.25	182.69	183.52	0.003702		2.29		7.28	18.29	0.56
colli	50	Max WS	UF_TR200_D3	16.34	181.27	183.90	182.67	183.94	0.000617	0.35	1.01	0.31	22.70	18.29	0.23
colli	45			Bridge											
colli	40	Max WS	UF_TR200_D5	16.67	180.76	182.72		183.15	0.009352	0.84	2.97	1.35	5.97	23.67	0.74
colli	40	Max WS	UF_TR200_D1	16.27	180.76	183.35		183.54	0.002847	0.89	2.03	1.11	8.60	23.67	0.43
colli	40	Max WS	UF_TR200_D2	16.10	180.76	183.32		183.52	0.002925	0.88	2.04	1.11	8.47	23.67	0.43
colli	40	Max WS	UF_TR200_D7	16.64	180.76	182.62		183.12	0.011637	0.76	3.18	1.37	5.55	22.51	0.81
colli	40	Max WS	UF_TR200_D3	16.30	180.76	183.12		183.37	0.004115	0.90	2.28	1.19	7.66	23.67	0.51
colli	39			Lat Struct											
colli	30	Max WS	UF_TR200_D5	19.22	179.98	182.16		182.36	0.003867	0.46	2.00	0.33	10.93	12.56	0.54
colli	30	Max WS	UF_TR200_D1	24.35	179.98	183.16		183.22	0.000688	0.45	1.21	0.35	28.99	20.64	0.25
colli	30	Max WS	UF_TR200_D2	23.17	179.98	183.15		183.20	0.000643	0.43	1.16	0.33	28.61	20.64	0.24
colli	30	Max WS	UF_TR200_D7	16.59	179.98	182.00		182.20	0.004630	0.31	2.01	0.25	8.89	12.07	0.58
colli	30	Max WS	UF_TR200_D3	24.34	179.98	182.83		182.93	0.001306	0.53	1.51	0.33	22.15	20.64	0.33
colli	25	Max WS	UF_TR200_D5	20.16	178.60	181.89	180.16	182.06	0.001054		1.82		11.08	5.76	0.32
colli	25	Max WS	UF_TR200_D1	40.57	178.60	182.69	181.07	183.13	0.002055		2.94		13.80	9.92	0.47
colli	25	Max WS	UF_TR200_D2	37.71	178.60	182.76	180.95	183.13	0.001669		2.68		14.05	10.47	0.42
colli	25	Max WS	UF_TR200_D7	16.47	178.60	181.79	179.97	181.91	0.000782		1.53		10.73	5.68	0.28
colli	25	Max WS	UF_TR200_D3	33.71	178.60	182.44	180.78	182.78	0.001749		2.60		12.96	8.10	0.43
colli	22.5			Bridge											
colli	20	Max WS	UF_TR200_D5	19.42	178.60	181.73		181.91	0.001149		1.84		10.56	5.63	0.33
colli	20	Max WS	UF_TR200_D1	40.54	178.60	181.77		182.50	0.004831		3.80		10.67	5.66	0.68
colli	20	Max WS	UF_TR200_D2	40.20	178.60	181.78		182.50	0.004662		3.75		10.73	5.68	0.67
colli	20	Max WS	UF_TR200_D7	16.36	178.60	181.69		181.81	0.000857		1.57		10.40	5.59	0.29
colli	20	Max WS	UF_TR200_D3	32.69	178.60	181.75		182.23	0.003212		3.08		10.60	5.64	0.56
colli	19			Lat Struct											
colli	18			Lat Struct											
colli	10	Max WS	UF_TR200_D5	19.51	177.74	181.75		181.80	0.000610	0.31	1.04	0.15	24.26	25.19	0.21
colli	10	Max WS	UF_TR200_D1	41.78	177.74	181.35		181.74	0.005655	0.69	2.81	0.25	16.55	13.08	0.61
colli	10	Max WS	UF_TR200_D2	37.10	177.74	181.57		181.80	0.003067	0.62	2.21	0.21	19.91	20.34	0.46
colli	10	Max WS	UF_TR200_D7	16.35	177.74	181.70		181.74	0.000471	0.26	0.90	0.12	22.91	23.94	0.18
colli	10	Max WS	UF_TR200_D3	32.63	177.74	181.74		181.88	0.001751	0.52	1.75	0.25	23.89	24.85	0.35
colli	5	Max WS	UF_TR200_D5	32.25	177.40	181.72		181.75	0.000282	0.19	0.87	0.29	57.62	45.37	0.17
colli	5	Max WS	UF_TR200_D1	38.71	177.40	180.99		181.13	0.001586	0.34	1.69	0.34	29.42	32.30	0.37
colli	5	Max WS	UF_TR200_D2	45.23	177.40	181.47		181.56	0.000858	0.27	1.43	0.42	46.65	41.72	0.29
colli	5	Max WS	UF_TR200_D7	35.17	177.40	181.64		181.68	0.000385	0.20	1.00	0.32	54.05	45.37	0.19
colli	5	Max WS	UF_TR200_D3	47.65	177.40	181.66		181.73	0.000679	0.27	1.33	0.43	55.10	45.37	0.26
colli	4	Max WS	UF_TR200_D5	32.08	176.70	181.71		181.74	0.000283	0.18	0.80	0.28	58.30	45.37	0.16
colli	4	Max WS	UF_TR200_D1	38.58	176.70	180.97		181.09	0.001741	0.32	1.58	0.34	29.73	32.26	0.37
colli	4	Max WS	UF_TR200_D2	45.20	176.70	181.47		181.54	0.000887	0.25	1.32	0.43	47.22	41.60	0.27
colli	4	Max WS	UF_TR200_D7	35.16	176.70	181.63		181.67	0.000393	0.19	0.92	0.32	54.72	45.37	0.18
colli	4	Max WS	UF_TR200_D3	47.55	176.70	181.65		181.72	0.000694	0.26	1.23	0.43	55.59	45.37	0.25
colli	3	Max WS	UF_TR200_D5	32.18	176.30	181.71		181.74	0.000219	0.16	0.74	0.25	61.94	45.37	0.14
colli	3	Max WS	UF_TR200_D1	39.37	176.30	180.99		181.08	0.001136	0.26	1.39	0.28	33.93	32.30	0.30
colli	3	Max WS	UF_TR200_D2	45.17	176.30	181.47		181.53	0.000646	0.21	1.20	0.36	50.99	41.64	0.23
colli	3	Max WS	UF_TR200_D7	35.16	176.30	181.63		181.67	0.000297	0.16	0.85	0.28	58.38	45.37	0.16
colli	3	Max WS	UF_TR200_D3	47.47	176.30	181.65		181.71	0.000526	0.23	1.13	0.37	59.23	45.37	0.21

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FIUME ELSA

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ProGeo Engineering S.r.l.
via Don Luigi Sturzo, 43/A - 52100 - Arezzo
tel. 0575 324114 - fax. 0575 406473 - email: info@progeo.arezzo.it

ALLEGATI

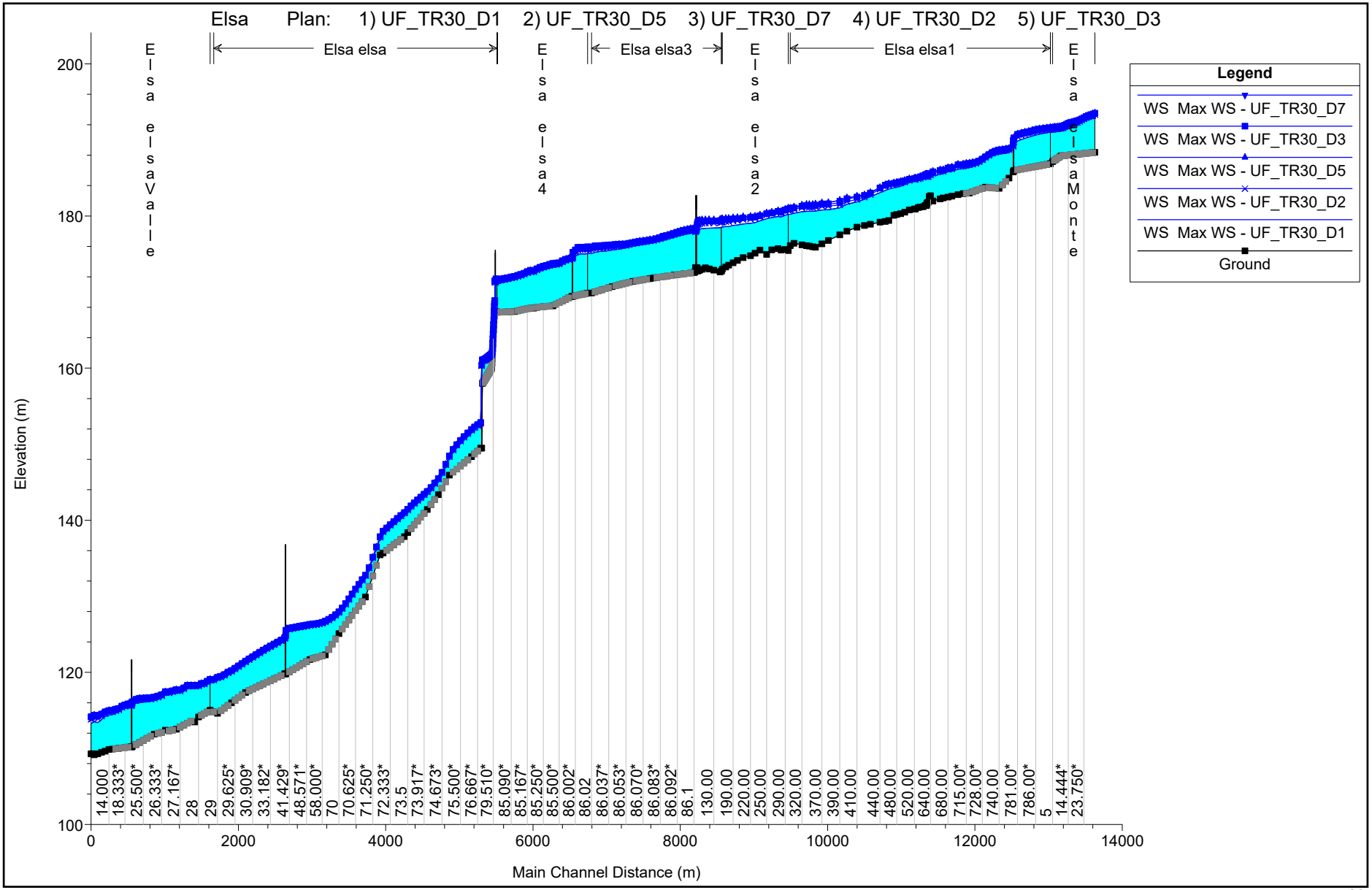
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FIUME ELSA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
Elsa elsa
Elsa elsa3
Elsa elsa1
Elsa elsaValle
Elsa elsa4
Elsa elsa2
Elsa elsaMonte
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
200
180
160
140
120
100
0
2000
4000
6000
8000
10000
12000
14000
14.000
18.333*
25.500*
26.333*
27.167*
28
29
29.625*
30.909*
33.182*
41.429*
48.571*
58.000*
70
70.625*
71.250*
72.333*
73.5
73.917*
74.673*
75.500*
76.667*
79.510*
85.090*
85.167*
85.250*
85.500*
86.002*
86.02
86.037*
86.053*
86.070*
86.083*
86.092*
86.1
130.00
190.00
220.00
250.00
290.00
320.00
370.00
390.00
410.00
440.00
480.00
520.00
640.00
680.00
715.00*
728.00*
740.00
781.00*
786.00*
5
14.444*
23.750*

ALLEGATI

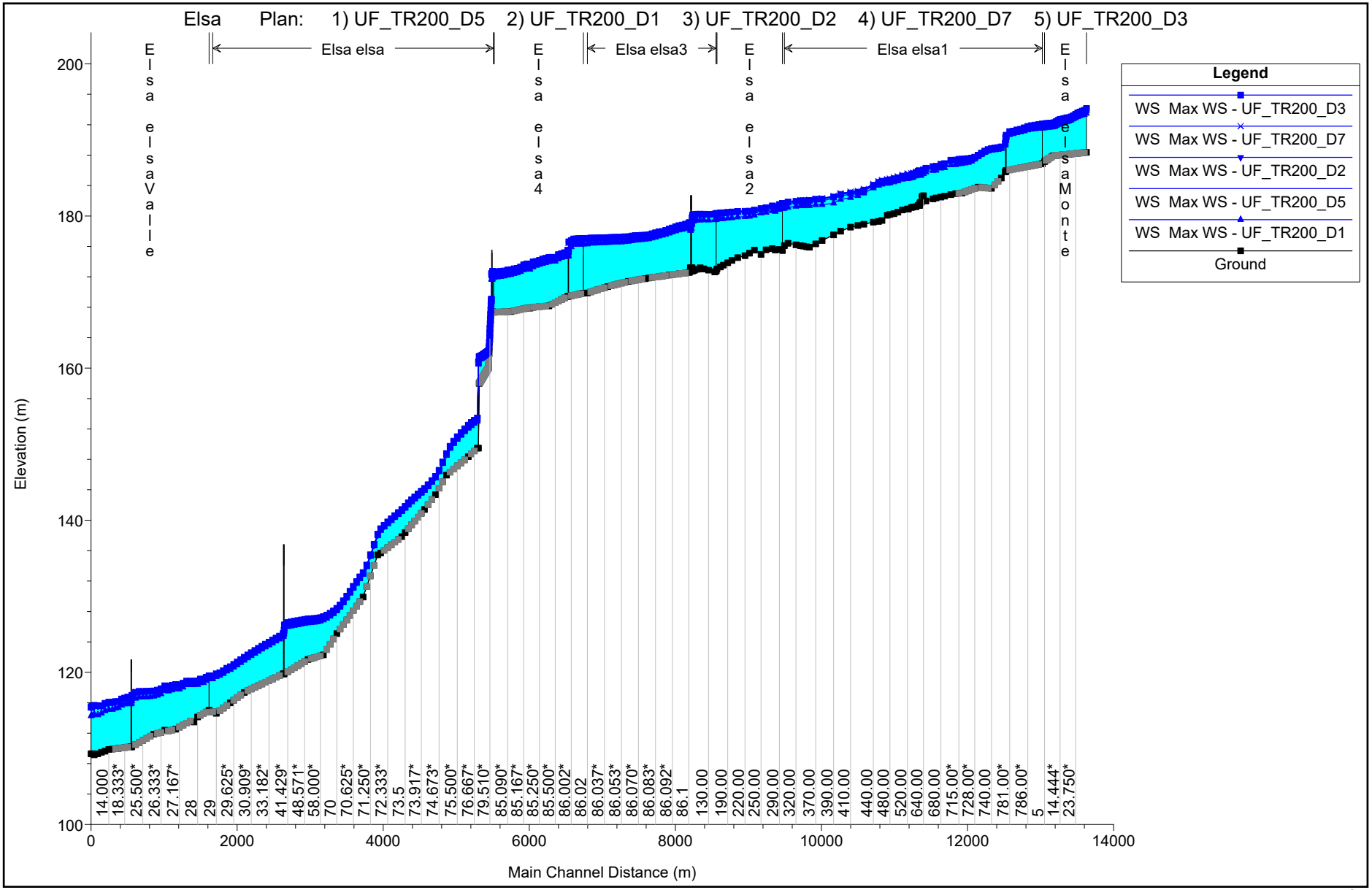
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FIUME ELSA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
Elsa elsa
Elsa elsa3
Elsa elsa1
Elsa elsaValle
Elsa elsa4
Elsa elsa2
Elsa elsaMonte
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
Main Channel Distance (m)
100
120
140
160
180
200
0
2000
4000
6000
8000
10000
12000
14000
14.000
18.333*
25.500*
26.333*
27.167*
28
29
29.625*
30.909*
33.182*
41.429*
48.571*
58.000*
70
70.625*
71.250*
72.333*
73.5
73.917*
74.673*
75.500*
76.667*
79.510*
85.090*
85.167*
85.250*
85.500*
86.002*
86.02
86.037*
86.053*
86.070*
86.083*
86.092*
86.1
130.00
190.00
220.00
250.00
290.00
320.00
370.00
390.00
410.00
440.00
480.00
520.00
640.00
680.00
715.00*
728.00*
740.00
781.00*
786.00*
5
14.444*
23.750*

ALLEGATI

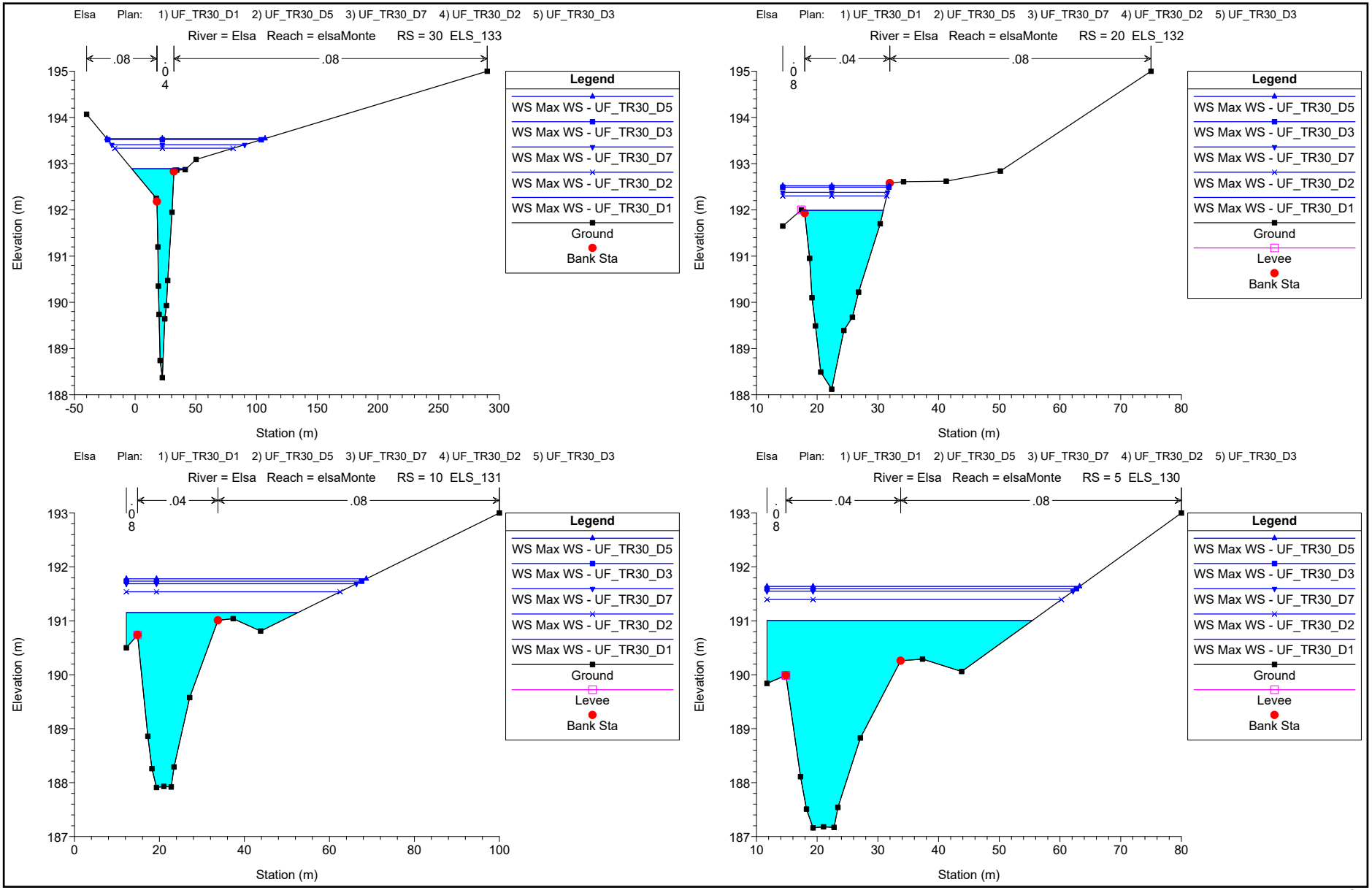
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

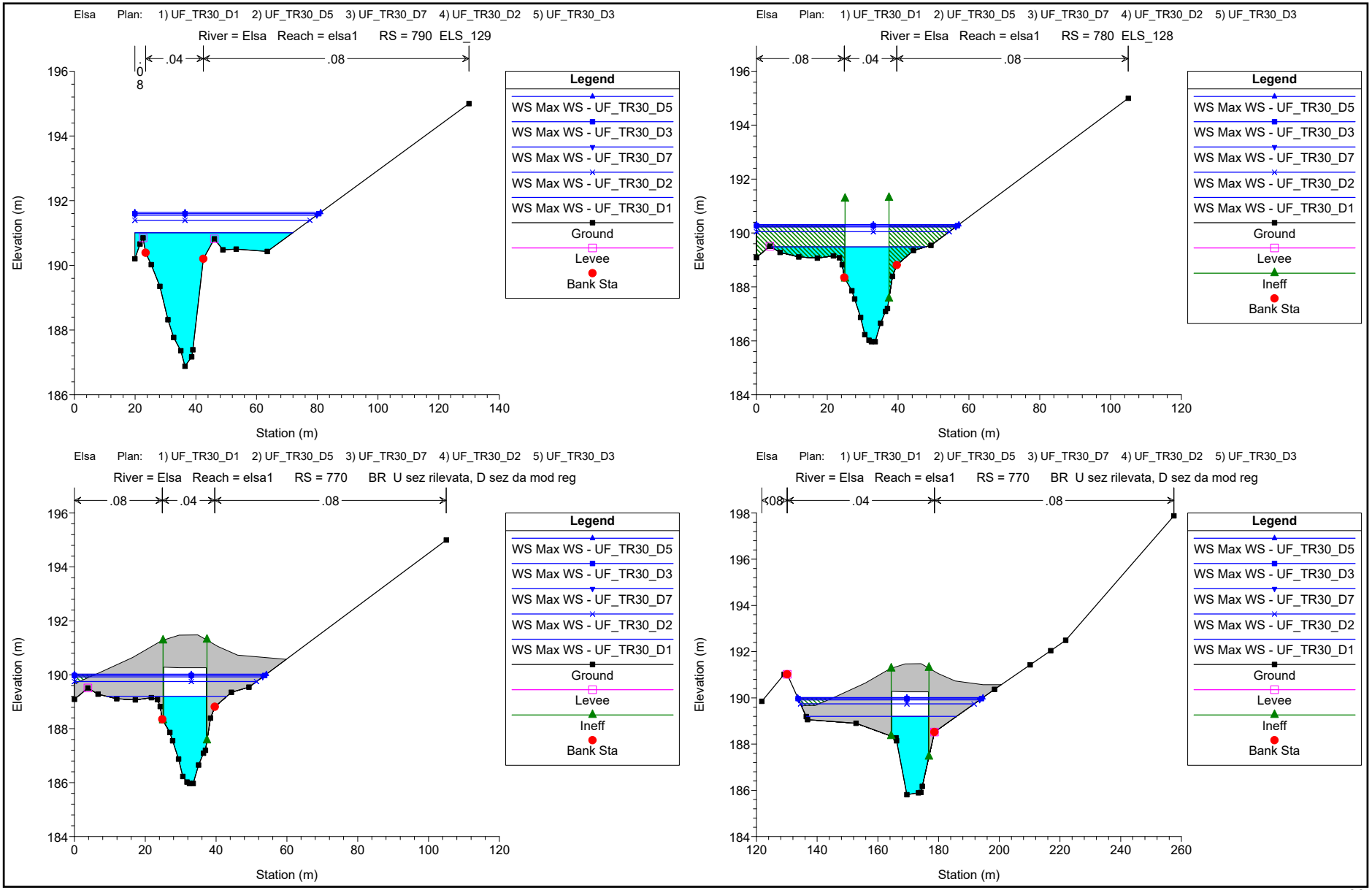
FIUME ELSA

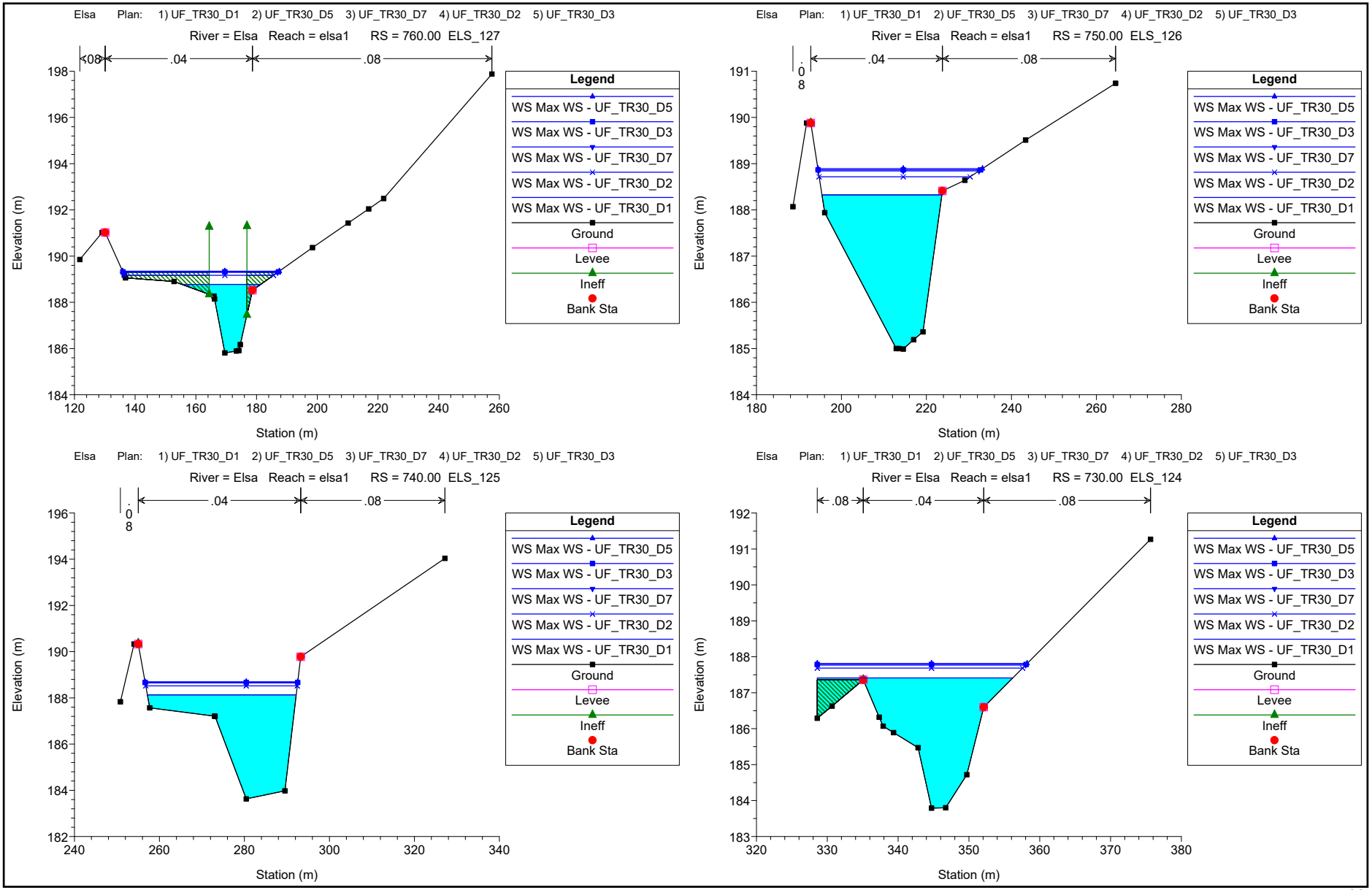
MODELLAZIONE PER TR=30 anni

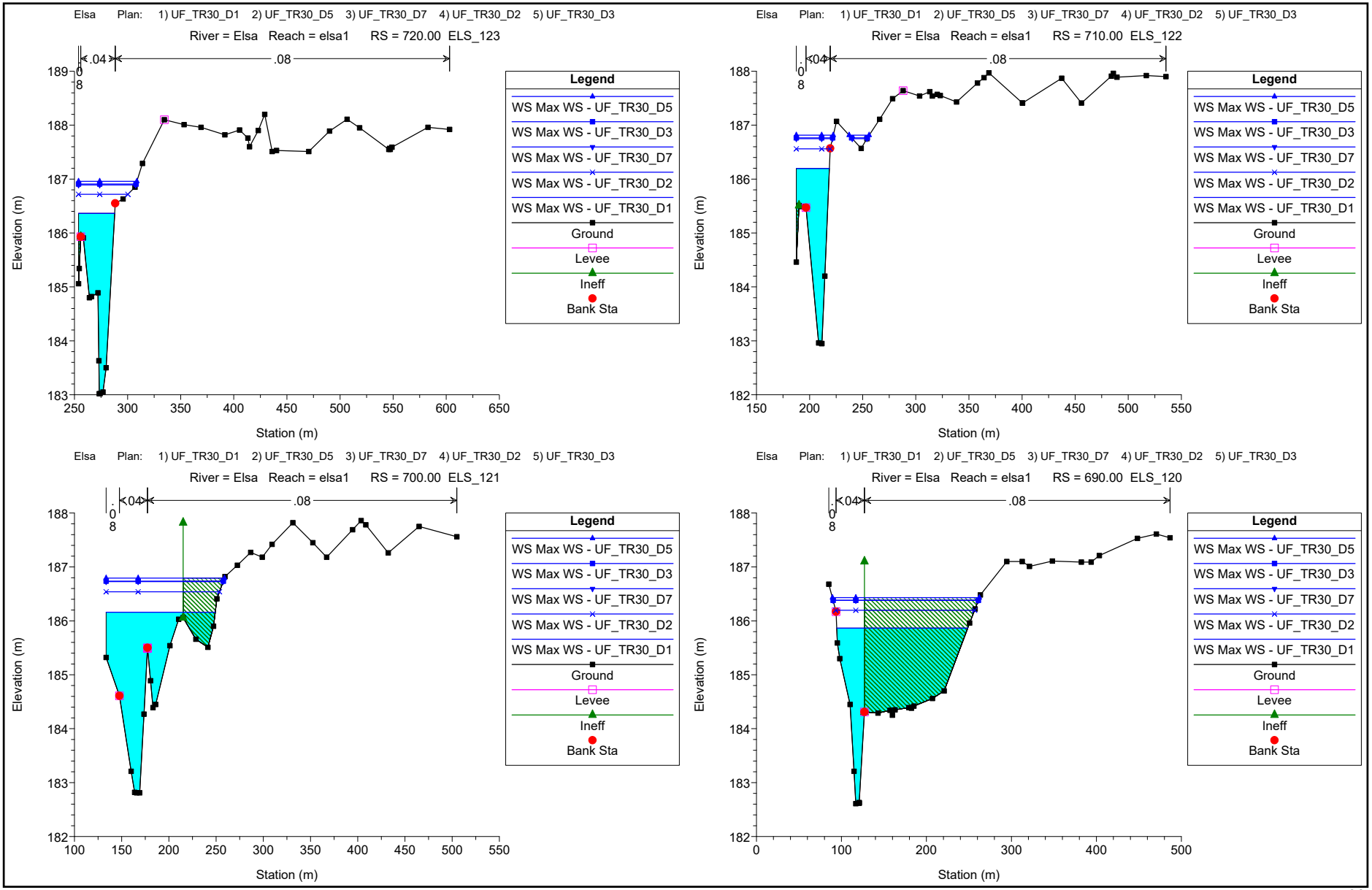
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

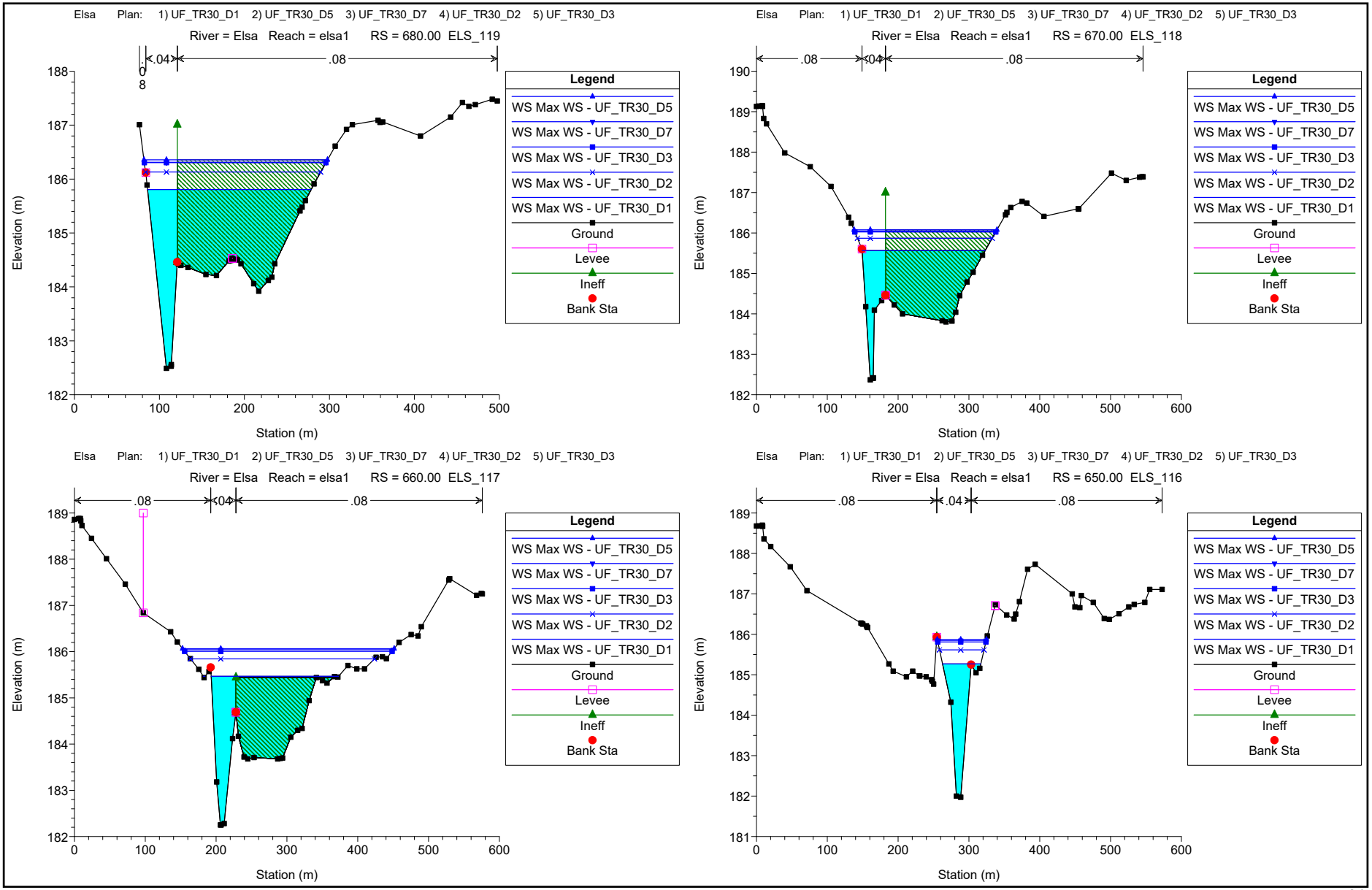
Sezioni Trasversali (da monte verso valle)

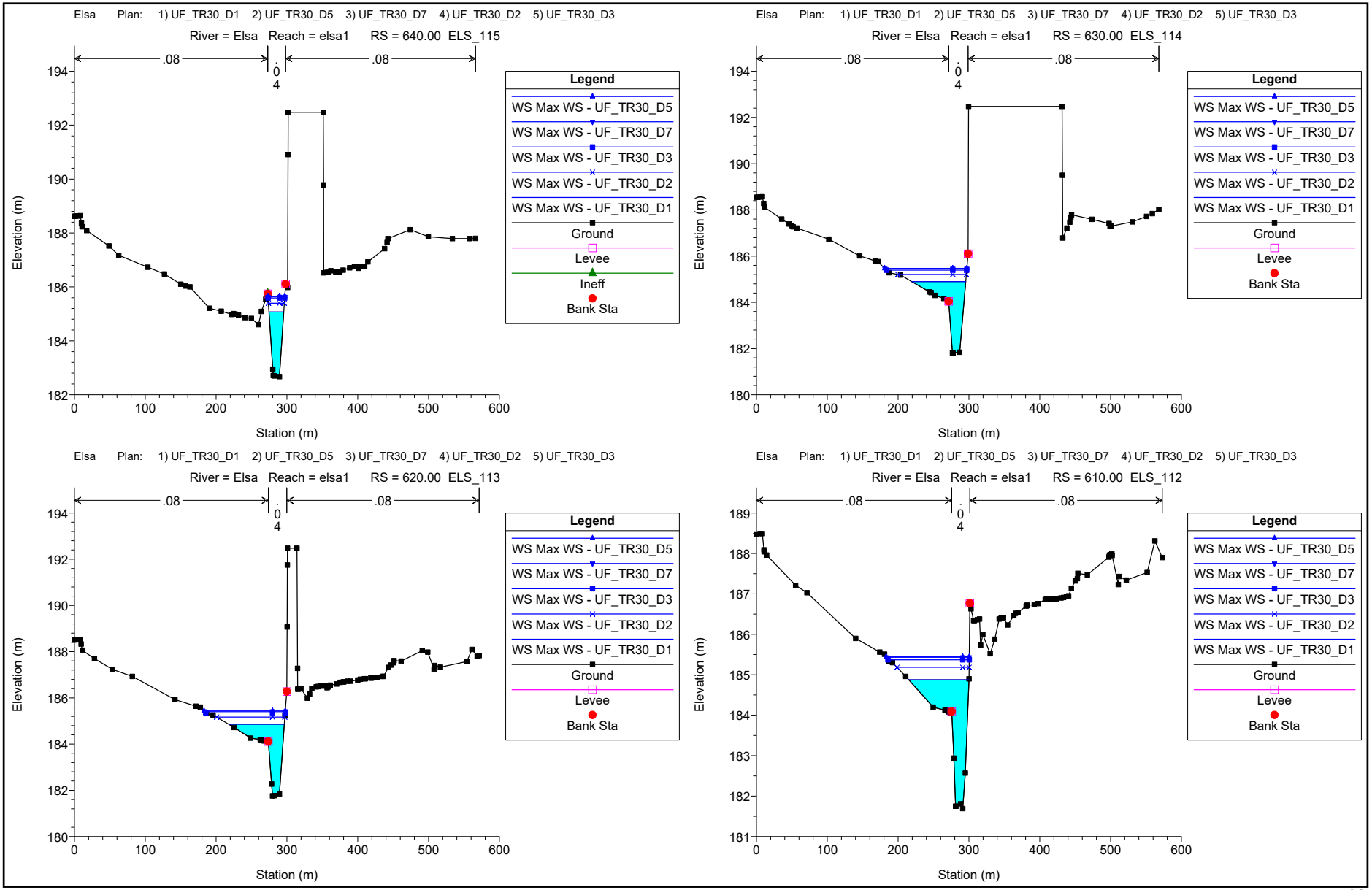

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaMonte RS = 30 ELS_133
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaMonte RS = 20 ELS_132
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaMonte RS = 10 ELS_131
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaMonte RS = 5 ELS_130
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

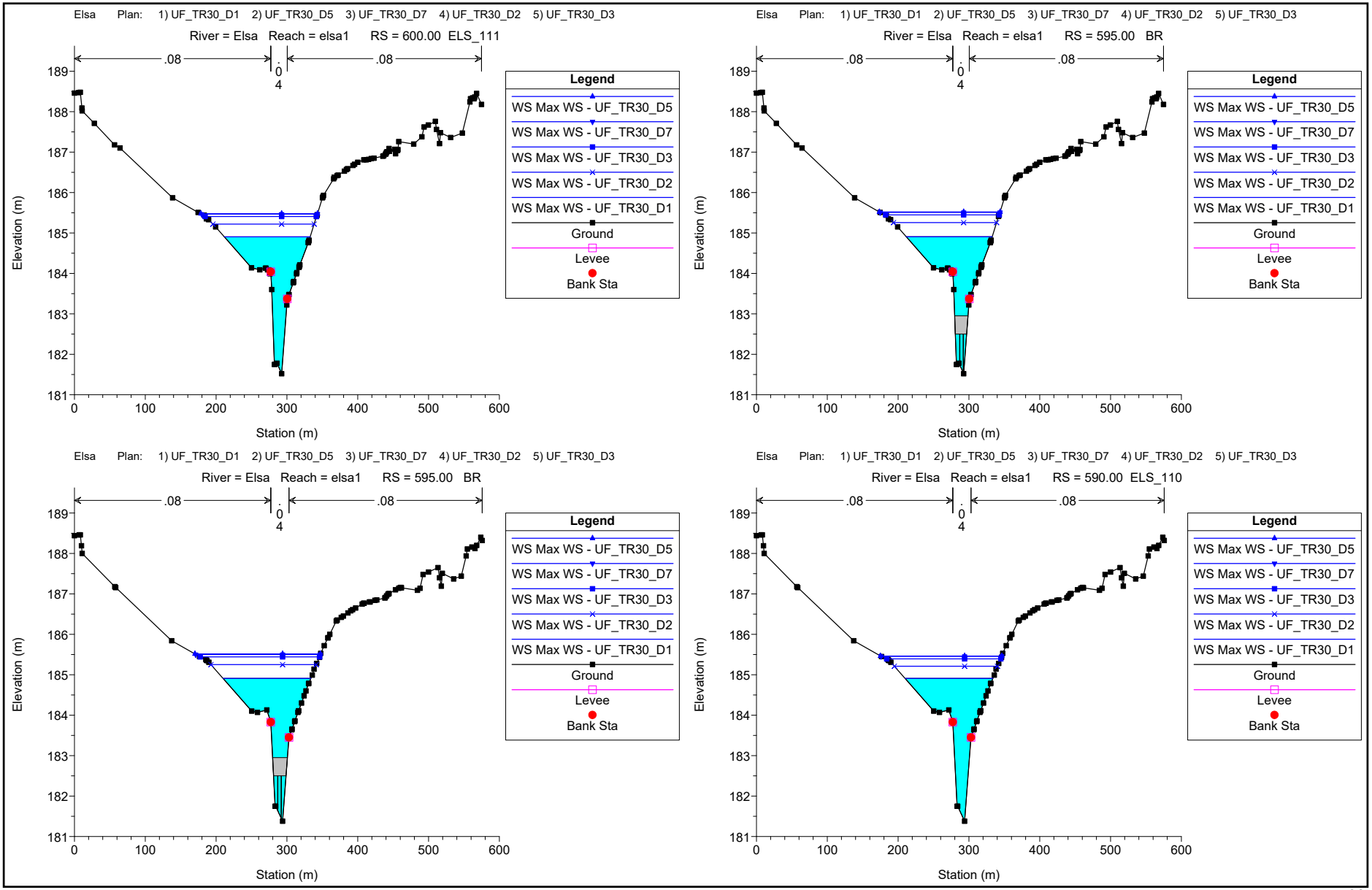

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 790 ELS_129
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 780 ELS_128
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 770 BR U sez rilevata, D sez da mod reg
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 770 BR U sez rilevata, D sez da mod reg
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

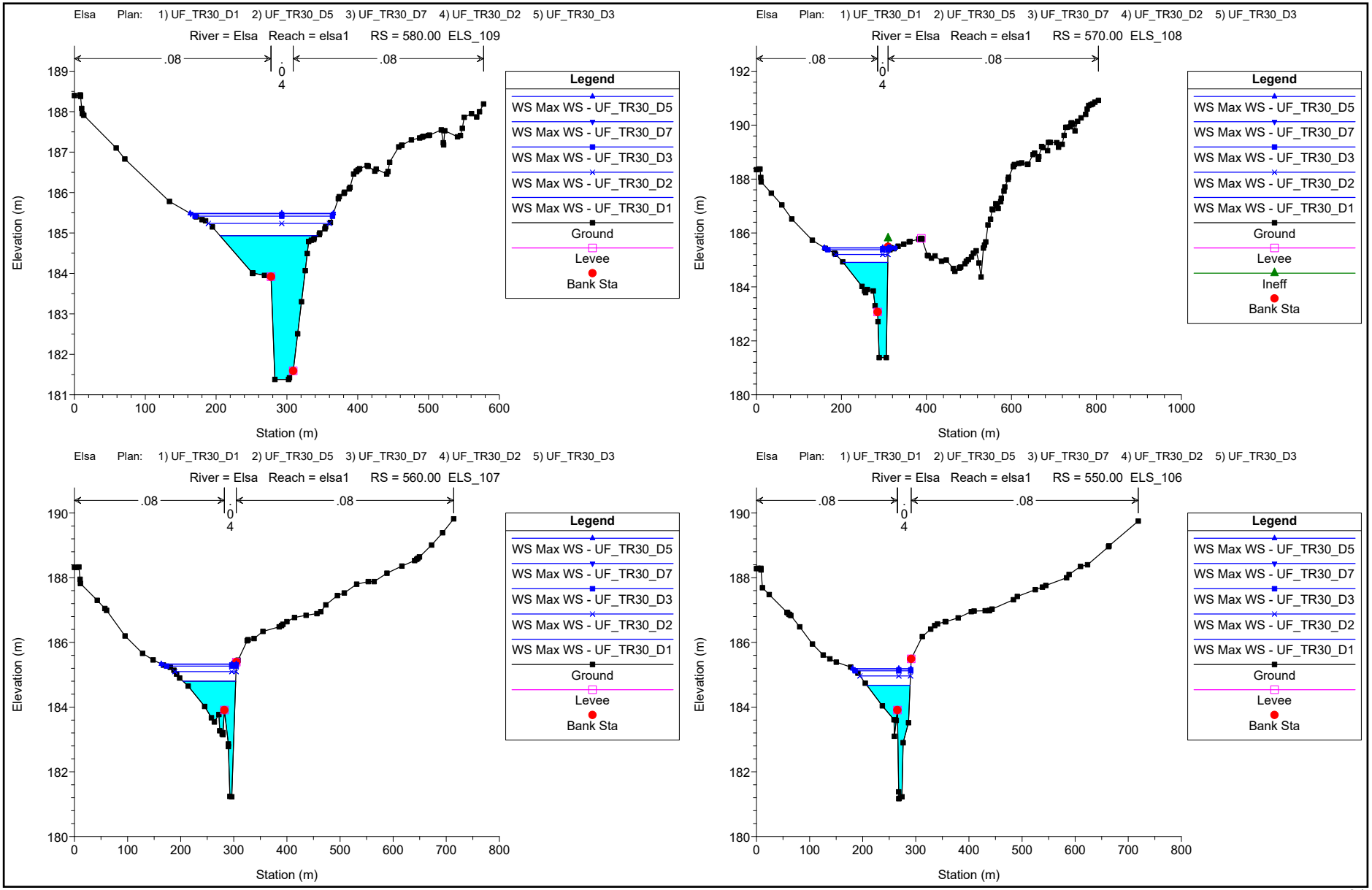

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 760.00 ELS_127
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 750.00 ELS_126
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 740.00 ELS_125
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 730.00 ELS_124
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

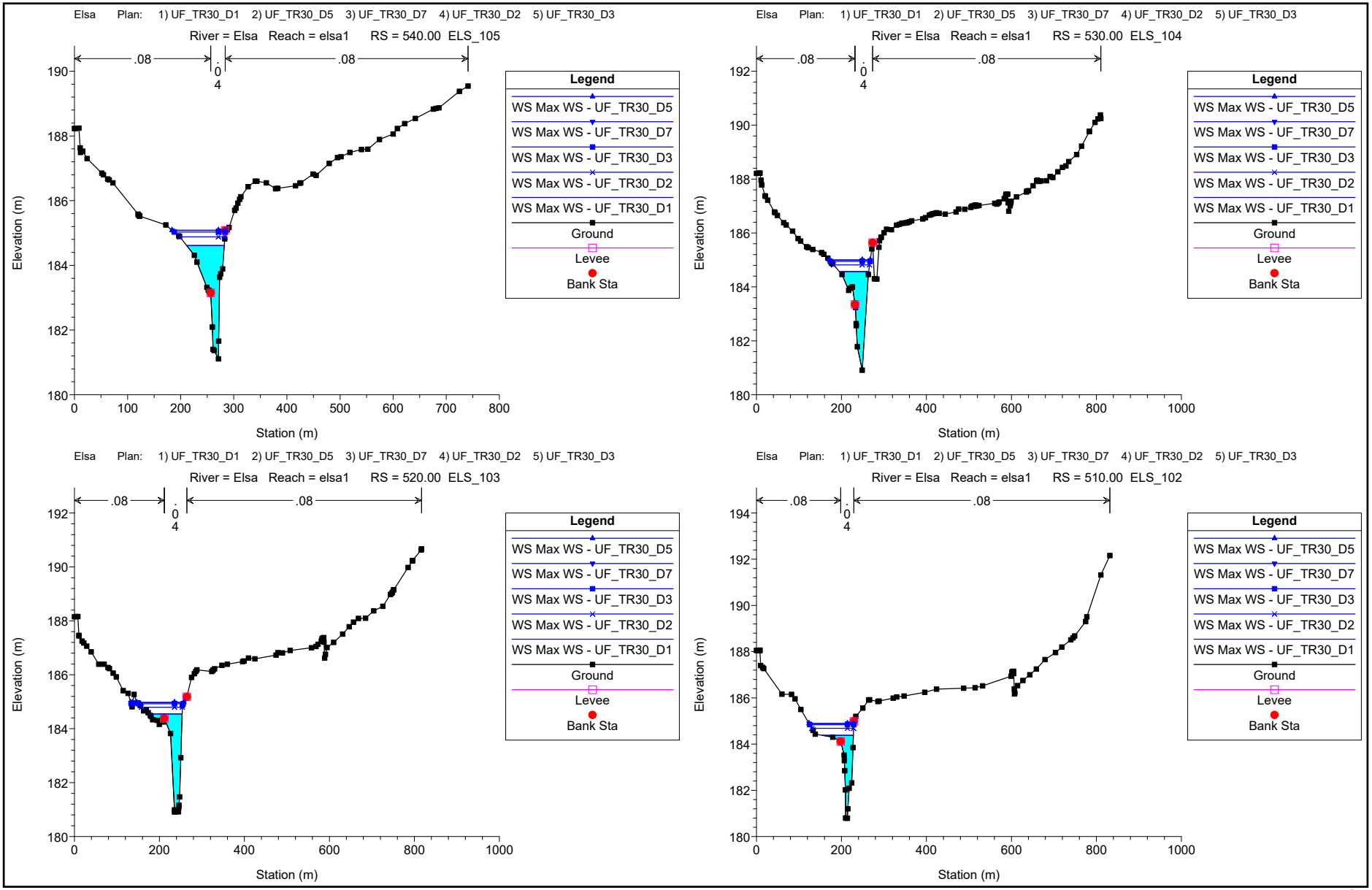

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 720.00 ELS_123
River = Elsa Reach = elsa1 RS = 710.00 ELS_122
River = Elsa Reach = elsa1 RS = 700.00 ELS_121
River = Elsa Reach = elsa1 RS = 690.00 ELS_120
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

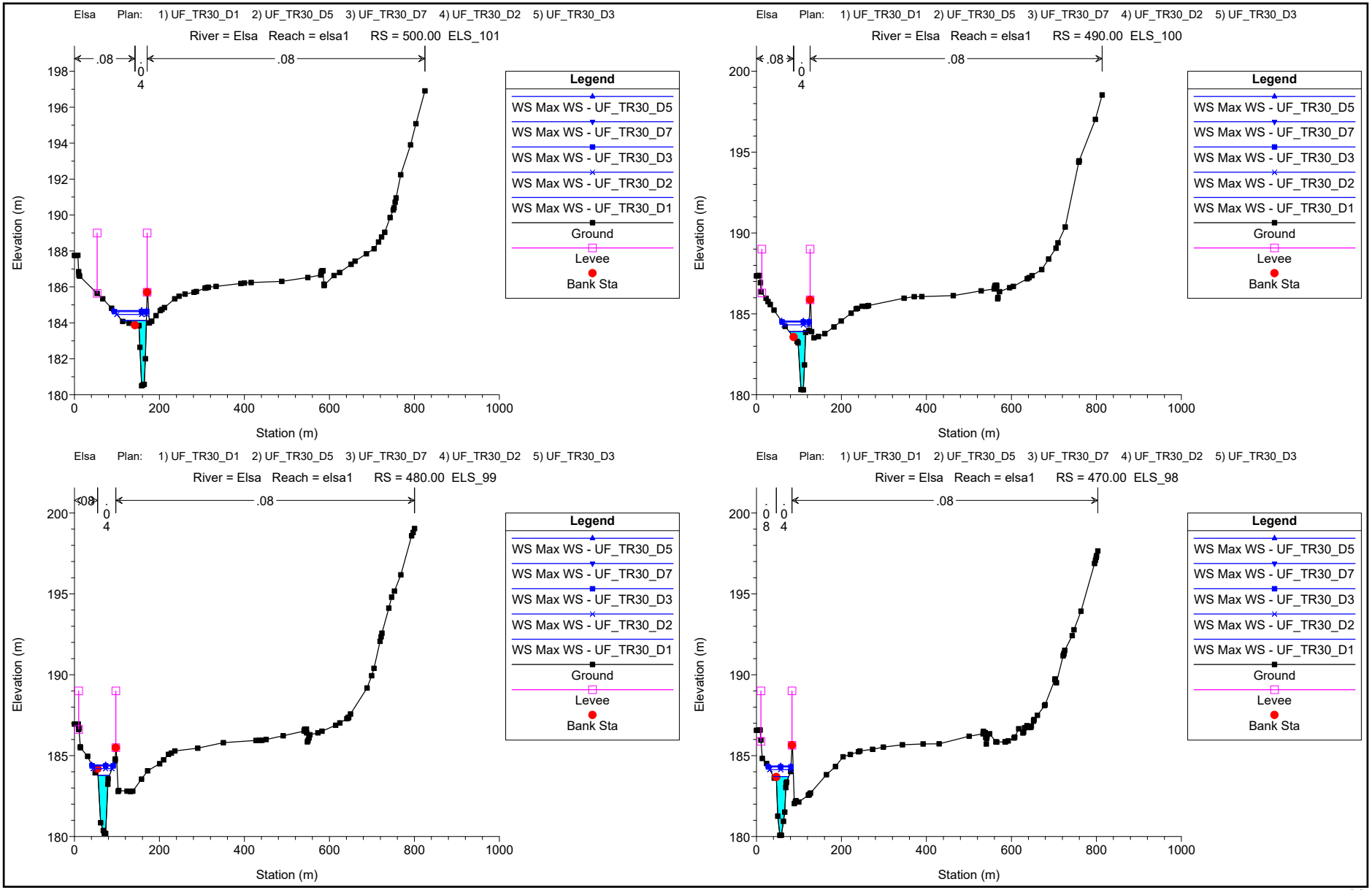

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 680.00 ELS_119
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 670.00 ELS_118
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 660.00 ELS_117
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 650.00 ELS_116
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

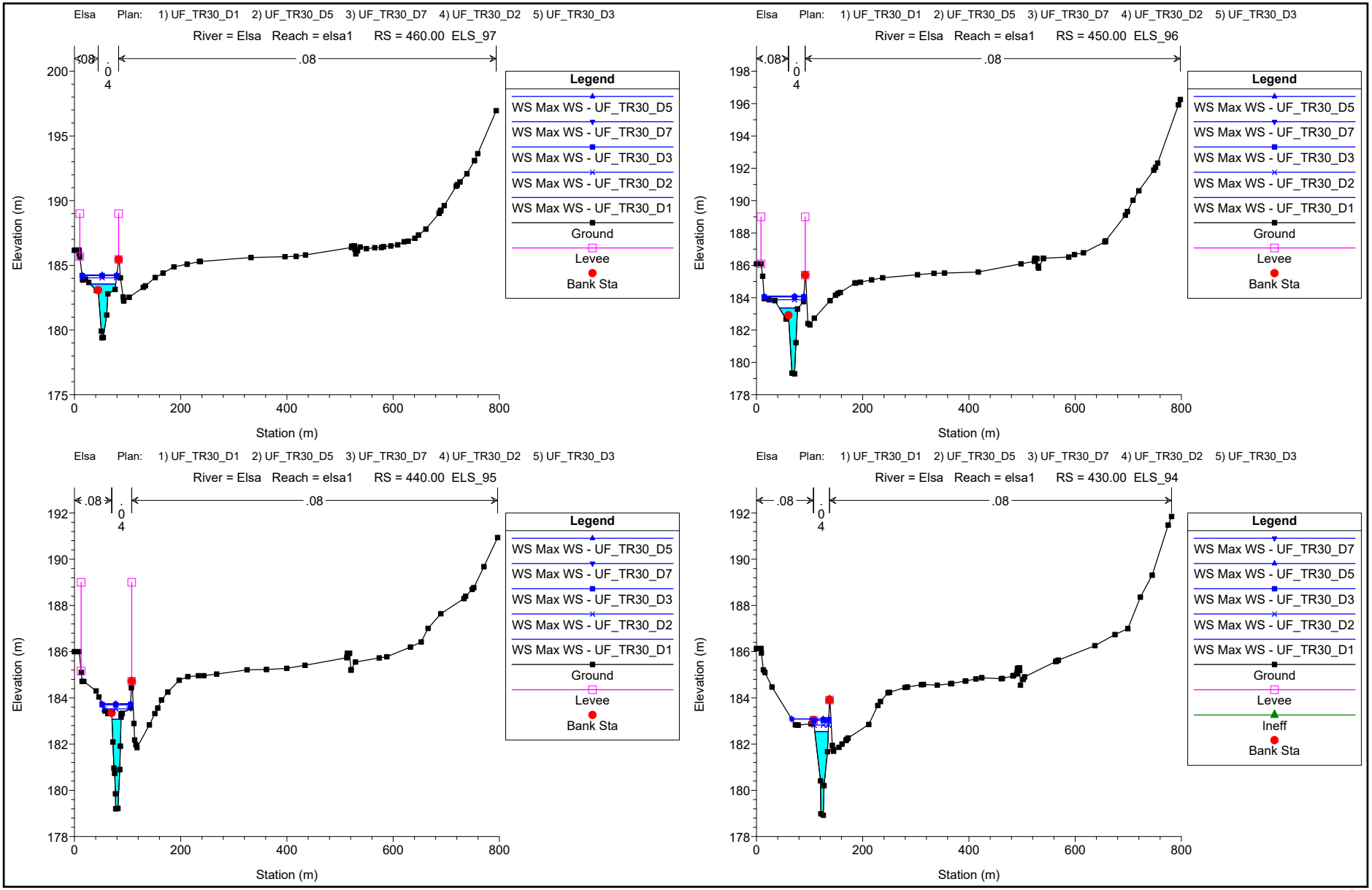

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 640.00 ELS_115
River = Elsa Reach = elsa1 RS = 630.00 ELS_114
River = Elsa Reach = elsa1 RS = 620.00 ELS_113
River = Elsa Reach = elsa1 RS = 610.00 ELS_112
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

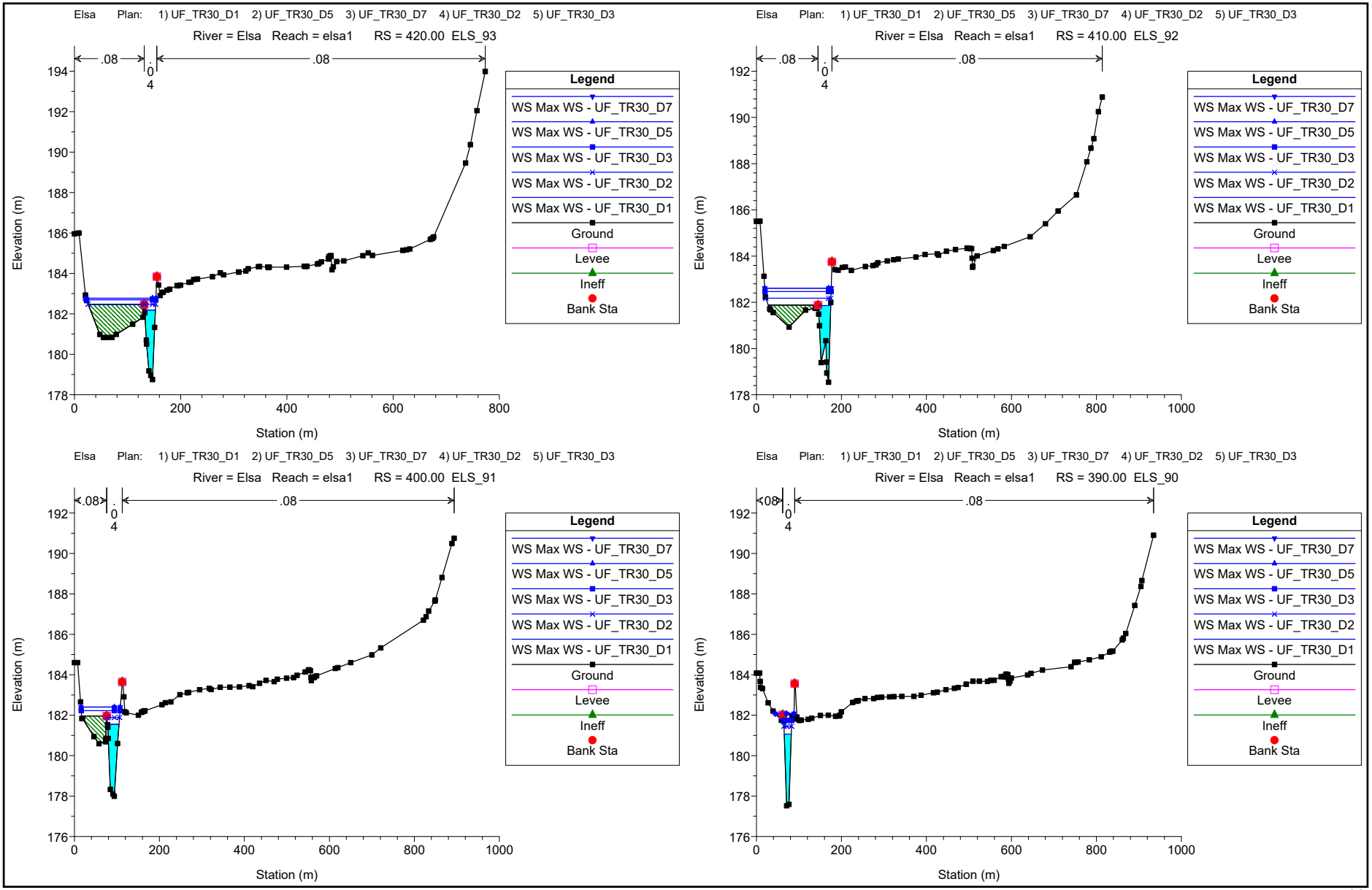

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 600.00 ELS_111
River = Elsa Reach = elsa1 RS = 595.00 BR
River = Elsa Reach = elsa1 RS = 595.00 BR
River = Elsa Reach = elsa1 RS = 590.00 ELS_110
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

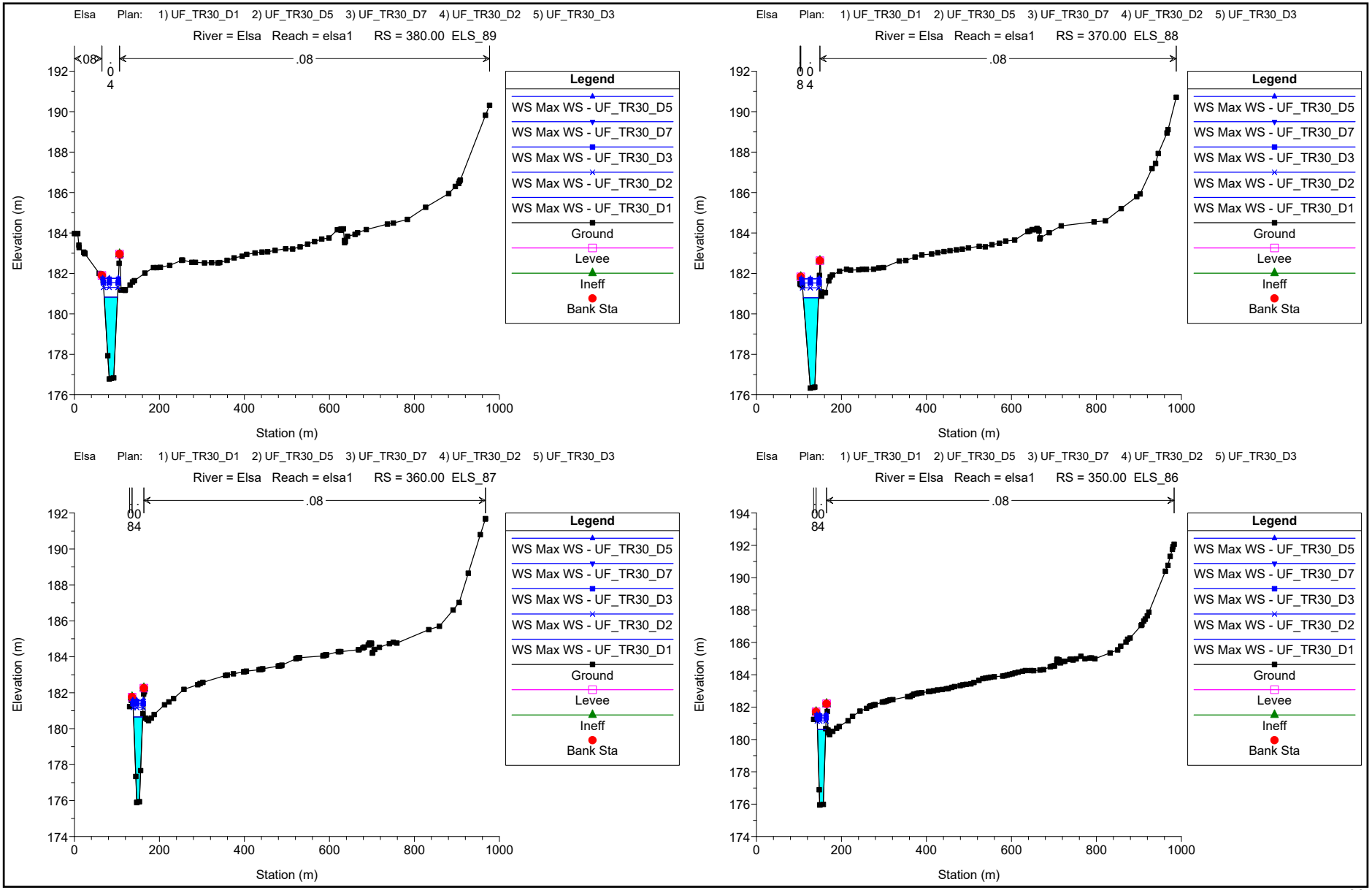

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 580.00 ELS_109
River = Elsa Reach = elsa1 RS = 570.00 ELS_108
River = Elsa Reach = elsa1 RS = 560.00 ELS_107
River = Elsa Reach = elsa1 RS = 550.00 ELS_106
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

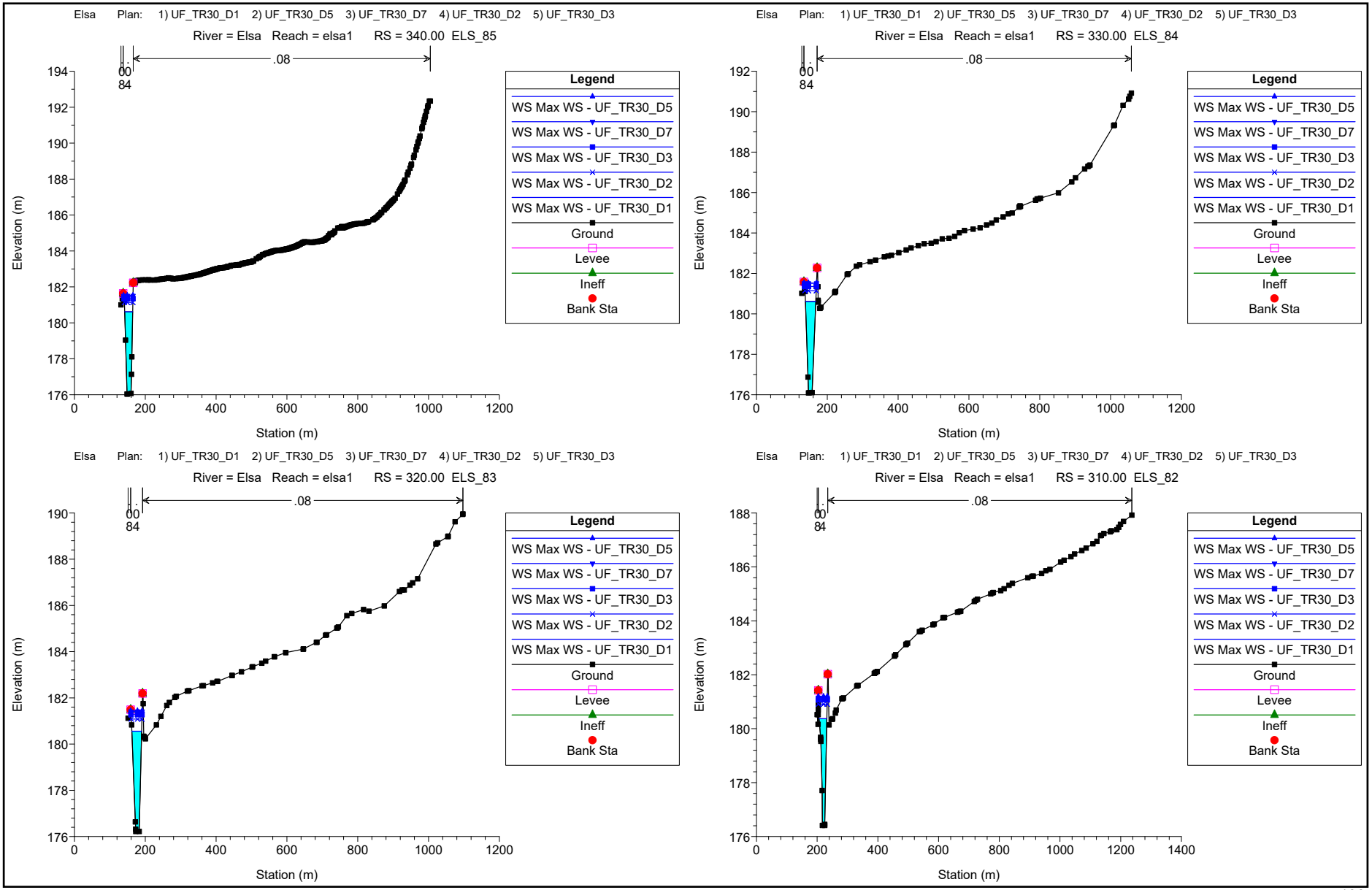

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 540.00 ELS_105
River = Elsa Reach = elsa1 RS = 530.00 ELS_104
River = Elsa Reach = elsa1 RS = 520.00 ELS_103
River = Elsa Reach = elsa1 RS = 510.00 ELS_102
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

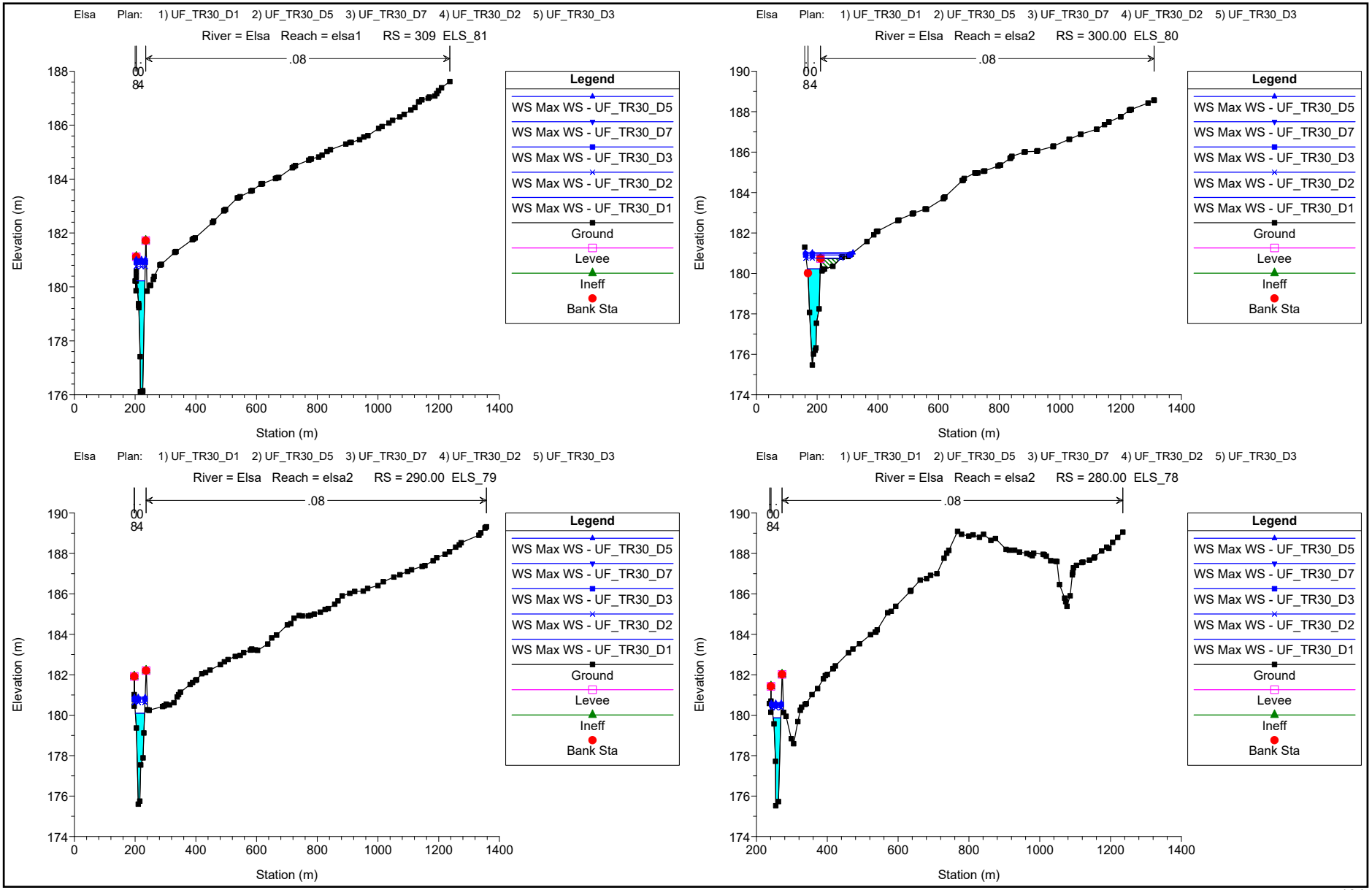

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 500.00 ELS_101
River = Elsa Reach = elsa1 RS = 490.00 ELS_100
River = Elsa Reach = elsa1 RS = 480.00 ELS_99
River = Elsa Reach = elsa1 RS = 470.00 ELS_98
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

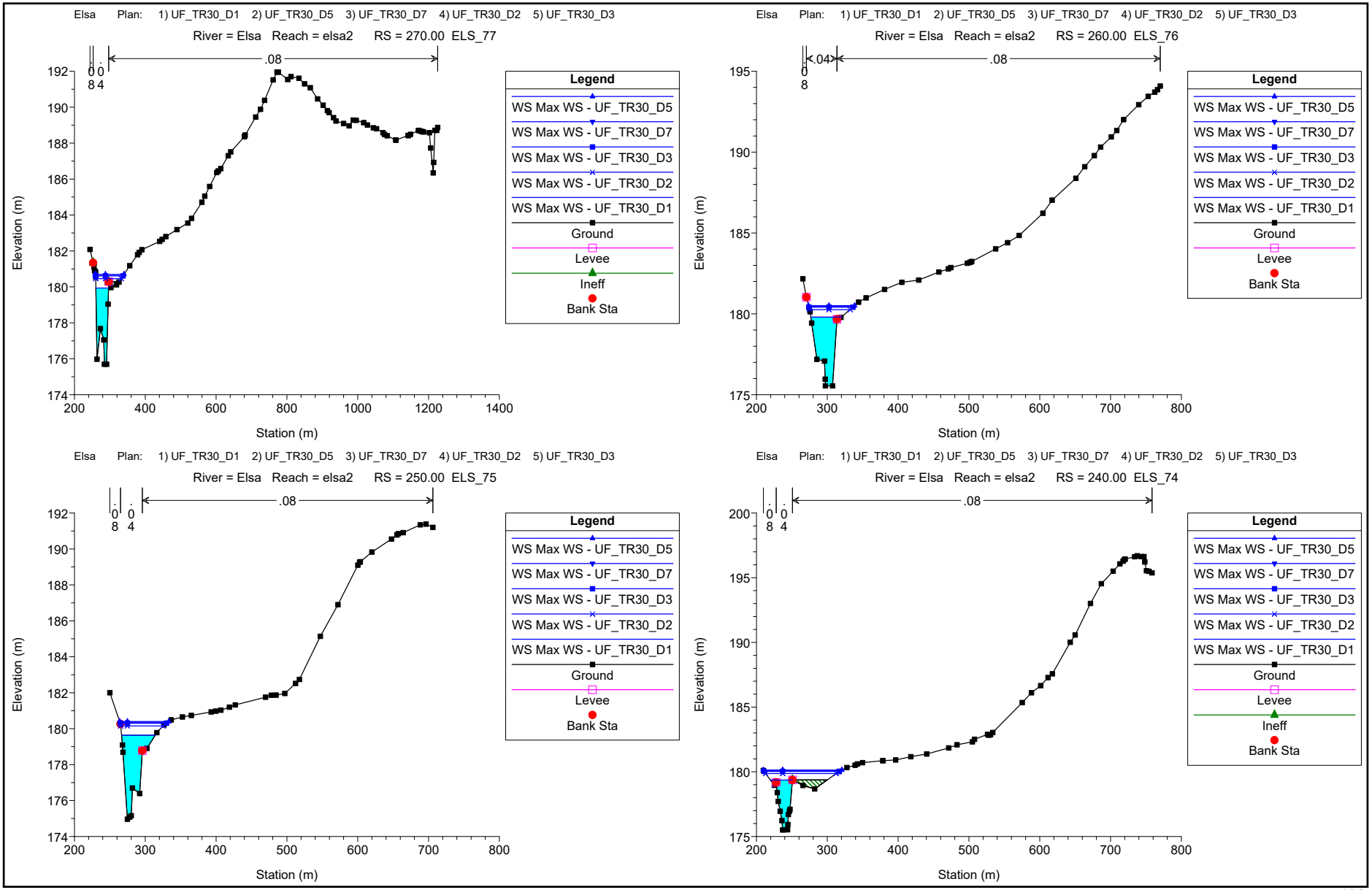

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 460.00 ELS_97
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 450.00 ELS_96
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 440.00 ELS_95
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 430.00 ELS_94
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

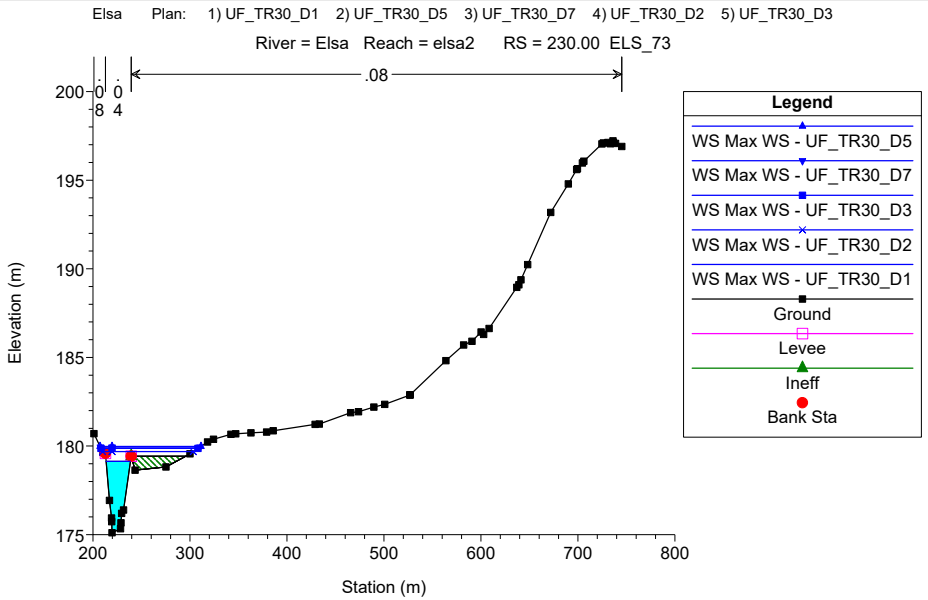

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 420.00 ELS_93
River = Elsa Reach = elsa1 RS = 410.00 ELS_92
River = Elsa Reach = elsa1 RS = 400.00 ELS_91
River = Elsa Reach = elsa1 RS = 390.00 ELS_90
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

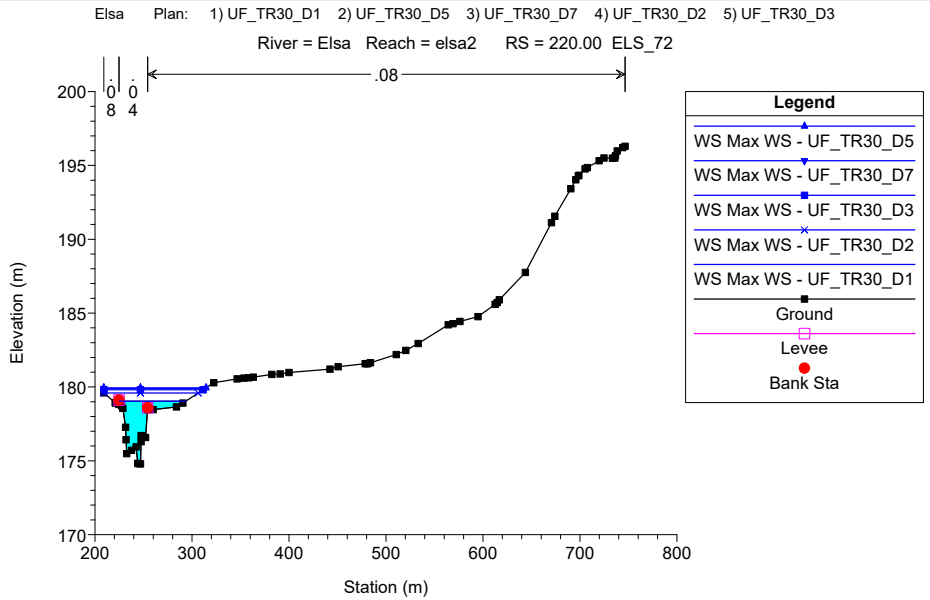

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 380.00 ELS_89
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 370.00 ELS_88
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 360.00 ELS_87
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 350.00 ELS_86
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

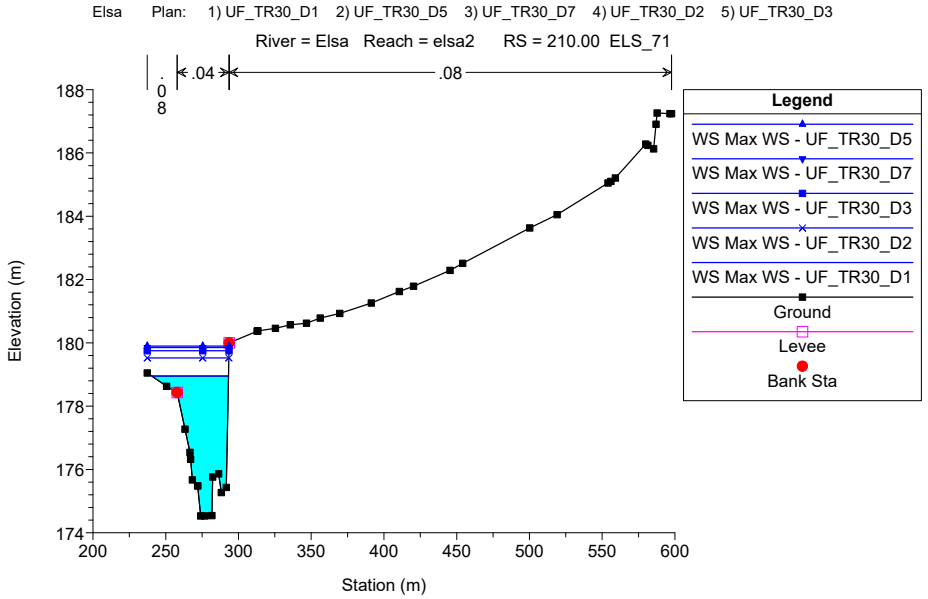

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 340.00 ELS_85
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 330.00 ELS_84
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 320.00 ELS_83
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 310.00 ELS_82
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

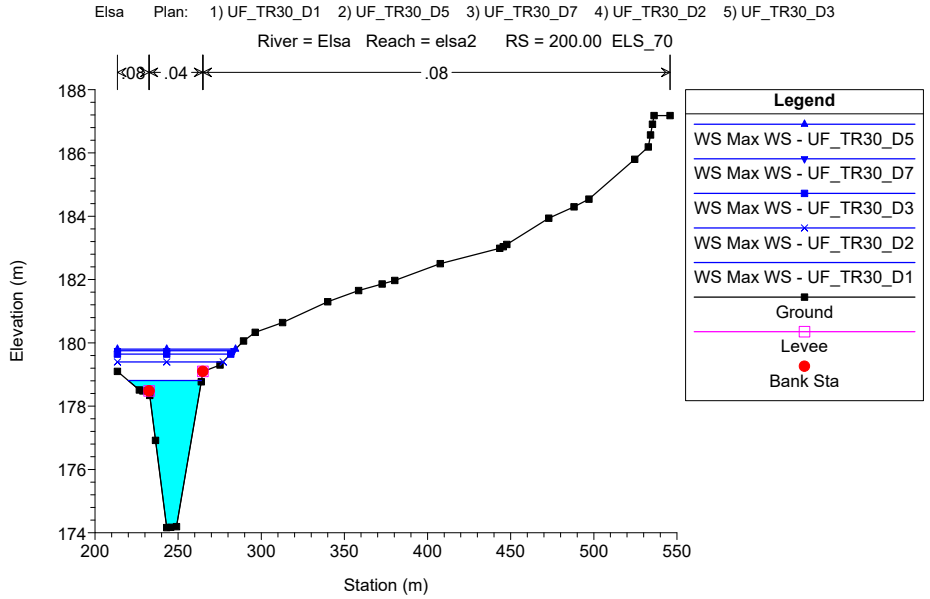

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa1 RS = 309 ELS_81
River = Elsa Reach = elsa2 RS = 300.00 ELS_80
River = Elsa Reach = elsa2 RS = 290.00 ELS_79
River = Elsa Reach = elsa2 RS = 280.00 ELS_78
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

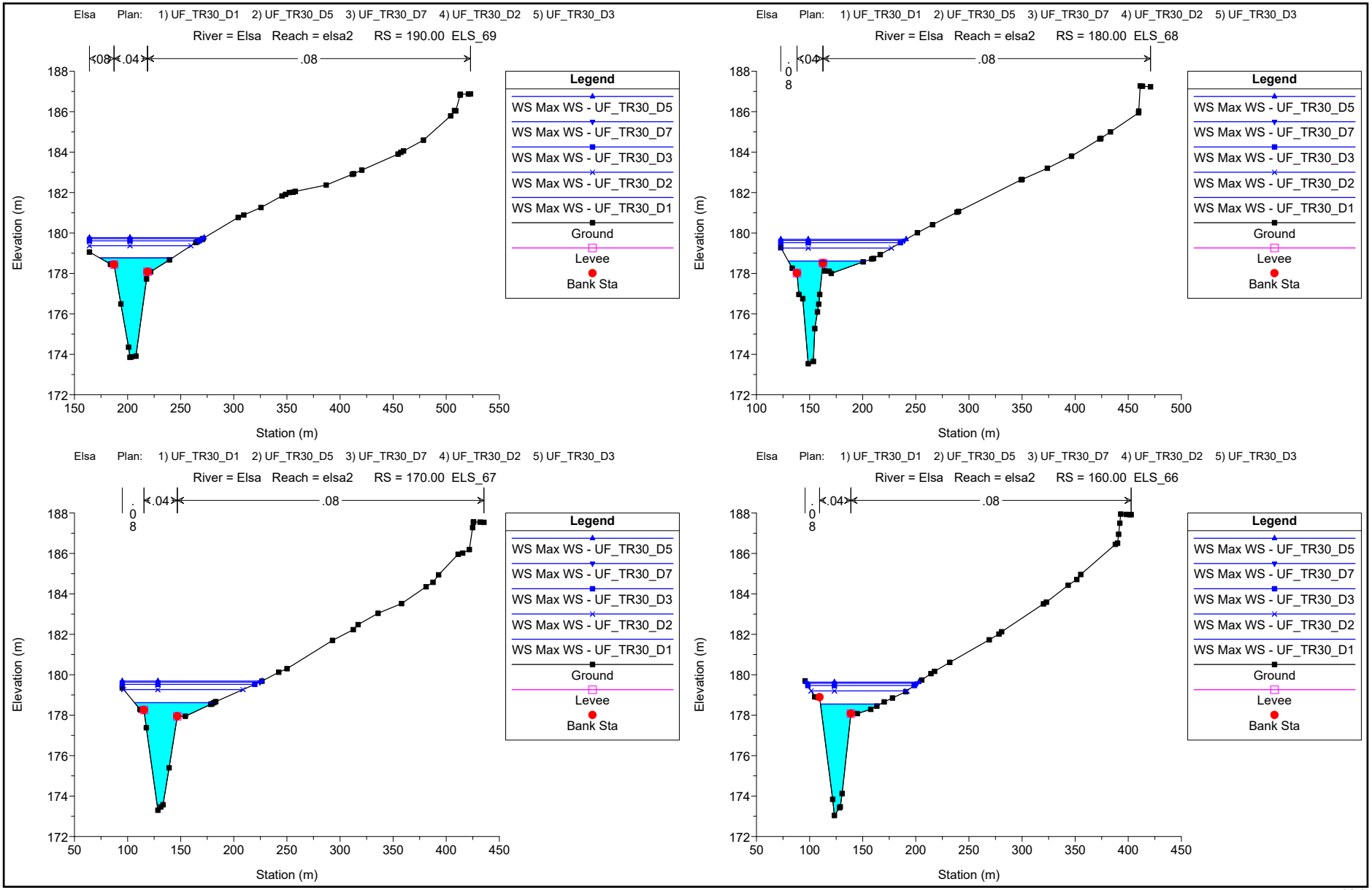

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 270.00 ELS_77
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 260.00 ELS_76
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 250.00 ELS_75
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 240.00 ELS_74
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

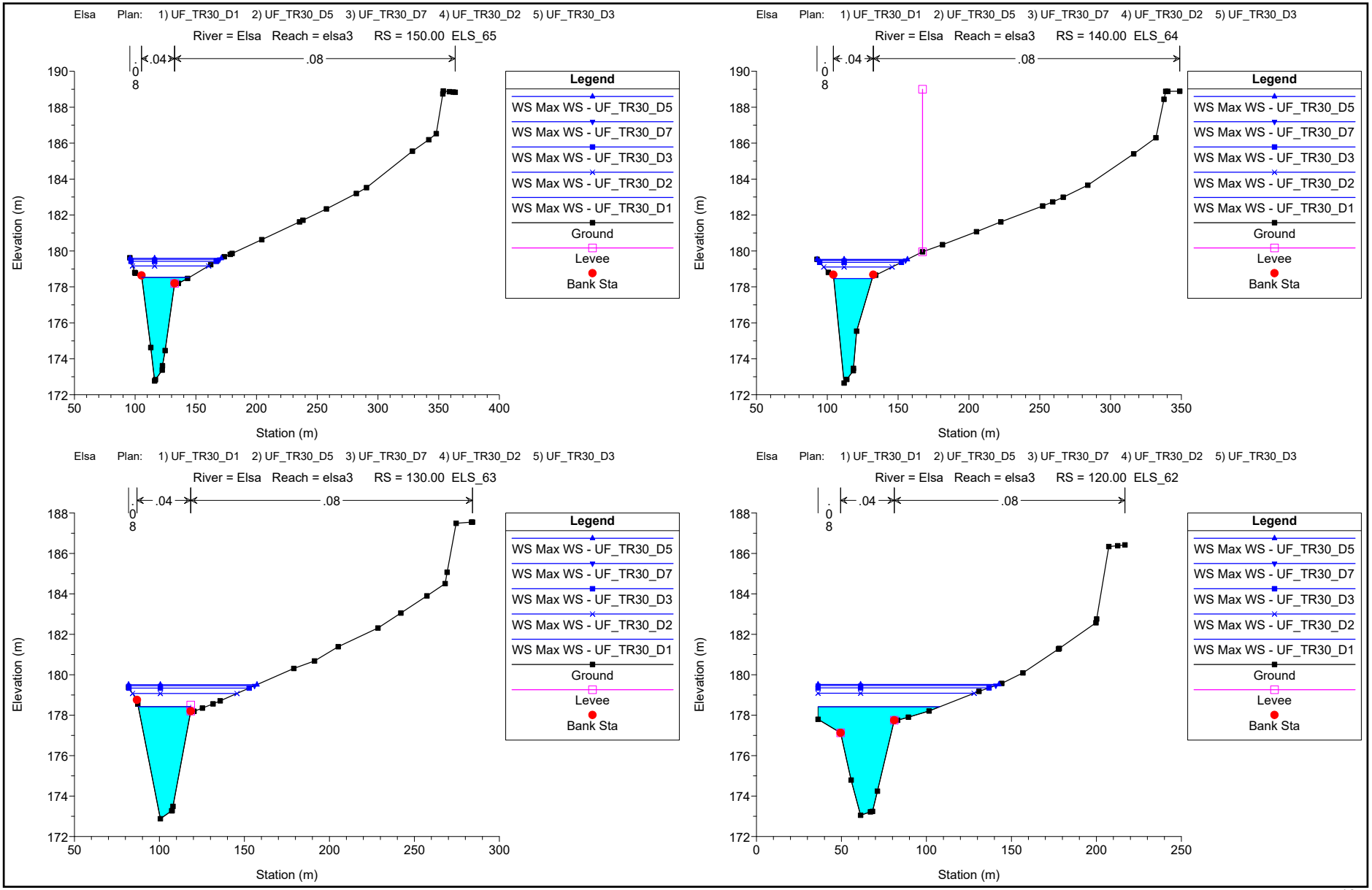

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 230.00 ELS_73
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

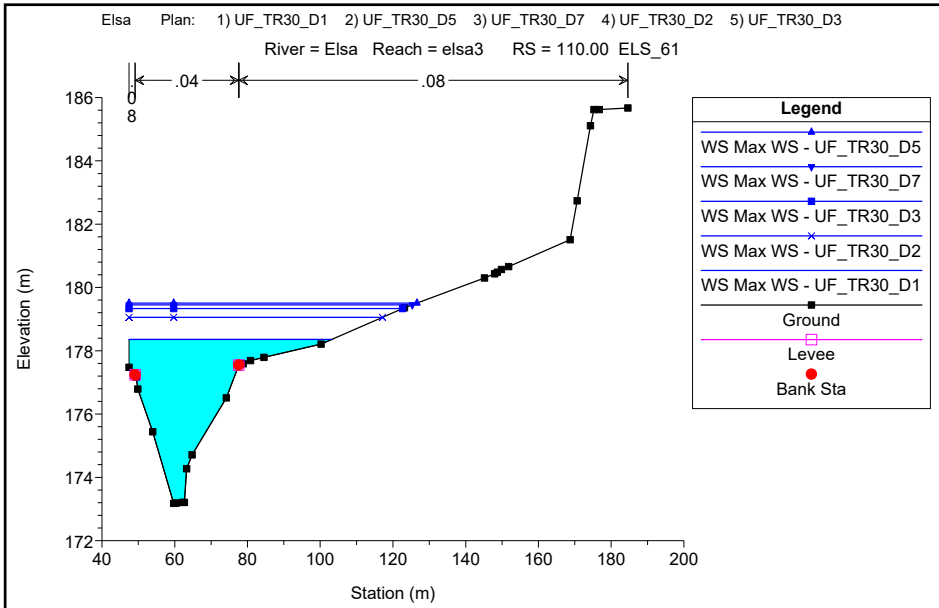

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 220.00 ELS_72
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 210.00 ELS_71
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 200.00 ELS_70
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 190.00 ELS_69
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 180.00 ELS_68
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 170.00 ELS_67
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa2 RS = 160.00 ELS_66
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 150.00 ELS_65
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 140.00 ELS_64
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 130.00 ELS_63
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 120.00 ELS_62
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta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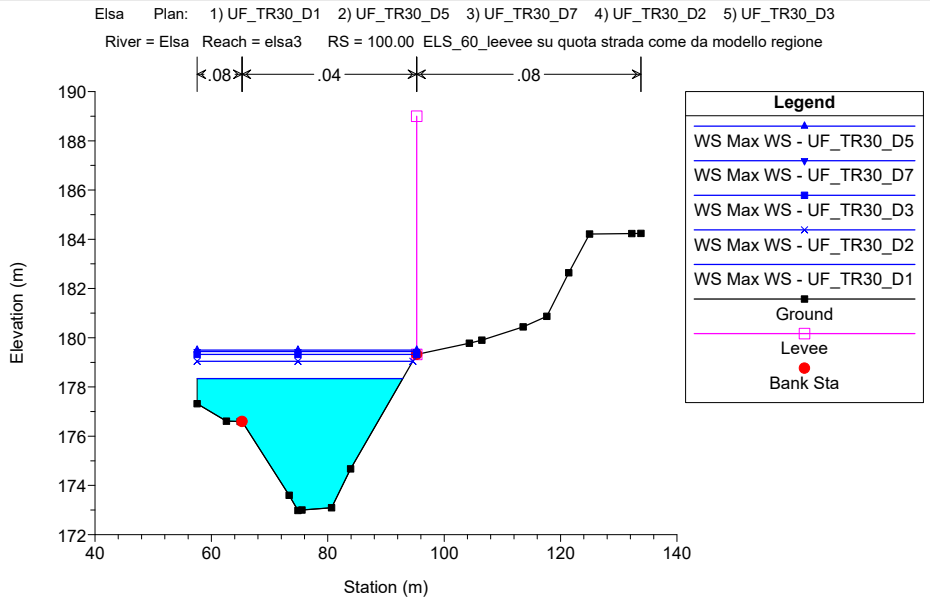
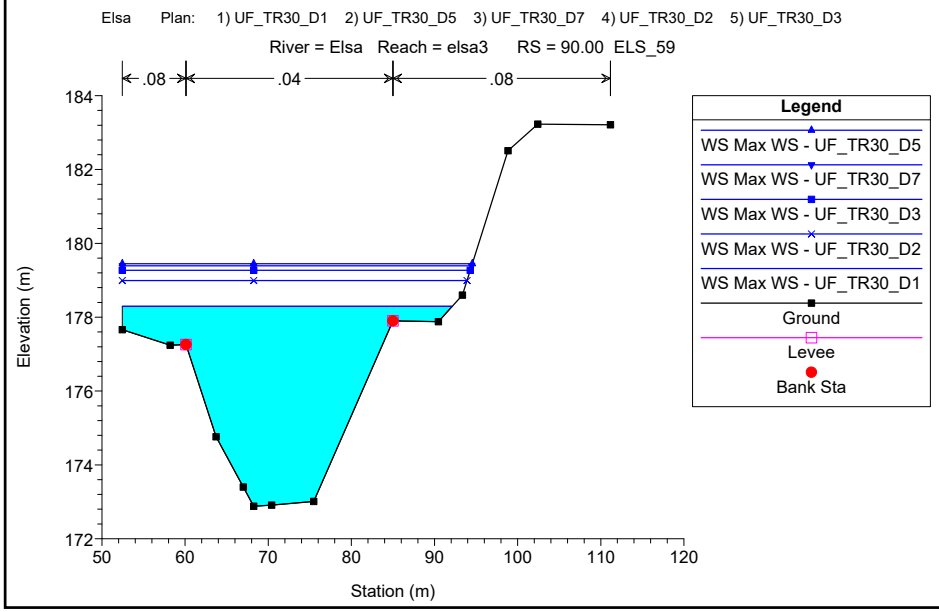
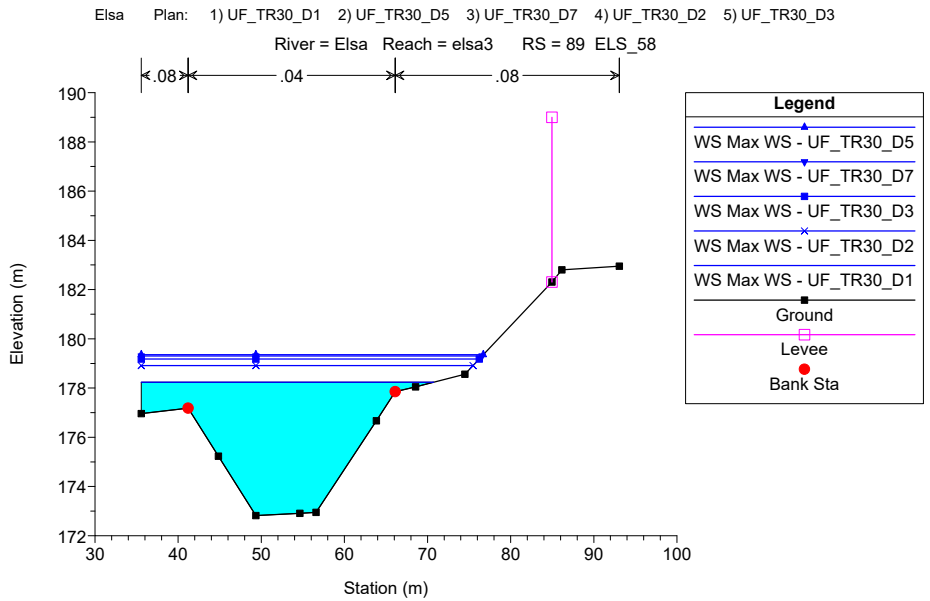
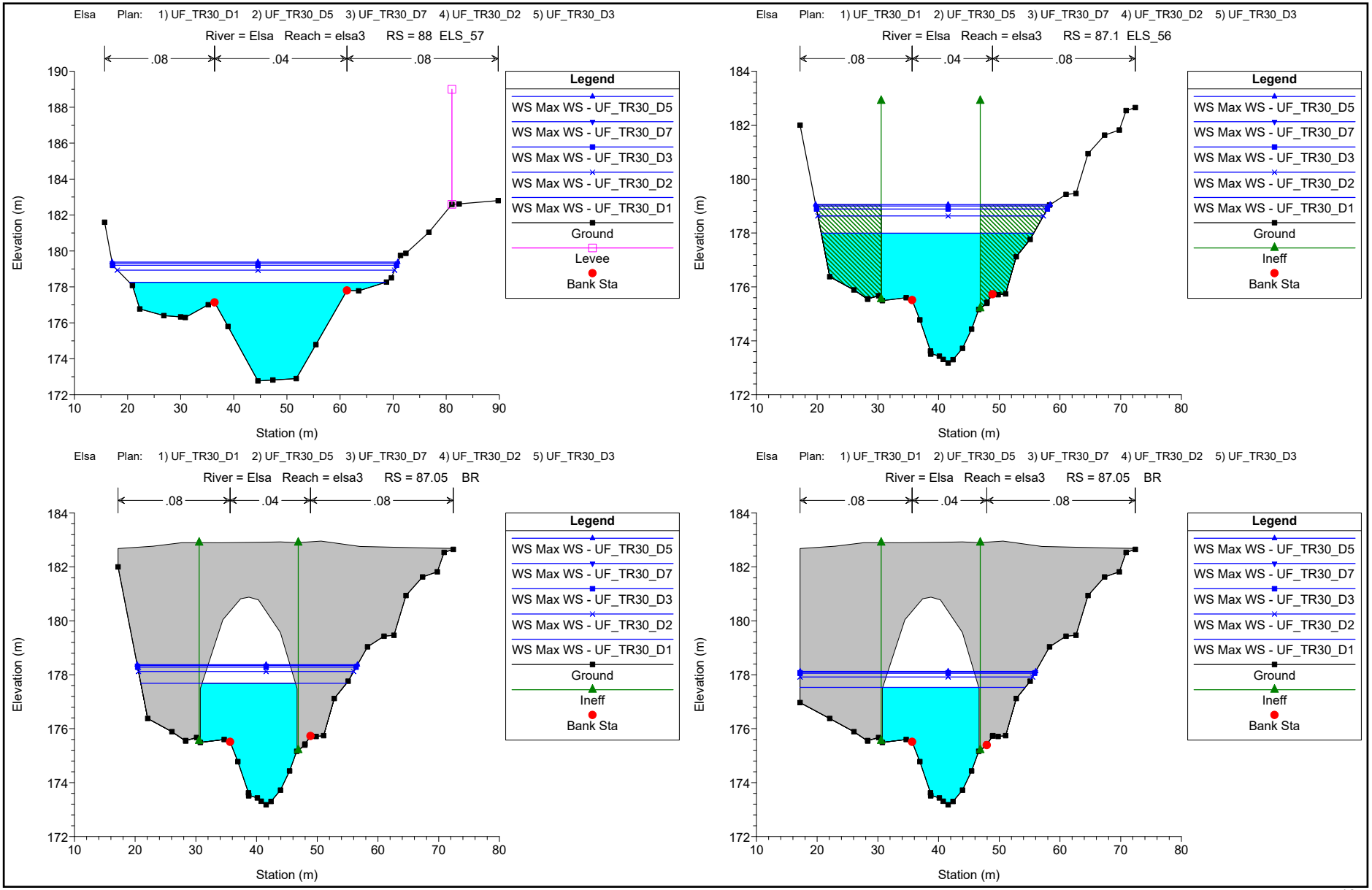
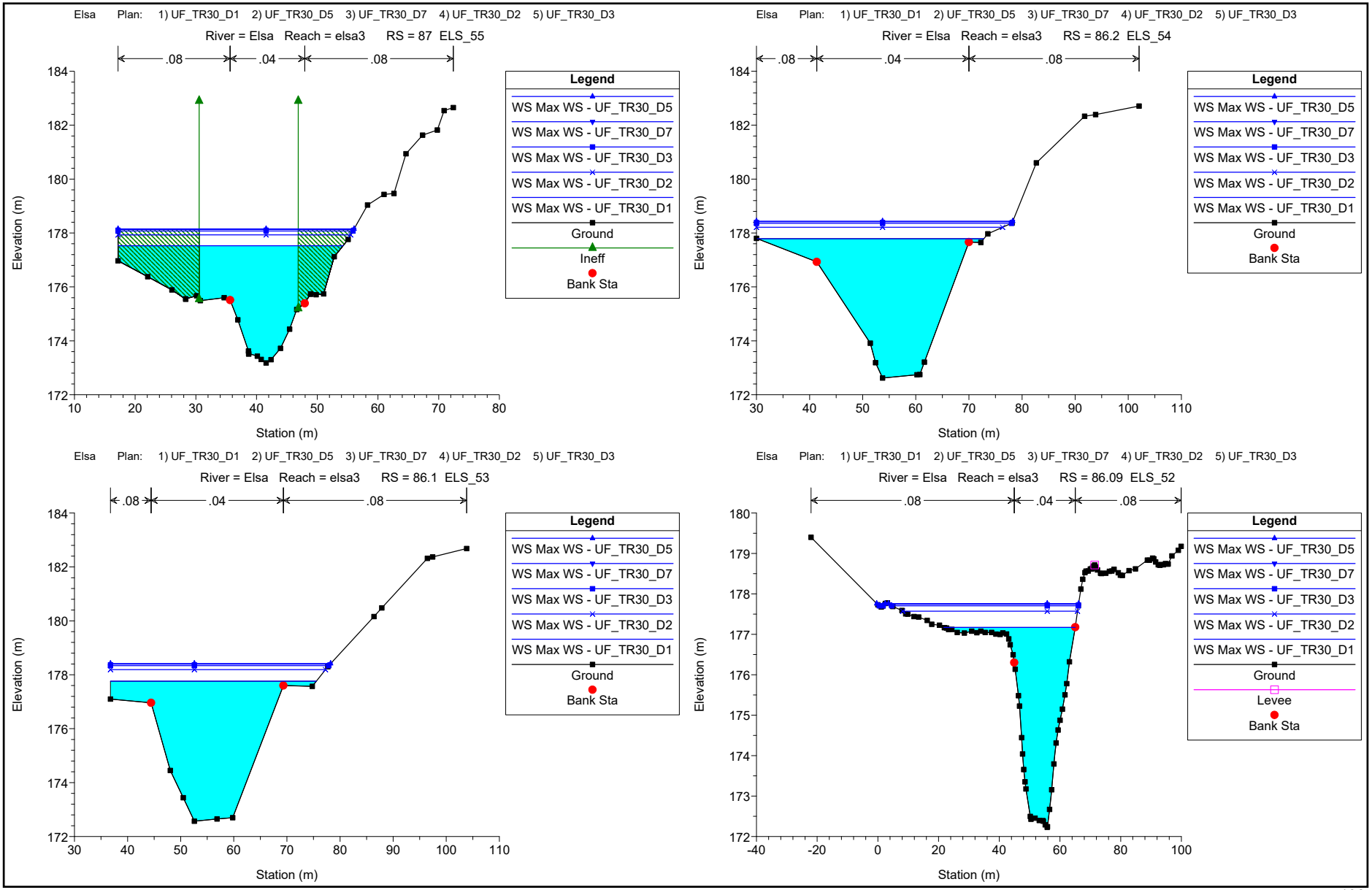
River = Elsa Reach = elsa3 RS = 110.00 ELS_61
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

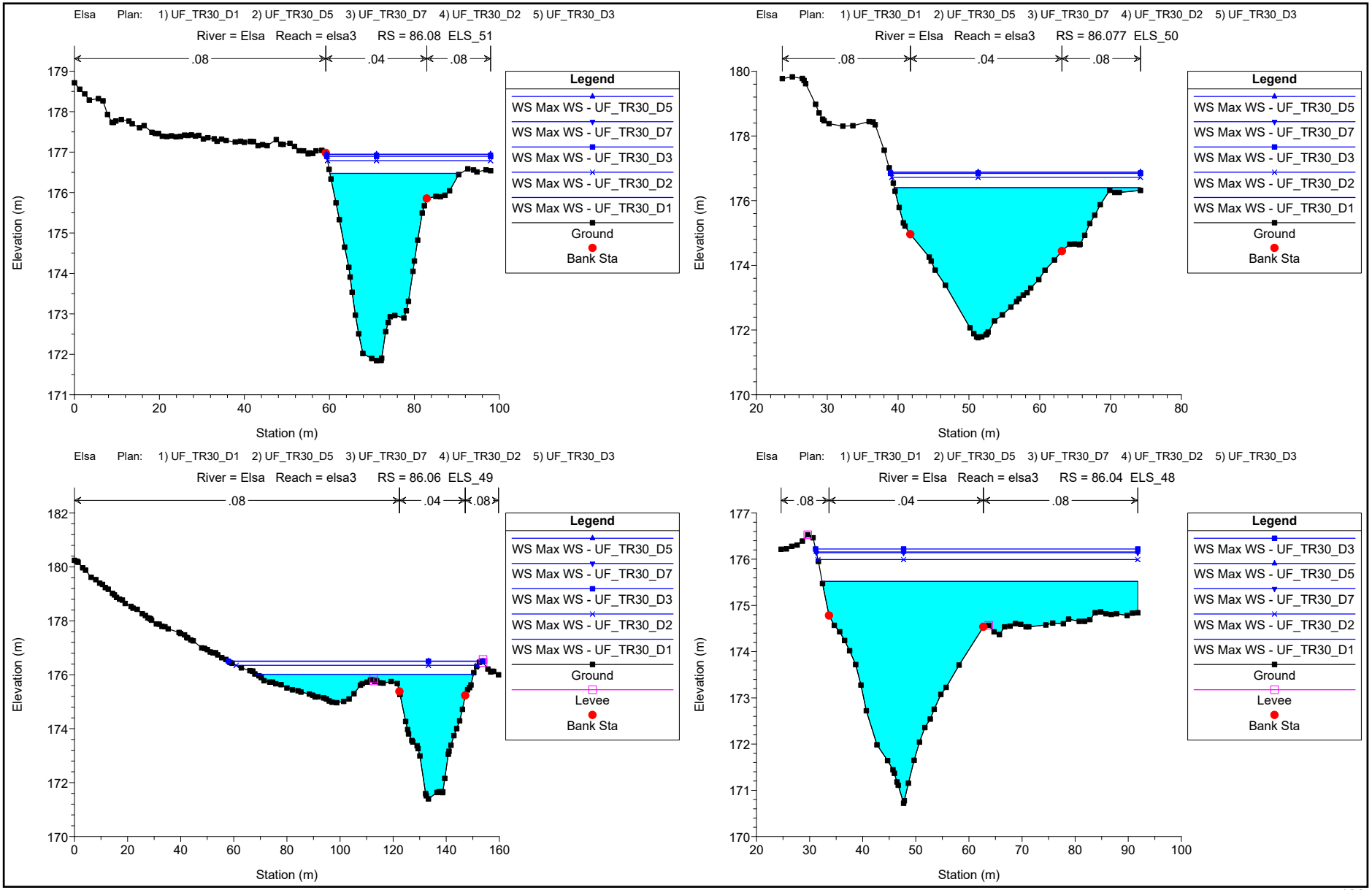

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 100.00 ELS_60_leevee su quota strada come da modello regione
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

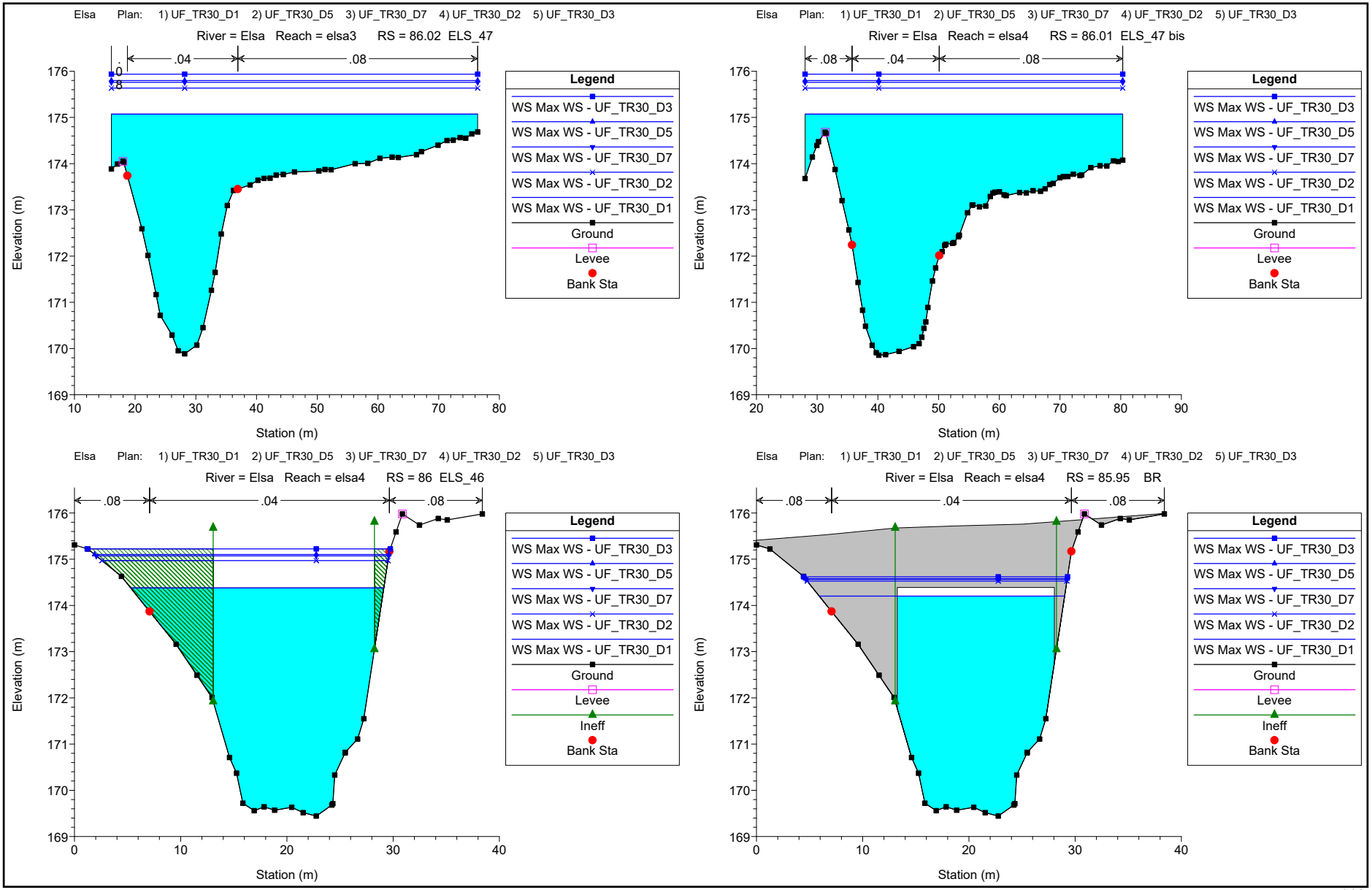

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 90.00 ELS_59
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

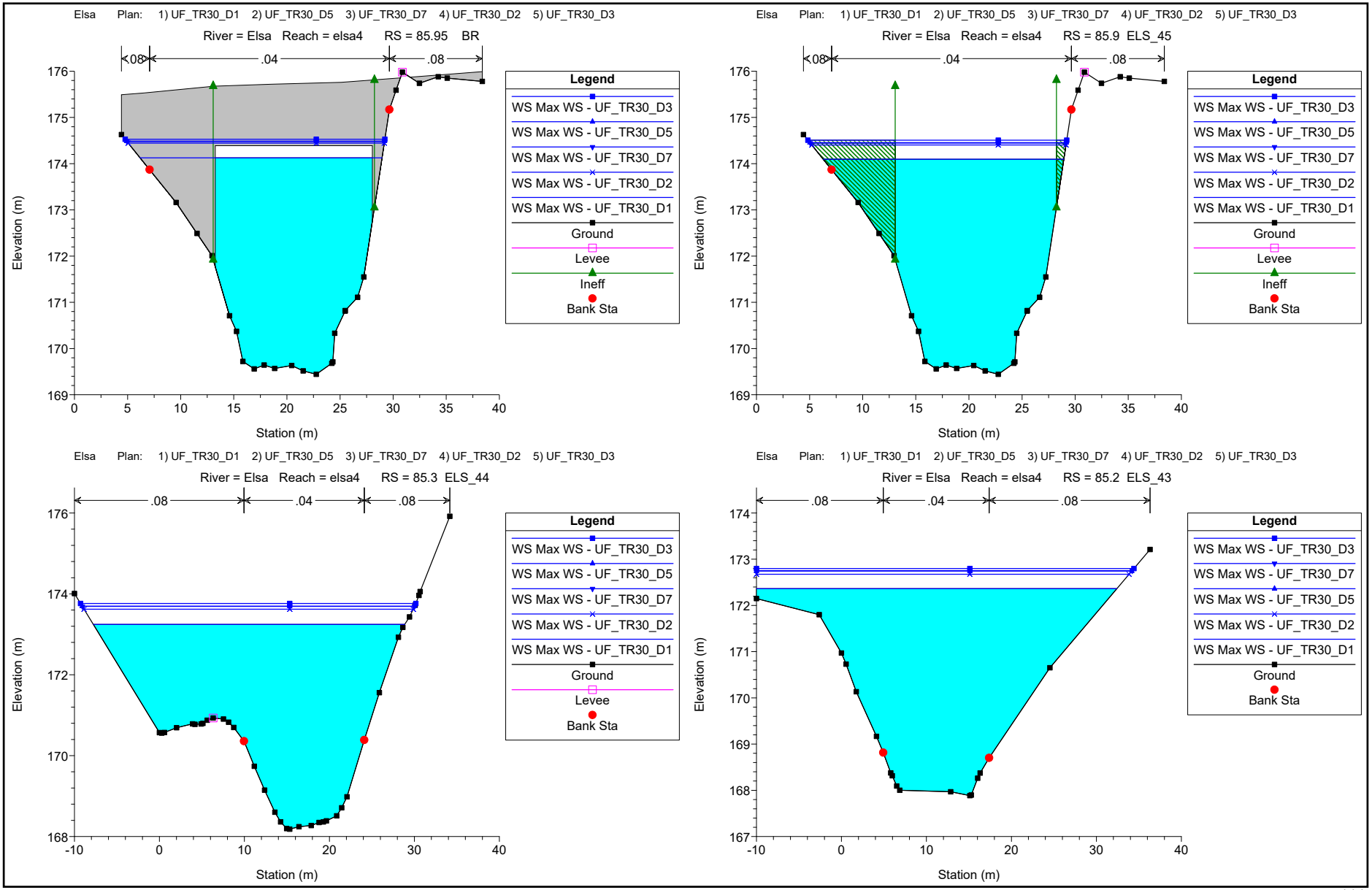

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 89 ELS_58
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

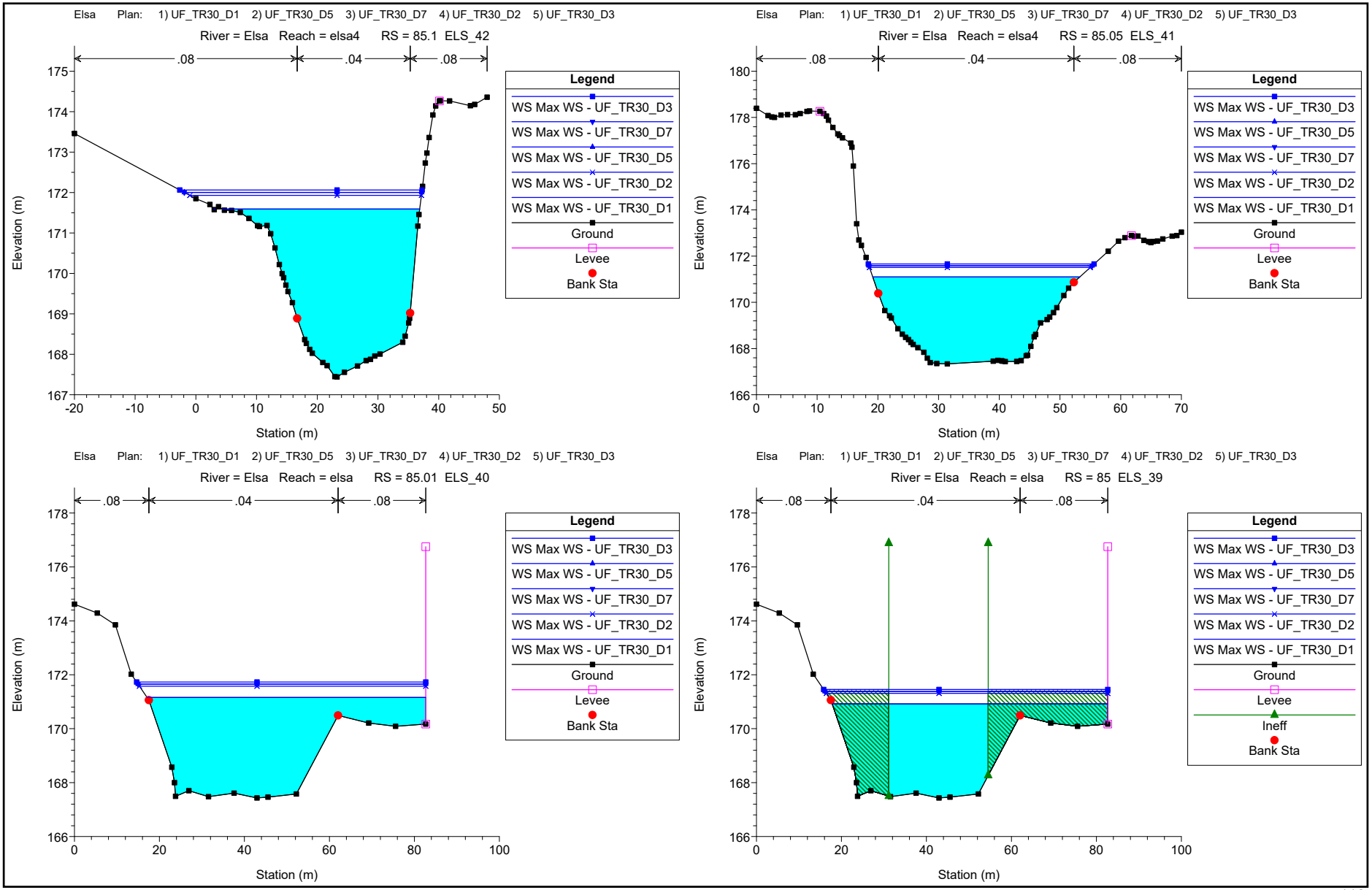

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 88 ELS_57
River = Elsa Reach = elsa3 RS = 87.1 ELS_56
River = Elsa Reach = elsa3 RS = 87.05 BR
River = Elsa Reach = elsa3 RS = 87.05 BR
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

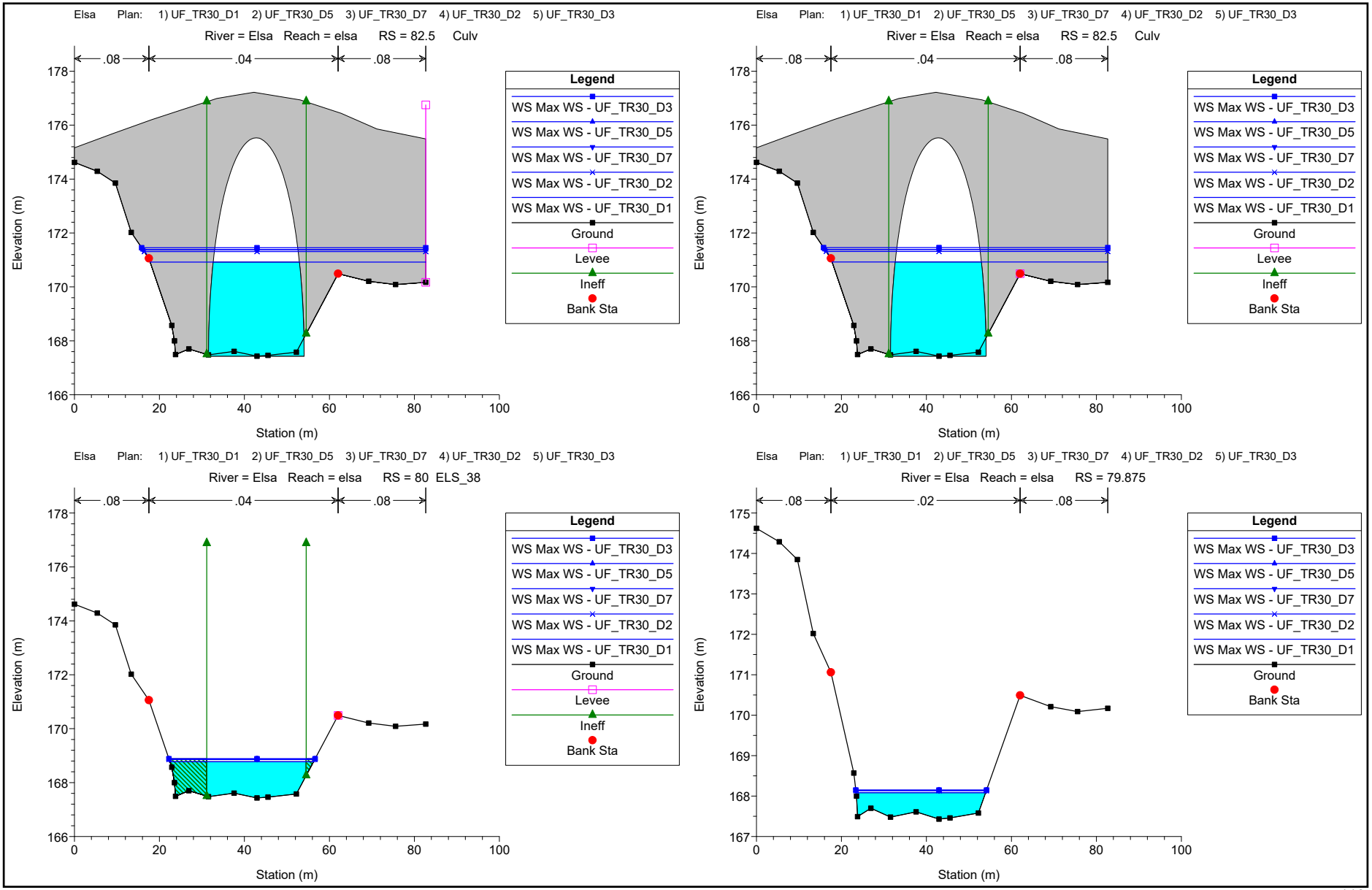

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 87 ELS_55
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.2 ELS_54
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.1 ELS_53
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.09 ELS_52
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

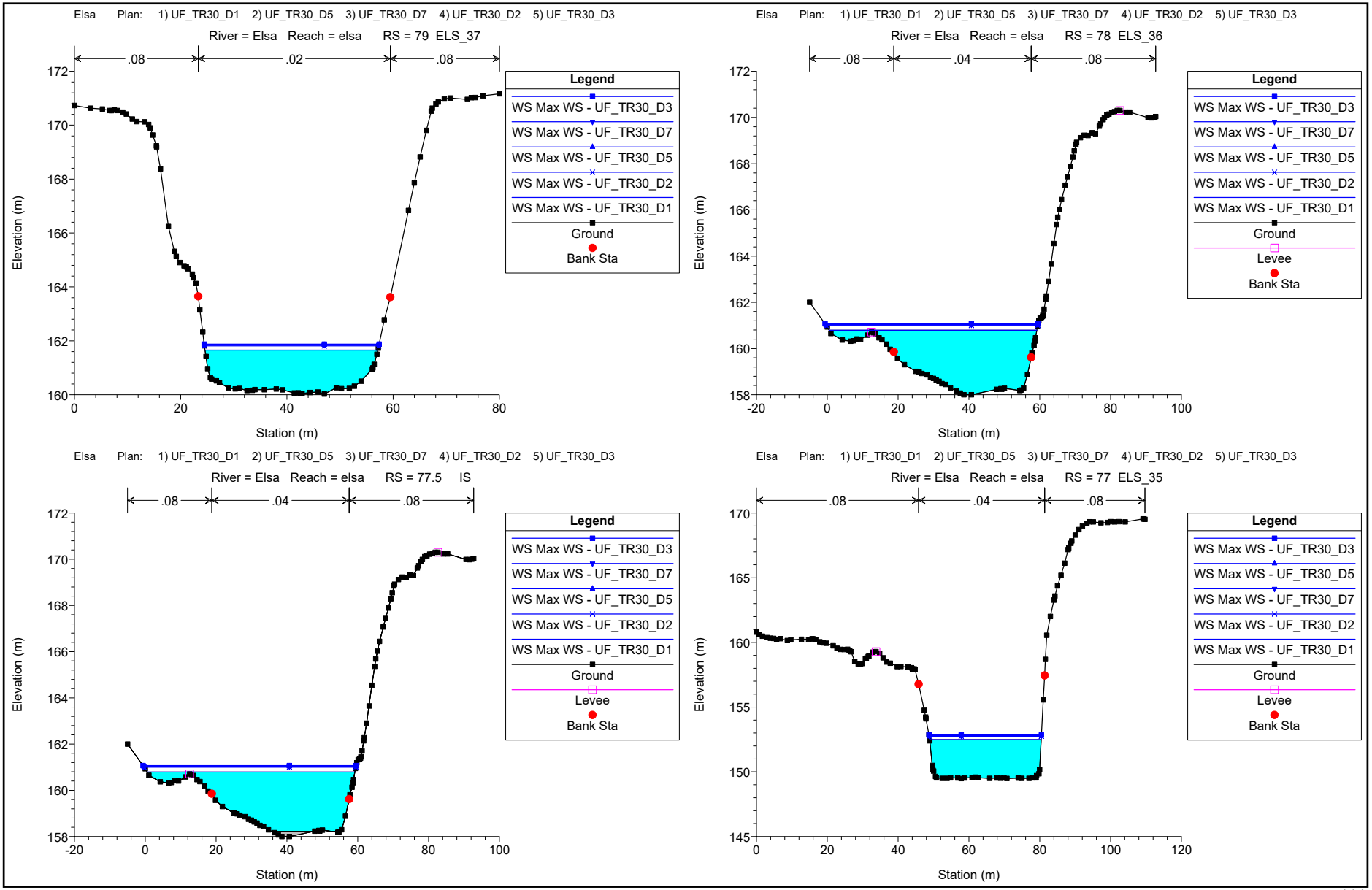

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.08 ELS_51
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.077 ELS_50
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.06 ELS_49
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.04 ELS_48
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

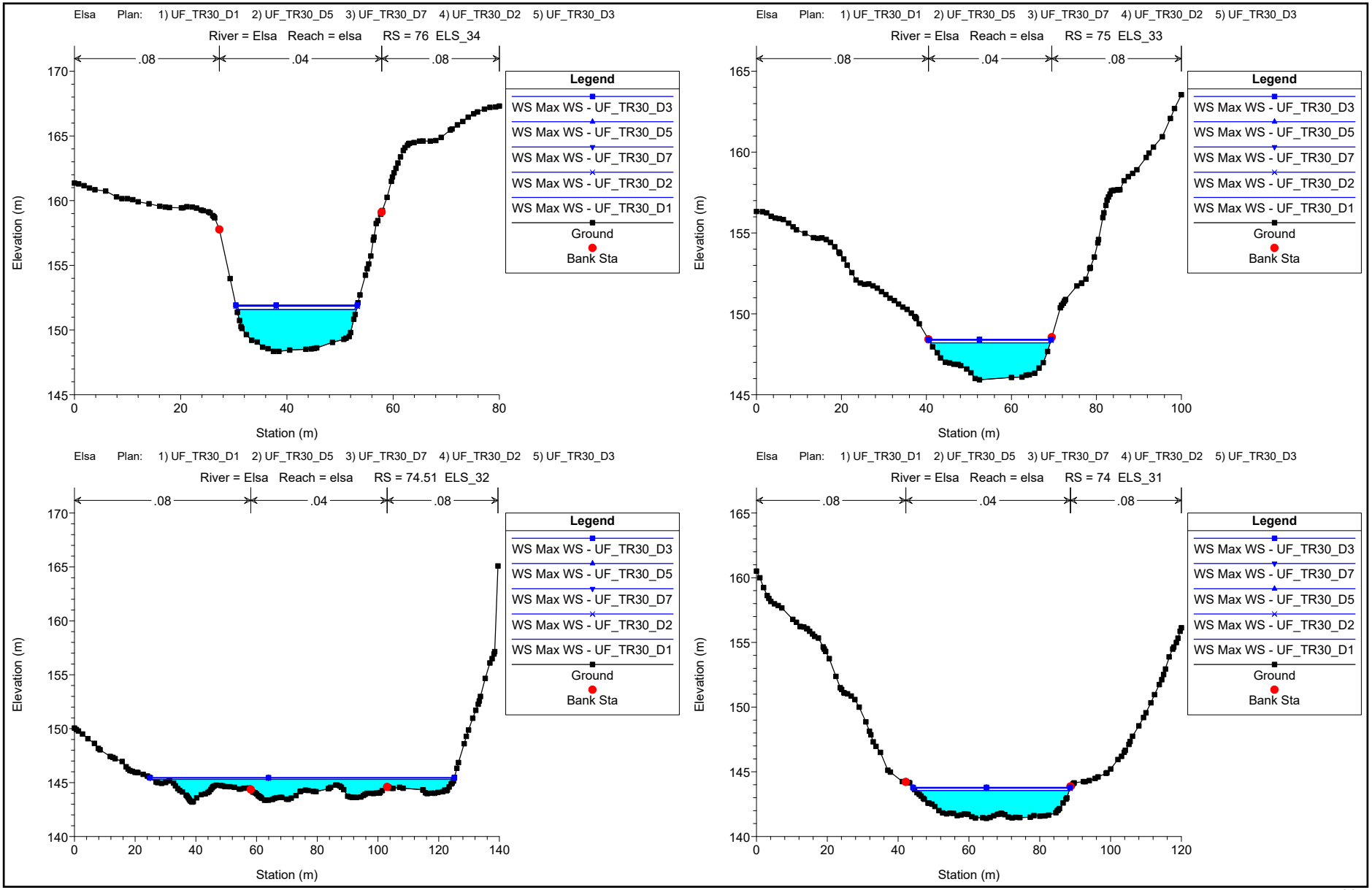

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa3 RS = 86.02 ELS_47
River = Elsa Reach = elsa4 RS = 86.01 ELS_47 bis
River = Elsa Reach = elsa4 RS = 86 ELS_46
River = Elsa Reach = elsa4 RS = 85.95 BR
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

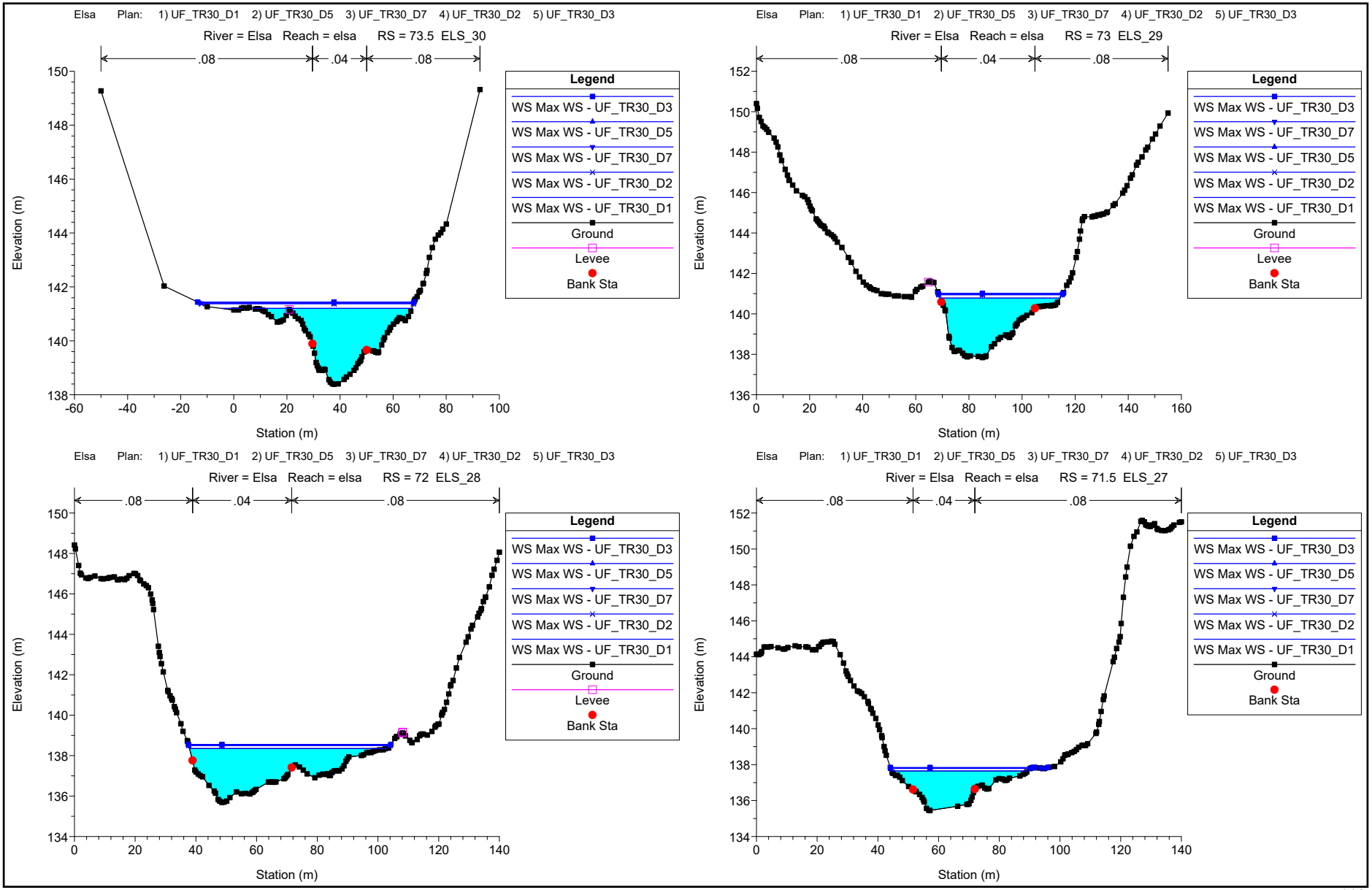

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa4 RS = 85.95 BR
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa4 RS = 85.9 ELS_45
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa4 RS = 85.3 ELS_44
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa4 RS = 85.2 ELS_43
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

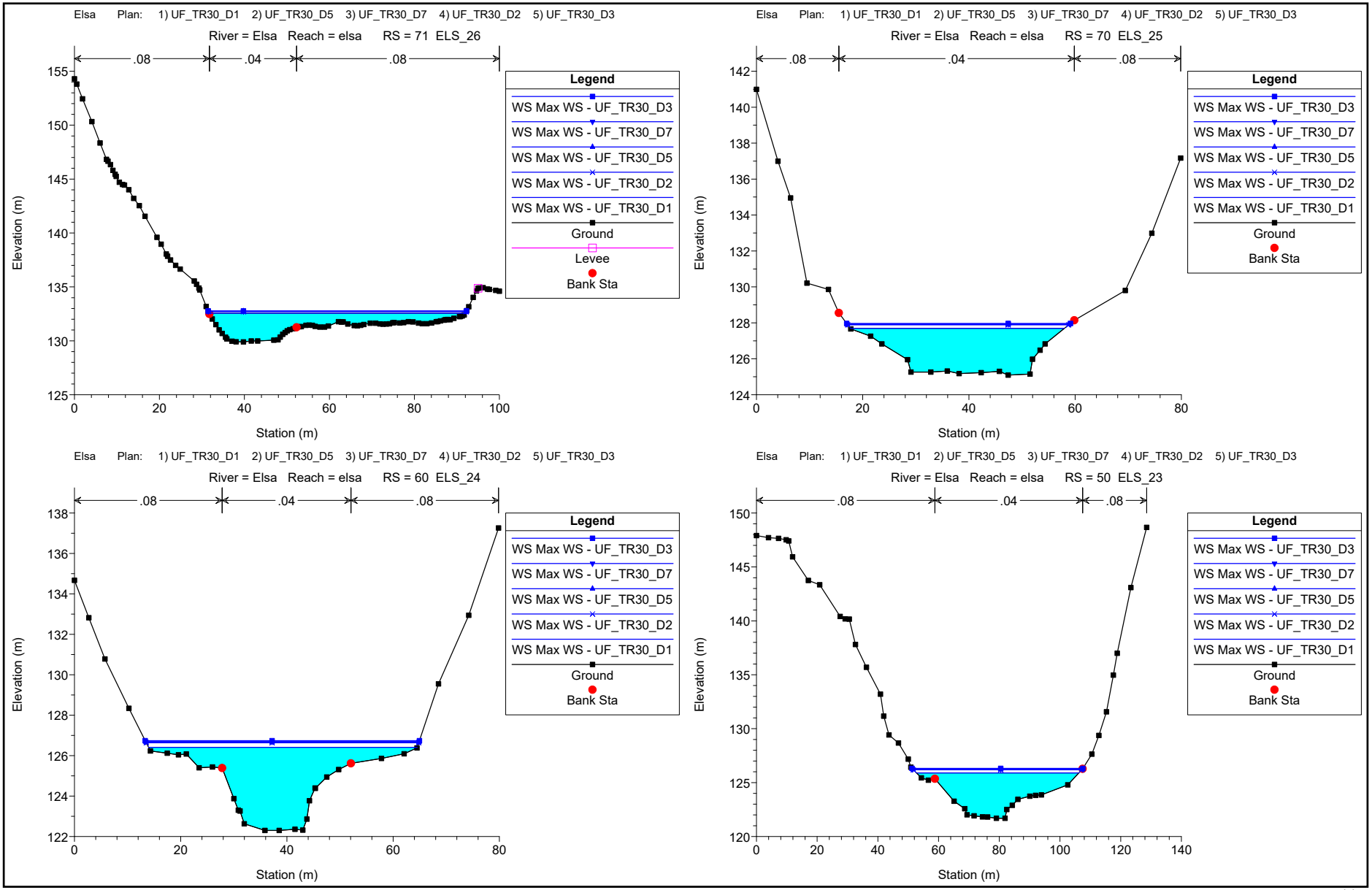

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa4 RS = 85.1 ELS_42
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa4 RS = 85.05 ELS_41
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 85.01 ELS_40
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 85 ELS_39
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta

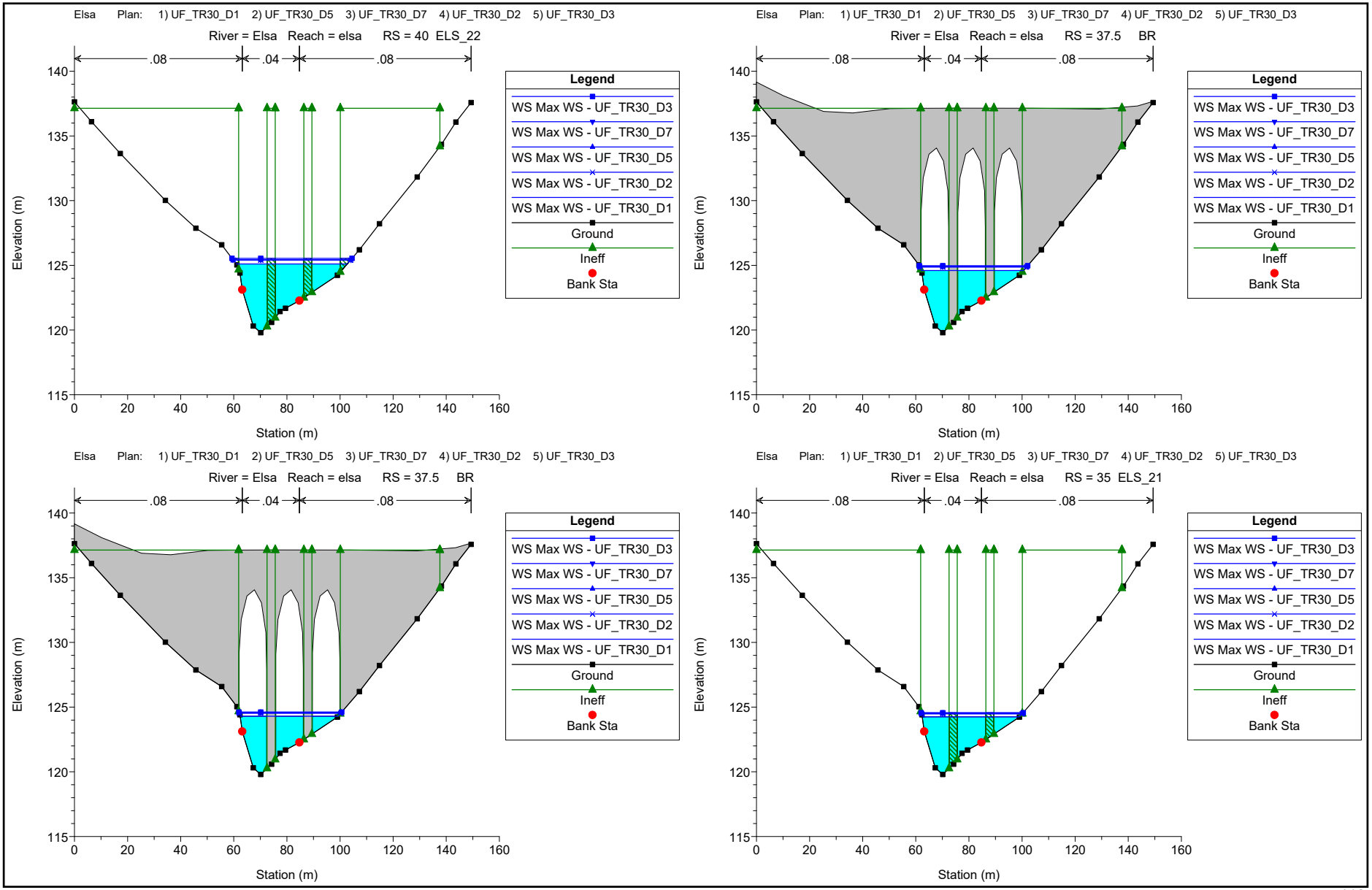

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 82.5 Culv
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 82.5 Culv
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 80 ELS_38
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 79.875
.08 .02 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

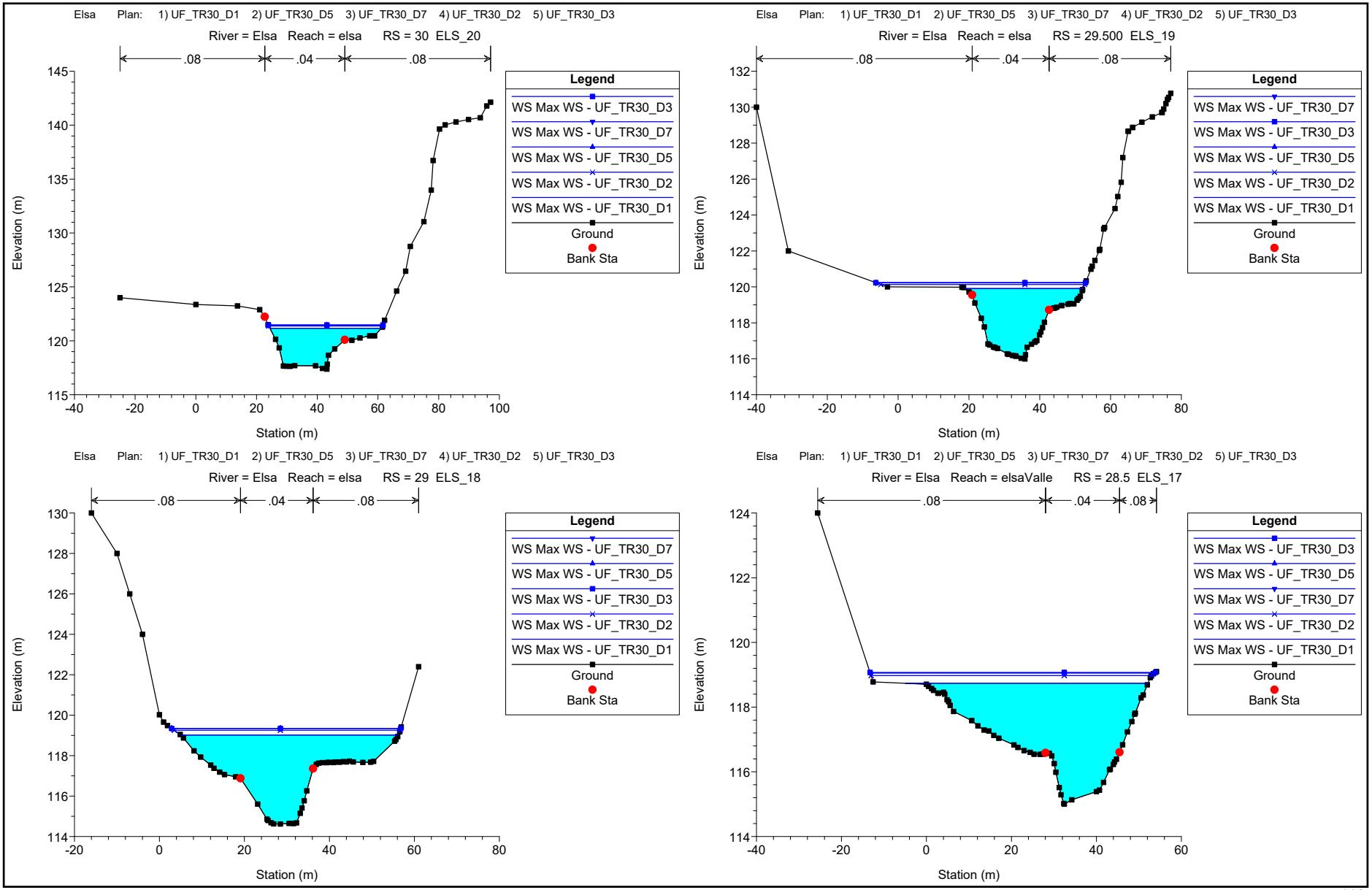

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 79 ELS_37
.08 .02 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 78 ELS_36
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 77.5 IS
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 77 ELS_35
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

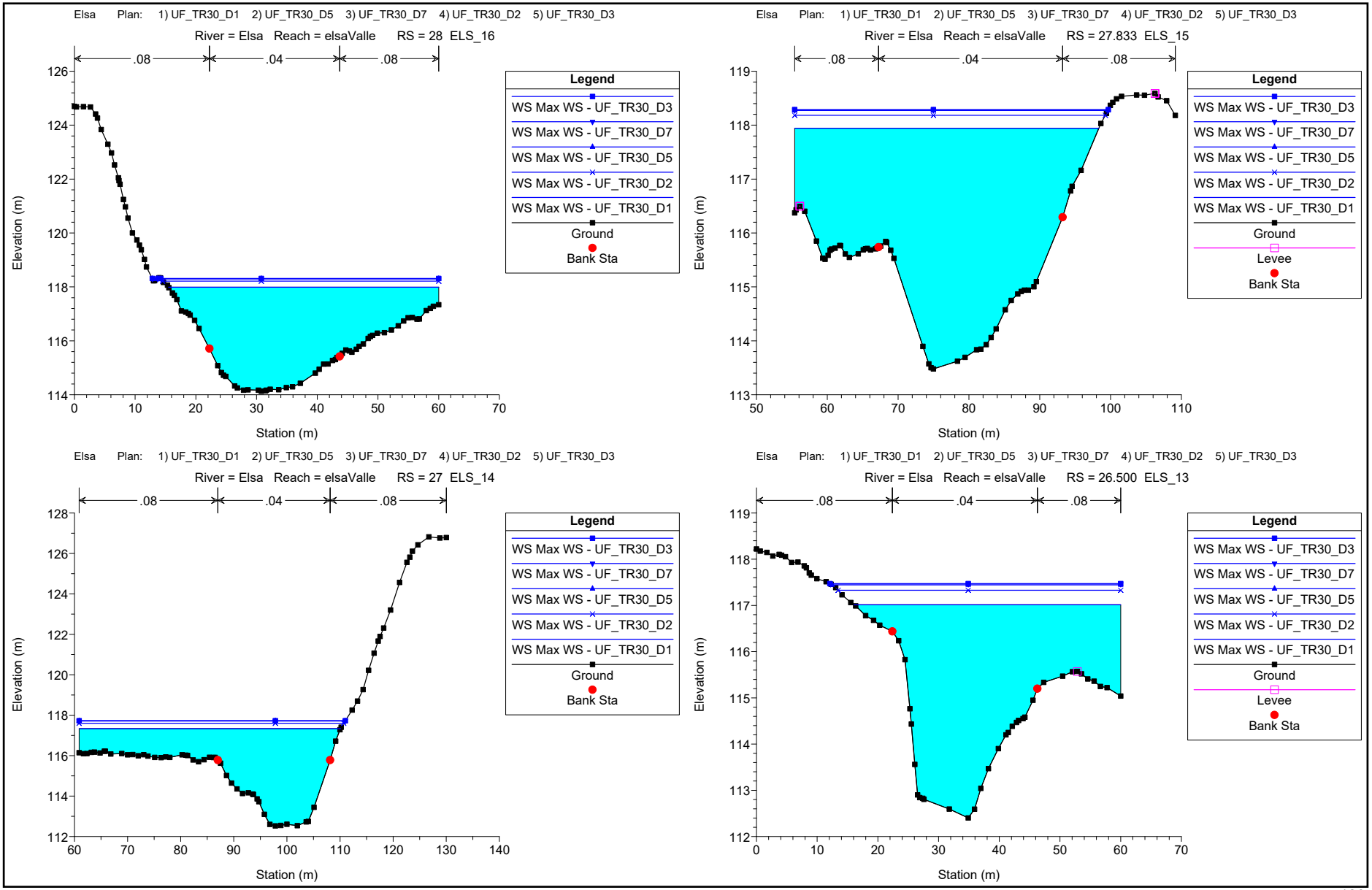

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 76 ELS_34
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 75 ELS_33
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 74.51 ELS_32
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 74 ELS_31
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

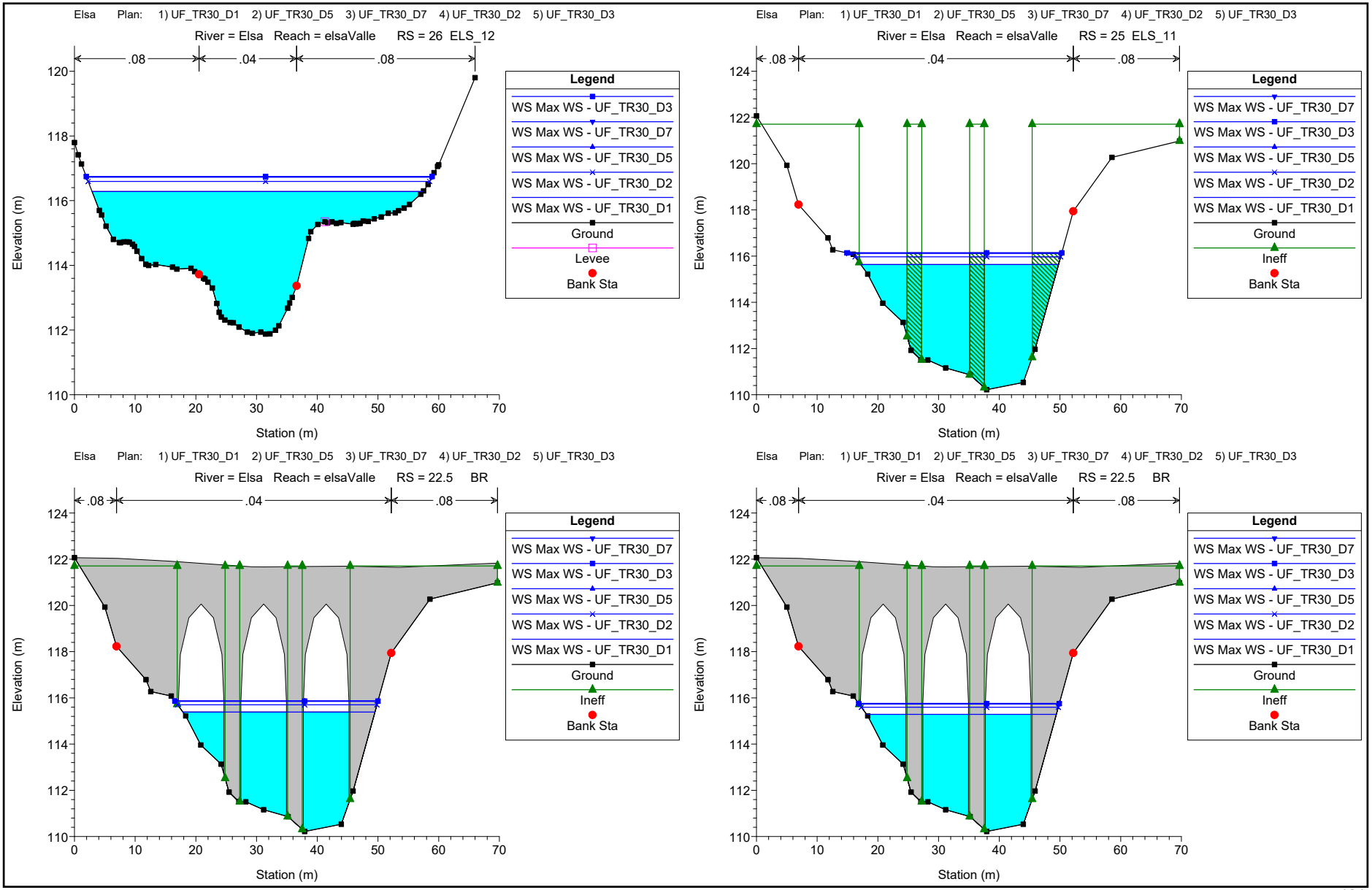

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 73.5 ELS_30
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 73 ELS_29
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 72 ELS_28
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 71.5 ELS_27
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

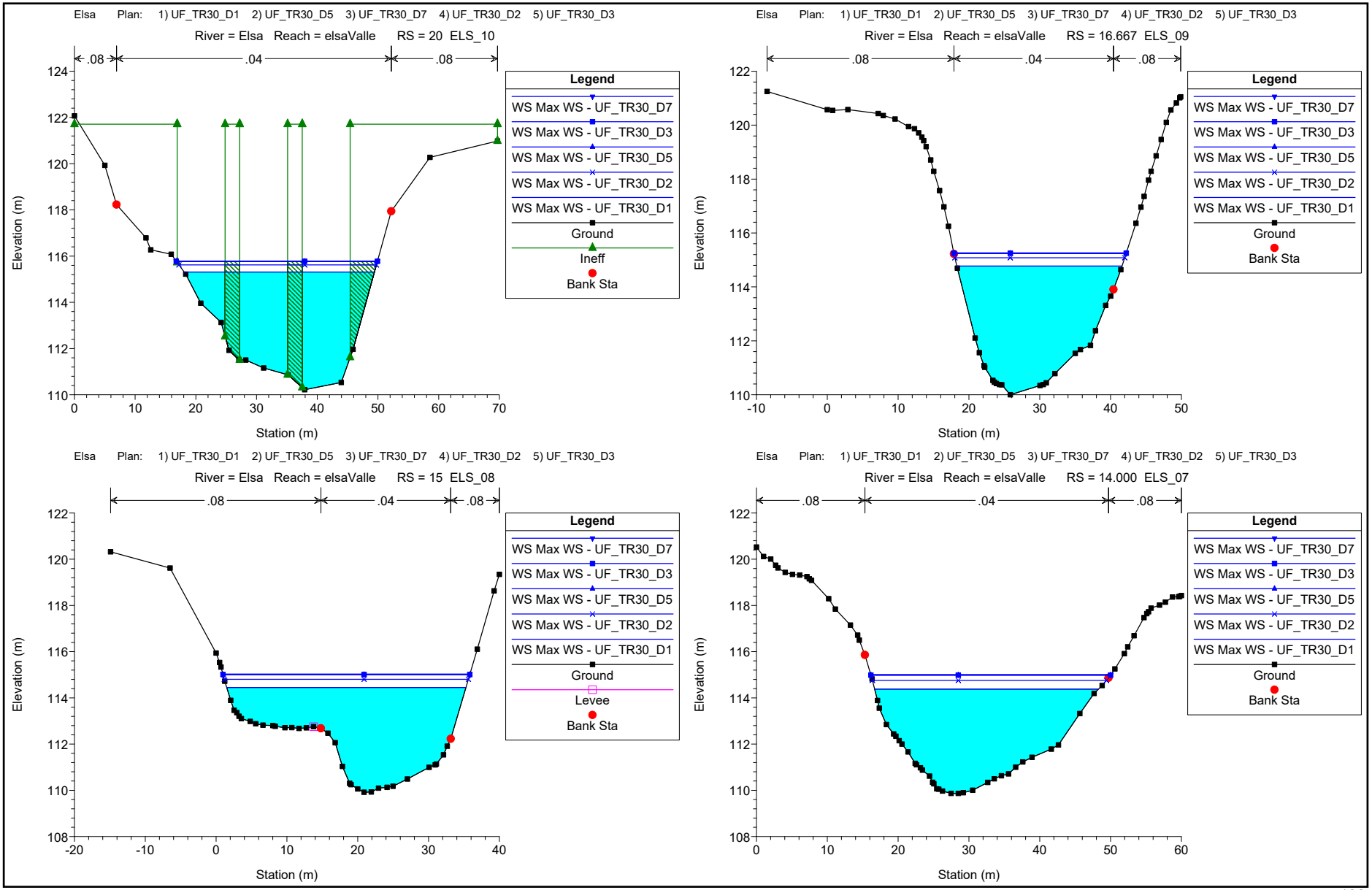

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 71 ELS_26
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 70 ELS_25
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 60 ELS_24
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 50 ELS_23
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

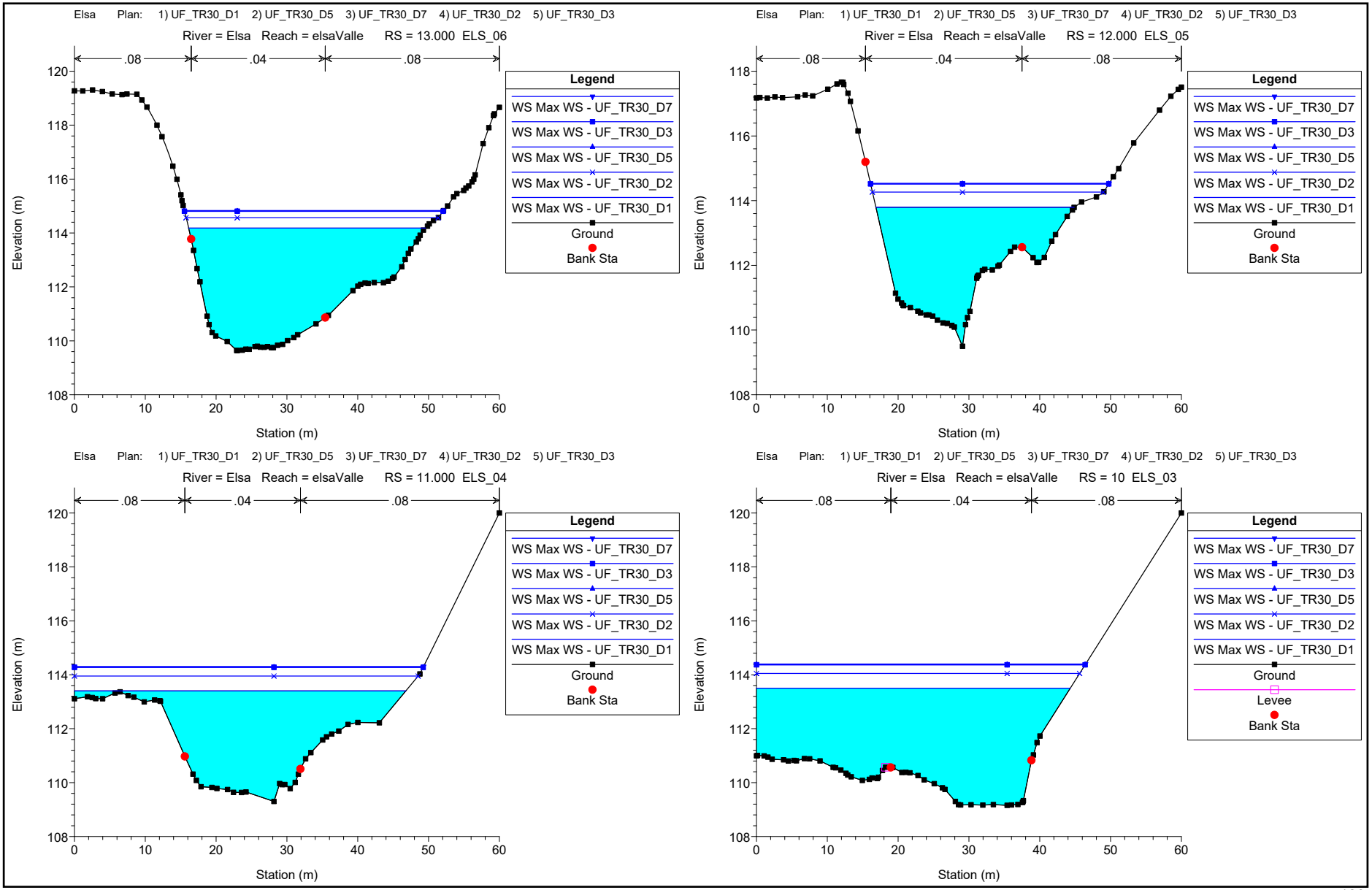

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 40 ELS_22
River = Elsa Reach = elsa RS = 37.5 BR
River = Elsa Reach = elsa RS = 35 ELS_21
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta

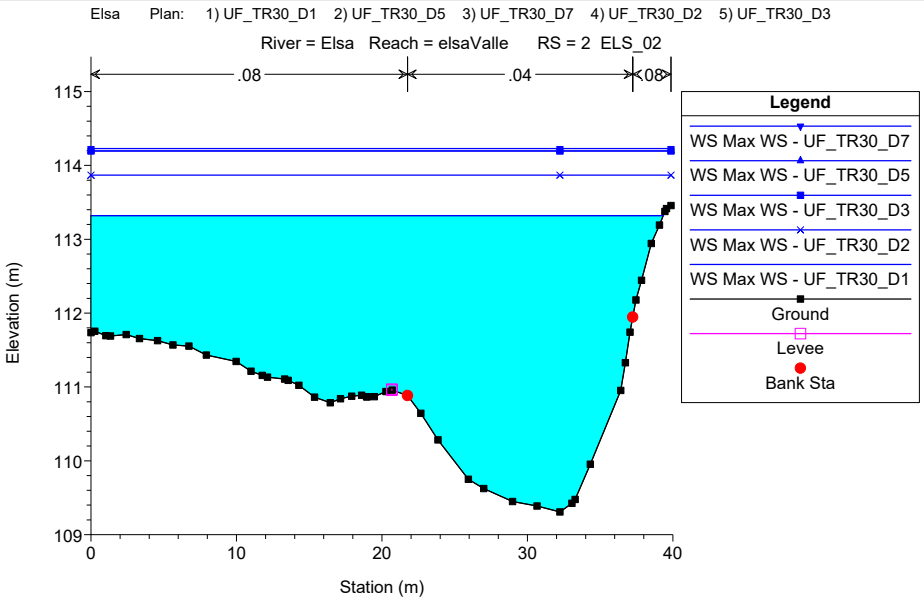

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 30 ELS_20
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 29.500 ELS_19
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsa RS = 29 ELS_18
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 28.5 ELS_17
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

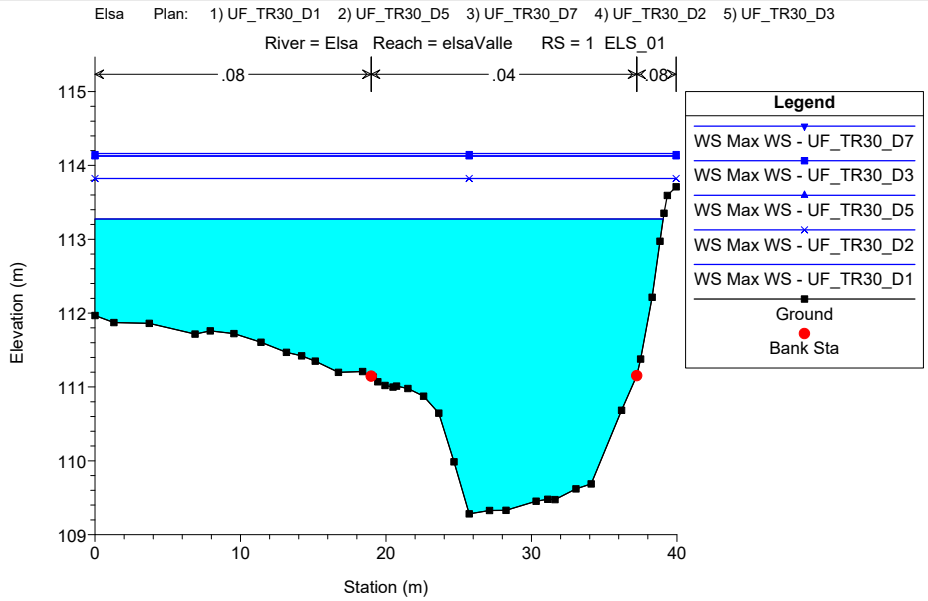

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 28 ELS_16
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 27.833 ELS_15
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 27 ELS_14
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 26.500 ELS_13
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 26 ELS_12
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 25 ELS_11
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 22.5 BR
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 22.5 BR
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 20 ELS_10
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 16.667 ELS_09
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 15 ELS_08
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 14.000 ELS_07
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 13.000 ELS_06
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 12.000 ELS_05
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 11.000 ELS_04
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 10 ELS_03
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 2 ELS_02
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Elsa Reach = elsaValle RS = 1 ELS_01
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

ALLEGATI

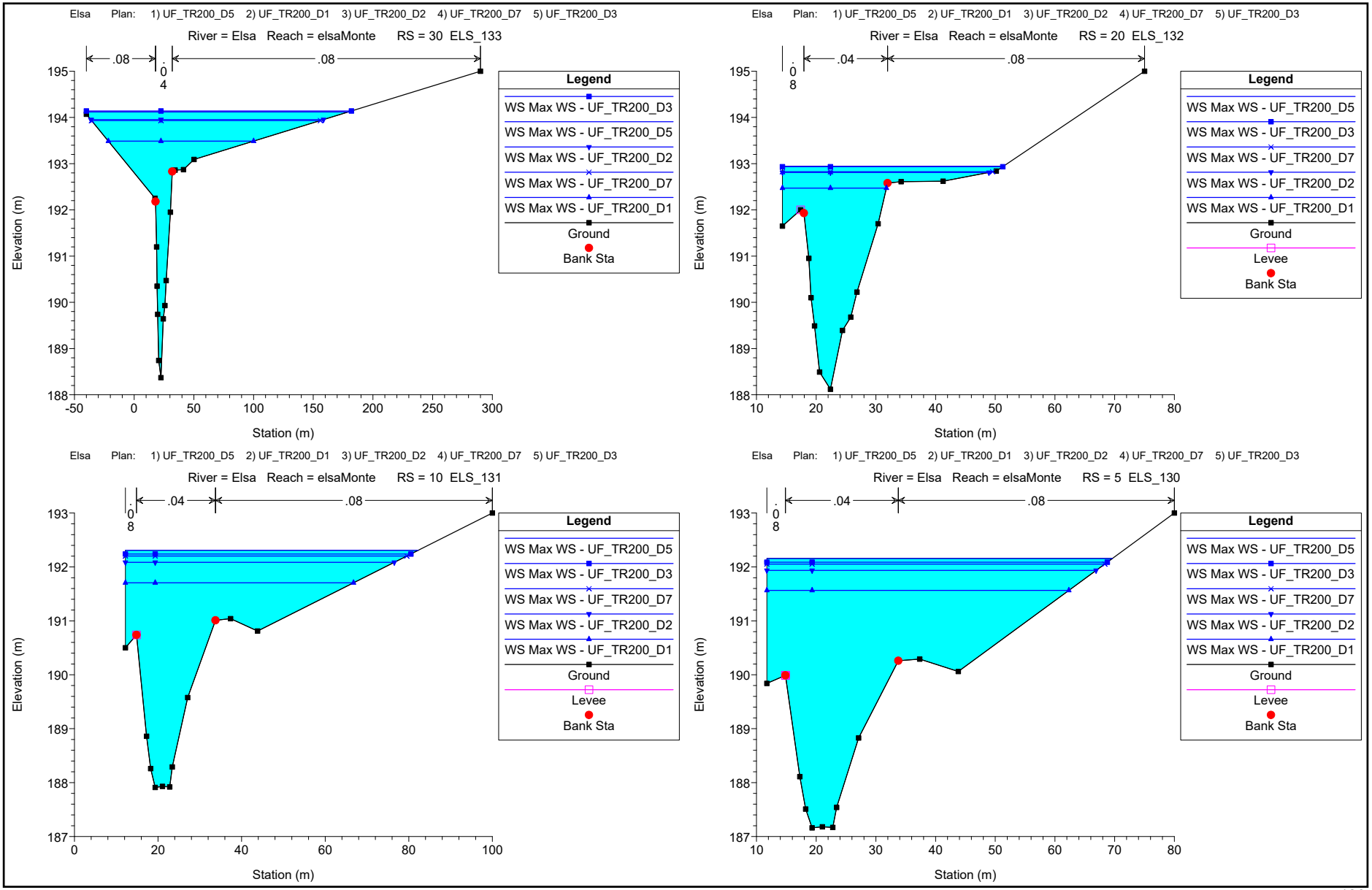
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

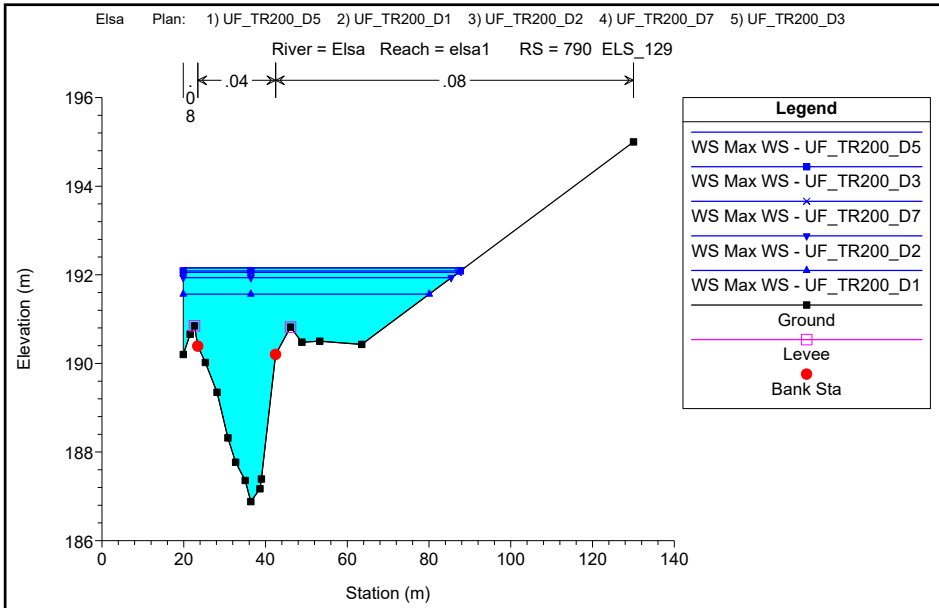
FIUME ELSA

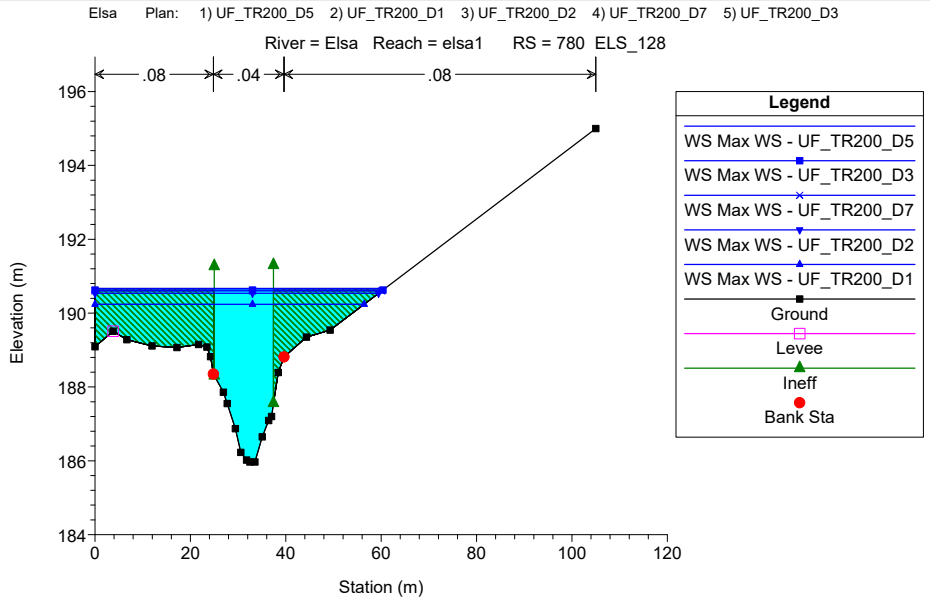
MODELLAZIONE PER TR=200 anni

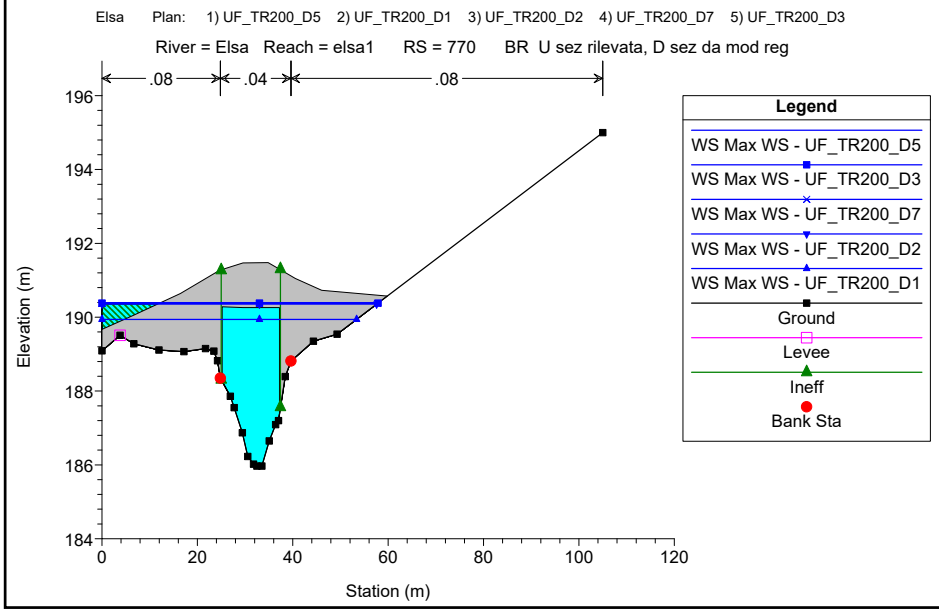
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

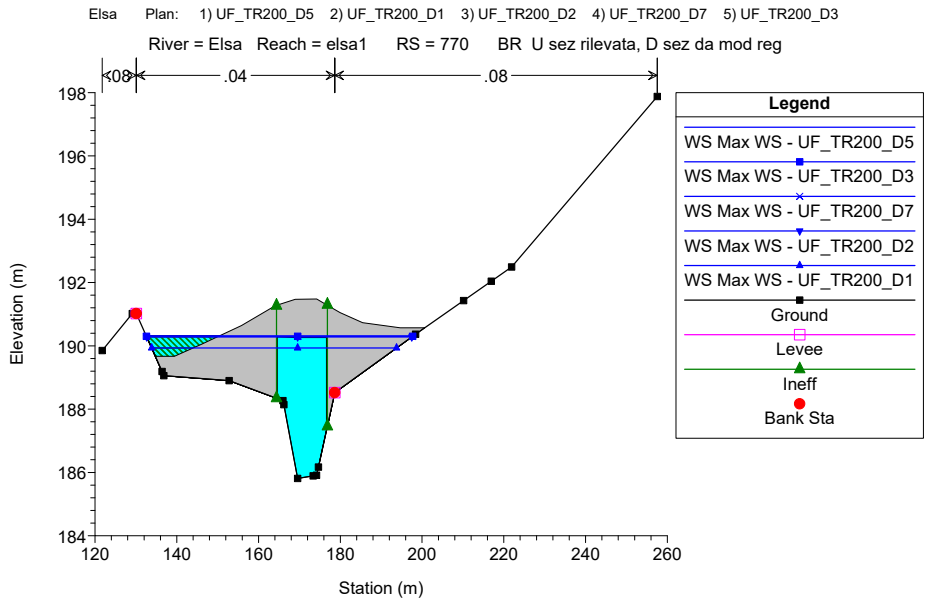
Sezioni Trasversali (da monte verso valle)

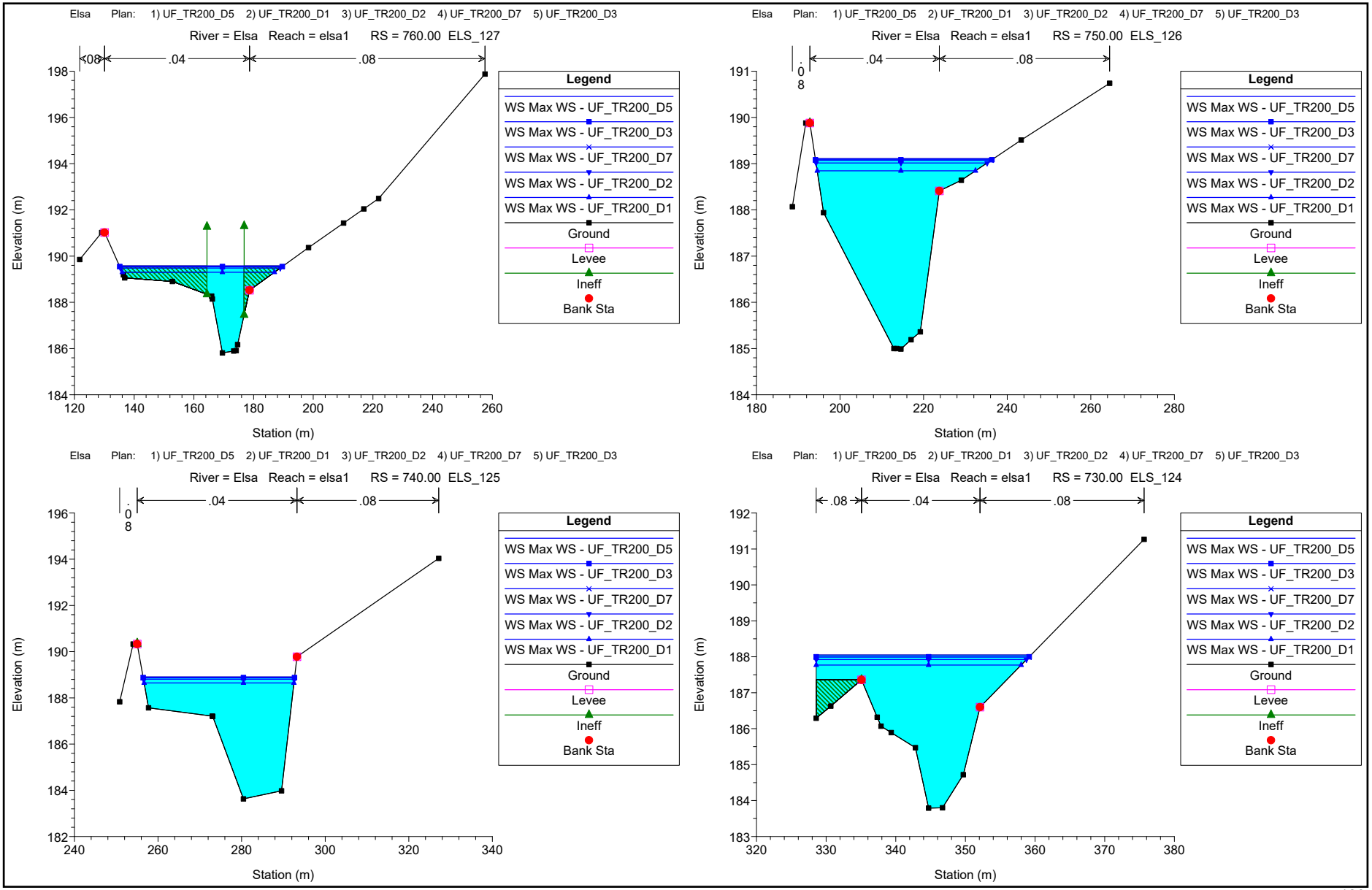

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaMonte RS = 30 ELS_133
.08
.04
.08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaMonte RS = 20 ELS_132
.08
.04
.08
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaMonte RS = 10 ELS_131
.08
.04
.08
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaMonte RS = 5 ELS_130
.08
.04
.08
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

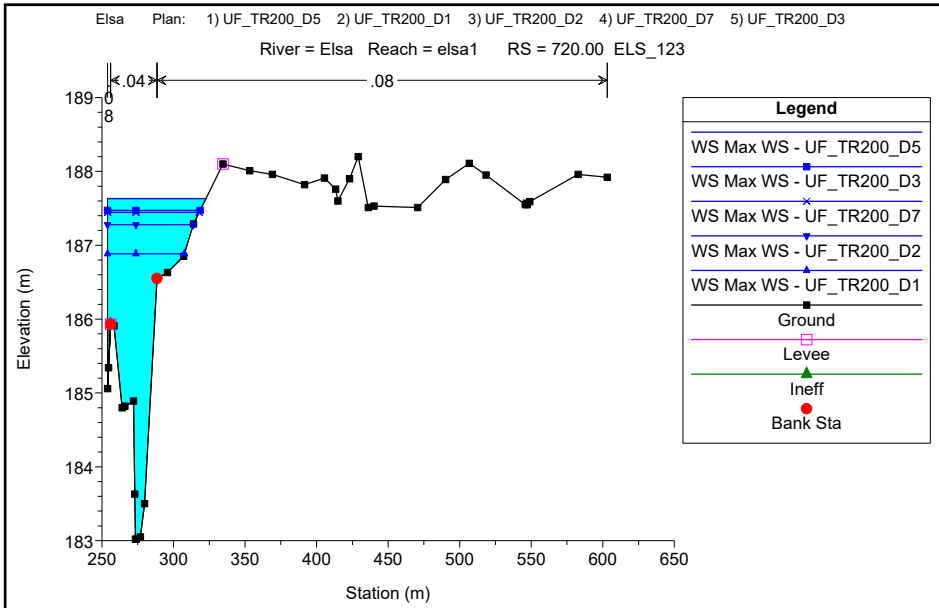

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 790 ELS_129
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

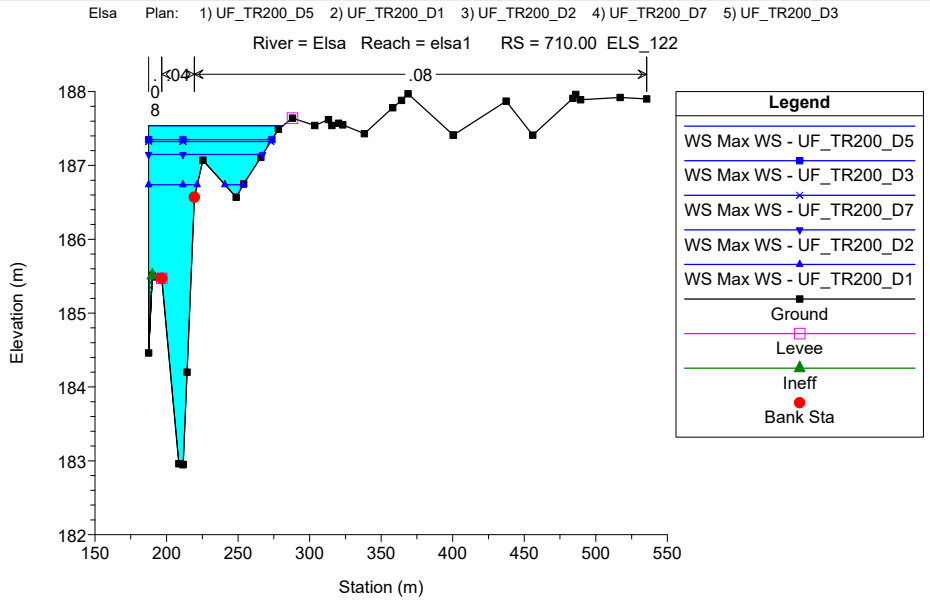

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 780 ELS_128
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

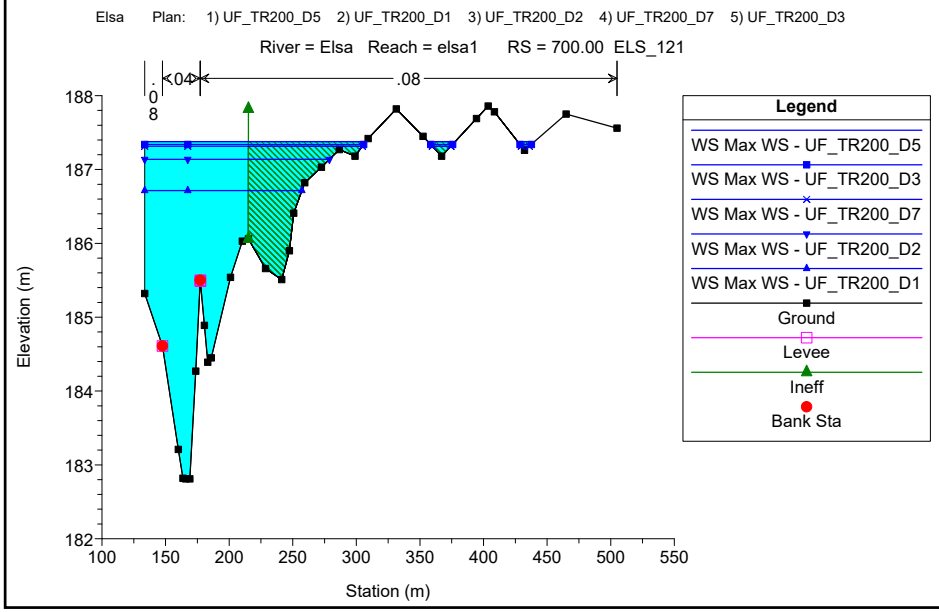

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 770 BR U sez rilevata, D sez da mod reg
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

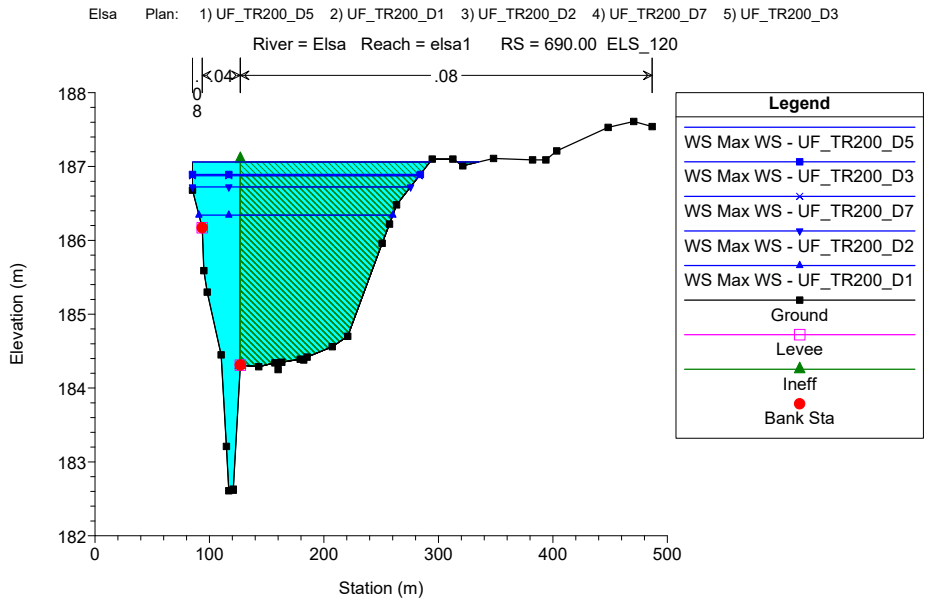

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 770 BR U sez rilevata, D sez da mod reg
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

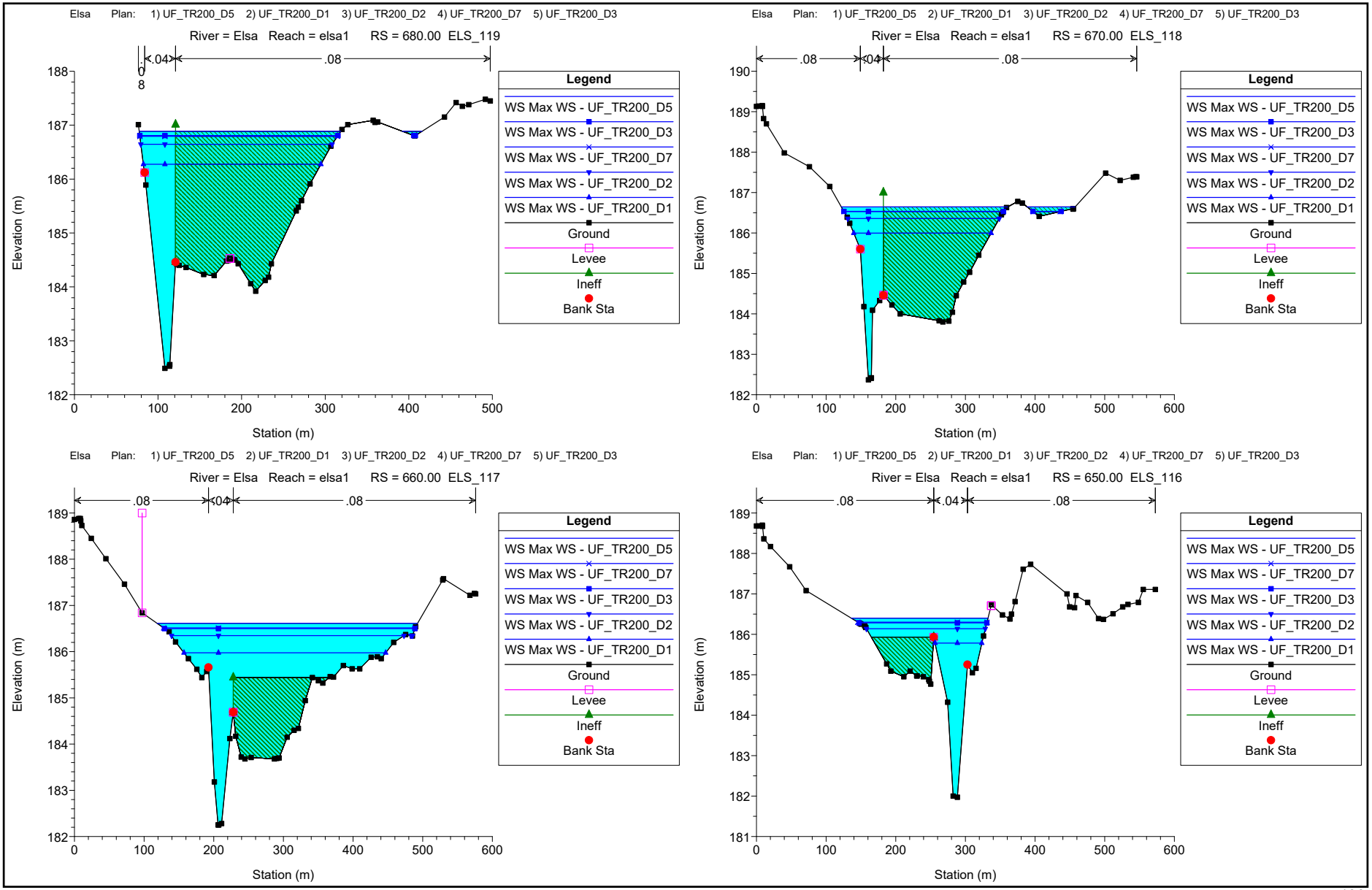

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 760.00 ELS_127
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 750.00 ELS_126
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 740.00 ELS_125
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 730.00 ELS_124
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

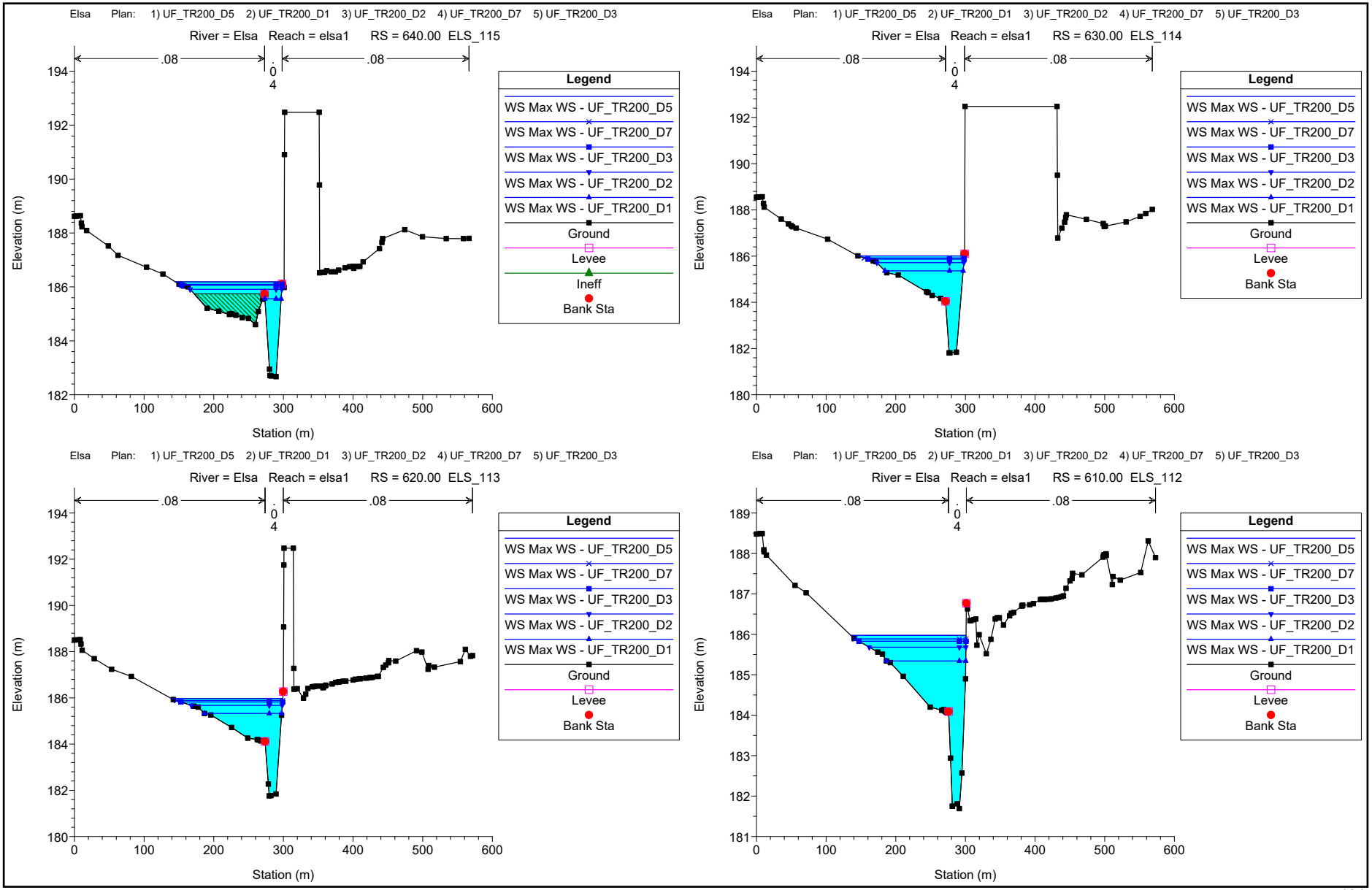

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 720.00 ELS_123
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

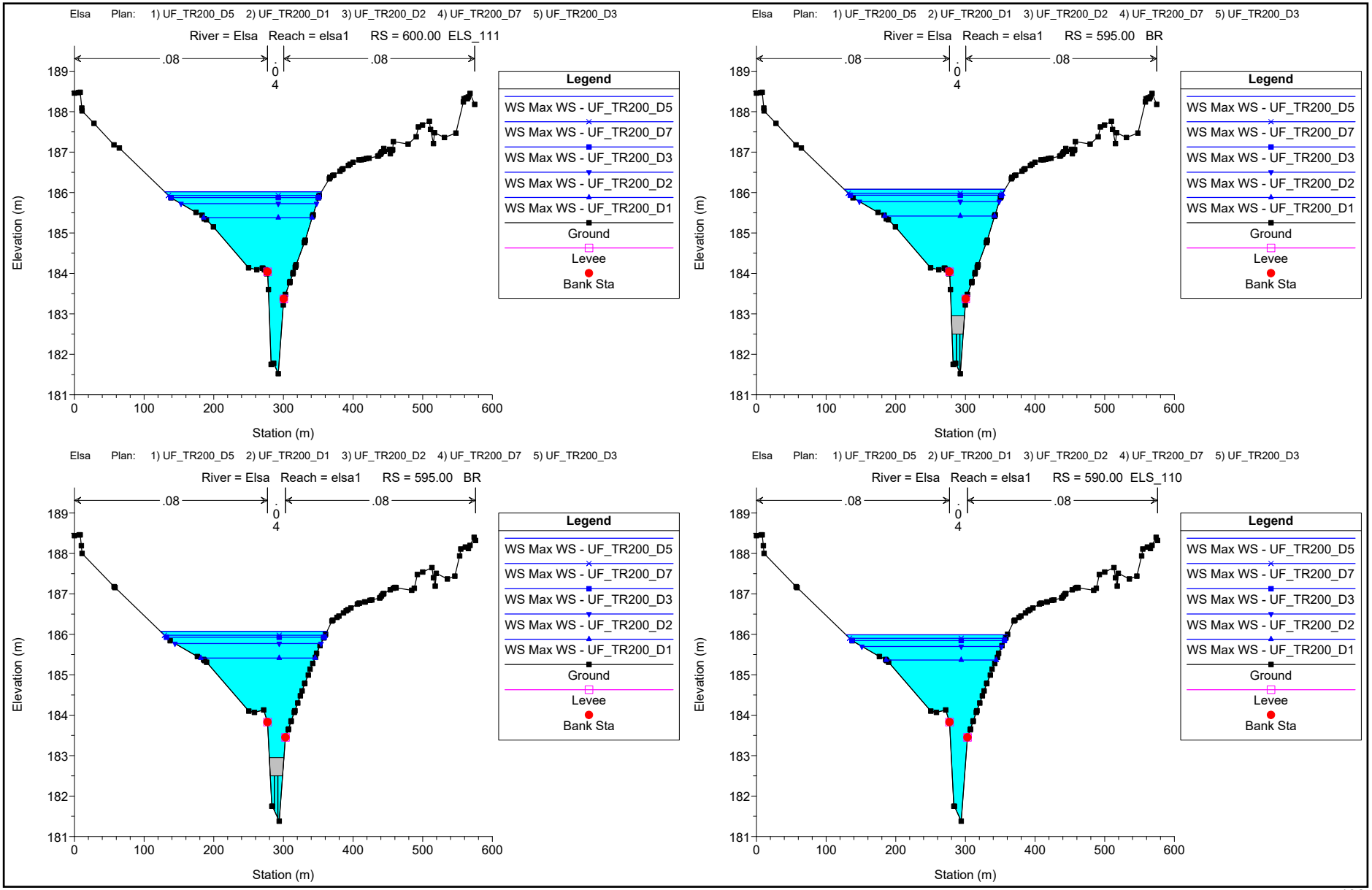

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 710.00 ELS_122
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

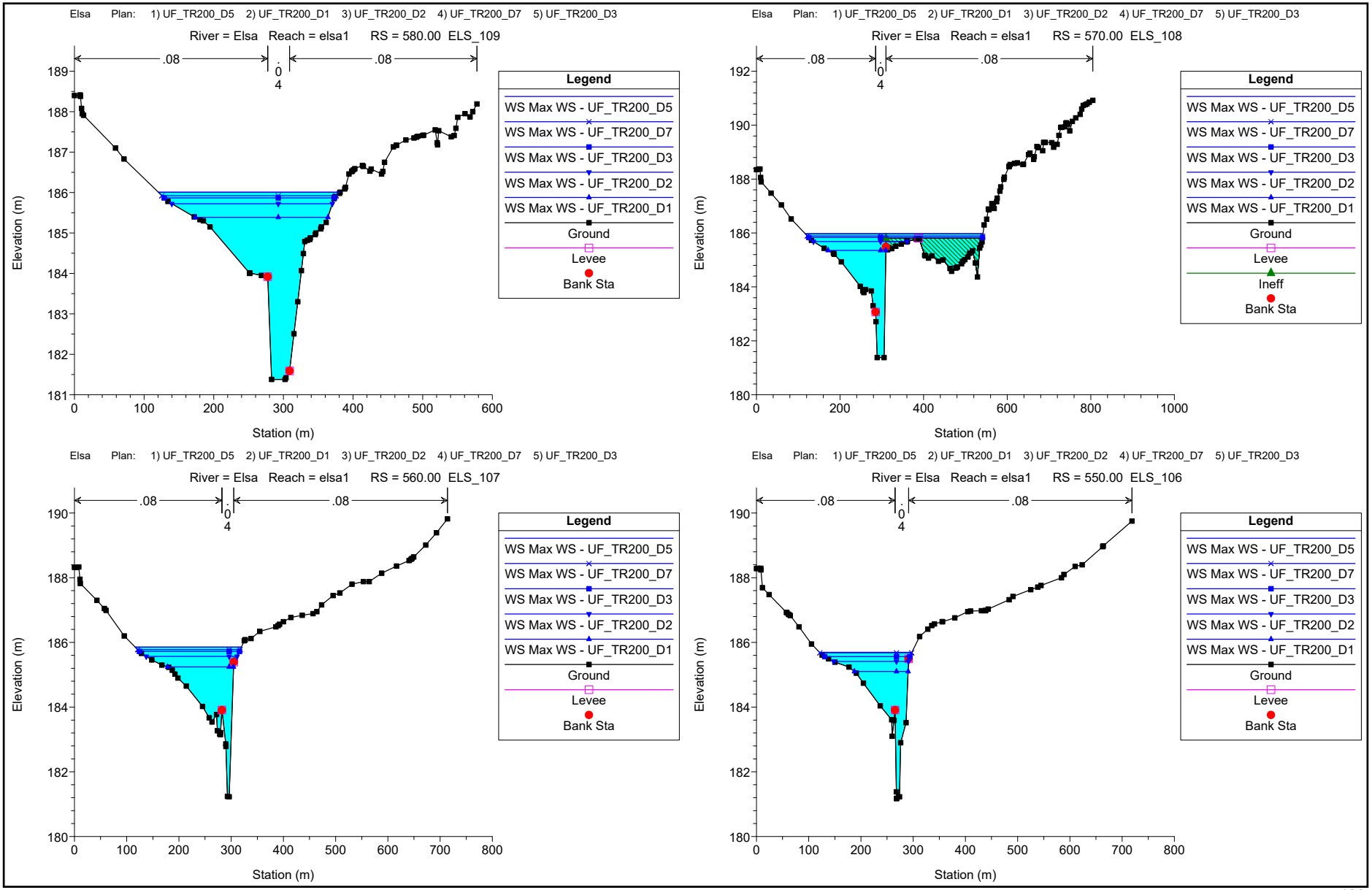

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 700.00 ELS_121
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

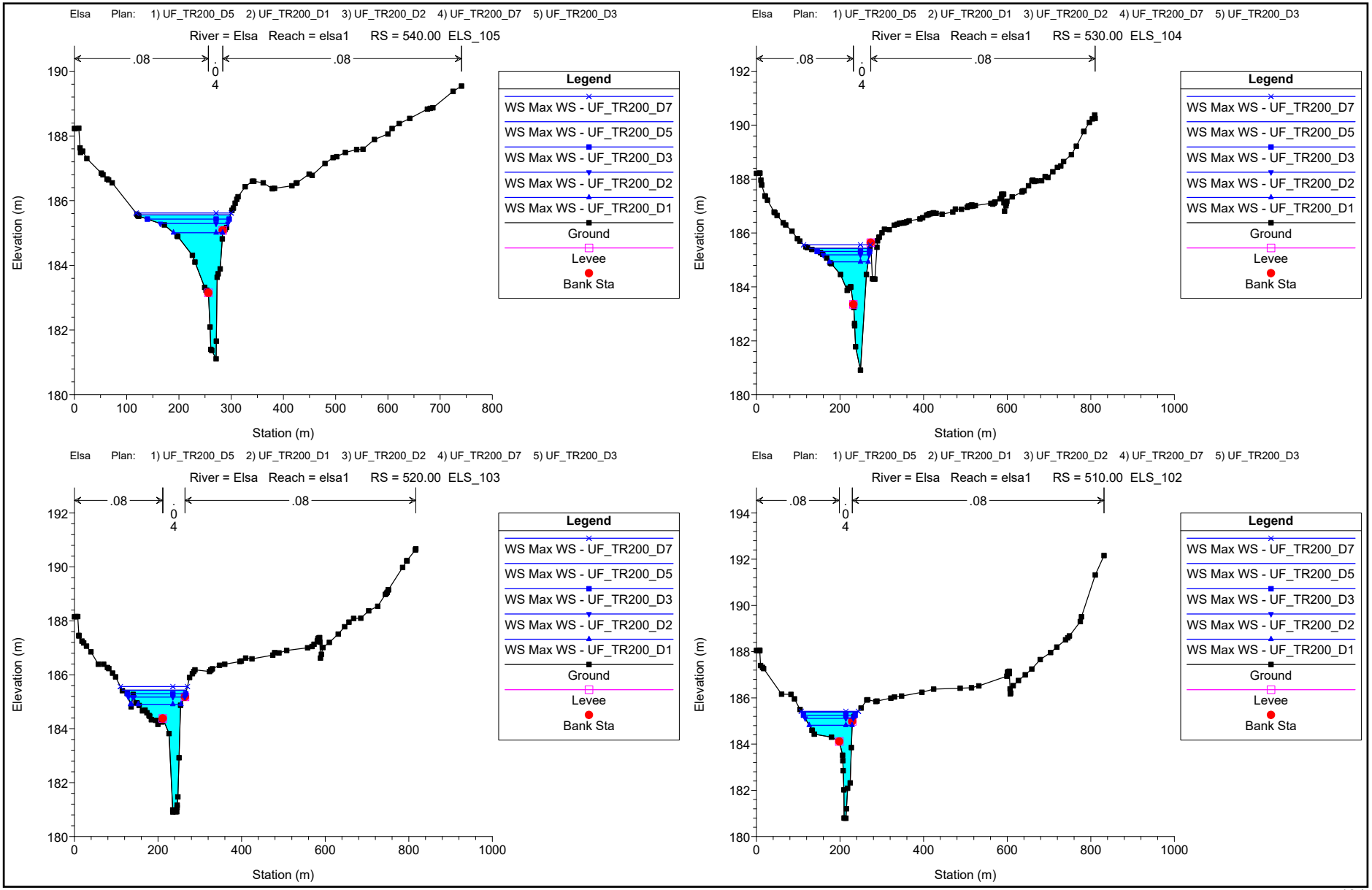

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 690.00 ELS_120
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

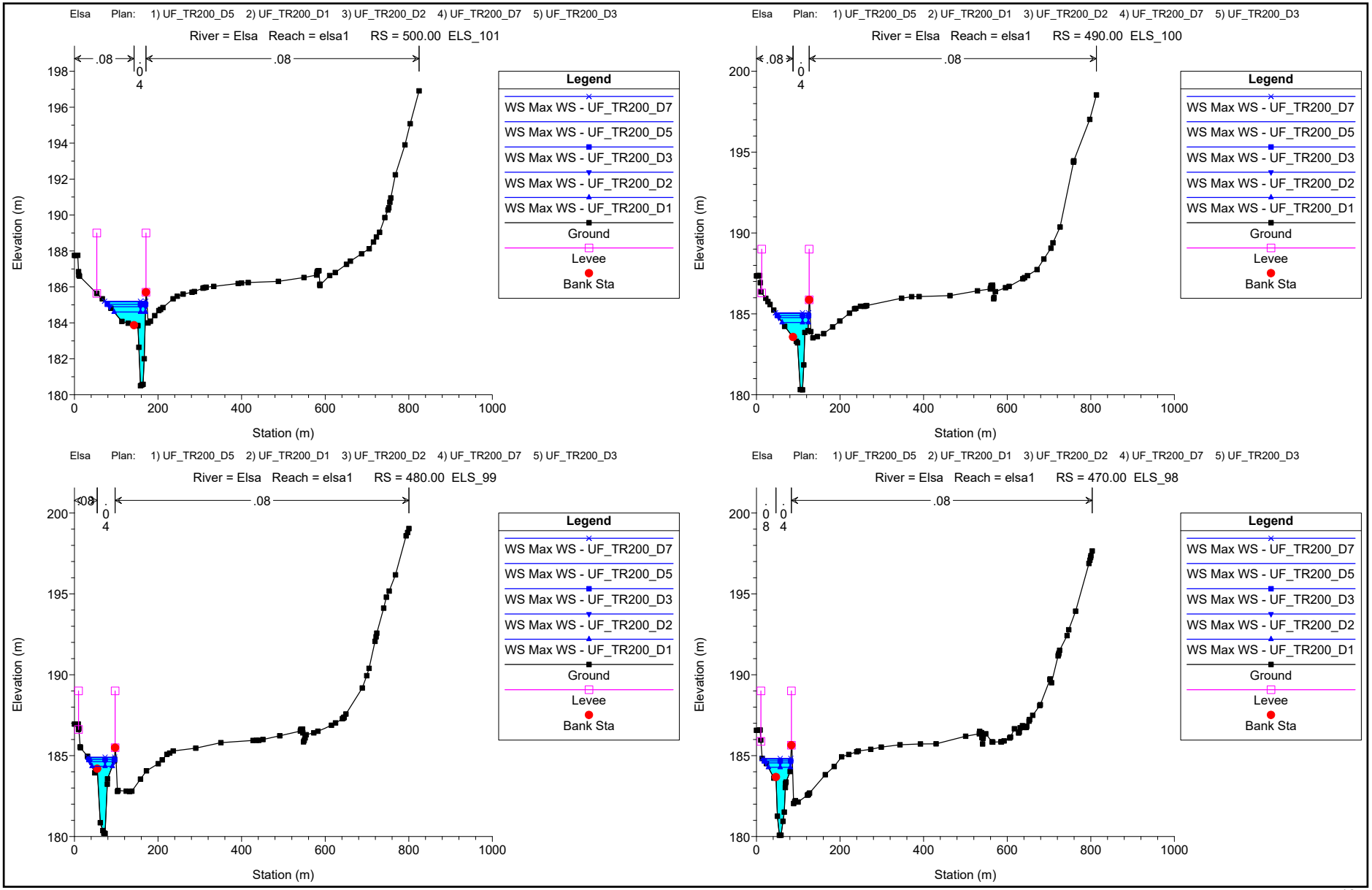

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 680.00 ELS_119
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 670.00 ELS_118
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 660.00 ELS_117
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 650.00 ELS_116
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

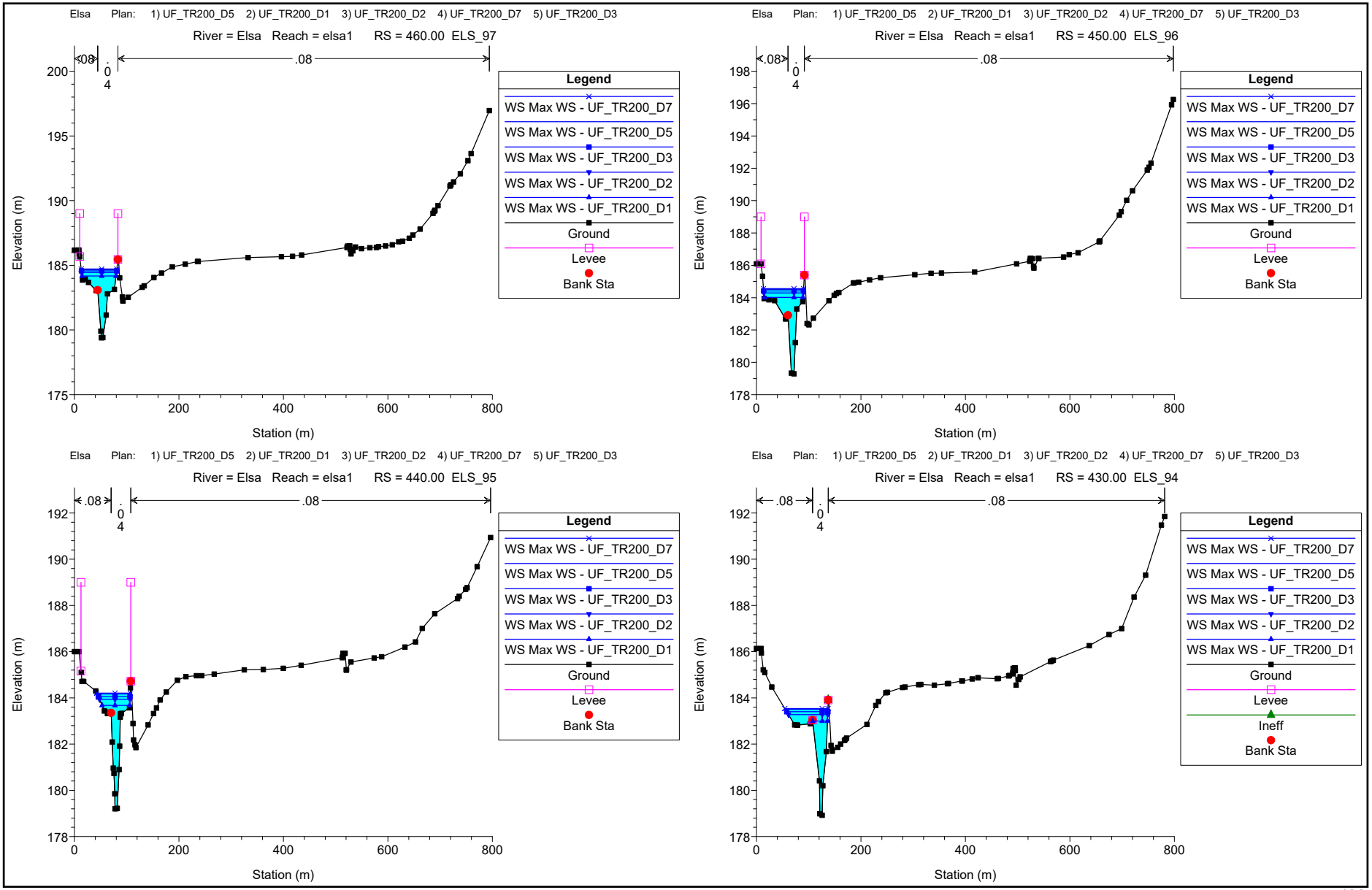

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 640.00 ELS_115
River = Elsa Reach = elsa1 RS = 630.00 ELS_114
River = Elsa Reach = elsa1 RS = 620.00 ELS_113
River = Elsa Reach = elsa1 RS = 610.00 ELS_112
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

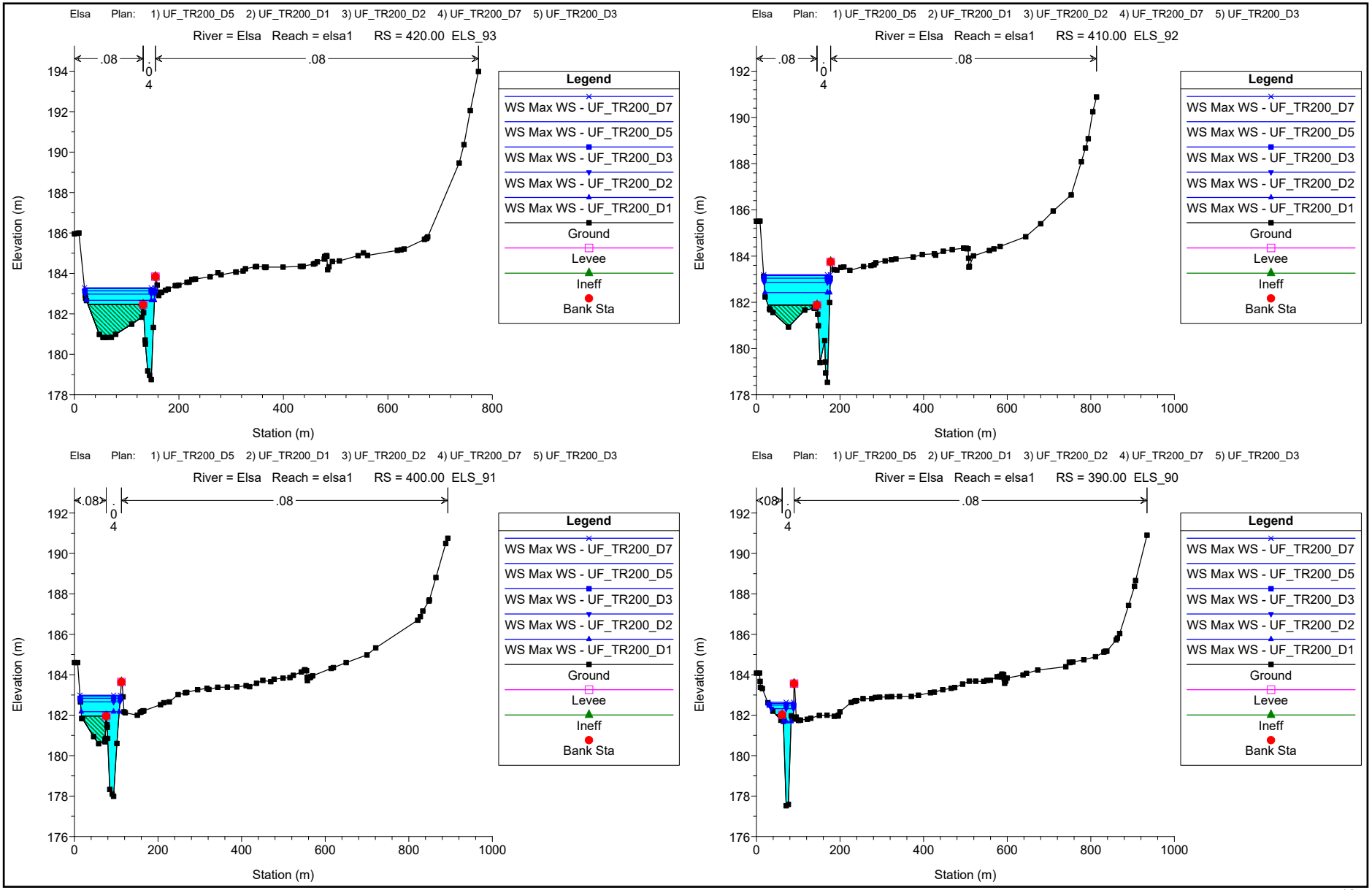

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 600.00 ELS_111
River = Elsa Reach = elsa1 RS = 595.00 BR
River = Elsa Reach = elsa1 RS = 595.00 BR
River = Elsa Reach = elsa1 RS = 590.00 ELS_110
.08
.08
0
4
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

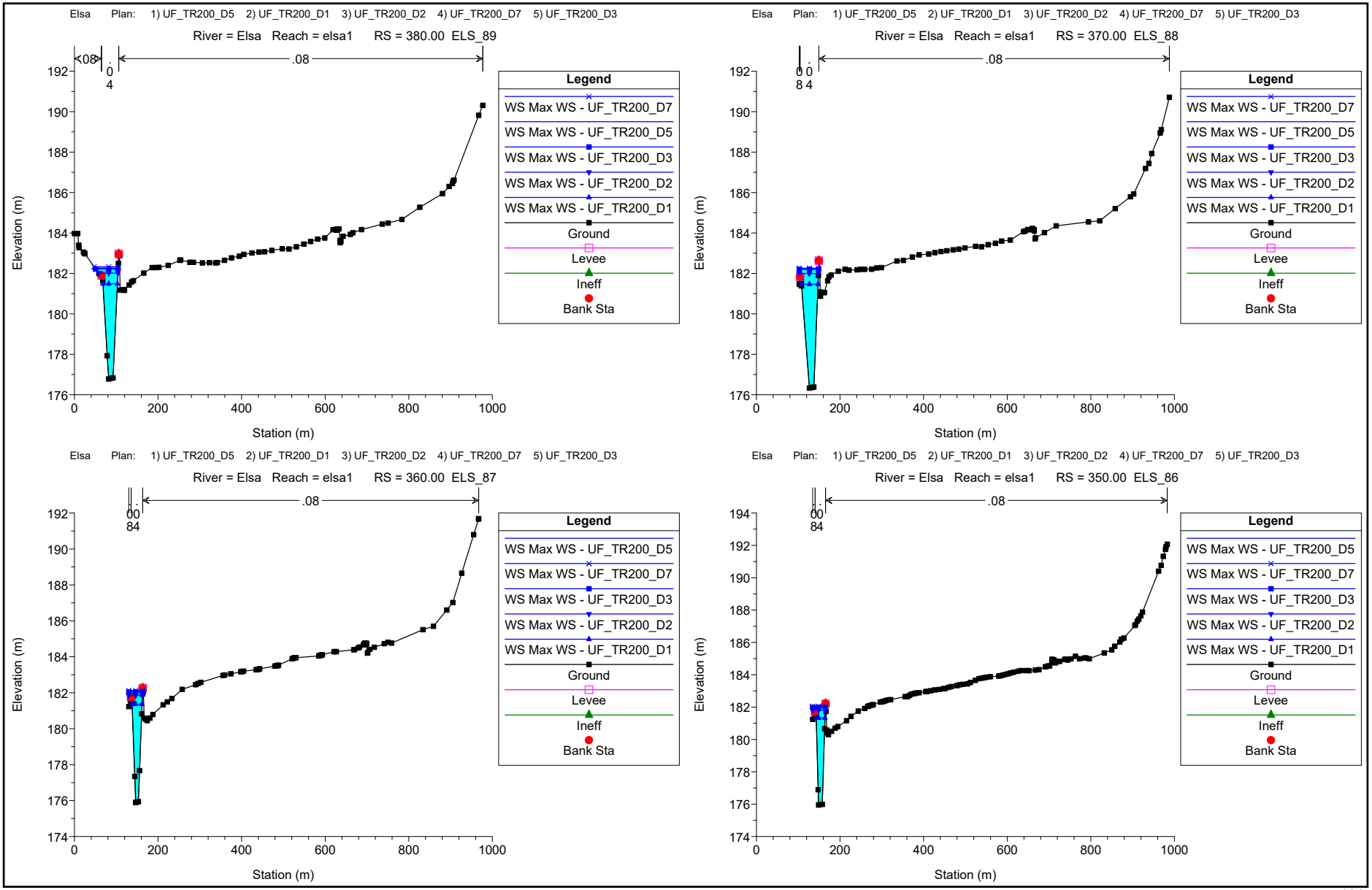

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 580.00 ELS_109
River = Elsa Reach = elsa1 RS = 570.00 ELS_108
River = Elsa Reach = elsa1 RS = 560.00 ELS_107
River = Elsa Reach = elsa1 RS = 550.00 ELS_106
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

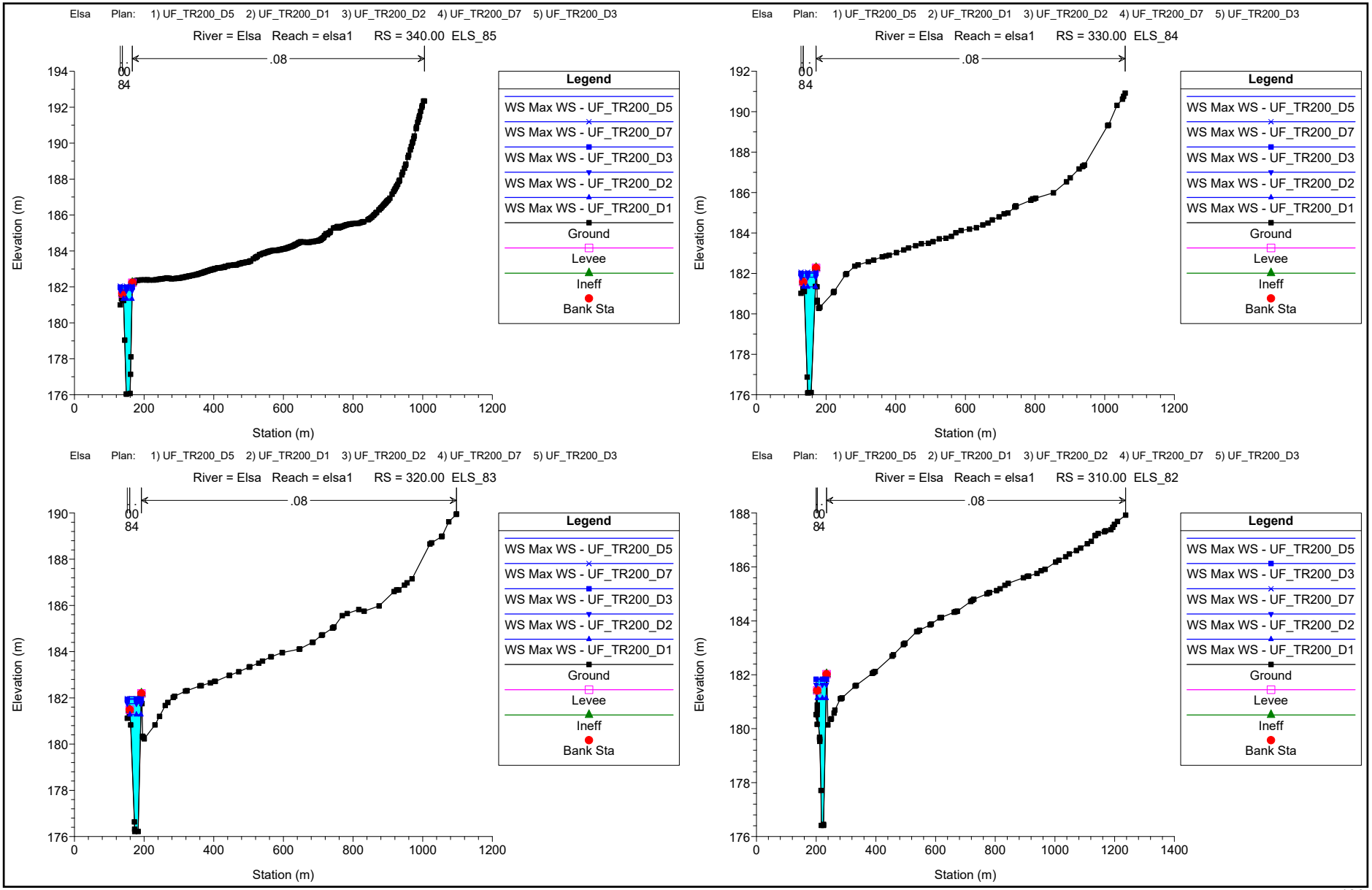

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 540.00 ELS_105
River = Elsa Reach = elsa1 RS = 530.00 ELS_104
River = Elsa Reach = elsa1 RS = 520.00 ELS_103
River = Elsa Reach = elsa1 RS = 510.00 ELS_102
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

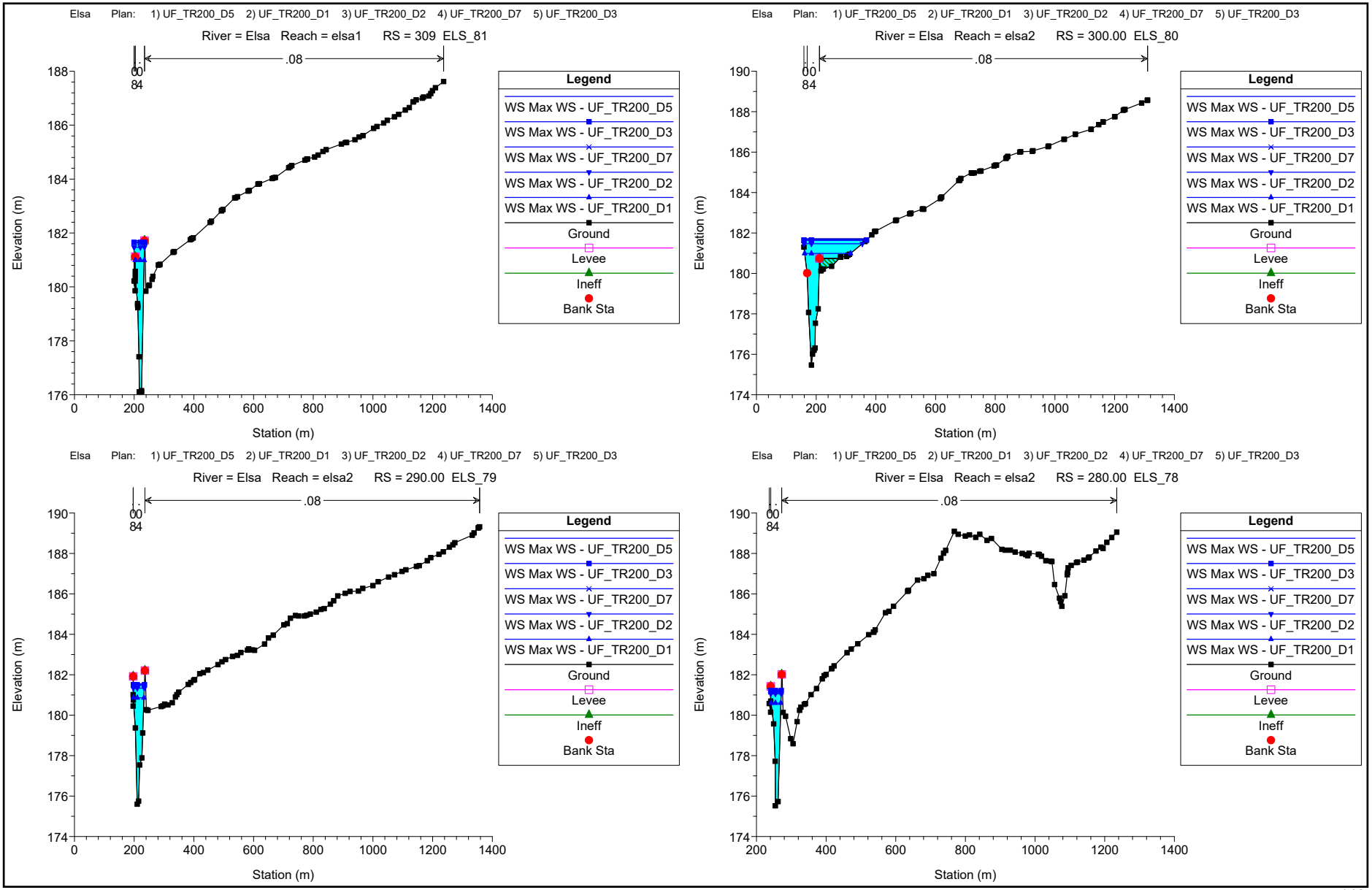

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 500.00 ELS_101
River = Elsa Reach = elsa1 RS = 490.00 ELS_100
River = Elsa Reach = elsa1 RS = 480.00 ELS_99
River = Elsa Reach = elsa1 RS = 470.00 ELS_98
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

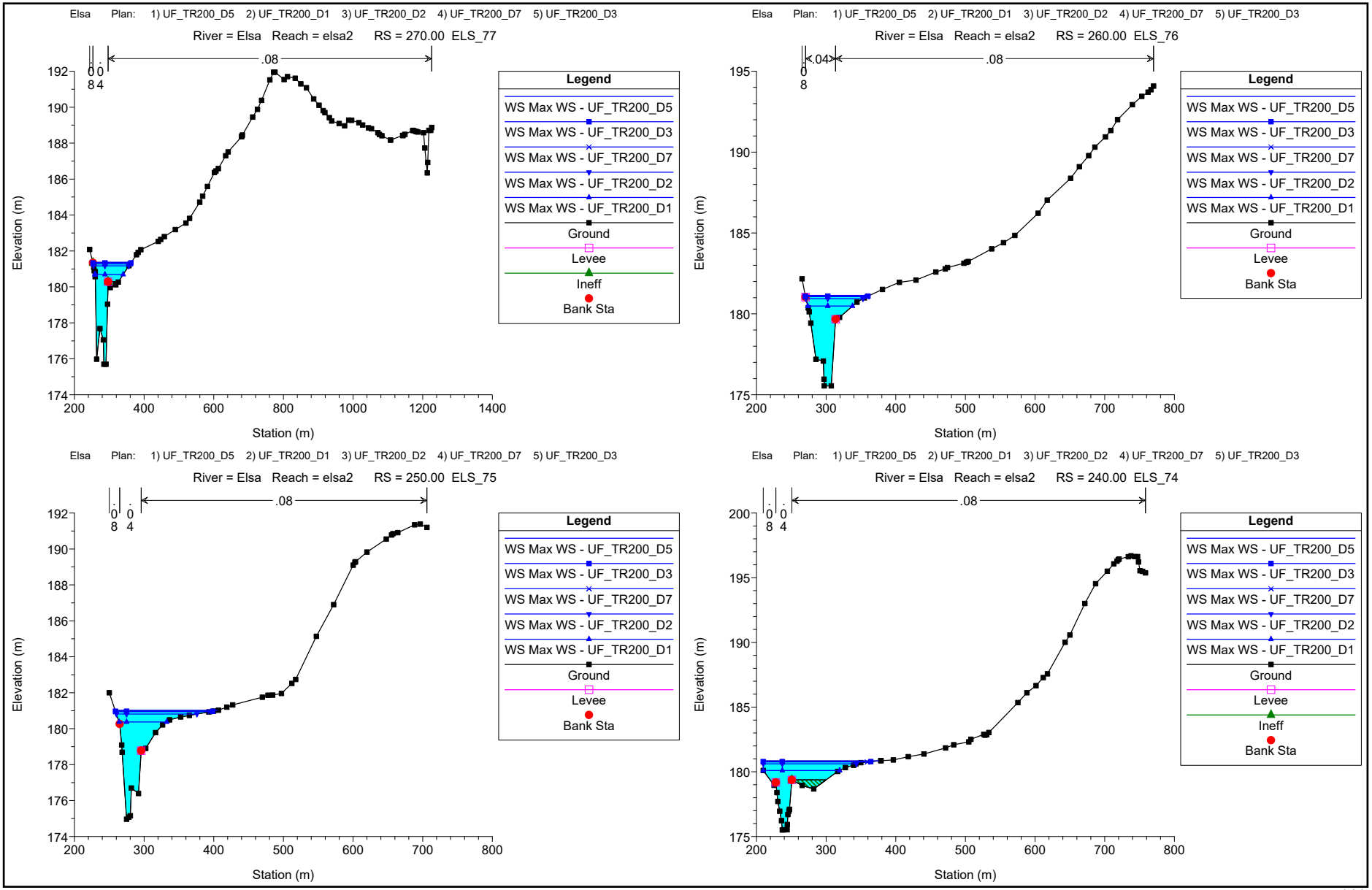

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 460.00 ELS_97
River = Elsa Reach = elsa1 RS = 450.00 ELS_96
River = Elsa Reach = elsa1 RS = 440.00 ELS_95
River = Elsa Reach = elsa1 RS = 430.00 ELS_94
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

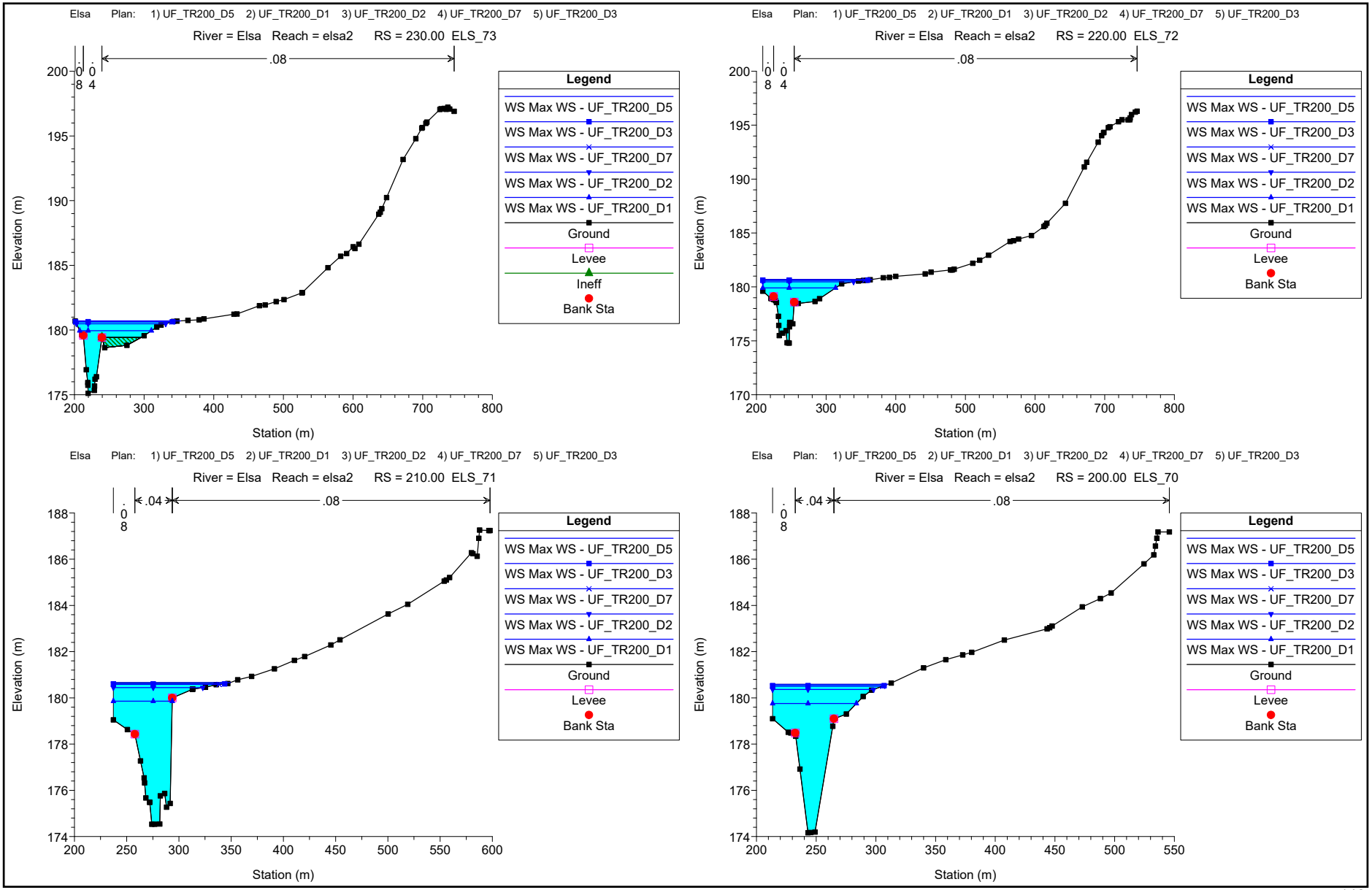

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 420.00 ELS_93
River = Elsa Reach = elsa1 RS = 410.00 ELS_92
River = Elsa Reach = elsa1 RS = 400.00 ELS_91
River = Elsa Reach = elsa1 RS = 390.00 ELS_90
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

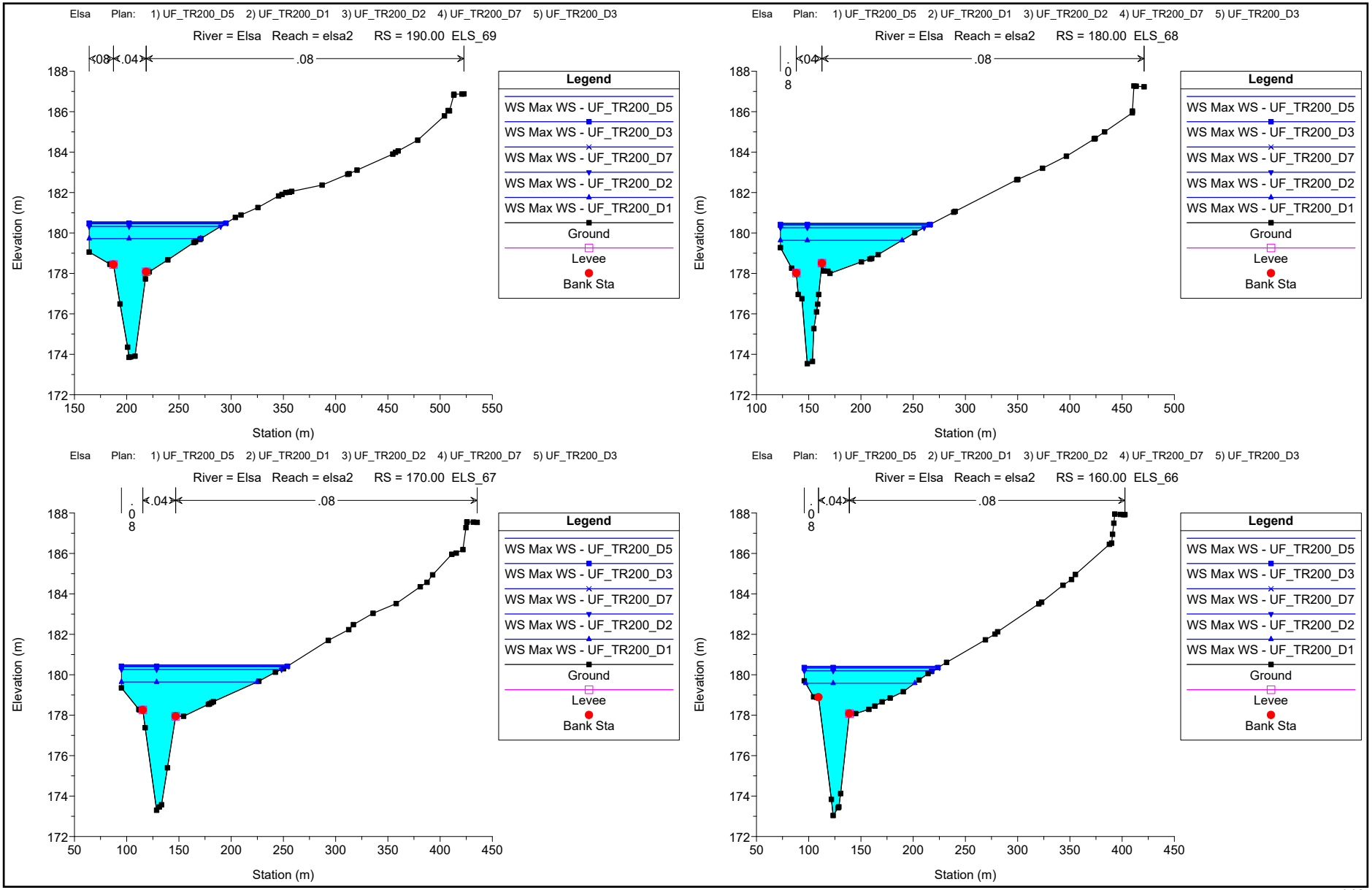

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 380.00 ELS_89
River = Elsa Reach = elsa1 RS = 370.00 ELS_88
River = Elsa Reach = elsa1 RS = 360.00 ELS_87
River = Elsa Reach = elsa1 RS = 350.00 ELS_86
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

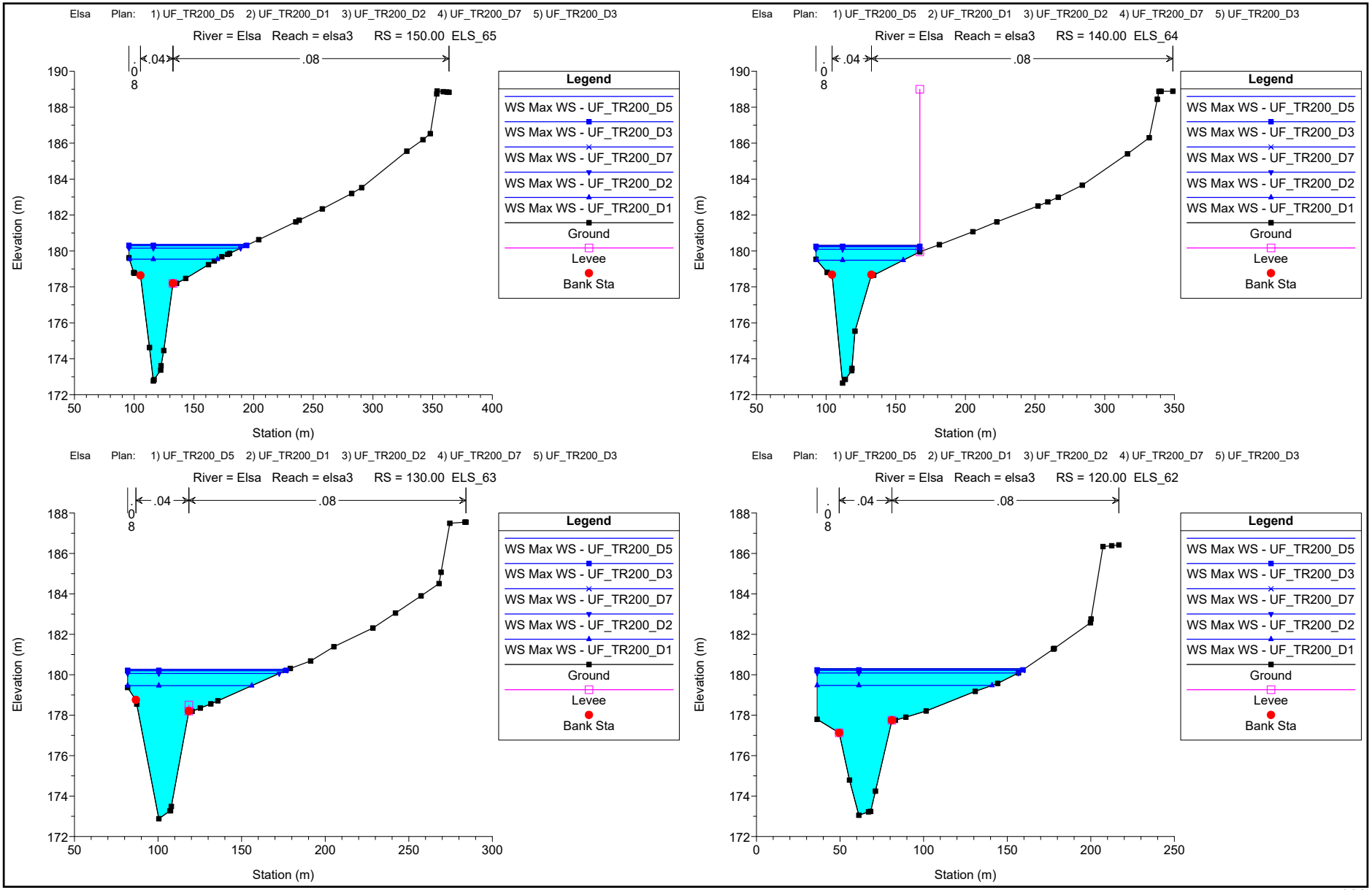

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 340.00 ELS_85
River = Elsa Reach = elsa1 RS = 330.00 ELS_84
River = Elsa Reach = elsa1 RS = 320.00 ELS_83
River = Elsa Reach = elsa1 RS = 310.00 ELS_82
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

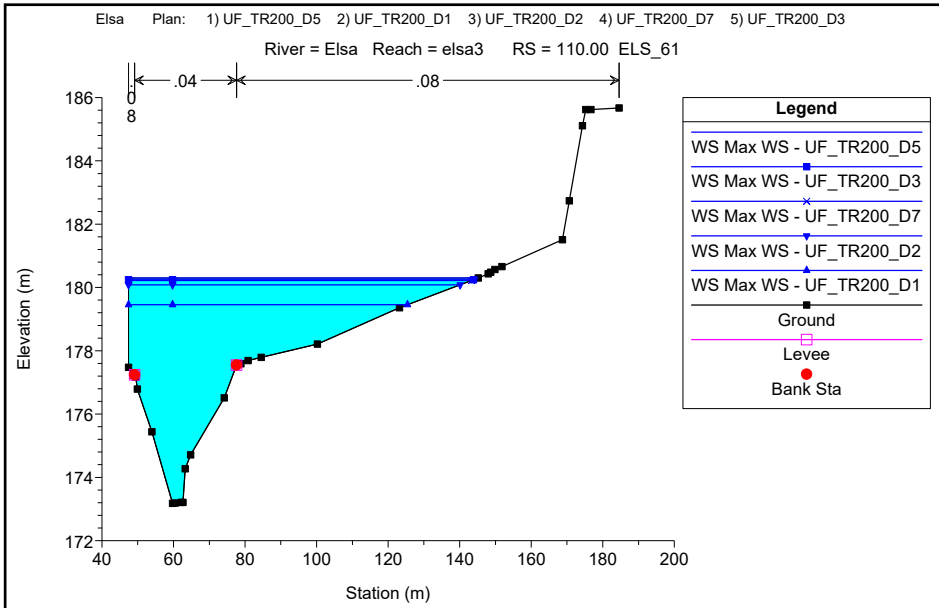

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa1 RS = 309 ELS_81
River = Elsa Reach = elsa2 RS = 300.00 ELS_80
River = Elsa Reach = elsa2 RS = 290.00 ELS_79
River = Elsa Reach = elsa2 RS = 280.00 ELS_78
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

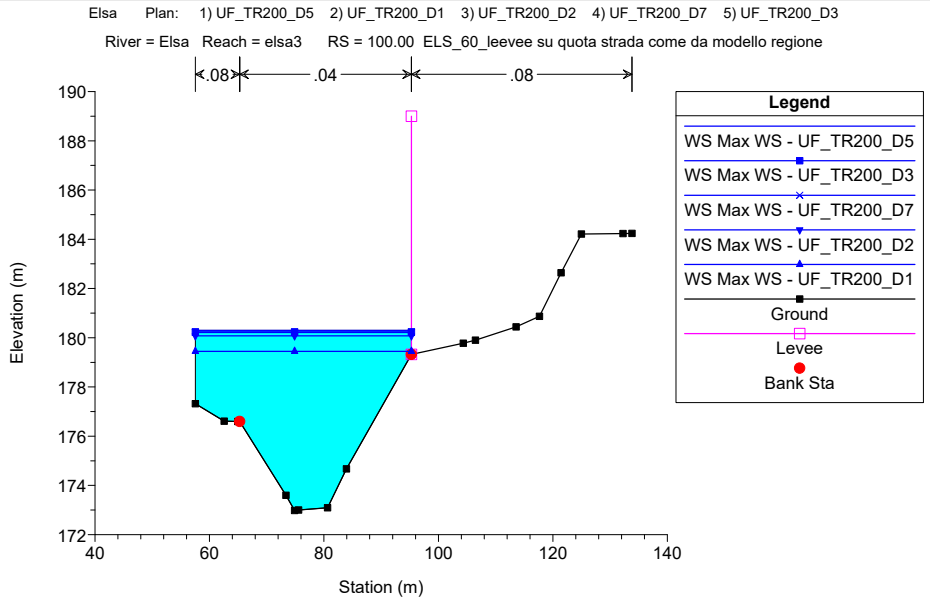

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 270.00 ELS_77
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 260.00 ELS_76
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 250.00 ELS_75
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 240.00 ELS_74
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

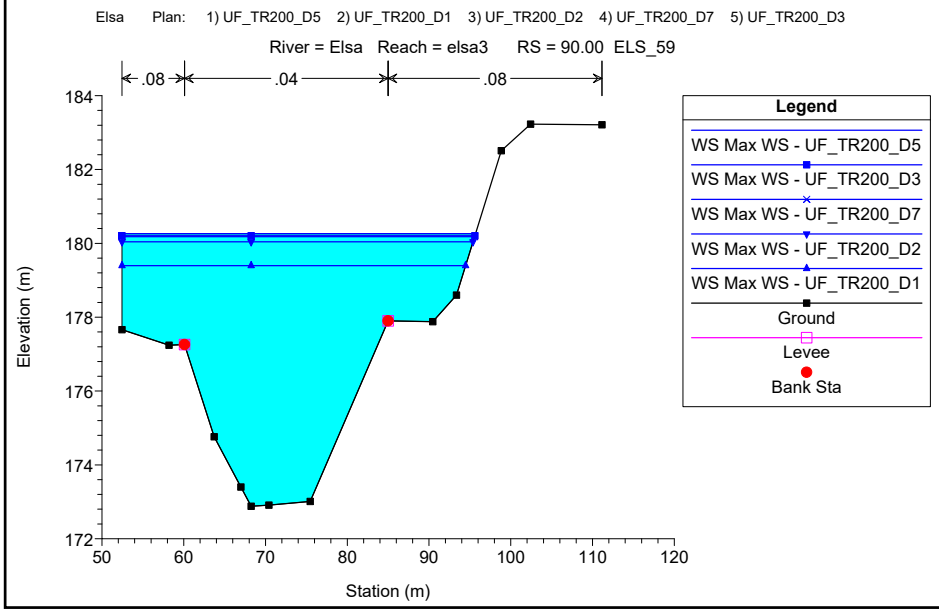

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 230.00 ELS_73
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 220.00 ELS_72
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 210.00 ELS_71
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 200.00 ELS_70
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

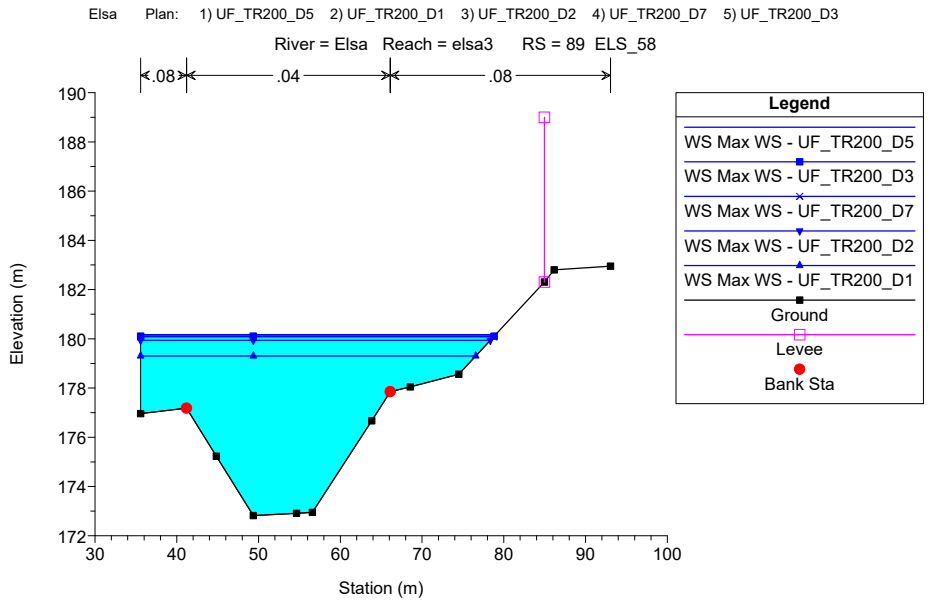

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa2 RS = 190.00 ELS_69
River = Elsa Reach = elsa2 RS = 180.00 ELS_68
River = Elsa Reach = elsa2 RS = 170.00 ELS_67
River = Elsa Reach = elsa2 RS = 160.00 ELS_66
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

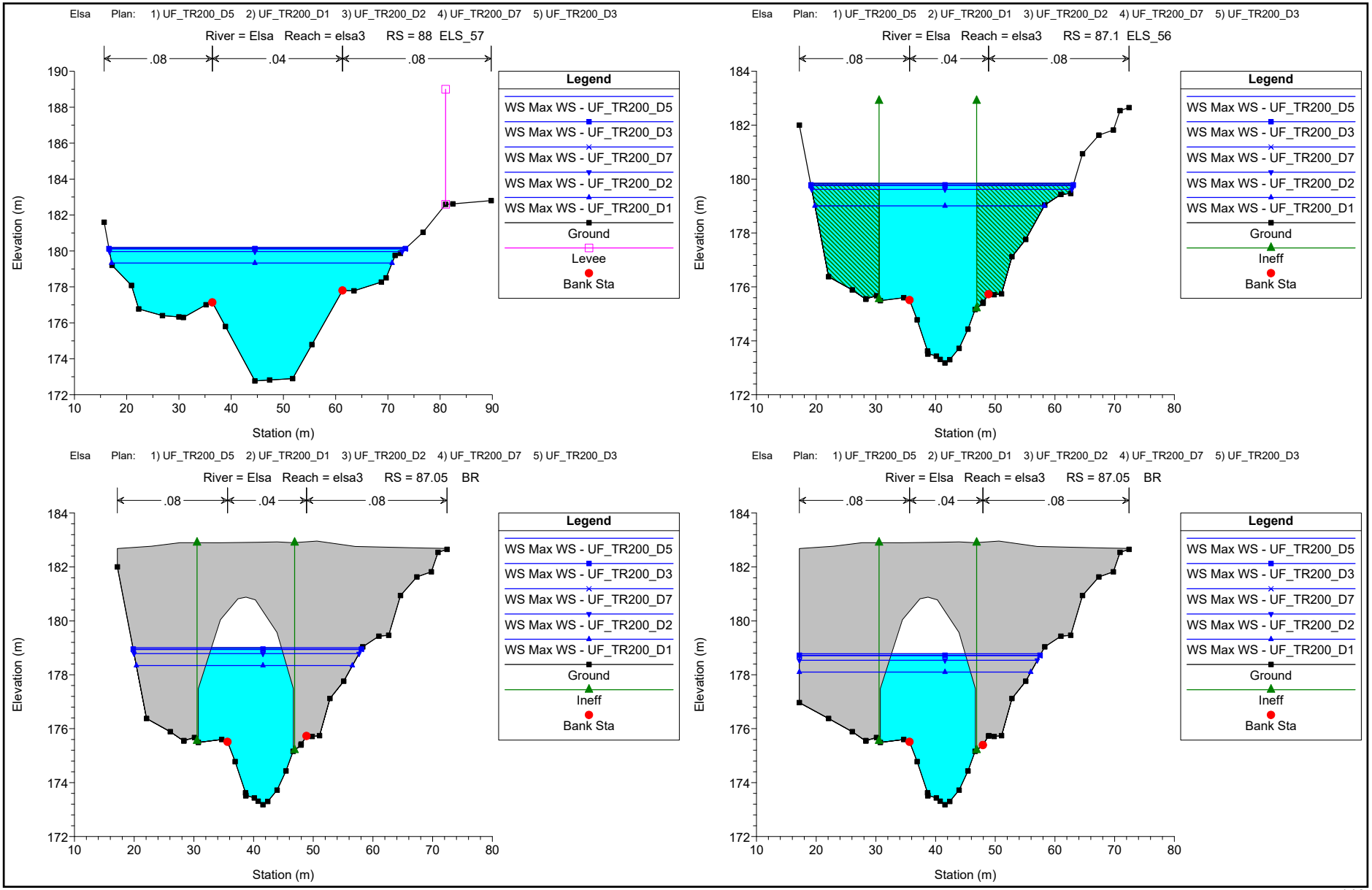

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 150.00 ELS_65
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 140.00 ELS_64
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 130.00 ELS_63
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 120.00 ELS_62
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

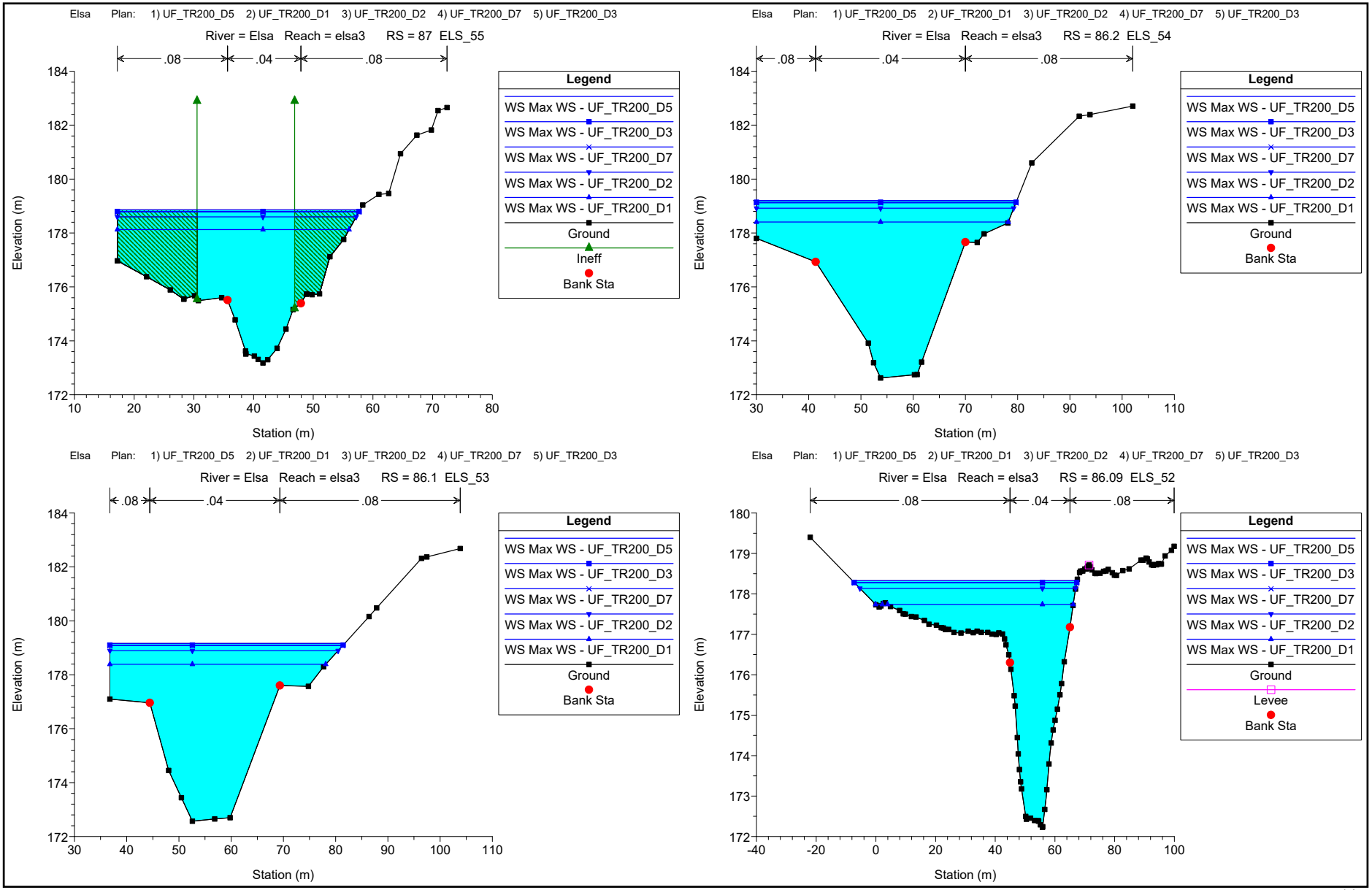

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 110.00 ELS_61
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

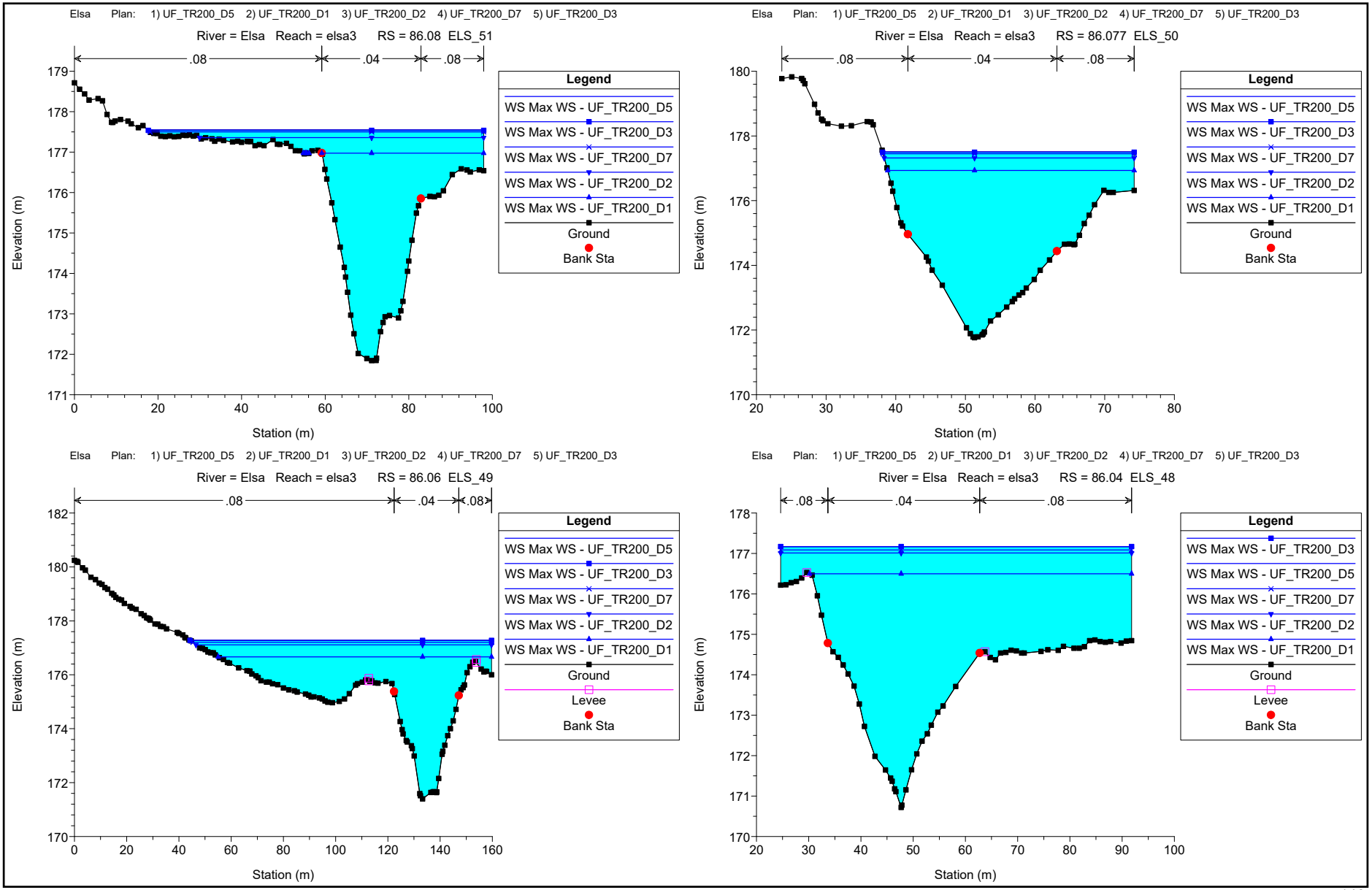

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 100.00 ELS_60_leevee su quota strada come da modello regione
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

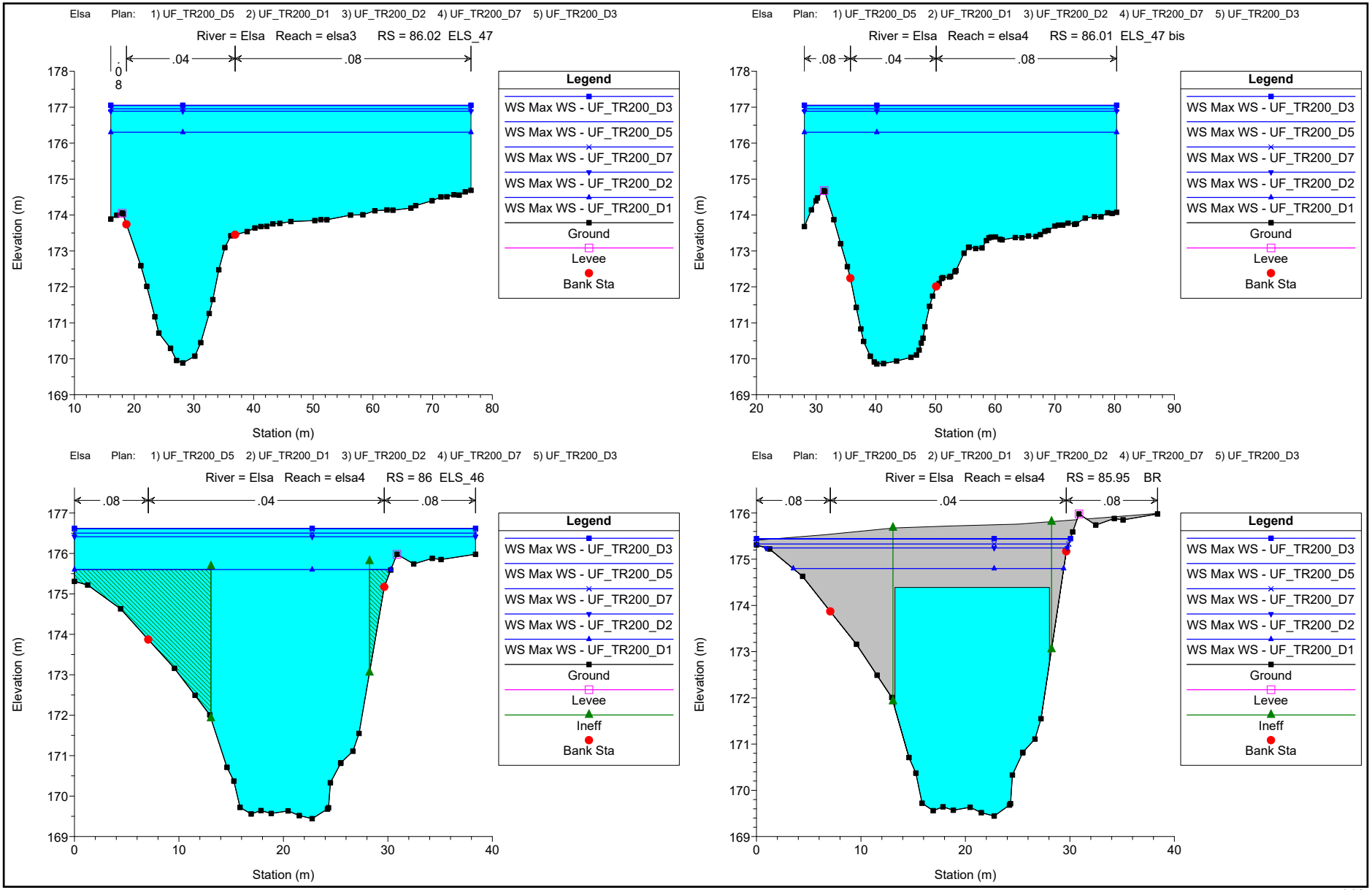

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 90.00 ELS_59
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

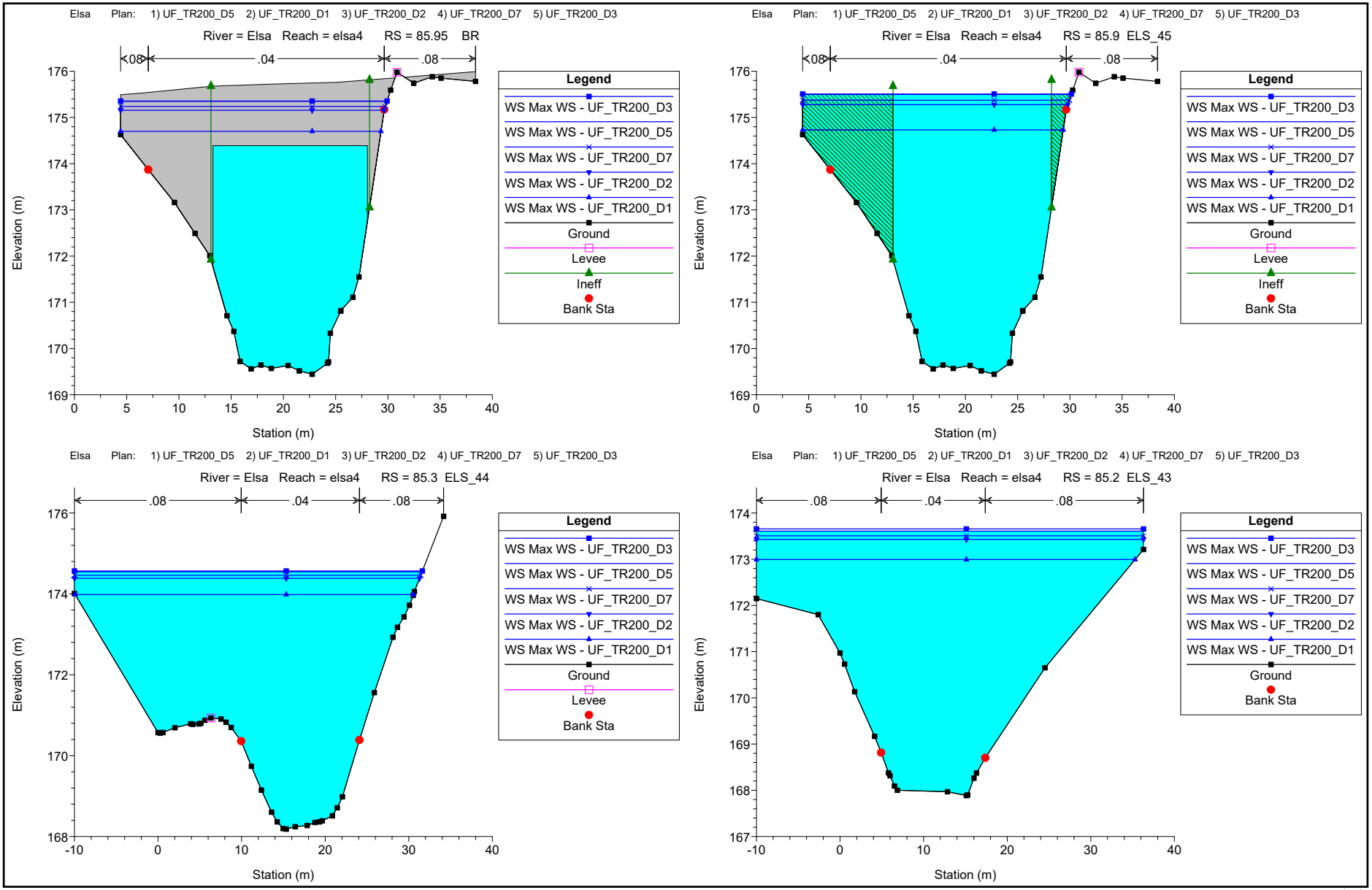

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 89 ELS_58
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

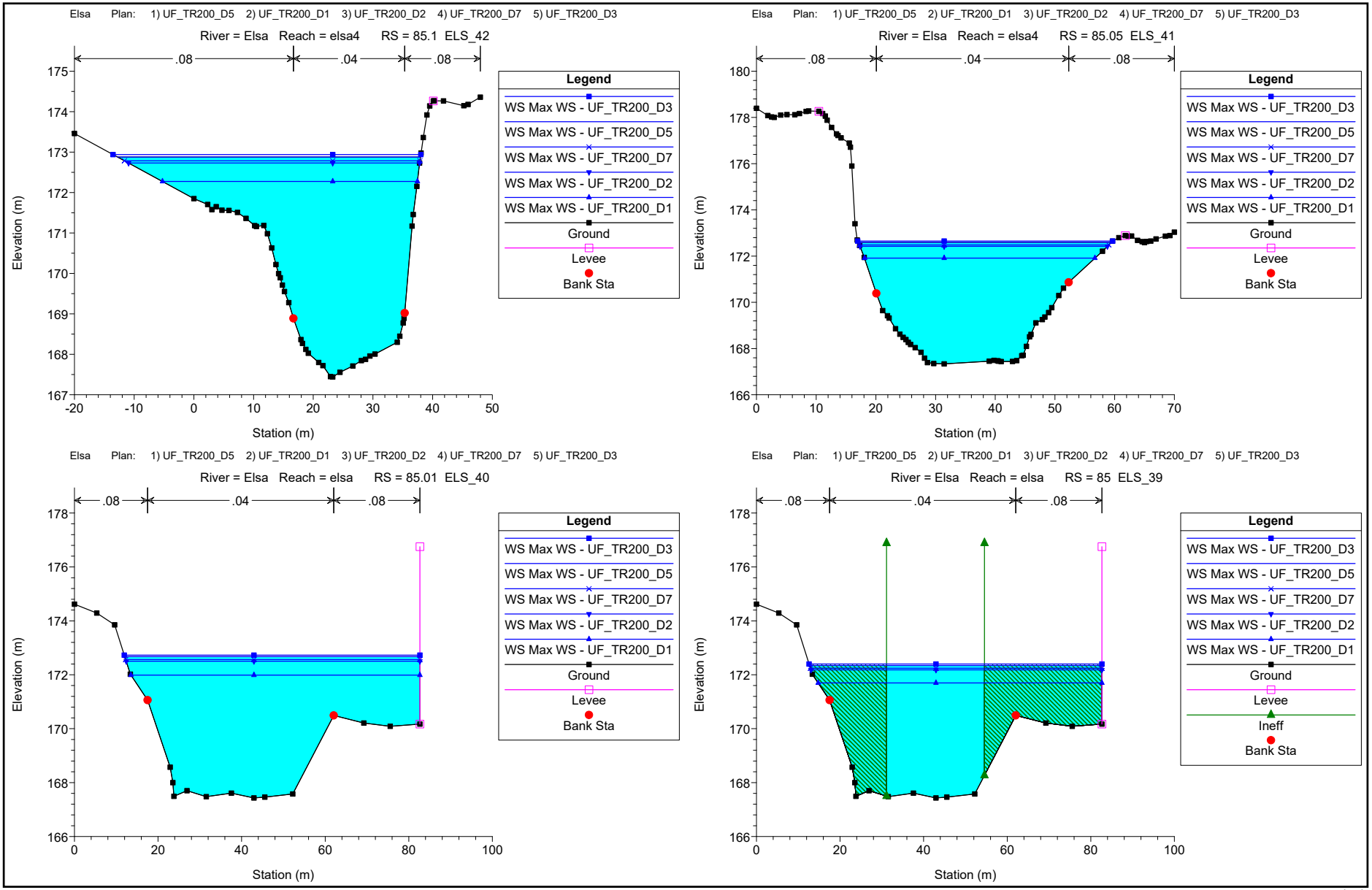

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 88 ELS_57
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 87.1 ELS_56
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 87.05 BR
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 87.05 BR
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta

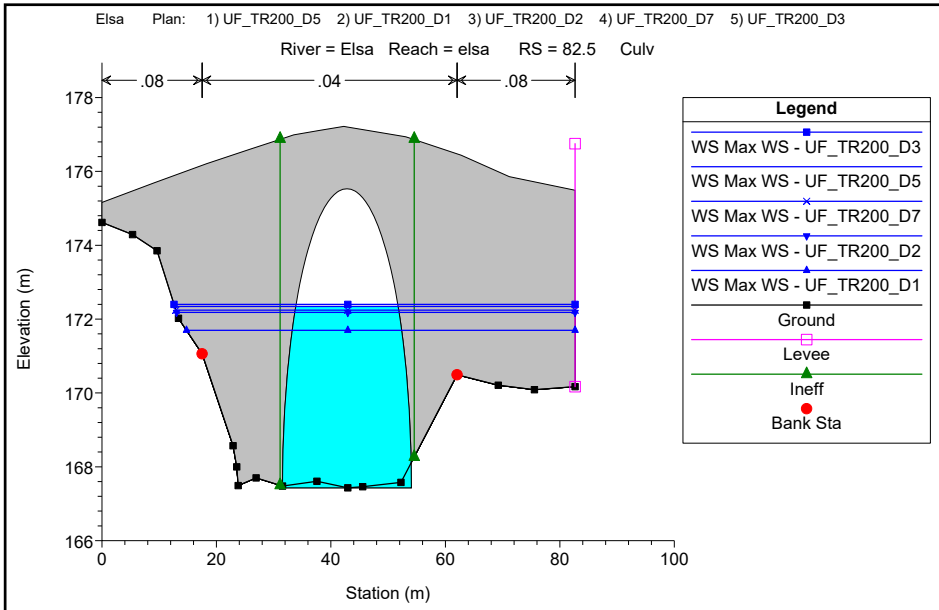

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 87 ELS_55
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.2 ELS_54
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.1 ELS_53
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.09 ELS_52
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

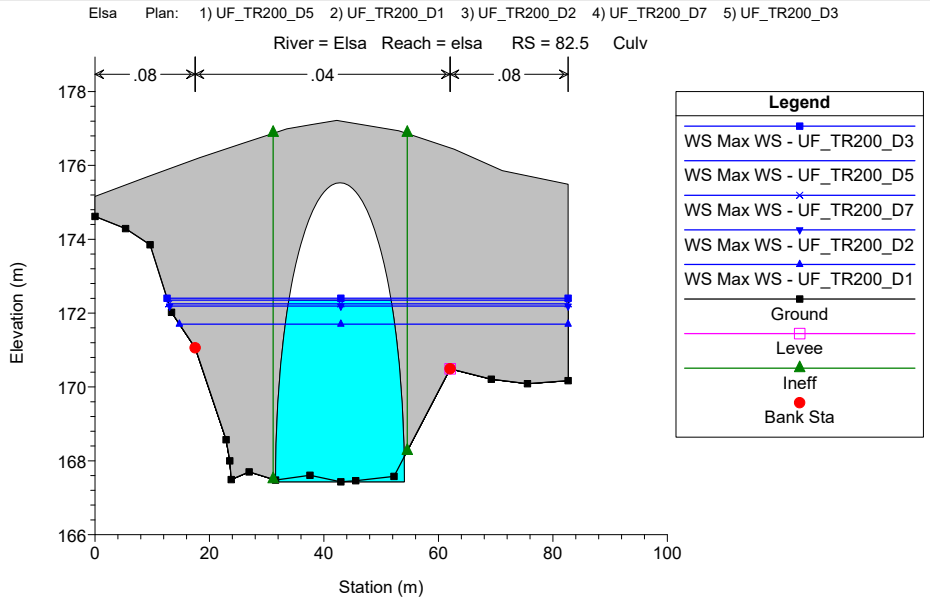

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.08 ELS_51
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.077 ELS_50
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.06 ELS_49
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.04 ELS_48
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

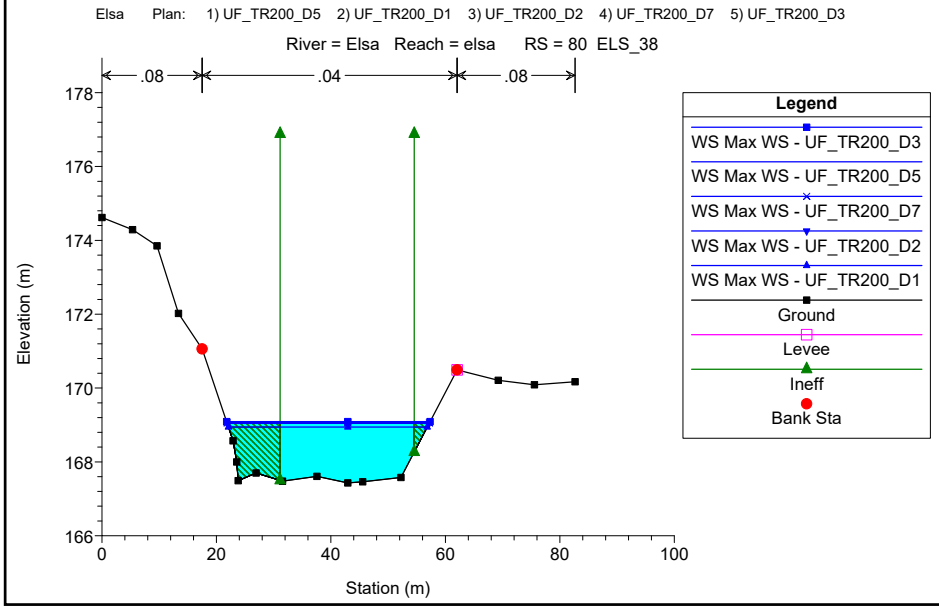

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa3 RS = 86.02 ELS_47
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 86.01 ELS_47 bis
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 86 ELS_46
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 85.95 BR
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

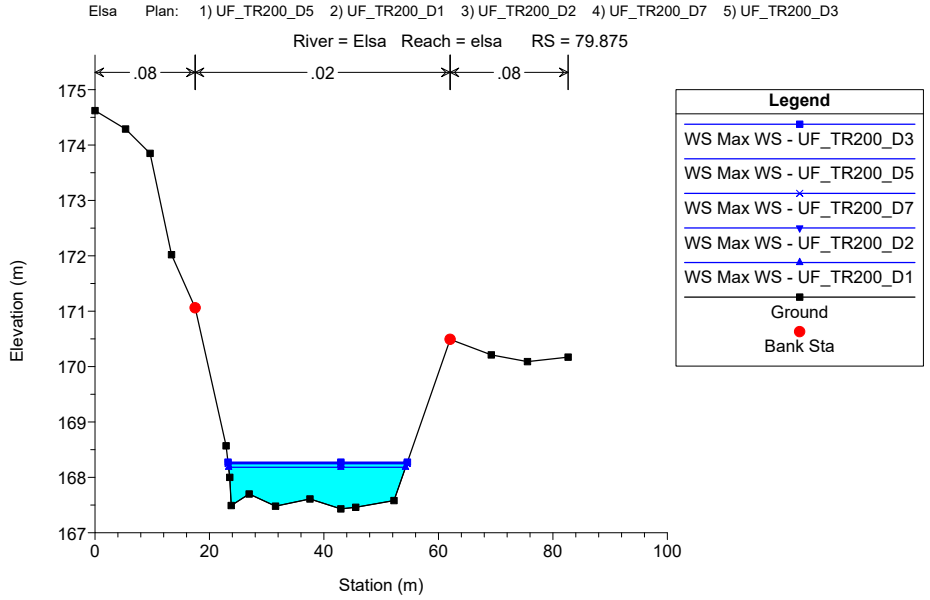

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 85.95 BR
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 85.9 ELS_45
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 85.3 ELS_44
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 85.2 ELS_43
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

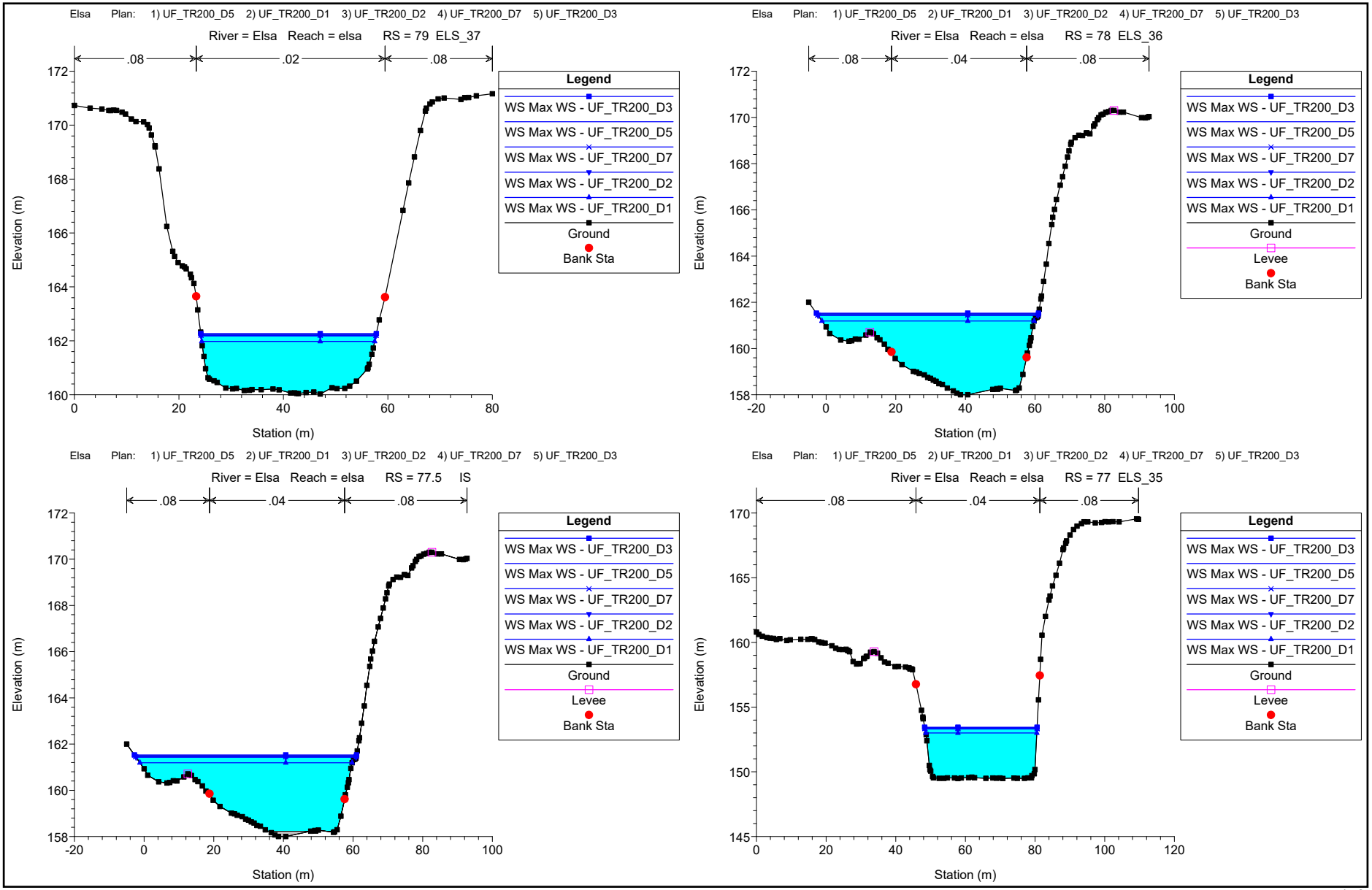

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa4 RS = 85.1 ELS_42
River = Elsa Reach = elsa4 RS = 85.05 ELS_41
River = Elsa Reach = elsa RS = 85.01 ELS_40
River = Elsa Reach = elsa RS = 85 ELS_39
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

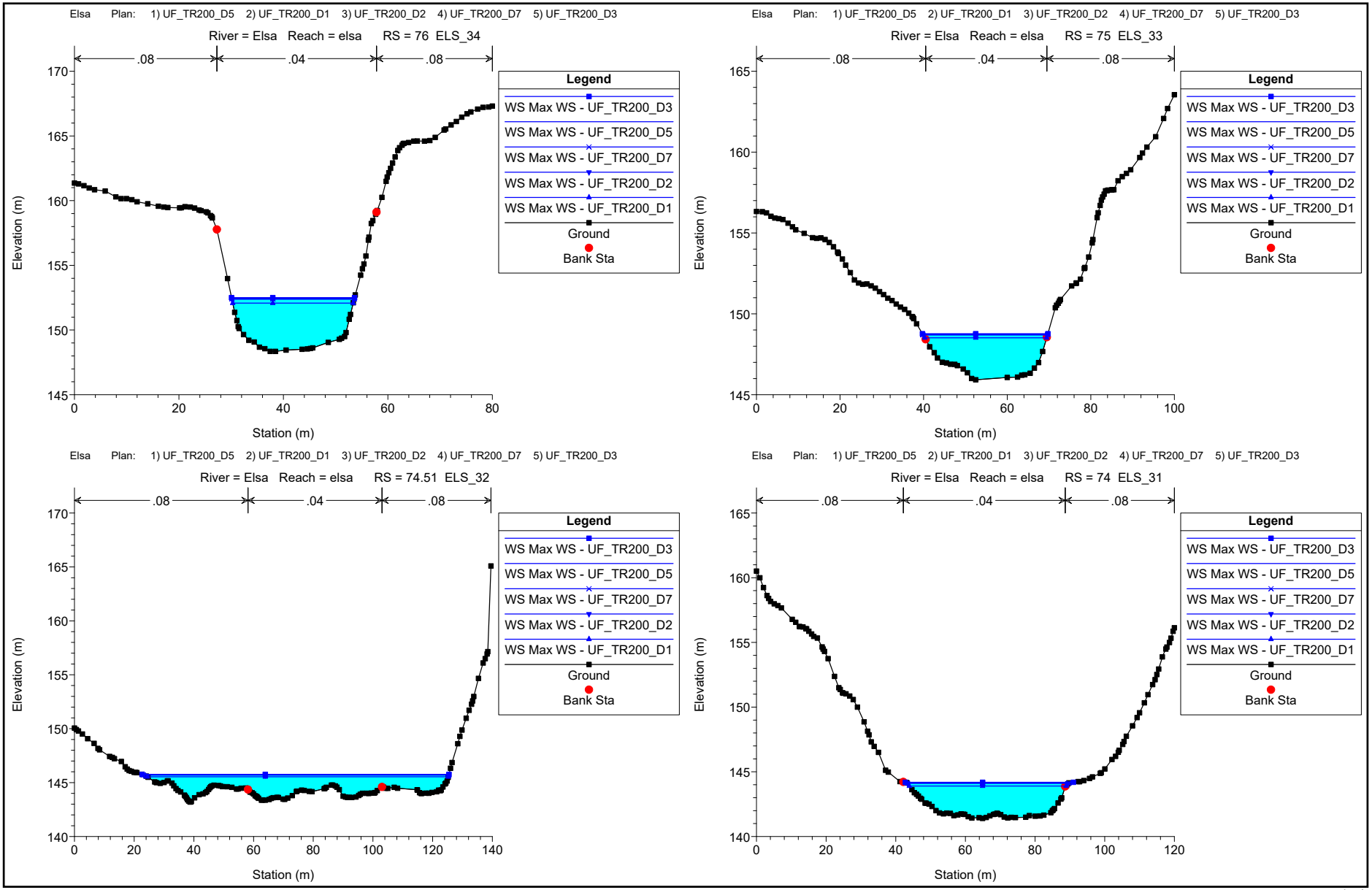

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 82.5 Culv
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

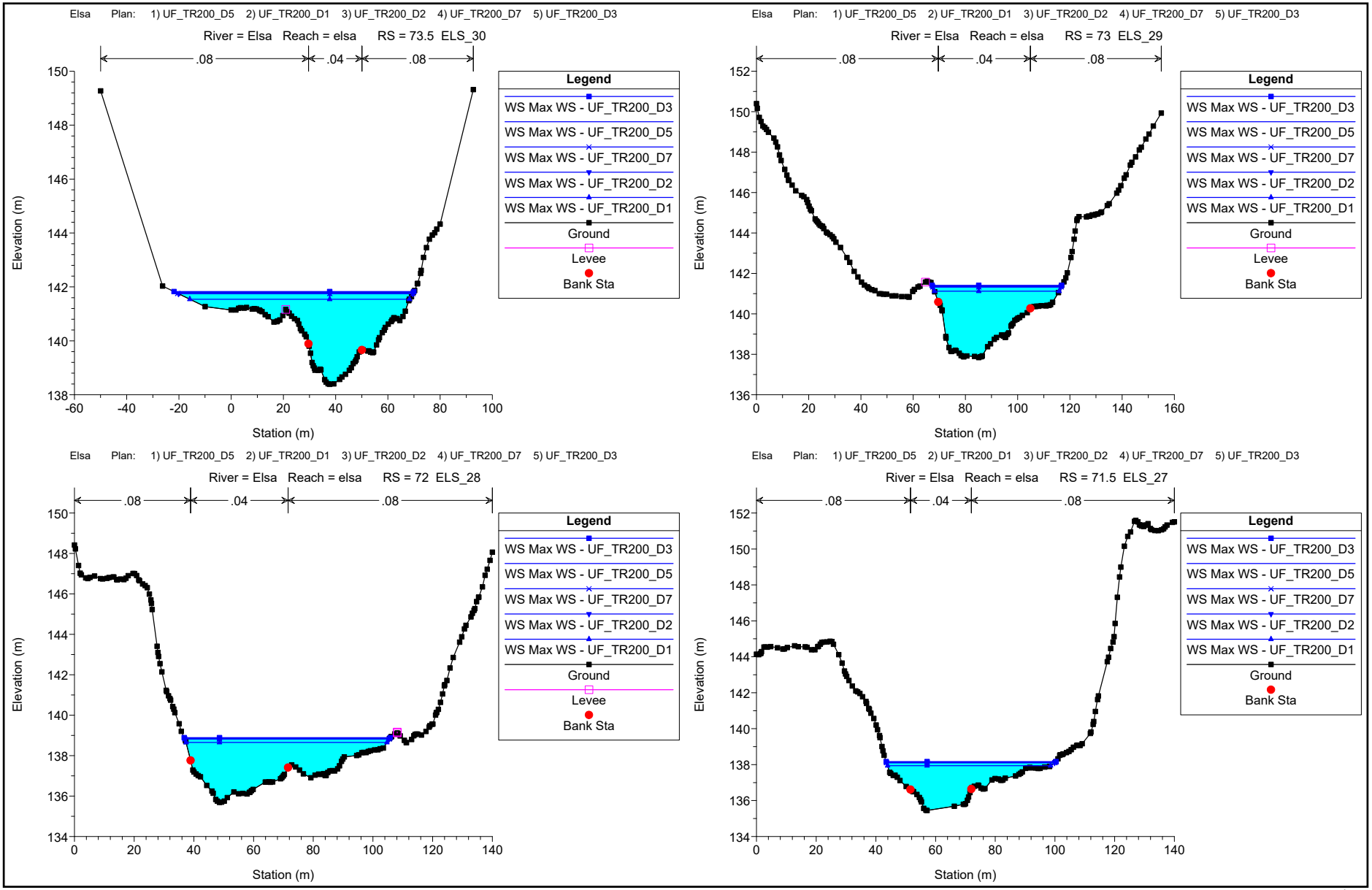

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 82.5 Culv
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

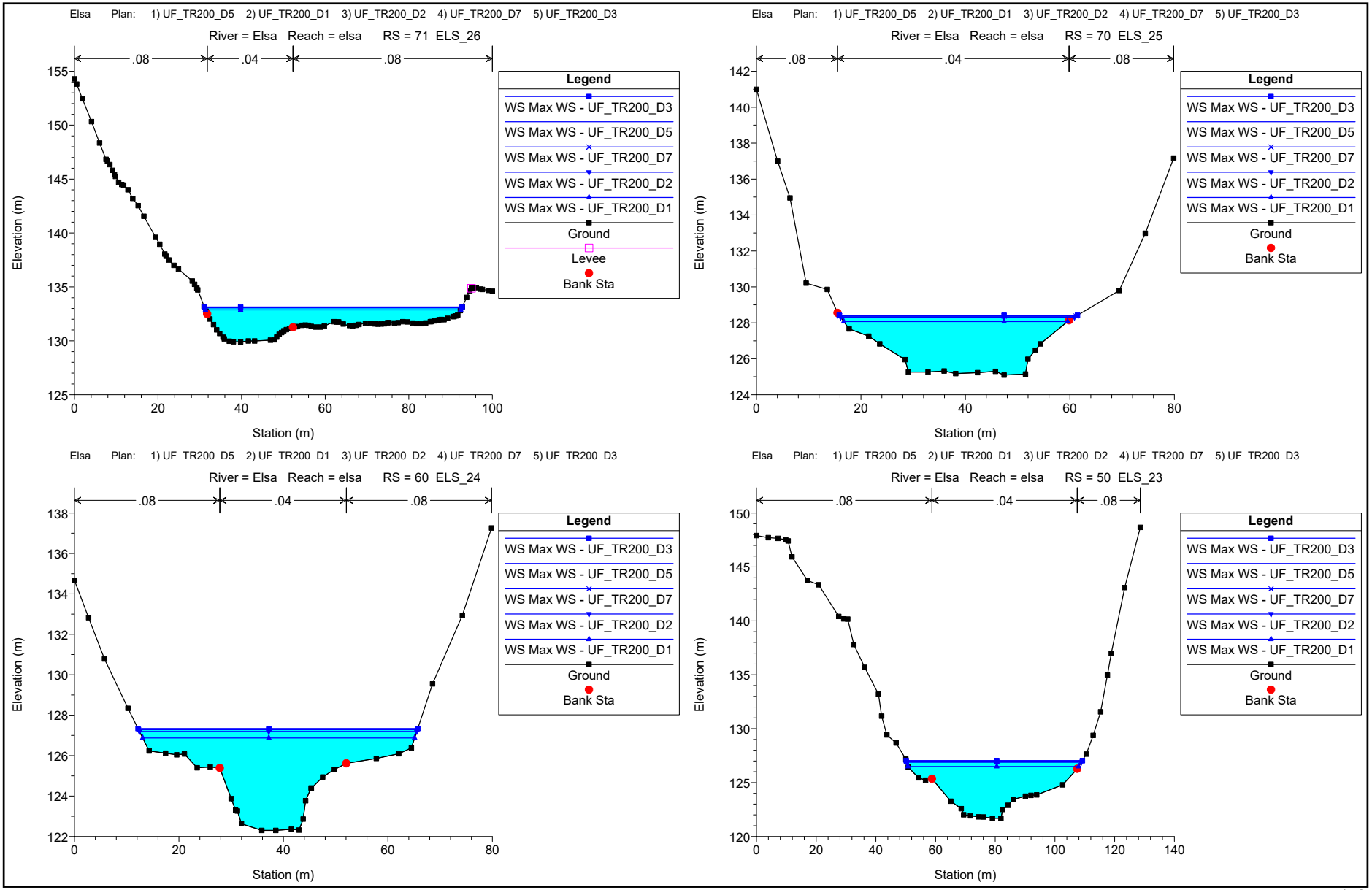

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 80 ELS_38
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta

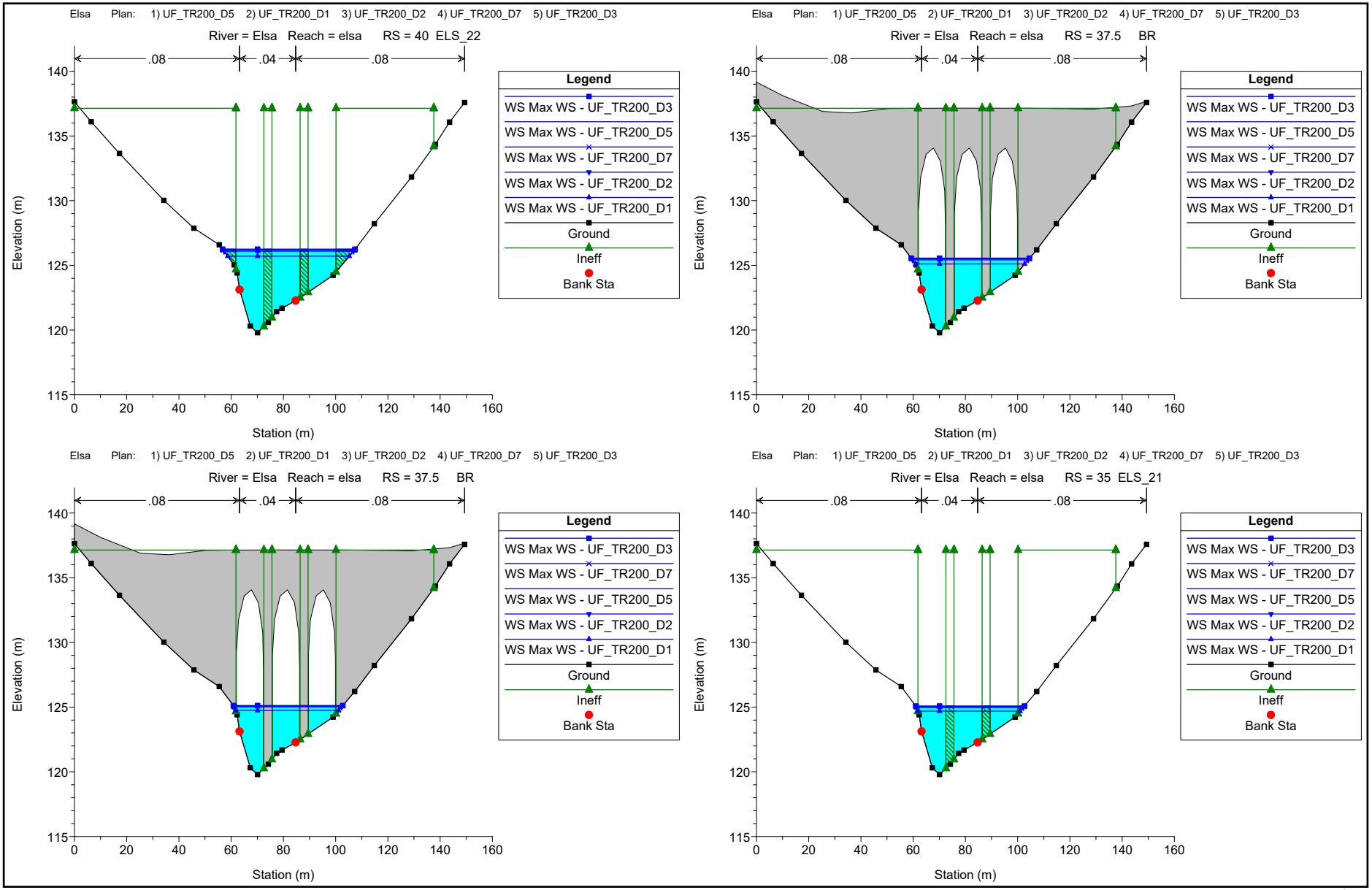

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 79.875
.08
.02
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

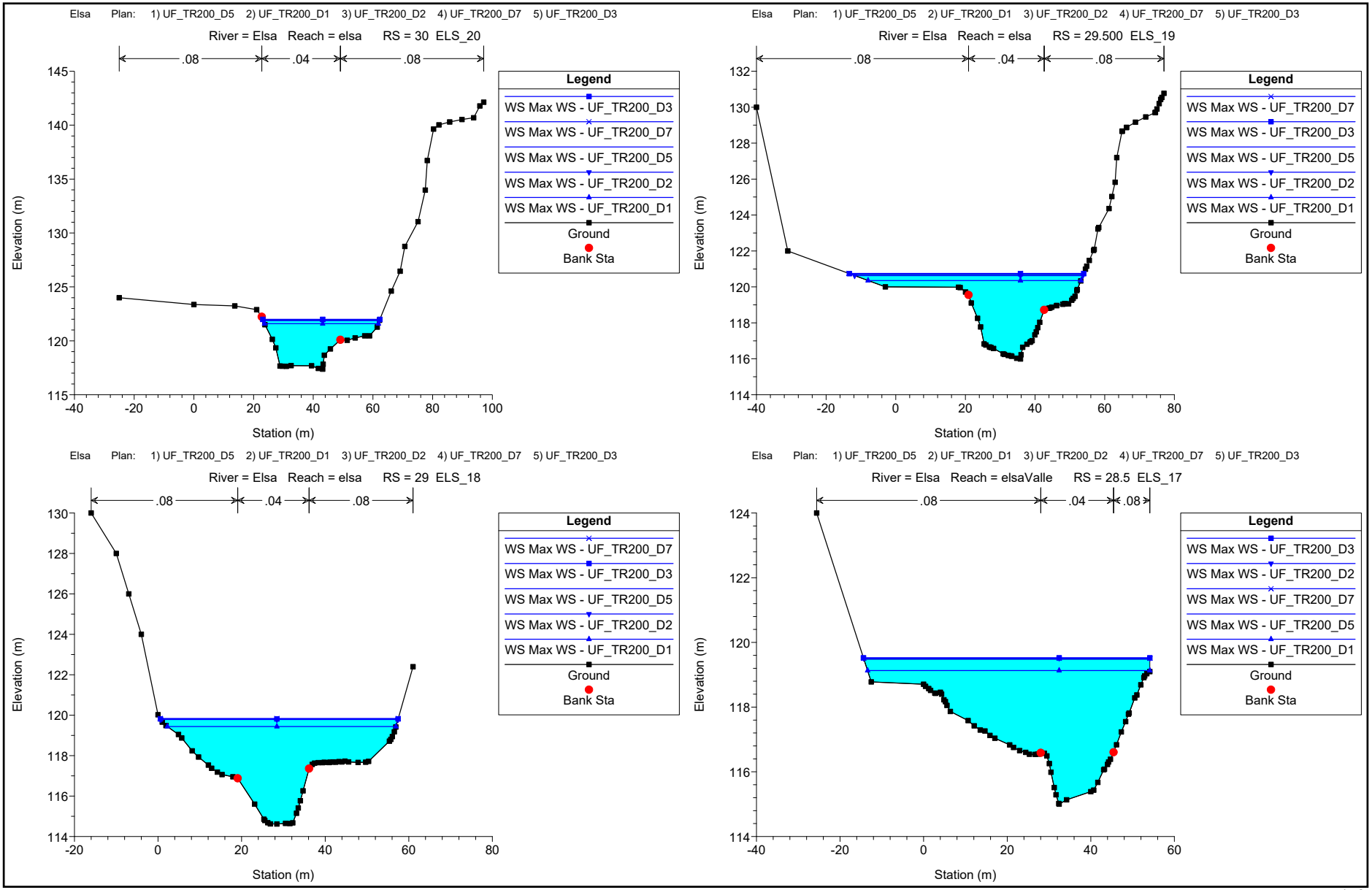

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 79 ELS_37
.08 .02 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 78 ELS_36
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 77.5 IS
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 77 ELS_35
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta

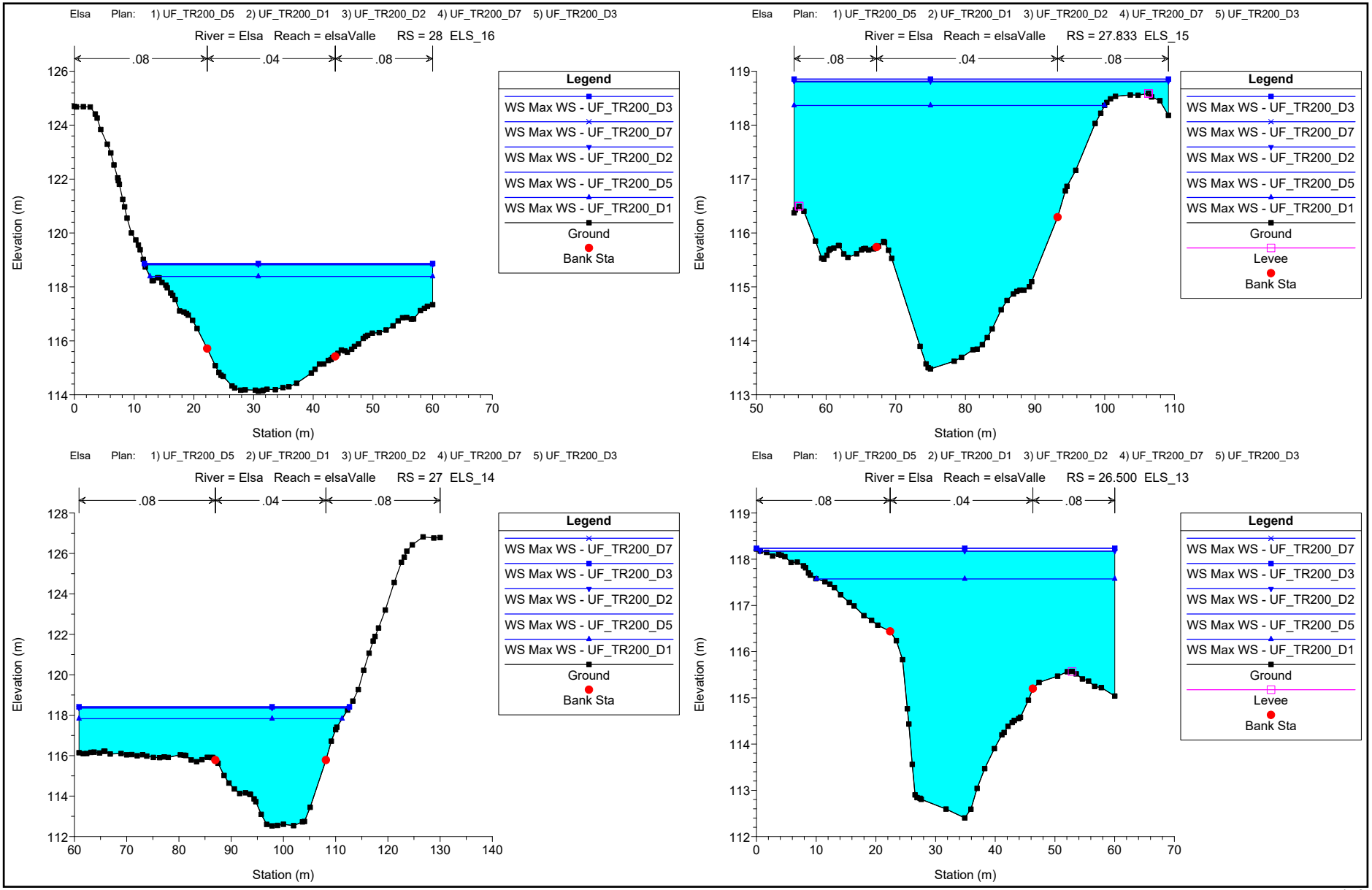

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 76 ELS_34
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 75 ELS_33
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 74.51 ELS_32
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 74 ELS_31
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

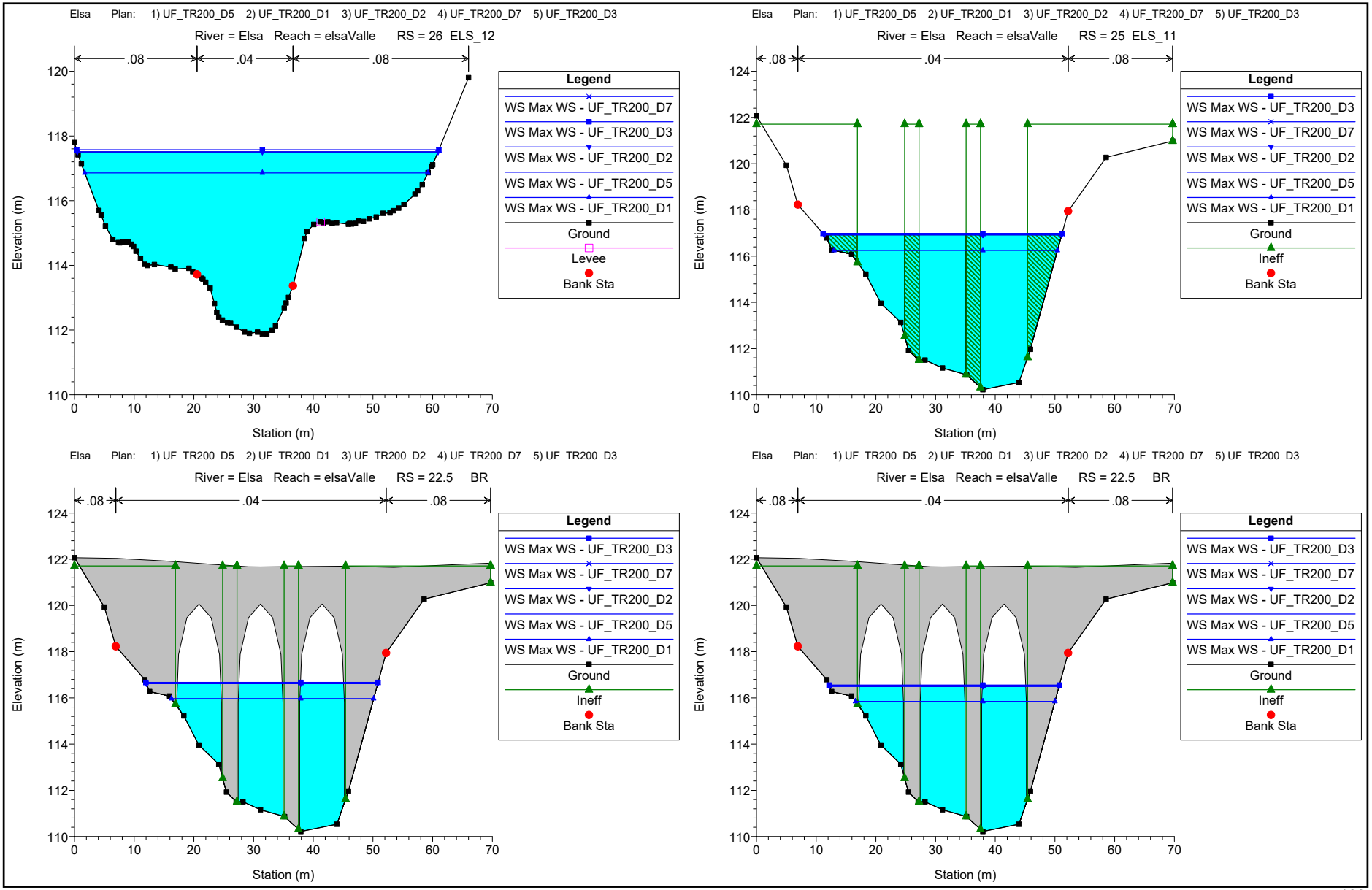

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 73.5 ELS_30
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 73 ELS_29
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 72 ELS_28
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 71.5 ELS_27
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

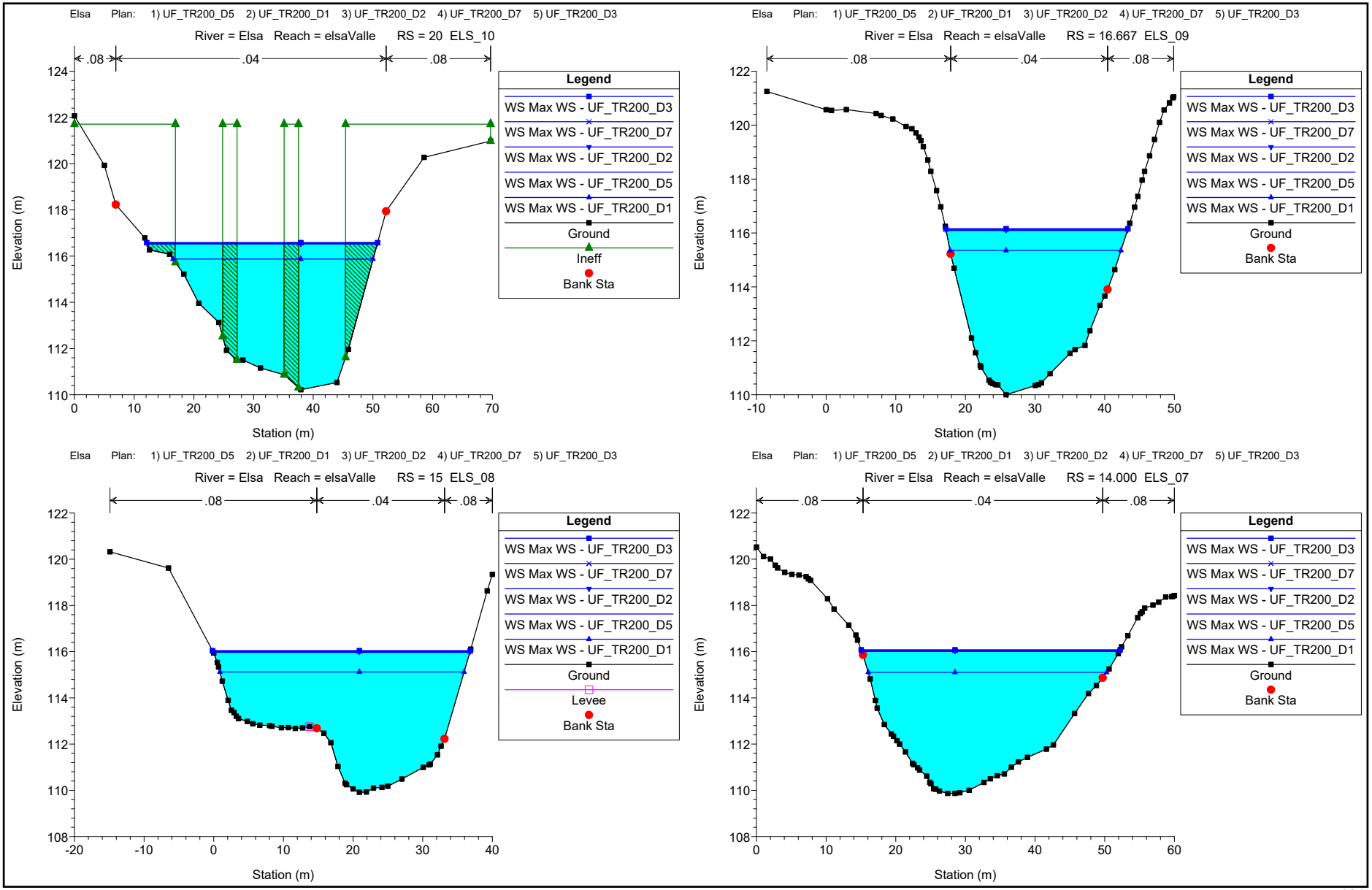

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 71 ELS_26
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 70 ELS_25
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 60 ELS_24
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 50 ELS_23
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

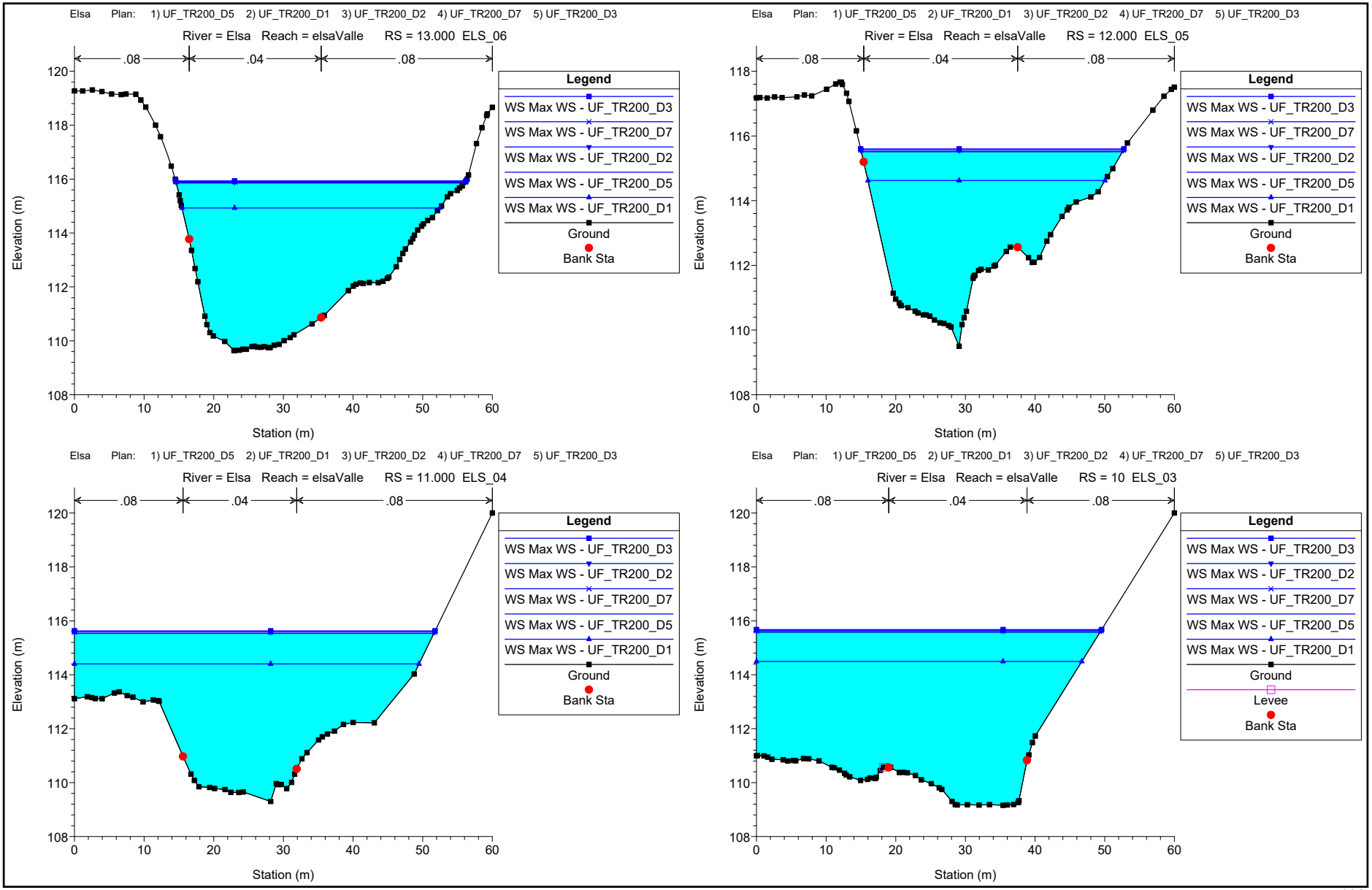

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 40 ELS_22
River = Elsa Reach = elsa RS = 37.5 BR
River = Elsa Reach = elsa RS = 37.5 BR
River = Elsa Reach = elsa RS = 35 ELS_21
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta

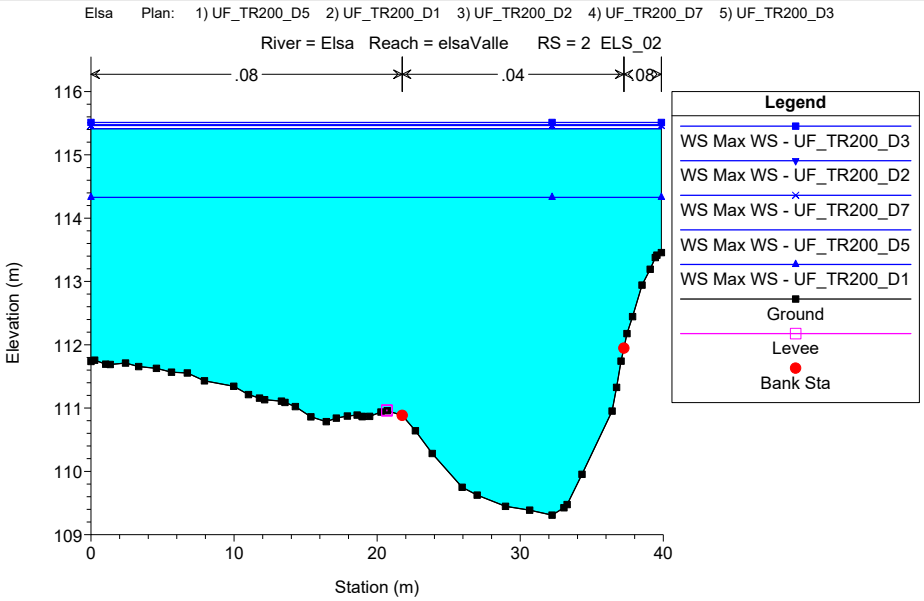

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 30 ELS_20
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 29.500 ELS_19
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsa RS = 29 ELS_18
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 28.5 ELS_17
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta

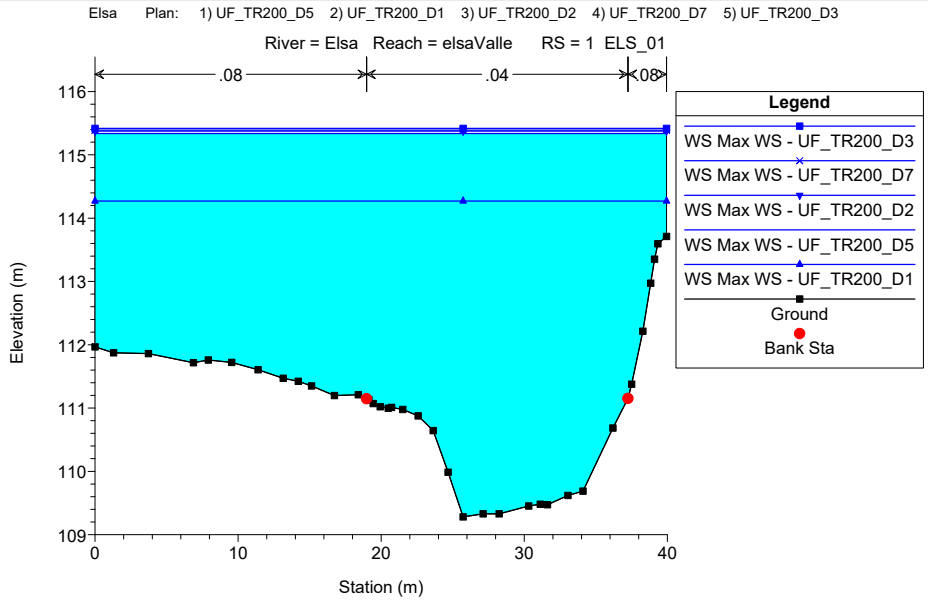

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 28 ELS_16
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 27.833 ELS_15
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 27 ELS_14
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 26.500 ELS_13
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 26 ELS_12
.08 .04 .08
Legend
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 25 ELS_11
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 22.5 BR
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 22.5 BR
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 20 ELS_10
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 16.667 ELS_09
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 15 ELS_08
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 14.000 ELS_07
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 13.000 ELS_06
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 12.000 ELS_05
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 11.000 ELS_04
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 10 ELS_03
.08 .04 .08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 2 ELS_02
.08
.04
.08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Elsa Reach = elsaValle RS = 1 ELS_01
.08
.04
.08
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FIUME ELSA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsaMonte	30	Max WS	UF_TR30_D1	76.89	188.37	192.89		193.10	0.002490	0.30	2.07	0.06	43.20	44.86	0.41
elsaMonte	30	Max WS	UF_TR30_D5	143.29	188.37	193.54		193.85	0.003079	0.52	2.68	0.33	96.49	130.32	0.48
elsaMonte	30	Max WS	UF_TR30_D7	127.19	188.37	193.41		193.71	0.003038	0.48	2.59	0.28	80.56	109.44	0.47
elsaMonte	30	Max WS	UF_TR30_D2	119.23	188.37	193.33		193.63	0.003028	0.46	2.54	0.26	72.62	97.38	0.47
elsaMonte	30	Max WS	UF_TR30_D3	140.40	188.37	193.52		193.83	0.003087	0.52	2.67	0.32	93.24	126.34	0.48
elsaMonte	28.7			Lat Struct											
elsaMonte	20	Max WS	UF_TR30_D1	72.73	188.12	191.99		192.35	0.005397	0.09	2.66		27.31	13.44	0.59
elsaMonte	20	Max WS	UF_TR30_D5	97.23	188.12	192.52		192.91	0.004735	0.57	2.78		36.85	17.51	0.57
elsaMonte	20	Max WS	UF_TR30_D7	94.15	188.12	192.38		192.80	0.005294	0.53	2.87		34.42	17.26	0.59
elsaMonte	20	Max WS	UF_TR30_D2	93.18	188.12	192.30		192.74	0.005742	0.50	2.94		33.07	17.12	0.62
elsaMonte	20	Max WS	UF_TR30_D3	96.28	188.12	192.49		192.88	0.004814	0.56	2.79		36.34	17.46	0.57
elsaMonte	10	Max WS	UF_TR30_D1	69.68	187.91	191.15		191.33	0.002657	0.36	1.90	0.21	40.96	40.39	0.44
elsaMonte	10	Max WS	UF_TR30_D5	110.53	187.91	191.78		191.98	0.002233	0.50	2.10	0.41	71.29	56.46	0.42
elsaMonte	10	Max WS	UF_TR30_D7	104.02	187.91	191.69		191.89	0.002286	0.49	2.07	0.39	66.32	54.16	0.42
elsaMonte	10	Max WS	UF_TR30_D2	96.03	187.91	191.54		191.75	0.002501	0.47	2.08	0.36	58.52	50.32	0.44
elsaMonte	10	Max WS	UF_TR30_D3	108.40	187.91	191.74		191.94	0.002298	0.50	2.11	0.41	68.92	55.38	0.43
elsaMonte	5	Max WS	UF_TR30_D1	65.97	187.16	191.01		191.09	0.000852	0.31	1.29	0.27	64.49	43.73	0.26
elsaMonte	5	Max WS	UF_TR30_D5	97.70	187.16	191.64		191.73	0.000783	0.37	1.43	0.35	94.51	51.49	0.26
elsaMonte	5	Max WS	UF_TR30_D7	92.82	187.16	191.55		191.64	0.000789	0.36	1.41	0.34	90.06	50.42	0.26
elsaMonte	5	Max WS	UF_TR30_D2	86.05	187.16	191.40		191.49	0.000832	0.36	1.40	0.33	82.38	48.51	0.26
elsaMonte	5	Max WS	UF_TR30_D3	95.68	187.16	191.60		191.69	0.000792	0.37	1.43	0.35	92.34	50.97	0.26
elsa1	790	Max WS	UF_TR30_D1	106.59	186.88	191.01		191.23	0.002325	0.29	2.12	0.35	62.59	52.05	0.43
elsa1	790	Max WS	UF_TR30_D5	150.80	186.88	191.64		191.86	0.001863	0.44	2.20	0.50	98.28	61.21	0.40
elsa1	790	Max WS	UF_TR30_D7	144.03	186.88	191.55		191.77	0.001910	0.42	2.19	0.48	93.00	59.95	0.40
elsa1	790	Max WS	UF_TR30_D2	134.84	186.88	191.40		191.62	0.002078	0.40	2.20	0.46	83.86	57.69	0.41
elsa1	790	Max WS	UF_TR30_D3	147.71	186.88	191.60		191.81	0.001891	0.43	2.20	0.49	95.70	60.60	0.40
elsa1	789.9			Lat Struct											
elsa1	780	Max WS	UF_TR30_D1	117.29	185.97	189.48	188.98	190.16	0.006473		3.64		32.20	43.65	0.72
elsa1	780	Max WS	UF_TR30_D5	176.23	185.97	190.31	189.63	191.19	0.005787		4.15		42.51	57.17	0.72
elsa1	780	Max WS	UF_TR30_D7	169.82	185.97	190.23	189.57	191.08	0.005846		4.10		41.45	56.30	0.72
elsa1	780	Max WS	UF_TR30_D2	156.58	185.97	190.05	189.43	190.86	0.005979		3.99		39.22	54.46	0.72
elsa1	780	Max WS	UF_TR30_D3	173.14	185.97	190.27	189.60	191.14	0.005816		4.12		42.00	56.75	0.72
elsa1	770			Bridge											
elsa1	760.00	Max WS	UF_TR30_D1	117.29	185.81	188.78	188.78	189.82	0.013816		4.52		25.95	25.94	1.00
elsa1	760.00	Max WS	UF_TR30_D5	175.91	185.81	189.35	189.42	190.79	0.013849		5.32		33.07	51.63	1.04
elsa1	760.00	Max WS	UF_TR30_D7	169.71	185.81	189.30	189.36	190.69	0.013774		5.23		32.42	50.89	1.03
elsa1	760.00	Max WS	UF_TR30_D2	156.57	185.81	189.17	189.22	190.48	0.013828		5.07		30.85	49.11	1.03
elsa1	760.00	Max WS	UF_TR30_D3	173.11	185.81	189.32	189.40	190.75	0.013856		5.29		32.75	51.27	1.04
elsa1	759.9			Lat Struct											
elsa1	750.00	Max WS	UF_TR30_D1	117.27	184.99	188.32		188.53	0.002641		2.02		58.10	28.23	0.45
elsa1	750.00	Max WS	UF_TR30_D5	175.67	184.99	188.89		189.17	0.002718		2.35	0.27	76.95	38.74	0.47
elsa1	750.00	Max WS	UF_TR30_D7	169.71	184.99	188.84		189.12	0.002704		2.32	0.25	75.02	37.83	0.47
elsa1	750.00	Max WS	UF_TR30_D2	156.50	184.99	188.72		188.97	0.002714		2.26	0.19	70.36	35.52	0.47
elsa1	750.00	Max WS	UF_TR30_D3	173.11	184.99	188.87		189.14	0.002730		2.34	0.26	75.91	38.25	0.47
elsa1	740.00	Max WS	UF_TR30_D1	117.26	183.63	188.13		188.25	0.001509		1.54		76.31	35.01	0.33
elsa1	740.00	Max WS	UF_TR30_D5	174.82	183.63	188.70		188.86	0.001613		1.81		96.50	35.93	0.35
elsa1	740.00	Max WS	UF_TR30_D7	169.96	183.63	188.64		188.81	0.001622		1.80		94.61	35.85	0.35
elsa1	740.00	Max WS	UF_TR30_D2	156.50	183.63	188.52		188.67	0.001597		1.74		90.16	35.65	0.35
elsa1	740.00	Max WS	UF_TR30_D3	173.10	183.63	188.67		188.84	0.001637		1.81		95.44	35.88	0.36
elsa1	730.00	Max WS	UF_TR30_D1	117.22	183.79	187.41		187.93	0.006886	0.13	3.21	0.56	38.17	27.61	0.70
elsa1	730.00	Max WS	UF_TR30_D5	172.39	183.79	187.81	187.55	188.57	0.008044	0.57	3.90	0.79	49.69	29.64	0.78
elsa1	730.00	Max WS	UF_TR30_D7	166.40	183.79	187.77	187.49	188.50	0.007986	0.53	3.84	0.77	48.39	29.42	0.78
elsa1	730.00	Max WS	UF_TR30_D2	154.32	183.79	187.69		188.37	0.007780	0.46	3.70	0.72	45.91	28.99	0.76
elsa1	730.00	Max WS	UF_TR30_D3	168.71	183.79	187.78	187.51	188.53	0.008042	0.55	3.87	0.78	48.81	29.49	0.78
elsa1	720.00	Max WS	UF_TR30_D1	107.31	183.02	186.36		186.56	0.003250	0.29	1.97		55.33	34.04	0.48
elsa1	720.00	Max WS	UF_TR30_D5	140.99	183.02	186.96		187.14	0.002044	0.37	1.89	0.23	81.05	54.88	0.40
elsa1	720.00	Max WS	UF_TR30_D7	137.25	183.02	186.89		187.07	0.002154	0.36	1.90	0.20	77.40	53.81	0.41
elsa1	720.00	Max WS	UF_TR30_D2	128.07	183.02	186.72		186.91	0.002490	0.35	1.93	0.13	68.64	46.44	0.43
elsa1	720.00	Max WS	UF_TR30_D3	139.12	183.02	186.91		187.09	0.002152	0.37	1.91	0.21	78.36	54.09	0.41
elsa1	710.00	Max WS	UF_TR30_D1	89.95	182.95	186.20		186.38	0.002460	0.43	1.94		51.36	31.10	0.43
elsa1	710.00	Max WS	UF_TR30_D5	128.42	182.95	186.81		187.02	0.002030	0.57	2.06	0.14	73.53	53.57	0.41
elsa1	710.00	Max WS	UF_TR30_D7	122.96	182.95	186.75		186.95	0.002038	0.56	2.03	0.11	70.28	47.70	0.41
elsa1	710.00	Max WS	UF_TR30_D2	112.85	182.95	186.56		186.76	0.002256	0.53	2.03		62.85	31.88	0.42
elsa1	710.00	Max WS	UF_TR30_D3	124.76	182.95	186.76		186.97	0.002056	0.57	2.04	0.12	70.98	49.01	0.41
elsa1	700.00	Max WS	UF_TR30_D1	102.39	182.81	186.16		186.22	0.000658	0.35	1.17	0.30	124.67	115.56	0.24
elsa1	700.00	Max WS	UF_TR30_D5	145.85	182.81	186.79		186.85	0.000533	0.40	1.22	0.38	176.31	125.31	0.22
elsa1	700.00	Max WS	UF_TR30_D7	138.76	182.81	186.73		186.79	0.000526	0.39	1.20	0.37	170.94	123.93	0.22
elsa1	700.00	Max WS	UF_TR30_D2	127.76	182.81	186.54		186.60	0.000575	0.38	1.20	0.35	155.64	119.99	0.23
elsa1	700.00	Max WS	UF_TR30_D3	141.46	182.81	186.74		186.80	0.000540	0.40	1.21	0.37	171.69	124.12	0.22
elsa1	690.00	Max WS	UF_TR30_D1	116.80	182.61	185.86		186.08	0.003339		2.06		56.61	154.17	0.50
elsa1	690.00	Max WS	UF_TR30_D5	192.79	182.61	186.43		186.76	0.003617	0.19	2.56		75.92	172.98	0.54
elsa1	690.00	Max WS	UF_TR30_D7	181.38	182.61	186.38		186.69	0.003456	0.16	2.46		74.02	170.93	0.53
elsa1	690.00	Max WS	UF_TR30_D2	159.26	182.61	186.20		186.48	0.003557	0.04	2.36		67.55	163.50	0.53
elsa1	690.00	Max WS	UF_TR30_D3	185.83	182.61	186.38		186.70	0.003625	0.17	2.52		74.03	170.94	0.54
elsa1	680.00	Max WS	UF_TR30_D1	116.79	182.49	185.81		185.94	0.001635		1.62		72.05	192.47	0.36
elsa1	680.00	Max WS	UF_TR30_D5	192.77	182.49	186.36		186.58	0.002113	0.15	2.09		92.39	216.00	0.42
elsa1	680.00	Max WS	UF_TR30_D7	181.35	182.49	186.31		186.52	0.001990	0.13	2.01		90.61	214.01	0.41
elsa1	680.00	Max WS	UF_TR30_D2	159.26	182.49	186.13		186.32	0.001982	0.02	1.90		83.73	205.98	0.40
elsa1	680.00	Max WS	UF_TR30_D3	185.81	182.49	186.30		186.52	0.002109	0.13	2.06		90.34	213.71	0.42
elsa1	670.00	Max WS	UF_TR30_D1	116.79	182.37	185.57		185.79	0.003676		2.10		55.64	173.68	0.52
elsa1	670.00	Max WS	UF_TR30_D5	192.69	182.37	186.08		186.43	0.004111	0.31	2.64		75.29	201.80	0.57
elsa1	670.00	Max WS	UF_TR30_D7	181.23	182.37	186.05		186.37	0.003817	0.28	2.52		73.93	200.07	0.55
elsa1	670.00	Max WS	UF_TR30_D2	159.25	182.37	185.87		186.17	0.003931	0.21	2.42		66.60	190.16	0.55
elsa1	670.00	Max WS	UF_TR30_D3	185.80	182.37	186.03		186.37	0.004142	0.29	2.61		73.05	198.94	0.57
elsa1	660.00	Max WS	UF_TR30_D1	116.78	182.25	185.47		185.60	0.001614	0.03	1.61	0.05	76.39	182.66	0.36
elsa1	660.00	Max WS	UF_TR30_D5	192.30	182.25	186.07		186.18	0.001259	0.22	1.67	0.29	223.23	298.90	0.33
elsa1	660.00	Max WS	UF_TR30_D7	181.17	182.25	186.04		186.15	0.001181	0.21	1.61	0.27	215.88	296.38	0.32
elsa1	660.00	Max WS	UF_TR30_D2	159.25	182.25	185.84		185.97	0.001405	0.18	1.66	0.23	160.07	259.68	0.34
elsa1	660.00	Max WS	UF_TR30_D3	185.79	182.25	186.01		186.13	0.001340	0.21	1.70	0.27	205.83	292.89	0.34
elsa1	650.00	Max WS	UF_TR30_D1	117.76	181.97	185.27		185.43	0.002631		1.77	0.16	68.21	54.01	0.44

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa1	650.00	Max WS	UF_TR30_D5	193.13	181.97	185.87		186.07	0.002732		2.02	0.45	105.44	69.46	0.46
elsa1	650.00	Max WS	UF_TR30_D7	187.51	181.97	185.85		186.04	0.002660		1.98	0.44	103.93	68.90	0.45
elsa1	650.00	Max WS	UF_TR30_D2	160.18	181.97	185.62		185.80	0.002771		1.94	0.36	88.52	62.91	0.46
elsa1	650.00	Max WS	UF_TR30_D3	186.78	181.97	185.81		186.01	0.002788		2.02	0.43	101.40	67.95	0.46
elsa1	640.00	Max WS	UF_TR30_D1	117.63	182.67	185.07		185.64	0.009487		3.35		35.09	20.82	0.82
elsa1	640.00	Max WS	UF_TR30_D5	192.78	182.67	185.65		186.47	0.010693		4.01		48.10	23.80	0.90
elsa1	640.00	Max WS	UF_TR30_D7	187.54	182.67	185.64		186.42	0.010319		3.93		47.76	23.73	0.88
elsa1	640.00	Max WS	UF_TR30_D2	159.86	182.67	185.40		186.13	0.010572		3.79		42.14	22.49	0.88
elsa1	640.00	Max WS	UF_TR30_D3	186.58	182.67	185.59		186.41	0.010951		4.01		46.56	23.47	0.91
elsa1	630.00	Max WS	UF_TR30_D1	117.32	181.81	184.90		185.08	0.002224	0.34	1.99		78.14	76.12	0.42
elsa1	630.00	Max WS	UF_TR30_D5	189.90	181.81	185.47		185.69	0.002382	0.49	2.30		133.27	116.07	0.45
elsa1	630.00	Max WS	UF_TR30_D7	187.61	181.81	185.46		185.68	0.002361	0.48	2.29		132.17	115.73	0.44
elsa1	630.00	Max WS	UF_TR30_D2	159.38	181.81	185.20		185.43	0.002529	0.44	2.26		104.36	96.67	0.46
elsa1	630.00	Max WS	UF_TR30_D3	186.26	181.81	185.39		185.64	0.002584	0.48	2.37		124.74	113.42	0.46
elsa1	620.00	Max WS	UF_TR30_D1	117.20	181.76	184.86		185.06	0.002421	0.37	2.07		77.68	78.47	0.44
elsa1	620.00	Max WS	UF_TR30_D5	189.25	181.76	185.43		185.67	0.002511	0.51	2.36		132.91	114.71	0.46
elsa1	620.00	Max WS	UF_TR30_D7	187.63	181.76	185.42		185.66	0.002504	0.51	2.36		131.87	114.39	0.46
elsa1	620.00	Max WS	UF_TR30_D2	159.15	181.76	185.17		185.41	0.002682	0.47	2.33		104.71	96.29	0.47
elsa1	620.00	Max WS	UF_TR30_D3	186.17	181.76	185.36		185.61	0.002753	0.51	2.44		124.21	112.04	0.48
elsa1	610.00	Max WS	UF_TR30_D1	117.25	181.69	184.88		185.03	0.001844	0.34	1.85		88.63	85.12	0.38
elsa1	610.00	Max WS	UF_TR30_D5	189.51	181.69	185.44		185.64	0.001937	0.48	2.15		146.04	117.43	0.40
elsa1	610.00	Max WS	UF_TR30_D7	187.63	181.69	185.43		185.63	0.001926	0.47	2.14		144.97	117.13	0.40
elsa1	610.00	Max WS	UF_TR30_D2	159.30	181.69	185.18		185.38	0.002044	0.44	2.09		117.51	101.92	0.41
elsa1	610.00	Max WS	UF_TR30_D3	186.16	181.69	185.37		185.58	0.002104	0.47	2.21		137.40	114.94	0.42
elsa1	600.00	Max WS	UF_TR30_D1	117.38	181.52	184.90	183.56	185.01	0.001115	0.28	1.58	0.35	123.64	121.04	0.31
elsa1	600.00	Max WS	UF_TR30_D5	189.92	181.52	185.48	184.30	185.60	0.001149	0.38	1.82	0.45	204.86	164.74	0.32
elsa1	600.00	Max WS	UF_TR30_D7	187.64	181.52	185.47	184.28	185.59	0.001135	0.37	1.81	0.44	203.46	163.52	0.32
elsa1	600.00	Max WS	UF_TR30_D2	159.28	181.52	185.22	183.95	185.34	0.001207	0.35	1.77	0.42	165.24	142.75	0.33
elsa1	600.00	Max WS	UF_TR30_D3	186.26	181.52	185.41	184.26	185.54	0.001229	0.38	1.86	0.45	193.34	157.21	0.33
elsa1	595.00			Bridge											
elsa1	590.00	Max WS	UF_TR30_D1	117.35	181.38	184.91		185.00	0.000874	0.26	1.43	0.30	131.64	123.91	0.28
elsa1	590.00	Max WS	UF_TR30_D5	189.55	181.38	185.46		185.58	0.000969	0.34	1.70	0.38	211.92	171.45	0.30
elsa1	590.00	Max WS	UF_TR30_D7	187.62	181.38	185.46		185.57	0.000960	0.34	1.69	0.38	210.56	170.52	0.30
elsa1	590.00	Max WS	UF_TR30_D2	159.27	181.38	185.21		185.32	0.000989	0.32	1.63	0.36	172.45	145.63	0.30
elsa1	590.00	Max WS	UF_TR30_D3	186.23	181.38	185.39		185.51	0.001031	0.35	1.73	0.38	200.04	161.20	0.31
elsa1	580.00	Max WS	UF_TR30_D1	117.42	181.38	184.93		184.98	0.000311	0.16	0.97	0.24	189.51	138.01	0.17
elsa1	580.00	Max WS	UF_TR30_D5	189.94	181.38	185.49		185.55	0.000415	0.23	1.24	0.28	282.49	202.30	0.20
elsa1	580.00	Max WS	UF_TR30_D7	187.65	181.38	185.48		185.54	0.000409	0.22	1.23	0.28	280.83	201.33	0.20
elsa1	580.00	Max WS	UF_TR30_D2	159.41	181.38	185.24		185.29	0.000397	0.21	1.16	0.25	235.99	170.79	0.19
elsa1	580.00	Max WS	UF_TR30_D3	186.25	181.38	185.42		185.48	0.000435	0.23	1.25	0.28	268.72	194.08	0.21
elsa1	570.00	Max WS	UF_TR30_D1	117.30	181.38	184.91		184.98	0.000685	0.28	1.33		137.80	104.98	0.24
elsa1	570.00	Max WS	UF_TR30_D5	189.46	181.38	185.45		185.56	0.000903	0.36	1.67		205.20	164.04	0.28
elsa1	570.00	Max WS	UF_TR30_D7	187.63	181.38	185.44		185.55	0.000894	0.36	1.66		204.05	160.34	0.28
elsa1	570.00	Max WS	UF_TR30_D2	159.23	181.38	185.20		185.31	0.000855	0.34	1.57		171.60	122.98	0.27
elsa1	570.00	Max WS	UF_TR30_D3	186.21	181.38	185.38		185.50	0.000949	0.37	1.70		194.83	141.69	0.29
elsa1	560.00	Max WS	UF_TR30_D1	125.29	181.23	184.80		184.97	0.002865	0.55	2.10		103.02	99.14	0.46
elsa1	560.00	Max WS	UF_TR30_D5	210.15	181.23	185.33		185.55	0.003146	0.66	2.48		164.63	141.30	0.50
elsa1	560.00	Max WS	UF_TR30_D7	208.02	181.23	185.32		185.54	0.003126	0.66	2.47		163.39	140.21	0.50
elsa1	560.00	Max WS	UF_TR30_D2	168.22	181.23	185.10		185.28	0.002912	0.63	2.27		135.20	115.20	0.48
elsa1	560.00	Max WS	UF_TR30_D3	198.62	181.23	185.27		185.47	0.003085	0.66	2.42		155.71	131.12	0.49
elsa1	550.00	Max WS	UF_TR30_D1	125.27	181.17	184.67		184.88	0.003339	0.52	2.20		84.13	81.41	0.49
elsa1	550.00	Max WS	UF_TR30_D5	210.15	181.17	185.19		185.46	0.003791	0.69	2.64		132.36	109.37	0.54
elsa1	550.00	Max WS	UF_TR30_D7	208.07	181.17	185.18		185.45	0.003760	0.68	2.62		131.56	108.82	0.54
elsa1	550.00	Max WS	UF_TR30_D2	168.19	181.17	184.96		185.21	0.003519	0.62	2.42		109.78	95.11	0.51
elsa1	550.00	Max WS	UF_TR30_D3	198.60	181.17	185.12		185.39	0.003738	0.67	2.58		125.77	104.75	0.53
elsa1	540.00	Max WS	UF_TR30_D1	125.25	181.11	184.61		184.79	0.002542	0.49	2.01		85.82	70.93	0.44
elsa1	540.00	Max WS	UF_TR30_D5	210.14	181.11	185.09		185.37	0.003447	0.63	2.57	0.02	125.72	101.27	0.52
elsa1	540.00	Max WS	UF_TR30_D7	208.11	181.11	185.08		185.36	0.003415	0.63	2.55		125.11	99.61	0.52
elsa1	540.00	Max WS	UF_TR30_D2	168.15	181.11	184.88		185.11	0.002996	0.58	2.30		106.81	85.07	0.48
elsa1	540.00	Max WS	UF_TR30_D3	198.59	181.11	185.03		185.30	0.003354	0.62	2.51		120.11	95.78	0.51
elsa1	530.00	Max WS	UF_TR30_D1	125.25	180.91	184.57		184.69	0.001391	0.29	1.61		92.34	68.96	0.34
elsa1	530.00	Max WS	UF_TR30_D5	210.14	180.91	185.00		185.22	0.002266	0.44	2.15		128.39	96.73	0.44
elsa1	530.00	Max WS	UF_TR30_D7	208.19	180.91	185.00		185.21	0.002239	0.44	2.14		127.89	96.44	0.43
elsa1	530.00	Max WS	UF_TR30_D2	168.13	180.91	184.82		184.99	0.001837	0.36	1.90		111.41	84.93	0.39
elsa1	530.00	Max WS	UF_TR30_D3	198.57	180.91	184.95		185.16	0.002168	0.42	2.09		123.25	93.74	0.43
elsa1	520.00	Max WS	UF_TR30_D1	125.25	180.91	184.55		184.67	0.001774	0.20	1.57		87.21	77.78	0.37
elsa1	520.00	Max WS	UF_TR30_D5	210.14	180.91	184.98		185.18	0.002581	0.38	2.05		127.75	115.74	0.45
elsa1	520.00	Max WS	UF_TR30_D7	208.23	180.91	184.97		185.17	0.002548	0.37	2.03		127.11	115.28	0.45
elsa1	520.00	Max WS	UF_TR30_D2	168.12	180.91	184.79		184.96	0.002062	0.29	1.82		108.70	96.38	0.40
elsa1	520.00	Max WS	UF_TR30_D3	198.56	180.91	184.92		185.12	0.002411	0.36	1.99		121.86	107.77	0.44
elsa1	513			Lat Struct											
elsa1	510.00	Max WS	UF_TR30_D1	109.82	180.79	184.38		184.58	0.002970	0.14	1.97		59.56	73.53	0.46
elsa1	510.00	Max WS	UF_TR30_D5	157.61	180.79	184.90		185.08	0.002312	0.38	2.01		109.26	105.44	0.42
elsa1	510.00	Max WS	UF_TR30_D7	156.42	180.79	184.89		185.08	0.002300	0.38	2.00		108.68	105.25	0.42
elsa1	510.00	Max WS	UF_TR30_D2	133.34	180.79	184.68		184.87	0.002448	0.30	1.96		87.59	98.28	0.43
elsa1	510.00	Max WS	UF_TR30_D3	150.94	180.79	184.84		185.03	0.002346	0.36	2.00		103.40	103.55	0.42
elsa1	500.00	Max WS	UF_TR30_D1	109.81	180.50	184.13		184.40	0.004394	0.23	2.31		51.64	57.51	0.55
elsa1	500.00	Max WS	UF_TR30_D5	157.61	180.50	184.68		184.94	0.003254	0.47	2.34		88.90	77.94	0.50
elsa1	500.00	Max WS	UF_TR30_D7	156.54	180.50	184.68		184.93	0.003233	0.46	2.33		88.57	77.78	0.49
elsa1	500.00	Max WS	UF_TR30_D2	133.29	180.50	184.47		184.71	0.003419	0.39	2.26		72.84	69.87	0.50
elsa1	500.00	Max WS	UF_TR30_D3	150.93	180.50	184.63		184.88	0.003287	0.45	2.32		84.58	75.86	0.50
elsa1	490.00	Max WS	UF_TR30_D1	109.80	180.30	183.91		184.15	0.004313	0.25	2.14		52.77	42.93	0.55
elsa1	490.00	Max WS	UF_TR30_D5	157.61	180.30	184.55		184.76	0.002812	0.42	2.05		88.31	65.07	0.46
elsa1	490.00	Max WS	UF_TR30_D7	156.63	180.30	184.55		184.75	0.002793	0.42	2.04		88.09	64.98	0.46
elsa1	490.00	Max WS	UF_TR30_D2	133.25	180.30	184.32		184.52	0.003044	0.36	1.98		74.16	58.74	0.47
elsa1	490.00	Max WS	UF_TR30_D3	150.91	180.30	184.49		184.69	0.002852	0.41	2.03		84.61	63.48	0.46
elsa1	480.00	Max WS	UF_TR30_D1	109.79	180.19	183.78		183.95	0.002045		1.84		59.51	26.97	0.40
elsa1	480.00	Max WS	UF_TR30_D5	157.61	180.19	184.42		184.61	0.002329	0.26	1.95		84.28	51.39	0.42
elsa1	480.00	Max WS	UF_TR30_D7	156.74	180.19	184.42		184.61	0.002310	0.26	1.94		84.15	51.31	0.42
elsa1	480.00	Max WS	UF_TR30_D2	133.23	180.19	184.20		184.37	0.002111	0.15	1.84		73.74	44.37	0.40
elsa1	480.00	Max WS	UF_TR30_D3	150.90	180.19	184.36		184.55	0.002268	0.24	1.92		81.51	49.64	0.42

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa1	470.00	Max WS	UF_TR30_D1	109.79	180.08	183.71		183.87	0.002101	0.09	1.80		61.29	36.18	0.40
elsa1	470.00	Max WS	UF_TR30_D5	157.61	180.08	184.35		184.53	0.001904	0.32	1.88		91.18	54.29	0.39
elsa1	470.00	Max WS	UF_TR30_D7	156.81	180.08	184.35		184.53	0.001892	0.32	1.87		91.04	54.23	0.39
elsa1	470.00	Max WS	UF_TR30_D2	133.21	180.08	184.14		184.30	0.001864	0.26	1.76		79.99	49.62	0.38
elsa1	470.00	Max WS	UF_TR30_D3	150.90	180.08	184.30		184.47	0.001883	0.31	1.85		88.32	53.14	0.39
elsa1	460.00	Max WS	UF_TR30_D1	109.78	179.41	183.55		183.71	0.002528	0.28	1.81		64.43	47.79	0.43
elsa1	460.00	Max WS	UF_TR30_D5	157.61	179.41	184.26		184.41	0.001673	0.41	1.77		105.70	65.42	0.36
elsa1	460.00	Max WS	UF_TR30_D7	156.93	179.41	184.25		184.40	0.001663	0.40	1.76		105.56	65.41	0.36
elsa1	460.00	Max WS	UF_TR30_D2	133.22	179.41	184.03		184.17	0.001675	0.32	1.68		91.31	64.11	0.36
elsa1	460.00	Max WS	UF_TR30_D3	150.88	179.41	184.20		184.35	0.001660	0.39	1.74		102.18	65.10	0.36
elsa1	450.00	Max WS	UF_TR30_D1	109.78	179.29	183.36		183.64	0.003084	0.38	2.35		52.42	35.62	0.48
elsa1	450.00	Max WS	UF_TR30_D5	157.60	179.29	184.10		184.33	0.003000	0.50	2.22		93.02	74.77	0.47
elsa1	450.00	Max WS	UF_TR30_D7	157.00	179.29	184.10		184.33	0.002985	0.50	2.21		92.91	74.77	0.47
elsa1	450.00	Max WS	UF_TR30_D2	133.21	179.29	183.87		184.09	0.003190	0.45	2.15		76.38	65.00	0.48
elsa1	450.00	Max WS	UF_TR30_D3	150.88	179.29	184.04		184.27	0.003033	0.47	2.20		88.88	74.54	0.48
elsa1	440.00	Max WS	UF_TR30_D1	109.77	179.20	183.07		183.42	0.003843		2.60		42.19	16.98	0.53
elsa1	440.00	Max WS	UF_TR30_D5	157.52	179.20	183.75		184.09	0.005974	0.44	2.60		65.38	54.32	0.64
elsa1	440.00	Max WS	UF_TR30_D7	157.13	179.20	183.75		184.09	0.005955	0.44	2.60		65.33	54.30	0.64
elsa1	440.00	Max WS	UF_TR30_D2	133.21	179.20	183.52		183.86	0.006181	0.26	2.57		53.67	46.60	0.65
elsa1	440.00	Max WS	UF_TR30_D3	150.88	179.20	183.69		184.03	0.006108	0.41	2.58		62.54	53.24	0.65
elsa1	430.00	Max WS	UF_TR30_D1	109.77	178.92	182.54		182.85	0.004863		2.44		45.07	25.34	0.58
elsa1	430.00	Max WS	UF_TR30_D5	157.49	178.92	183.09		183.42	0.004447	0.29	2.59		68.39	69.76	0.57
elsa1	430.00	Max WS	UF_TR30_D7	157.37	178.92	183.09		183.42	0.004424	0.29	2.59		68.54	69.82	0.57
elsa1	430.00	Max WS	UF_TR30_D2	133.19	178.92	182.83		183.16	0.004713		2.53		52.55	27.21	0.58
elsa1	430.00	Max WS	UF_TR30_D3	150.84	178.92	183.02		183.37	0.004639		2.60		57.92	28.48	0.58
elsa1	420.00	Max WS	UF_TR30_D1	109.76	178.75	182.18		182.50	0.003813		2.48		44.35	20.29	0.53
elsa1	420.00	Max WS	UF_TR30_D5	157.35	178.75	182.77	181.77	183.09	0.003331	0.32	2.58		89.97	131.95	0.51
elsa1	420.00	Max WS	UF_TR30_D7	157.51	178.75	182.77	181.77	183.09	0.003316	0.33	2.58		90.45	132.01	0.51
elsa1	420.00	Max WS	UF_TR30_D2	133.17	178.75	182.48	181.53	182.83	0.003934	0.05	2.64		52.33	127.19	0.55
elsa1	420.00	Max WS	UF_TR30_D3	150.82	178.75	182.69	181.70	183.02	0.003515	0.28	2.61		80.04	130.71	0.52
elsa1	410.00	Max WS	UF_TR30_D1	109.75	178.54	181.86		182.05	0.002772		1.94		56.62	29.77	0.45
elsa1	410.00	Max WS	UF_TR30_D5	157.22	178.54	182.61		182.71	0.001253	0.35	1.58		168.53	156.50	0.32
elsa1	410.00	Max WS	UF_TR30_D7	157.66	178.54	182.61		182.72	0.001245	0.35	1.58		169.53	156.54	0.32
elsa1	410.00	Max WS	UF_TR30_D2	133.15	178.54	182.18		182.34	0.002168	0.25	1.88		101.64	153.35	0.41
elsa1	410.00	Max WS	UF_TR30_D3	150.80	178.54	182.47		182.59	0.001520	0.34	1.69		146.54	155.77	0.35
elsa1	400.00	Max WS	UF_TR30_D1	109.71	177.99	181.55		181.71	0.001899		1.81		60.65	27.01	0.39
elsa1	400.00	Max WS	UF_TR30_D5	156.99	177.99	182.40		182.54	0.001379	0.26	1.74		112.14	92.52	0.34
elsa1	400.00	Max WS	UF_TR30_D7	157.86	177.99	182.40		182.55	0.001382	0.27	1.75		112.73	92.57	0.34
elsa1	400.00	Max WS	UF_TR30_D2	132.74	177.99	181.89		182.07	0.001919		1.88		70.47	29.81	0.39
elsa1	400.00	Max WS	UF_TR30_D3	150.74	177.99	182.22		182.39	0.001612	0.20	1.83		96.37	91.26	0.36
elsa1	390.00	Max WS	UF_TR30_D1	109.26	177.52	181.06		181.47	0.004805		2.82		38.75	16.66	0.59
elsa1	390.00	Max WS	UF_TR30_D5	156.92	177.52	182.07		182.44	0.004556	0.12	2.68		59.45	43.76	0.58
elsa1	390.00	Max WS	UF_TR30_D7	158.02	177.52	182.08		182.45	0.004587	0.12	2.69		59.67	43.97	0.58
elsa1	390.00	Max WS	UF_TR30_D2	121.62	177.52	181.46		181.82	0.003848		2.67		45.54	17.92	0.53
elsa1	390.00	Max WS	UF_TR30_D3	150.48	177.52	181.75		182.19	0.004454		2.96		50.91	19.20	0.58
elsa1	380.00	Max WS	UF_TR30_D1	108.27	176.78	180.82		180.91	0.000752		1.28		84.32	31.39	0.25
elsa1	380.00	Max WS	UF_TR30_D5	156.36	176.78	181.76		181.85	0.000682		1.35		115.89	37.17	0.24
elsa1	380.00	Max WS	UF_TR30_D7	158.23	176.78	181.75		181.85	0.000700		1.37		115.76	37.12	0.25
elsa1	380.00	Max WS	UF_TR30_D2	116.56	176.78	181.30		181.37	0.000548		1.17		99.97	33.86	0.22
elsa1	380.00	Max WS	UF_TR30_D3	137.85	176.78	181.55		181.63	0.000617		1.27		108.30	35.11	0.23
elsa1	370.00	Max WS	UF_TR30_D1	108.01	176.33	180.80		180.85	0.000453		1.05		103.31	35.83	0.20
elsa1	370.00	Max WS	UF_TR30_D5	156.39	176.33	181.74		181.80	0.000438		1.12		139.47	42.47	0.20
elsa1	370.00	Max WS	UF_TR30_D7	158.38	176.33	181.73		181.80	0.000450		1.14		139.29	42.41	0.20
elsa1	370.00	Max WS	UF_TR30_D2	116.43	176.33	181.29		181.33	0.000339		0.96		121.46	38.59	0.17
elsa1	370.00	Max WS	UF_TR30_D3	137.60	176.33	181.53		181.58	0.000387		1.05		130.88	39.94	0.19
elsa1	369.99			Lat Struct											
elsa1	360.00	Max WS	UF_TR30_D1	107.55	175.89	180.65		180.79	0.001128		1.63		65.80	21.53	0.30
elsa1	360.00	Max WS	UF_TR30_D5	156.32	175.89	181.57		181.74	0.001140		1.80		86.97	24.78	0.31
elsa1	360.00	Max WS	UF_TR30_D7	158.53	175.89	181.56		181.73	0.001177		1.83		86.73	24.67	0.31
elsa1	360.00	Max WS	UF_TR30_D2	113.50	175.89	181.17		181.28	0.000813		1.47		77.39	23.22	0.26
elsa1	360.00	Max WS	UF_TR30_D3	136.05	175.89	181.39		181.53	0.000985		1.65		82.47	23.92	0.28
elsa1	350.00	Max WS	UF_TR30_D1	93.88	175.95	180.62		180.72	0.000822		1.44		65.17	19.42	0.25
elsa1	350.00	Max WS	UF_TR30_D5	156.34	175.95	181.51		181.69	0.001203		1.87		83.60	22.33	0.31
elsa1	350.00	Max WS	UF_TR30_D7	158.59	175.95	181.50		181.69	0.001244		1.90		83.34	22.22	0.31
elsa1	350.00	Max WS	UF_TR30_D2	113.44	175.95	181.14		181.25	0.000802		1.50		75.55	20.64	0.25
elsa1	350.00	Max WS	UF_TR30_D3	135.59	175.95	181.34		181.49	0.000988		1.70		79.82	21.13	0.28
elsa1	340.00	Max WS	UF_TR30_D1	93.61	176.04	180.62		180.69	0.000543		1.21		77.44	22.70	0.21
elsa1	340.00	Max WS	UF_TR30_D5	156.36	176.04	181.52		181.64	0.000826		1.58		99.20	26.74	0.26
elsa1	340.00	Max WS	UF_TR30_D7	158.66	176.04	181.51		181.64	0.000856		1.60		98.88	26.63	0.27
elsa1	340.00	Max WS	UF_TR30_D2	113.38	176.04	181.14		181.22	0.000532		1.26		89.63	24.01	0.21
elsa1	340.00	Max WS	UF_TR30_D3	135.54	176.04	181.34		181.45	0.000675		1.43		94.65	25.19	0.24
elsa1	330.00	Max WS	UF_TR30_D1	93.58	176.09	180.62		180.67	0.000433		1.04		89.68	29.54	0.19
elsa1	330.00	Max WS	UF_TR30_D5	156.43	176.09	181.53		181.62	0.000600		1.32		118.84	35.31	0.23
elsa1	330.00	Max WS	UF_TR30_D7	158.75	176.09	181.52		181.61	0.000622		1.34		118.42	35.21	0.23
elsa1	330.00	Max WS	UF_TR30_D2	113.36	176.09	181.14		181.20	0.000407		1.07		105.83	31.96	0.19
elsa1	330.00	Max WS	UF_TR30_D3	135.84	176.09	181.35		181.42	0.000510		1.21		112.70	33.81	0.21
elsa1	325			Lat Struct											
elsa1	320.00	Max WS	UF_TR30_D1	96.95	176.22	180.56		180.63	0.000605		1.20		80.82	27.59	0.22
elsa1	320.00	Max WS	UF_TR30_D5	165.98	176.22	181.44		181.56	0.000858		1.55		106.90	32.17	0.27
elsa1	320.00	Max WS	UF_TR30_D7	169.73	176.22	181.42		181.55	0.000911		1.60		106.27	32.06	0.28
elsa1	320.00	Max WS	UF_TR30_D2	119.53	176.22	181.08		181.16	0.000587		1.25		95.86	30.15	0.22
elsa1	320.00	Max WS	UF_TR30_D3	143.05	176.22	181.27		181.38	0.000722		1.41		101.76	31.25	0.25
elsa1	310.00	Max WS	UF_TR30_D1	90.18	176.41	180.37		180.50	0.001561		1.59		56.88	25.79	0.34
elsa1	310.00	Max WS	UF_TR30_D5	165.05	176.41	181.19		181.41	0.002029		2.05		80.41	29.89	0.40
elsa1	310.00	Max WS	UF_TR30_D7	169.67	176.41	181.15		181.39	0.002244		2.14		79.20	29.80	0.42
elsa1	310.00	Max WS	UF_TR30_D2	118.53	176.41	180.91		181.05	0.001450		1.64		72.13	29.31	0.33
elsa1	310.00	Max WS	UF_TR30_D3	137.32	176.41	181.07		181.24	0.001607		1.79		76.87	29.64	0.35
elsa1	309	Max WS	UF_TR30_D1	96.72	176.11	180.23		180.35	0.001522		1.58		61.03	27.25	0.34
elsa1	309	Max WS	UF_TR30_D5	182.67	176.11	181.03		181.27	0.002150		2.16		84.41	30.16	0.41
elsa1	309	Max WS	UF_TR30_D7	184.11	176.11	180.99		181.24	0.002271		2.21		83.31	30.08	0.42
elsa1	309	Max WS	UF_TR30_D2	139.73	176.11	180.76		180.93	0.001699		1.83		76.34	29.60	0.36
elsa1	309	Max WS	UF_TR30_D3	158.37	176.11	180.91		181.11	0.001825		1.95		81.05	29.93	0.38

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa2	300.00	Max WS	UF_TR30_D1	128.70	175.47	180.23		180.29	0.000485	0.07	1.09		117.86	42.32	0.20
elsa2	300.00	Max WS	UF_TR30_D5	194.84	175.47	181.03		181.11	0.000489	0.18	1.27	0.11	180.46	156.90	0.21
elsa2	300.00	Max WS	UF_TR30_D7	194.86	175.47	180.99		181.07	0.000509	0.18	1.29	0.10	174.78	153.57	0.22
elsa2	300.00	Max WS	UF_TR30_D2	165.70	175.47	180.76		180.83	0.000472	0.14	1.19	0.02	142.84	114.94	0.21
elsa2	300.00	Max WS	UF_TR30_D3	178.94	175.47	180.91		180.99	0.000466	0.16	1.22	0.07	163.50	145.51	0.21
elsa2	299.91			Lat Struct											
elsa2	290.00	Max WS	UF_TR30_D1	127.39	175.60	180.10		180.25	0.001590		1.72		73.93	30.46	0.35
elsa2	290.00	Max WS	UF_TR30_D5	194.82	175.60	180.89		181.08	0.001650		1.94		100.27	35.49	0.37
elsa2	290.00	Max WS	UF_TR30_D7	194.86	175.60	180.85		181.04	0.001726		1.97		98.77	35.37	0.38
elsa2	290.00	Max WS	UF_TR30_D2	165.62	175.60	180.63		180.80	0.001558		1.82		91.15	34.25	0.36
elsa2	290.00	Max WS	UF_TR30_D3	178.91	175.60	180.79		180.96	0.001553		1.85		96.63	35.21	0.36
elsa2	280.00	Max WS	UF_TR30_D1	125.63	175.52	179.87		180.14	0.002999		2.32		54.26	21.57	0.47
elsa2	280.00	Max WS	UF_TR30_D5	194.74	175.52	180.60		180.97	0.003811		2.69		72.49	28.20	0.54
elsa2	280.00	Max WS	UF_TR30_D7	194.85	175.52	180.55		180.93	0.004006		2.75		70.97	27.71	0.55
elsa2	280.00	Max WS	UF_TR30_D2	165.73	175.52	180.37		180.69	0.003402		2.51		66.14	26.08	0.50
elsa2	280.00	Max WS	UF_TR30_D3	178.77	175.52	180.52		180.85	0.003455		2.55		70.22	27.46	0.51
elsa2	270.00	Max WS	UF_TR30_D1	124.47	175.70	179.94		180.01	0.000628		1.19		104.40	35.72	0.22
elsa2	270.00	Max WS	UF_TR30_D5	194.73	175.70	180.69		180.80	0.000750		1.46	0.17	146.72	81.22	0.25
elsa2	270.00	Max WS	UF_TR30_D7	194.85	175.70	180.64		180.75	0.000781		1.49	0.16	142.33	78.81	0.25
elsa2	270.00	Max WS	UF_TR30_D2	165.55	175.70	180.46		180.55	0.000662		1.34	0.09	128.66	71.88	0.23
elsa2	270.00	Max WS	UF_TR30_D3	178.77	175.70	180.61		180.71	0.000671		1.38	0.14	140.09	77.55	0.24
elsa2	260.00	Max WS	UF_TR30_D1	147.62	175.55	179.80		179.91	0.000983		1.47	0.06	100.93	43.00	0.28
elsa2	260.00	Max WS	UF_TR30_D5	237.38	175.55	180.51		180.68	0.001245		1.83	0.26	139.20	65.13	0.33
elsa2	260.00	Max WS	UF_TR30_D7	230.66	175.55	180.47		180.63	0.001221		1.81	0.25	136.52	63.79	0.33
elsa2	260.00	Max WS	UF_TR30_D2	210.14	175.55	180.26		180.42	0.001225		1.77	0.21	124.28	57.25	0.32
elsa2	260.00	Max WS	UF_TR30_D3	226.82	175.55	180.41		180.58	0.001241		1.81	0.24	133.17	62.07	0.33
elsa2	250.00	Max WS	UF_TR30_D1	156.00	174.96	179.64		179.79	0.001214		1.72	0.28	98.54	47.73	0.32
elsa2	250.00	Max WS	UF_TR30_D5	237.63	174.96	180.40		180.60	0.001313	0.08	2.02	0.39	141.66	69.51	0.34
elsa2	250.00	Max WS	UF_TR30_D7	230.91	174.96	180.36		180.55	0.001290	0.06	1.99	0.38	138.94	67.73	0.34
elsa2	250.00	Max WS	UF_TR30_D2	210.63	174.96	180.15		180.34	0.001316		1.94	0.37	125.92	59.89	0.34
elsa2	250.00	Max WS	UF_TR30_D3	226.58	174.96	180.30		180.50	0.001314	0.04	1.99	0.38	135.31	65.27	0.34
elsa2	240.00	Max WS	UF_TR30_D1	162.39	175.51	179.36		179.75	0.003880	0.29	2.75		60.63	31.11	0.55
elsa2	240.00	Max WS	UF_TR30_D5	237.13	175.51	180.14		180.47	0.002689	0.50	2.73	0.48	133.81	110.84	0.48
elsa2	240.00	Max WS	UF_TR30_D7	231.02	175.51	180.10		180.43	0.002700	0.48	2.72	0.47	129.45	109.33	0.48
elsa2	240.00	Max WS	UF_TR30_D2	209.76	175.51	179.87		180.23	0.003097	0.45	2.77	0.41	105.57	99.59	0.51
elsa2	240.00	Max WS	UF_TR30_D3	226.64	175.51	180.03		180.38	0.002849	0.47	2.76	0.46	122.43	106.03	0.49
elsa2	230.00	Max WS	UF_TR30_D1	162.40	175.11	179.13		179.45	0.003150		2.50		64.97	25.17	0.50
elsa2	230.00	Max WS	UF_TR30_D5	236.55	175.11	179.98		180.29	0.002401	0.25	2.55	0.38	124.10	104.09	0.45
elsa2	230.00	Max WS	UF_TR30_D7	230.92	175.11	179.94		180.25	0.002414	0.23	2.54	0.37	119.94	102.65	0.45
elsa2	230.00	Max WS	UF_TR30_D2	208.74	175.11	179.68		180.02	0.002786	0.10	2.58	0.25	94.86	93.48	0.48
elsa2	230.00	Max WS	UF_TR30_D3	226.24	175.11	179.86		180.19	0.002566	0.21	2.58	0.34	112.25	99.93	0.46
elsa2	220.00	Max WS	UF_TR30_D1	161.72	174.79	179.04		179.26	0.002413		2.11	0.34	90.38	68.43	0.42
elsa2	220.00	Max WS	UF_TR30_D5	233.94	174.79	179.94		180.12	0.001449	0.39	1.99	0.48	174.04	105.50	0.34
elsa2	220.00	Max WS	UF_TR30_D7	229.42	174.79	179.90		180.07	0.001477	0.38	1.99	0.48	169.27	104.45	0.35
elsa2	220.00	Max WS	UF_TR30_D2	208.01	174.79	179.59		179.79	0.001835	0.30	2.08	0.46	138.07	97.08	0.38
elsa2	220.00	Max WS	UF_TR30_D3	225.04	174.79	179.80		179.99	0.001604	0.36	2.03	0.48	159.63	102.28	0.36
elsa2	210.00	Max WS	UF_TR30_D1	161.76	174.53	178.95		179.07	0.000906	0.16	1.48		113.18	52.83	0.27
elsa2	210.00	Max WS	UF_TR30_D5	218.54	174.53	179.90		180.01	0.000651	0.34	1.48		166.11	56.32	0.24
elsa2	210.00	Max WS	UF_TR30_D7	215.50	174.53	179.85		179.96	0.000660	0.34	1.48		163.44	56.30	0.24
elsa2	210.00	Max WS	UF_TR30_D2	202.29	174.53	179.52		179.64	0.000788	0.30	1.54		144.91	56.15	0.26
elsa2	210.00	Max WS	UF_TR30_D3	213.30	174.53	179.75		179.87	0.000706	0.33	1.51		157.88	56.25	0.25
elsa2	200.00	Max WS	UF_TR30_D1	161.81	174.16	178.81		178.98	0.001434	0.18	1.82		91.37	44.15	0.35
elsa2	200.00	Max WS	UF_TR30_D5	221.80	174.16	179.80		179.95	0.000919	0.39	1.76	0.22	149.68	71.03	0.29
elsa2	200.00	Max WS	UF_TR30_D7	218.77	174.16	179.75		179.90	0.000941	0.39	1.76	0.21	146.15	70.10	0.29
elsa2	200.00	Max WS	UF_TR30_D2	203.03	174.16	179.40		179.57	0.001179	0.33	1.85	0.14	122.70	63.58	0.32
elsa2	200.00	Max WS	UF_TR30_D3	215.67	174.16	179.64		179.80	0.001021	0.38	1.80	0.20	138.82	68.13	0.31
elsa2	190.00	Max WS	UF_TR30_D1	161.83	173.85	178.77		178.91	0.001039	0.14	1.65	0.21	108.32	68.57	0.30
elsa2	190.00	Max WS	UF_TR30_D5	233.77	173.85	179.77		179.89	0.000713	0.34	1.65	0.31	199.50	108.04	0.26
elsa2	190.00	Max WS	UF_TR30_D7	229.87	173.85	179.72		179.84	0.000726	0.33	1.65	0.30	194.14	106.67	0.26
elsa2	190.00	Max WS	UF_TR30_D2	206.70	173.85	179.37		179.50	0.000853	0.27	1.69	0.29	158.91	95.52	0.28
elsa2	190.00	Max WS	UF_TR30_D3	224.16	173.85	179.61		179.74	0.000771	0.32	1.67	0.30	183.06	103.35	0.27
elsa2	180.00	Max WS	UF_TR30_D1	161.87	173.54	178.61		178.86	0.002186	0.28	2.22	0.28	87.33	73.13	0.42
elsa2	180.00	Max WS	UF_TR30_D5	235.45	173.54	179.69		179.85	0.001169	0.45	2.00	0.43	192.60	118.03	0.32
elsa2	180.00	Max WS	UF_TR30_D7	231.36	173.54	179.63		179.81	0.001201	0.44	2.01	0.43	186.46	116.33	0.32
elsa2	180.00	Max WS	UF_TR30_D2	207.03	173.54	179.26		179.46	0.001533	0.38	2.12	0.40	144.93	103.88	0.36
elsa2	180.00	Max WS	UF_TR30_D3	224.99	173.54	179.52		179.70	0.001303	0.43	2.05	0.42	173.48	112.66	0.34
elsa2	170.00	Max WS	UF_TR30_D1	161.90	173.30	178.62		178.74	0.000886	0.15	1.57	0.21	117.41	74.69	0.28
elsa2	170.00	Max WS	UF_TR30_D5	235.19	173.30	179.69		179.79	0.000584	0.29	1.54	0.29	229.46	131.72	0.24
elsa2	170.00	Max WS	UF_TR30_D7	231.32	173.30	179.64		179.74	0.000596	0.29	1.54	0.29	222.69	129.54	0.24
elsa2	170.00	Max WS	UF_TR30_D2	207.28	173.30	179.26		179.38	0.000708	0.23	1.59	0.27	177.69	112.24	0.26
elsa2	170.00	Max WS	UF_TR30_D3	224.96	173.30	179.52		179.64	0.000633	0.27	1.56	0.28	208.43	124.71	0.25
elsa2	160.00	Max WS	UF_TR30_D1	161.89	173.04	178.55		178.70	0.001084		1.72	0.19	101.75	56.32	0.30
elsa2	160.00	Max WS	UF_TR30_D5	236.52	173.04	179.63		179.77	0.000763	0.22	1.72	0.33	191.31	106.24	0.27
elsa2	160.00	Max WS	UF_TR30_D7	232.28	173.04	179.58		179.72	0.000776	0.21	1.72	0.33	185.79	104.28	0.27
elsa2	160.00	Max WS	UF_TR30_D2	207.21	173.04	179.20		179.35	0.000911	0.15	1.75	0.29	149.12	90.21	0.29
elsa2	160.00	Max WS	UF_TR30_D3	225.24	173.04	179.47		179.61	0.000819	0.19	1.74	0.32	174.15	100.03	0.28
elsa3	150.00	Max WS	UF_TR30_D1	162.22	172.77	178.53		178.68	0.001096		1.76	0.14	94.42	39.09	0.30
elsa3	150.00	Max WS	UF_TR30_D5	236.31	172.77	179.59		179.76	0.000865	0.28	1.87	0.31	156.55	75.22	0.28
elsa3	150.00	Max WS	UF_TR30_D7	232.26	172.77	179.54		179.71	0.000874	0.27	1.86	0.30	152.74	73.62	0.28
elsa3	150.00	Max WS	UF_TR30_D2	207.28	172.77	179.17		179.34	0.000974	0.21	1.85	0.26	127.58	62.62	0.30
elsa3	150.00	Max WS	UF_TR30_D3	225.58	172.77	179.42		179.60	0.000912	0.26	1.87	0.29	144.64	70.13	0.29
elsa3	149.99			Lat Struct											
elsa3	140.00	Max WS	UF_TR30_D1	162.25	172.65	178.46		178.66	0.001651		1.97		82.27	27.10	0.36
elsa3	140.00	Max WS	UF_TR30_D5	236.38	172.65	179.53		179.75	0.001256	0.28	2.06	0.27	129.33	63.81	0.33
elsa3	140.00	Max WS	UF_TR30_D7	232.30	172.65	179.48		179.69	0.001273	0.27	2.06	0.26	126.09	61.93	0.33
elsa3	140.00	Max WS	UF_TR30_D2	207.30	172.65	179.11		179.32	0.001449	0.19	2.06	0.19	105.51	48.30	0.35
elsa3	140.00	Max WS	UF_TR30_D3	225.48	172.65	179.37		179.58	0.001338	0.25	2.07	0.24	119.16	57.70	0.34
elsa3	130.00	Max WS	UF_TR30_D1	162.43	172.88	178.42		178.55	0.000900		1.59		102.36	30.86	0.28
elsa3	130.00	Max WS	UF_TR30_D5	236.79	172.88	179.51		179.65	0.000709	0.19	1.68	0.26	166.50	75.58	0.26
elsa3	130.00	Max WS	UF_TR30_D7	232.78	172.88	179.46		179.59	0.000718	0.18	1.67	0.26	162.56	74.15	0.26
elsa3	130.00	Max WS	UF_TR30_D2	207.50	172.88	179.07		179.21	0.000805	0.11	1.66	0.22	136.57	61.48	0.27

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa3	130.00	Max WS	UF_TR30_D3	225.71	172.88	179.34		179.48	0.000749	0.15	1.68	0.25	154.09	70.75	0.26
elsa3	120.00	Max WS	UF_TR30_D1	159.39	173.05	178.41		178.50	0.000553	0.28	1.35	0.15	137.14	71.42	0.23
elsa3	120.00	Max WS	UF_TR30_D5	228.70	173.05	179.52		179.61	0.000399	0.37	1.37	0.24	235.17	106.41	0.20
elsa3	120.00	Max WS	UF_TR30_D7	224.74	173.05	179.47		179.55	0.000404	0.37	1.37	0.24	229.54	104.57	0.20
elsa3	120.00	Max WS	UF_TR30_D2	200.00	173.05	179.08		179.17	0.000452	0.34	1.36	0.22	191.87	91.73	0.21
elsa3	120.00	Max WS	UF_TR30_D3	217.65	173.05	179.35		179.44	0.000420	0.36	1.37	0.23	217.57	100.55	0.20
elsa3	110.00	Max WS	UF_TR30_D1	144.37	173.18	178.36		178.49	0.001008	0.30	1.61	0.22	100.06	55.81	0.29
elsa3	110.00	Max WS	UF_TR30_D5	196.86	173.18	179.51		179.61	0.000562	0.29	1.49	0.31	177.19	79.19	0.23
elsa3	110.00	Max WS	UF_TR30_D7	193.90	173.18	179.45		179.56	0.000574	0.29	1.49	0.31	172.93	77.92	0.23
elsa3	110.00	Max WS	UF_TR30_D2	175.41	173.18	179.06		179.17	0.000691	0.30	1.53	0.29	143.86	69.73	0.25
elsa3	110.00	Max WS	UF_TR30_D3	188.67	173.18	179.33		179.44	0.000609	0.30	1.51	0.31	163.76	75.21	0.24
elsa3	100.00	Max WS	UF_TR30_D1	145.22	172.98	178.34		178.45	0.000719	0.40	1.47		107.11	35.35	0.25
elsa3	100.00	Max WS	UF_TR30_D5	187.66	172.98	179.50		179.59	0.000480	0.44	1.38		149.57	37.74	0.21
elsa3	100.00	Max WS	UF_TR30_D7	185.34	172.98	179.44		179.53	0.000488	0.44	1.39		147.51	37.74	0.21
elsa3	100.00	Max WS	UF_TR30_D2	170.96	172.98	179.04		179.14	0.000559	0.44	1.41		132.64	37.07	0.23
elsa3	100.00	Max WS	UF_TR30_D3	181.41	172.98	179.32		179.42	0.000513	0.44	1.40		142.98	37.74	0.22
elsa3	90.00	Max WS	UF_TR30_D1	150.57	172.88	178.29		178.42	0.000756	0.30	1.57	0.17	103.57	39.67	0.26
elsa3	90.00	Max WS	UF_TR30_D5	201.05	172.88	179.45		179.56	0.000516	0.40	1.55	0.33	151.11	42.10	0.22
elsa3	90.00	Max WS	UF_TR30_D7	198.52	172.88	179.39		179.51	0.000524	0.39	1.55	0.33	148.81	42.02	0.22
elsa3	90.00	Max WS	UF_TR30_D2	181.79	172.88	178.99		179.11	0.000598	0.37	1.57	0.29	132.19	41.46	0.24
elsa3	90.00	Max WS	UF_TR30_D3	193.89	172.88	179.27		179.39	0.000547	0.39	1.56	0.32	143.74	41.85	0.23
elsa3	89	Max WS	UF_TR30_D1	161.80	172.82	178.24		178.39	0.000938	0.37	1.73	0.13	99.65	35.16	0.29
elsa3	89	Max WS	UF_TR30_D5	233.04	172.82	179.35		179.52	0.000765	0.47	1.86	0.34	143.44	41.14	0.27
elsa3	89	Max WS	UF_TR30_D7	229.51	172.82	179.30		179.47	0.000773	0.47	1.86	0.33	141.23	40.99	0.27
elsa3	89	Max WS	UF_TR30_D2	205.36	172.82	178.91		179.08	0.000838	0.45	1.83	0.27	125.52	39.90	0.28
elsa3	89	Max WS	UF_TR30_D3	222.61	172.82	179.18		179.35	0.000795	0.46	1.85	0.32	136.40	40.66	0.27
elsa3	88	Max WS	UF_TR30_D1	162.53	172.77	178.25		178.38	0.000796	0.46	1.61	0.16	120.70	48.24	0.26
elsa3	88	Max WS	UF_TR30_D5	236.93	172.77	179.38		179.51	0.000636	0.54	1.71	0.36	178.63	53.79	0.25
elsa3	88	Max WS	UF_TR30_D7	233.22	172.77	179.32		179.46	0.000643	0.53	1.71	0.35	175.73	53.68	0.25
elsa3	88	Max WS	UF_TR30_D2	207.73	172.77	178.93		179.07	0.000701	0.51	1.69	0.30	155.05	52.19	0.26
elsa3	88	Max WS	UF_TR30_D3	225.88	172.77	179.21		179.34	0.000664	0.52	1.71	0.34	169.36	53.44	0.25
elsa3	87.1	Max WS	UF_TR30_D1	162.53	173.18	177.99	176.76	178.49	0.003078	1.26	3.28		57.27	34.99	0.52
elsa3	87.1	Max WS	UF_TR30_D5	236.94	173.18	179.05	177.45	179.68	0.002847	1.54	3.69		74.63	38.65	0.52
elsa3	87.1	Max WS	UF_TR30_D7	233.24	173.18	179.00	177.41	179.62	0.002859	1.53	3.67		73.80	38.40	0.52
elsa3	87.1	Max WS	UF_TR30_D2	207.73	173.18	178.63	177.19	179.22	0.002972	1.44	3.56		67.74	37.15	0.53
elsa3	87.1	Max WS	UF_TR30_D3	225.89	173.18	178.89	177.35	179.50	0.002908	1.50	3.65		71.94	38.02	0.53
elsa3	87.05			Bridge											
elsa3	87	Max WS	UF_TR30_D1	162.50	173.18	177.53		178.19	0.004768	1.36	3.76		49.69	37.06	0.64
elsa3	87	Max WS	UF_TR30_D5	236.93	173.18	178.15		179.13	0.005683	1.78	4.58		59.91	38.88	0.72
elsa3	87	Max WS	UF_TR30_D7	233.23	173.18	178.13		179.09	0.005617	1.76	4.53		59.53	38.82	0.71
elsa3	87	Max WS	UF_TR30_D2	207.68	173.18	177.93		178.78	0.005306	1.62	4.26		56.27	38.32	0.69
elsa3	87	Max WS	UF_TR30_D3	225.86	173.18	178.07		179.00	0.005521	1.72	4.45		58.64	38.69	0.70
elsa3	86.2	Max WS	UF_TR30_D1	162.51	172.62	177.79		177.94	0.001051	0.23	1.71	0.10	99.36	42.67	0.30
elsa3	86.2	Max WS	UF_TR30_D5	240.13	172.62	178.44		178.65	0.001211	0.44	2.07	0.26	128.76	48.26	0.33
elsa3	86.2	Max WS	UF_TR30_D7	236.31	172.62	178.41		178.62	0.001197	0.43	2.05	0.25	127.70	48.21	0.33
elsa3	86.2	Max WS	UF_TR30_D2	209.38	172.62	178.21		178.40	0.001136	0.37	1.93	0.20	118.14	46.34	0.32
elsa3	86.2	Max WS	UF_TR30_D3	228.53	172.62	178.36		178.56	0.001177	0.41	2.02	0.23	125.10	48.02	0.33
elsa3	86.1	Max WS	UF_TR30_D1	161.21	172.57	177.76		177.93	0.001072	0.31	1.80	0.12	95.30	38.77	0.30
elsa3	86.1	Max WS	UF_TR30_D5	233.59	172.57	178.42		178.65	0.001235	0.49	2.16	0.33	121.46	41.45	0.34
elsa3	86.1	Max WS	UF_TR30_D7	230.00	172.57	178.39		178.62	0.001220	0.48	2.14	0.33	120.55	41.35	0.33
elsa3	86.1	Max WS	UF_TR30_D2	204.90	172.57	178.19		178.39	0.001157	0.43	2.01	0.27	112.27	40.48	0.32
elsa3	86.1	Max WS	UF_TR30_D3	222.71	172.57	178.34		178.56	0.001199	0.47	2.10	0.31	118.32	41.10	0.33
elsa3	86.094			Lat Struct											
elsa3	86.09	Max WS	UF_TR30_D1	162.57	172.23	177.17		177.51	0.002768	0.19	2.58		66.15	43.32	0.47
elsa3	86.09	Max WS	UF_TR30_D5	237.28	172.23	177.76		178.21	0.003046	0.46	3.04	0.28	97.90	65.42	0.50
elsa3	86.09	Max WS	UF_TR30_D7	233.99	172.23	177.74		178.19	0.003015	0.45	3.02	0.27	96.85	64.64	0.50
elsa3	86.09	Max WS	UF_TR30_D2	207.63	172.23	177.57		177.97	0.002869	0.38	2.85	0.21	86.52	57.58	0.49
elsa3	86.09	Max WS	UF_TR30_D3	225.96	172.23	177.71		178.13	0.002928	0.43	2.95	0.26	94.52	62.73	0.49
elsa3	86.08	Max WS	UF_TR30_D1	162.29	171.84	176.47		176.76	0.002443		2.39	0.36	70.95	30.76	0.44
elsa3	86.08	Max WS	UF_TR30_D5	235.16	171.84	176.95		177.38	0.003160		2.93	0.53	88.56	38.63	0.51
elsa3	86.08	Max WS	UF_TR30_D7	232.46	171.84	176.94		177.36	0.003108		2.90	0.52	88.30	38.62	0.51
elsa3	86.08	Max WS	UF_TR30_D2	205.87	171.84	176.79		177.16	0.002847		2.71	0.42	82.38	38.36	0.48
elsa3	86.08	Max WS	UF_TR30_D3	223.50	171.84	176.90		177.30	0.003003		2.83	0.49	86.59	38.54	0.50
elsa3	86.077	Max WS	UF_TR30_D1	162.25	171.76	176.40		176.66	0.001866	0.44	2.29	0.45	79.48	34.77	0.41
elsa3	86.077	Max WS	UF_TR30_D5	226.19	171.76	176.88		177.24	0.002186	0.55	2.72	0.65	96.40	35.33	0.45
elsa3	86.077	Max WS	UF_TR30_D7	224.20	171.76	176.88		177.23	0.002161	0.55	2.70	0.64	96.18	35.33	0.45
elsa3	86.077	Max WS	UF_TR30_D2	201.85	171.76	176.72		177.04	0.002053	0.51	2.56	0.58	90.59	35.13	0.43
elsa3	86.077	Max WS	UF_TR30_D3	215.57	171.76	176.84		177.18	0.002071	0.53	2.63	0.62	94.89	35.28	0.44
elsa3	86.06	Max WS	UF_TR30_D1	161.30	171.40	176.02		176.22	0.001763	0.35	2.06	0.30	104.09	81.97	0.38
elsa3	86.06	Max WS	UF_TR30_D5	232.74	171.40	176.51		176.76	0.001894	0.51	2.37	0.34	147.33	95.99	0.41
elsa3	86.06	Max WS	UF_TR30_D7	232.63	171.40	176.50		176.75	0.001906	0.51	2.37	0.34	146.80	95.92	0.41
elsa3	86.06	Max WS	UF_TR30_D2	203.44	171.40	176.35		176.58	0.001767	0.45	2.22	0.36	132.99	90.84	0.39
elsa3	86.06	Max WS	UF_TR30_D3	219.05	171.40	176.50		176.72	0.001690	0.48	2.24	0.32	146.80	95.92	0.39
elsa3	86.0599			Lat Struct											
elsa3	86.0469			Lat Struct											
elsa3	86.04	Max WS	UF_TR30_D1	151.79	170.72	175.52		175.68	0.001646	0.24	1.86	0.45	101.03	59.44	0.37
elsa3	86.04	Max WS	UF_TR30_D5	196.16	170.72	176.16		176.31	0.001184	0.30	1.83	0.55	139.31	60.55	0.32
elsa3	86.04	Max WS	UF_TR30_D7	197.47	170.72	176.14		176.30	0.001226	0.31	1.85	0.55	138.19	60.51	0.33
elsa3	86.04	Max WS	UF_TR30_D2	174.75	170.72	175.99		176.13	0.001146	0.28	1.74	0.50	129.39	60.23	0.32
elsa3	86.04	Max WS	UF_TR30_D3	183.87	170.72	176.22		176.35	0.000968	0.28	1.67	0.51	143.03	60.67	0.29
elsa3	86.02	Max WS	UF_TR30_D1	156.77	169.88	175.07		175.26	0.001408	0.39	2.07	0.48	109.67	60.32	0.35
elsa3	86.02	Max WS	UF_TR30_D5	188.65	169.88	175.80		175.95	0.000916	0.39	1.89	0.54	153.50	60.32	0.29
elsa3	86.02	Max WS	UF_TR30_D7	191.64	169.88	175.76		175.92	0.000983	0.40	1.94	0.55	151.13	60.32	0.30
elsa3	86.02	Max WS	UF_TR30_D2	178.25	169.88	175.64		175.78	0.000965	0.39	1.89	0.52	143.68	60.32	0.30
elsa3	86.02	Max WS	UF_TR30_D3	176.81	169.88	175.94		176.05	0.000704	0.35	1.69	0.50	161.80	60.32	0.25
elsa4	86.01	Max WS	UF_TR30_D1	220.43	169.86	175.07		175.38	0.001682	0.50	2.69	0.71	127.43	52.32	0.40
elsa4	86.01	Max WS	UF_TR30_D5	232.94	169.86	175.80		176.00	0.000992	0.50	2.28	0.68	165.45	52.32	0.31
elsa4	86.01	Max WS	UF_TR30_D7	234.44	169.86	175.76		175.97	0.001037	0.50	2.32	0.69	163.39	52.32	0.32
elsa4	86.01	Max WS	UF_TR30_D2	234.46	169.86	175.64		175.87	0.001149	0.51	2.40	0.70	156.93	52.32	0.34
elsa4	86.01	Max WS	UF_TR30_D3	228.41	169.86	175.94		176.12	0.000855	0.48	2.15	0.65	172.64	52.32	0.29

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa4	86.009			Lat Struct											
elsa4	86.0089			Lat Struct											
elsa4	86	Max WS	UF_TR30_D1	233.15	169.44	174.38	173.13	175.08	0.004033		3.71		62.84	23.83	0.58
elsa4	86	Max WS	UF_TR30_D5	277.64	169.44	175.10	173.48	175.82	0.003342		3.76		73.83	27.71	0.54
elsa4	86	Max WS	UF_TR30_D7	275.90	169.44	175.07	173.47	175.79	0.003371		3.76		73.36	27.53	0.55
elsa4	86	Max WS	UF_TR30_D2	270.68	169.44	174.97	173.43	175.69	0.003481		3.77		71.83	26.92	0.55
elsa4	86	Max WS	UF_TR30_D3	283.37	169.44	175.22	173.53	175.94	0.003205		3.74		75.69	28.53	0.54
elsa4	85.95			Bridge											
elsa4	85.9	Max WS	UF_TR30_D1	233.05	169.44	174.10		174.90	0.005096		3.98		58.57	22.66	0.65
elsa4	85.9	Max WS	UF_TR30_D5	277.54	169.44	174.46		175.41	0.005372		4.34		64.02	24.15	0.67
elsa4	85.9	Max WS	UF_TR30_D7	275.88	169.44	174.44		175.40	0.005356		4.32		63.85	24.10	0.67
elsa4	85.9	Max WS	UF_TR30_D2	270.68	169.44	174.40		175.34	0.005327		4.28		63.23	23.93	0.67
elsa4	85.9	Max WS	UF_TR30_D3	283.29	169.44	174.51		175.48	0.005371		4.37		64.81	24.37	0.68
elsa4	85.799			Lat Struct											
elsa4	85.39			Lat Struct											
elsa4	85.3	Max WS	UF_TR30_D1	232.74	168.18	173.25		173.67	0.002382	0.95	3.13	0.67	104.02	36.64	0.48
elsa4	85.3	Max WS	UF_TR30_D5	277.73	168.18	173.70		174.16	0.002324	1.03	3.30	0.72	121.15	39.13	0.48
elsa4	85.3	Max WS	UF_TR30_D7	275.95	168.18	173.69		174.15	0.002309	1.02	3.29	0.71	120.84	39.08	0.48
elsa4	85.3	Max WS	UF_TR30_D2	270.08	168.18	173.62		174.08	0.002337	1.01	3.27	0.71	118.19	38.73	0.48
elsa4	85.3	Max WS	UF_TR30_D3	284.69	168.18	173.76		174.23	0.002318	1.04	3.33	0.73	123.73	39.45	0.48
elsa4	85.29			Lat Struct											
elsa4	85.2	Max WS	UF_TR30_D1	232.62	167.89	172.36		172.93	0.003164	0.76	3.64	0.99	96.81	42.41	0.56
elsa4	85.2	Max WS	UF_TR30_D5	276.97	167.89	172.74		173.36	0.003138	0.90	3.84	1.06	113.32	44.16	0.57
elsa4	85.2	Max WS	UF_TR30_D7	274.28	167.89	172.75		173.35	0.003053	0.89	3.79	1.04	113.71	44.20	0.56
elsa4	85.2	Max WS	UF_TR30_D2	269.95	167.89	172.68		173.28	0.003172	0.88	3.82	1.05	110.30	43.85	0.57
elsa4	85.2	Max WS	UF_TR30_D3	283.61	167.89	172.80		173.42	0.003136	0.92	3.86	1.07	115.69	44.41	0.57
elsa4	85.19			Lat Struct											
elsa4	85.185			Lat Struct											
elsa4	85.1	Max WS	UF_TR30_D1	233.92	167.44	171.59		172.16	0.003356	0.58	3.37	0.54	78.70	32.76	0.56
elsa4	85.1	Max WS	UF_TR30_D5	279.14	167.44	172.00		172.62	0.003256	0.62	3.56	0.58	93.51	39.12	0.57
elsa4	85.1	Max WS	UF_TR30_D7	279.32	167.44	172.00		172.63	0.003258	0.62	3.56	0.58	93.54	39.14	0.57
elsa4	85.1	Max WS	UF_TR30_D2	271.09	167.44	171.93		172.54	0.003285	0.61	3.53	0.58	90.67	38.15	0.57
elsa4	85.1	Max WS	UF_TR30_D3	285.64	167.44	172.06		172.69	0.003225	0.63	3.58	0.59	95.93	39.94	0.56
elsa4	85.099			Lat Struct											
elsa4	85.05	Max WS	UF_TR30_D1	233.87	167.33	171.10		171.43	0.002682	0.28	2.54	0.15	92.57	34.12	0.48
elsa4	85.05	Max WS	UF_TR30_D5	279.12	167.33	171.58		171.92	0.002265	0.36	2.59	0.29	109.65	36.78	0.45
elsa4	85.05	Max WS	UF_TR30_D7	279.32	167.33	171.58		171.92	0.002268	0.36	2.59	0.29	109.65	36.78	0.45
elsa4	85.05	Max WS	UF_TR30_D2	271.07	167.33	171.51		171.84	0.002308	0.35	2.57	0.28	106.88	36.36	0.45
elsa4	85.05	Max WS	UF_TR30_D3	285.63	167.33	171.66		172.00	0.002198	0.37	2.59	0.31	112.46	37.20	0.45
elsa	85.029			Lat Struct											
elsa	85.01	Max WS	UF_TR30_D1	242.36	167.43	171.16		171.31	0.001184	0.06	1.75	0.40	153.39	65.58	0.32
elsa	85.01	Max WS	UF_TR30_D5	287.93	167.43	171.65		171.80	0.000974	0.17	1.76	0.47	186.18	67.71	0.30
elsa	85.01	Max WS	UF_TR30_D7	287.94	167.43	171.65		171.80	0.000974	0.17	1.76	0.47	186.18	67.71	0.30
elsa	85.01	Max WS	UF_TR30_D2	280.56	167.43	171.58		171.73	0.001001	0.16	1.76	0.47	180.97	67.37	0.30
elsa	85.01	Max WS	UF_TR30_D3	295.40	167.43	171.73		171.88	0.000948	0.18	1.76	0.48	191.41	68.04	0.30
elsa	85	Max WS	UF_TR30_D1	242.36	167.43	170.92		171.40	0.003025		3.08		78.77	64.85	0.54
elsa	85	Max WS	UF_TR30_D5	287.93	167.43	171.38		171.91	0.002779		3.21		89.61	66.54	0.52
elsa	85	Max WS	UF_TR30_D7	287.94	167.43	171.38		171.91	0.002779		3.21		89.61	66.54	0.52
elsa	85	Max WS	UF_TR30_D2	280.56	167.43	171.31		171.83	0.002812		3.19		87.91	66.22	0.53
elsa	85	Max WS	UF_TR30_D3	295.40	167.43	171.45		171.99	0.002747		3.24		91.31	66.85	0.52
elsa	82.5			Culvert											
elsa	80	Max WS	UF_TR30_D1	242.36	167.43	168.77	169.78	172.46	0.089610		8.50		28.50	33.79	2.46
elsa	80	Max WS	UF_TR30_D5	287.93	167.43	168.87	170.05	173.32	0.097277		9.34		30.84	34.34	2.60
elsa	80	Max WS	UF_TR30_D7	287.94	167.43	168.87	170.05	173.32	0.097283		9.34		30.84	34.34	2.60
elsa	80	Max WS	UF_TR30_D2	280.56	167.43	168.86	170.01	173.18	0.096094		9.21		30.47	34.26	2.58
elsa	80	Max WS	UF_TR30_D3	295.40	167.43	168.89	170.09	173.46	0.098385		9.46		31.21	34.43	2.62
elsa	79.875	Max WS	UF_TR30_D1	242.36	167.43	168.08	169.40	179.69	0.217977		15.08		16.07	30.49	6.64
elsa	79.875	Max WS	UF_TR30_D5	287.92	167.43	168.14	169.61	181.51	0.221949		16.19		17.78	30.74	6.80
elsa	79.875	Max WS	UF_TR30_D7	287.94	167.43	168.14	169.62	181.51	0.221972		16.19		17.78	30.74	6.80
elsa	79.875	Max WS	UF_TR30_D2	280.56	167.43	168.13	169.58	181.23	0.221805		16.03		17.50	30.70	6.78
elsa	79.875	Max WS	UF_TR30_D3	295.39	167.43	168.15	169.65	181.78	0.222156		16.35		18.06	30.79	6.82
elsa	79	Max WS	UF_TR30_D1	242.36	160.03	161.66	162.09	163.20	0.008329		5.50		44.08	32.53	1.51
elsa	79	Max WS	UF_TR30_D5	287.93	160.03	161.85	162.31	163.51	0.007710		5.72		50.34	32.90	1.48
elsa	79	Max WS	UF_TR30_D7	287.94	160.03	161.85	162.30	163.51	0.007705		5.72		50.35	32.90	1.48
elsa	79	Max WS	UF_TR30_D2	280.56	160.03	161.81	162.28	163.47	0.007838		5.69		49.27	32.84	1.48
elsa	79	Max WS	UF_TR30_D3	295.40	160.03	161.88	162.34	163.57	0.007632		5.76		51.32	32.95	1.47
elsa	78	Max WS	UF_TR30_D1	242.35	158.00	160.79	160.11	161.16	0.004006	0.41	2.71	0.50	96.10	58.68	0.57
elsa	78	Max WS	UF_TR30_D5	287.93	158.00	161.03	160.30	161.45	0.003955	0.55	2.88	0.55	110.36	59.95	0.58
elsa	78	Max WS	UF_TR30_D7	287.94	158.00	161.03	160.30	161.45	0.003954	0.55	2.88	0.55	110.37	59.95	0.58
elsa	78	Max WS	UF_TR30_D2	280.55	158.00	161.00	160.28	161.40	0.003959	0.53	2.85	0.55	108.15	59.72	0.58
elsa	78	Max WS	UF_TR30_D3	295.40	158.00	161.07	160.34	161.49	0.003952	0.57	2.91	0.56	112.57	60.18	0.58
elsa	77.5			Inl Struct											
elsa	77	Max WS	UF_TR30_D1	242.35	149.48	152.49		152.85	0.003282		2.68		90.60	31.52	0.50
elsa	77	Max WS	UF_TR30_D5	287.93	149.48	152.80		153.22	0.003372		2.87		100.39	31.72	0.51
elsa	77	Max WS	UF_TR30_D7	287.94	149.48	152.80		153.22	0.003372		2.87		100.39	31.72	0.51
elsa	77	Max WS	UF_TR30_D2	280.55	149.48	152.75		153.16	0.003357		2.84		98.86	31.69	0.51
elsa	77	Max WS	UF_TR30_D3	295.40	149.48	152.85		153.27	0.003388		2.90		101.92	31.75	0.52
elsa	76	Max WS	UF_TR30_D1	242.35	148.35	151.59		152.47	0.008802		4.15		58.45	22.52	0.82
elsa	76	Max WS	UF_TR30_D5	287.93	148.35	151.89		152.88	0.008962		4.42		65.16	22.85	0.84
elsa	76	Max WS	UF_TR30_D7	287.94	148.35	151.89		152.88	0.008963		4.42		65.16	22.85	0.84
elsa	76	Max WS	UF_TR30_D2	280.55	148.35	151.84		152.82	0.008933		4.38		64.11	22.80	0.83
elsa	76	Max WS	UF_TR30_D3	295.40	148.35	151.93		152.95	0.008992		4.46		66.21	22.90	0.84
elsa	75	Max WS	UF_TR30_D1	242.34	145.93	148.21	148.50	149.55	0.021934		5.13		47.28	28.17	1.26
elsa	75	Max WS	UF_TR30_D5	287.92	145.93	148.40	148.75	149.93	0.022451		5.48		52.58	28.77	1.29

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa	75	Max WS	UF_TR30_D7	287.93	145.93	148.40	148.75	149.93	0.022452		5.48		52.58	28.77	1.29
elsa	75	Max WS	UF_TR30_D2	280.55	145.93	148.37	148.71	149.87	0.022344		5.42		51.76	28.68	1.29
elsa	75	Max WS	UF_TR30_D3	295.40	145.93	148.43	148.78	149.99	0.022557		5.53		53.39	28.86	1.30
elsa	74.99			Lat Struct											
elsa	74.51	Max WS	UF_TR30_D1	242.34	143.37	145.30		145.69	0.010777	1.17	3.10	1.23	108.18	99.33	0.86
elsa	74.51	Max WS	UF_TR30_D5	287.92	143.37	145.44		145.87	0.010465	1.26	3.27	1.33	122.41	100.22	0.86
elsa	74.51	Max WS	UF_TR30_D7	287.94	143.37	145.44		145.87	0.010465	1.26	3.27	1.33	122.41	100.22	0.86
elsa	74.51	Max WS	UF_TR30_D2	280.55	143.37	145.42		145.84	0.010529	1.24	3.25	1.31	120.09	100.07	0.86
elsa	74.51	Max WS	UF_TR30_D3	295.39	143.37	145.46		145.90	0.010388	1.27	3.29	1.34	124.80	100.36	0.86
elsa	74	Max WS	UF_TR30_D1	242.34	141.40	143.56		144.11	0.008751		3.29		73.72	43.49	0.81
elsa	74	Max WS	UF_TR30_D5	287.92	141.40	143.77		144.38	0.008650		3.48		82.71	44.29	0.81
elsa	74	Max WS	UF_TR30_D7	287.93	141.40	143.77		144.38	0.008646		3.48		82.73	44.30	0.81
elsa	74	Max WS	UF_TR30_D2	280.55	141.40	143.73		144.34	0.008659		3.45		81.31	44.17	0.81
elsa	74	Max WS	UF_TR30_D3	295.39	141.40	143.80		144.43	0.008629		3.51		84.16	44.42	0.81
elsa	73.5	Max WS	UF_TR30_D1	242.36	138.38	141.20	141.43	142.17	0.011176	0.66	4.58	1.23	71.46	67.45	0.96
elsa	73.5	Max WS	UF_TR30_D5	287.92	138.38	141.40	141.63	142.46	0.011267	0.70	4.86	1.38	86.73	80.55	0.98
elsa	73.5	Max WS	UF_TR30_D7	287.93	138.38	141.40	141.63	142.46	0.011268	0.70	4.86	1.38	86.73	80.55	0.98
elsa	73.5	Max WS	UF_TR30_D2	280.58	138.38	141.37	141.59	142.42	0.011291	0.67	4.83	1.36	84.23	79.77	0.98
elsa	73.5	Max WS	UF_TR30_D3	295.40	138.38	141.44	141.71	142.50	0.011133	0.73	4.88	1.39	89.71	81.46	0.97
elsa	73	Max WS	UF_TR30_D1	242.35	137.84	140.78		141.37	0.007680	0.22	3.41	0.55	73.91	45.28	0.77
elsa	73	Max WS	UF_TR30_D5	287.92	137.84	140.97		141.65	0.007890	0.36	3.68	0.71	82.75	46.71	0.79
elsa	73	Max WS	UF_TR30_D7	287.93	137.84	140.97		141.65	0.007887	0.36	3.68	0.71	82.77	46.71	0.79
elsa	73	Max WS	UF_TR30_D2	280.57	137.84	140.94		141.61	0.007853	0.34	3.64	0.68	81.38	46.49	0.79
elsa	73	Max WS	UF_TR30_D3	295.40	137.84	141.01		141.70	0.007786	0.38	3.70	0.73	84.68	47.02	0.79
elsa	72	Max WS	UF_TR30_D1	245.79	135.69	138.35	138.21	138.95	0.008993	0.48	3.60	0.98	85.91	64.93	0.83
elsa	72	Max WS	UF_TR30_D5	288.42	135.69	138.52	138.43	139.18	0.009040	0.56	3.81	1.10	96.81	66.49	0.85
elsa	72	Max WS	UF_TR30_D7	288.43	135.69	138.52	138.43	139.18	0.009041	0.56	3.81	1.10	96.81	66.49	0.85
elsa	72	Max WS	UF_TR30_D2	281.91	135.69	138.49	138.41	139.15	0.009036	0.55	3.78	1.08	95.19	66.34	0.85
elsa	72	Max WS	UF_TR30_D3	298.42	135.69	138.56	138.47	139.24	0.009055	0.58	3.86	1.13	99.24	66.71	0.85
elsa	71.5	Max WS	UF_TR30_D1	245.79	135.45	137.65	138.25	139.39	0.026586	1.34	6.06	1.36	50.91	44.88	1.43
elsa	71.5	Max WS	UF_TR30_D5	288.42	135.45	137.81	138.44	139.72	0.026682	1.54	6.41	1.55	58.11	47.77	1.45
elsa	71.5	Max WS	UF_TR30_D7	288.43	135.45	137.81	138.44	139.72	0.026685	1.54	6.41	1.55	58.11	47.77	1.45
elsa	71.5	Max WS	UF_TR30_D2	281.91	135.45	137.78	138.42	139.67	0.026667	1.51	6.36	1.53	57.00	45.94	1.44
elsa	71.5	Max WS	UF_TR30_D3	298.42	135.45	137.84	138.49	139.80	0.026732	1.59	6.50	1.55	59.90	51.55	1.45
elsa	71	Max WS	UF_TR30_D1	245.79	129.90	132.55	132.67	133.41	0.012551	0.11	4.52	1.32	80.08	60.24	0.99
elsa	71	Max WS	UF_TR30_D5	288.41	129.90	132.74	132.85	133.65	0.012285	0.28	4.73	1.46	91.14	60.72	0.99
elsa	71	Max WS	UF_TR30_D7	288.43	129.90	132.74	132.85	133.65	0.012280	0.28	4.73	1.46	91.15	60.73	0.99
elsa	71	Max WS	UF_TR30_D2	281.91	129.90	132.71	132.82	133.61	0.012330	0.26	4.70	1.44	89.47	60.65	0.99
elsa	71	Max WS	UF_TR30_D3	298.42	129.90	132.77	132.89	133.70	0.012290	0.31	4.78	1.49	93.47	60.83	0.99
elsa	70	Max WS	UF_TR30_D1	252.16	125.09	127.70		128.34	0.009872		3.55		71.00	40.32	0.85
elsa	70	Max WS	UF_TR30_D5	292.60	125.09	127.91		128.60	0.009413		3.66		79.88	41.77	0.85
elsa	70	Max WS	UF_TR30_D7	297.63	125.09	127.94		128.63	0.009377		3.68		80.93	41.94	0.85
elsa	70	Max WS	UF_TR30_D2	287.67	125.09	127.89		128.57	0.009476		3.65		78.78	41.59	0.85
elsa	70	Max WS	UF_TR30_D3	303.99	125.09	127.97		128.67	0.009327		3.70		82.26	42.15	0.84
elsa	60	Max WS	UF_TR30_D1	252.10	122.30	126.41		127.00	0.005115	0.61	3.46	0.56	84.54	50.58	0.65
elsa	60	Max WS	UF_TR30_D5	292.78	122.30	126.67		127.30	0.004999	0.76	3.62	0.71	97.56	51.40	0.65
elsa	60	Max WS	UF_TR30_D7	297.17	122.30	126.69		127.33	0.005000	0.77	3.64	0.73	98.81	51.48	0.65
elsa	60	Max WS	UF_TR30_D2	287.61	122.30	126.63		127.26	0.005026	0.74	3.60	0.70	95.84	51.29	0.65
elsa	60	Max WS	UF_TR30_D3	303.85	122.30	126.74		127.38	0.004925	0.79	3.65	0.75	101.37	51.63	0.65
elsa	50	Max WS	UF_TR30_D1	251.92	121.69	125.89		126.12	0.002109	0.35	2.09		122.91	53.48	0.42
elsa	50	Max WS	UF_TR30_D5	292.96	121.69	126.23		126.46	0.001923	0.44	2.14		141.15	55.75	0.41
elsa	50	Max WS	UF_TR30_D7	289.97	121.69	126.26		126.48	0.001826	0.43	2.09		142.72	55.95	0.40
elsa	50	Max WS	UF_TR30_D2	287.47	121.69	126.19		126.42	0.001934	0.43	2.13		139.02	55.49	0.41
elsa	50	Max WS	UF_TR30_D3	303.73	121.69	126.32		126.55	0.001861	0.45	2.14	0.04	146.26	56.32	0.40
elsa	40	Max WS	UF_TR30_D1	251.90	119.80	125.11	123.96	125.61	0.003045	0.54	3.27	0.95	92.61	41.80	0.53
elsa	40	Max WS	UF_TR30_D5	293.41	119.80	125.44	124.27	125.99	0.003049	0.65	3.45	1.07	103.21	44.39	0.54
elsa	40	Max WS	UF_TR30_D7	293.83	119.80	125.44	124.28	126.00	0.003038	0.65	3.45	1.07	103.45	44.45	0.54
elsa	40	Max WS	UF_TR30_D2	287.46	119.80	125.41	124.21	125.95	0.003003	0.64	3.41	1.05	102.27	44.16	0.53
elsa	40	Max WS	UF_TR30_D3	303.72	119.80	125.54	124.34	126.10	0.002993	0.68	3.48	1.10	106.44	45.18	0.54
elsa	37.5			Bridge											
elsa	35	Max WS	UF_TR30_D1	251.90	119.80	124.25	123.96	125.19	0.007663	0.52	4.39	0.97	65.32	36.70	0.81
elsa	35	Max WS	UF_TR30_D5	293.41	119.80	124.51	124.27	125.56	0.007664	0.58	4.64	1.11	73.57	38.10	0.82
elsa	35	Max WS	UF_TR30_D7	320.04	119.80	124.55	124.44	125.76	0.008723	0.63	4.99	1.21	74.82	38.34	0.88
elsa	35	Max WS	UF_TR30_D2	287.46	119.80	124.47	124.21	125.51	0.007714	0.57	4.61	1.09	72.23	37.85	0.82
elsa	35	Max WS	UF_TR30_D3	303.71	119.80	124.57	124.34	125.64	0.007721	0.59	4.71	1.15	75.32	38.43	0.83
elsa	30	Max WS	UF_TR30_D1	252.66	117.37	121.15		121.80	0.006138		3.61	0.83	77.23	36.63	0.70
elsa	30	Max WS	UF_TR30_D5	298.57	117.37	121.45		122.15	0.006094		3.80	1.00	88.27	37.76	0.70
elsa	30	Max WS	UF_TR30_D7	301.04	117.37	121.46		122.17	0.006100		3.81	1.00	88.80	37.80	0.70
elsa	30	Max WS	UF_TR30_D2	288.21	117.37	121.38		122.07	0.006154		3.77	0.96	85.56	37.54	0.70
elsa	30	Max WS	UF_TR30_D3	304.49	117.37	121.47		122.19	0.006167		3.84	1.02	89.20	37.83	0.71
elsa	29.500	Max WS	UF_TR30_D1	252.64	115.99	119.91		120.68	0.006774	0.32	3.95	0.91	70.52	33.41	0.75
elsa	29.500	Max WS	UF_TR30_D5	299.22	115.99	120.23	119.80	121.06	0.006450	0.39	4.14	1.05	86.64	59.06	0.74
elsa	29.500	Max WS	UF_TR30_D7	301.81	115.99	120.24	119.78	121.08	0.006482	0.40	4.16	1.06	87.24	59.22	0.74
elsa	29.500	Max WS	UF_TR30_D2	288.20	115.99	120.14	119.74	120.97	0.006682	0.30	4.13	1.03	81.40	57.61	0.75
elsa	29.500	Max WS	UF_TR30_D3	304.47	115.99	120.24	119.83	121.09	0.006599	0.40	4.19	1.07	87.22	59.21	0.75
elsa	29.12			Lat Struct											
elsa	29	Max WS	UF_TR30_D1	252.24	114.62	119.02		119.54	0.003795	0.93	3.47	0.85	104.21	51.19	0.58
elsa	29	Max WS	UF_TR30_D5	299.17	114.62	119.35		119.91	0.003728	0.98	3.65	0.97	121.62	53.93	0.59
elsa	29	Max WS	UF_TR30_D7	301.75	114.62	119.35		119.93	0.003783	0.99	3.68	0.98	121.75	53.95	0.59
elsa	29	Max WS	UF_TR30_D2	281.26	114.62	119.25		119.79	0.003644	0.96	3.55	0.93	116.51	53.15	0.58
elsa	29	Max WS	UF_TR30_D3	291.21	114.62	119.34		119.88	0.003544	0.96	3.56	0.95	121.45	53.91	0.57
elsaValle	28.5	Max WS	UF_TR30_D1	266.62	115.00	118.74		119.44	0.006098	1.07	4.07	0.97	98.86	57.07	0.74
elsaValle	28.5	Max WS	UF_TR30_D5	320.46	115.00	119.06		119.81	0.005926	1.10	4.28	1.01	119.78	66.96	0.74
elsaValle	28.5	Max WS	UF_TR30_D7	318.21	115.00	119.06		119.80	0.005866	1.10	4.26	1.01	119.58	66.92	0.74
elsaValle	28.5	Max WS	UF_TR30_D2	305.89	115.00	118.98		119.73	0.006015	1.07	4.24	1.03	114.23	66.02	0.74
elsaValle	28.5	Max WS	UF_TR30_D3	323.73	115.00	119.07		119.83	0.005945	1.11	4.30	1.01	120.68	67.14	0.74
elsaValle	28.4			Lat Struct											
elsaValle	28.11			Lat Struct											
elsaValle	28	Max WS	UF_TR30_D1	266.49	114.13	117.99		118.47	0.003318	0.72	3.23	0.95	106.38	44.50	0.56

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsaValle	28	Max WS	UF_TR30_D5	318.91	114.13	118.30		118.84	0.003431	0.79	3.48	1.07	120.39	46.54	0.58
elsaValle	28	Max WS	UF_TR30_D7	318.98	114.13	118.30		118.85	0.003411	0.79	3.47	1.07	120.69	46.61	0.57
elsaValle	28	Max WS	UF_TR30_D2	304.52	114.13	118.21		118.74	0.003409	0.77	3.42	1.04	116.52	45.48	0.57
elsaValle	28	Max WS	UF_TR30_D3	321.18	114.13	118.31		118.86	0.003431	0.79	3.49	1.07	121.04	46.70	0.58
elsaValle	27.9			Lat Struct											
elsaValle	27.833	Max WS	UF_TR30_D1	262.33	113.48	117.94		118.28	0.002375	0.92	2.70	0.50	117.14	42.93	0.47
elsaValle	27.833	Max WS	UF_TR30_D5	309.91	113.48	118.27		118.65	0.002387	1.00	2.88	0.56	131.51	44.21	0.48
elsaValle	27.833	Max WS	UF_TR30_D7	309.68	113.48	118.28		118.66	0.002366	0.99	2.87	0.56	131.86	44.24	0.47
elsaValle	27.833	Max WS	UF_TR30_D2	296.79	113.48	118.18		118.55	0.002385	0.97	2.83	0.54	127.59	43.86	0.47
elsaValle	27.833	Max WS	UF_TR30_D3	311.78	113.48	118.29		118.67	0.002376	1.00	2.88	0.56	132.28	44.28	0.48
elsaValle	27.59			Lat Struct											
elsaValle	27.4			Lat Struct											
elsaValle	27	Max WS	UF_TR30_D1	242.07	112.53	117.34		117.69	0.002423	0.72	2.78	0.42	114.07	49.22	0.46
elsaValle	27	Max WS	UF_TR30_D5	282.73	112.53	117.71		118.08	0.002260	0.82	2.87	0.45	132.52	50.08	0.46
elsaValle	27	Max WS	UF_TR30_D7	283.85	112.53	117.72		118.09	0.002250	0.82	2.87	0.45	133.16	50.11	0.45
elsaValle	27	Max WS	UF_TR30_D2	271.82	112.53	117.60		117.97	0.002319	0.79	2.85	0.44	127.22	49.82	0.46
elsaValle	27	Max WS	UF_TR30_D3	283.72	112.53	117.73		118.09	0.002234	0.82	2.86	0.45	133.49	50.13	0.45
elsaValle	26.500	Max WS	UF_TR30_D1	219.74	112.40	117.02		117.32	0.002352	0.29	2.55	0.77	103.81	43.94	0.45
elsaValle	26.500	Max WS	UF_TR30_D5	249.73	112.40	117.44		117.74	0.001946	0.37	2.52	0.81	123.41	47.56	0.42
elsaValle	26.500	Max WS	UF_TR30_D7	250.58	112.40	117.46		117.76	0.001920	0.37	2.51	0.81	124.41	47.81	0.41
elsaValle	26.500	Max WS	UF_TR30_D2	241.73	112.40	117.33		117.63	0.002046	0.36	2.53	0.80	117.99	46.56	0.42
elsaValle	26.500	Max WS	UF_TR30_D3	253.14	112.40	117.47		117.77	0.001946	0.38	2.53	0.81	124.76	47.92	0.42
elsaValle	26.39			Lat Struct											
elsaValle	26	Max WS	UF_TR30_D1	265.77	111.88	116.28		116.81	0.003448	1.09	3.51	0.68	113.64	54.52	0.57
elsaValle	26	Max WS	UF_TR30_D5	316.02	111.88	116.72		117.24	0.003084	1.15	3.57	0.81	138.27	56.86	0.55
elsaValle	26	Max WS	UF_TR30_D7	318.82	111.88	116.75		117.27	0.003065	1.15	3.58	0.81	139.64	56.98	0.55
elsaValle	26	Max WS	UF_TR30_D2	302.72	111.88	116.59		117.12	0.003225	1.14	3.58	0.78	130.87	56.24	0.56
elsaValle	26	Max WS	UF_TR30_D3	319.99	111.88	116.75		117.27	0.003086	1.16	3.59	0.82	139.67	56.98	0.55
elsaValle	25.9			Lat Struct											
elsaValle	25	Max WS	UF_TR30_D1	265.73	110.22	115.63	114.01	116.11	0.002731		3.04		87.33	32.59	0.50
elsaValle	25	Max WS	UF_TR30_D5	316.15	110.22	116.12	114.36	116.64	0.002606		3.20		98.72	34.96	0.50
elsaValle	25	Max WS	UF_TR30_D7	318.90	110.22	116.14	114.38	116.67	0.002599		3.21		99.31	35.43	0.50
elsaValle	25	Max WS	UF_TR30_D2	302.22	110.22	115.97	114.27	116.48	0.002683		3.17		95.26	33.87	0.51
elsaValle	25	Max WS	UF_TR30_D3	319.51	110.22	116.14	114.38	116.67	0.002614		3.22		99.26	35.39	0.50
elsaValle	22.5			Bridge											
elsaValle	20	Max WS	UF_TR30_D1	265.73	110.22	115.31		115.87	0.003488		3.33		79.88	31.35	0.56
elsaValle	20	Max WS	UF_TR30_D5	316.12	110.22	115.76		116.39	0.003502		3.50		90.34	33.08	0.57
elsaValle	20	Max WS	UF_TR30_D7	318.89	110.22	115.79		116.41	0.003493		3.51		90.89	33.17	0.57
elsaValle	20	Max WS	UF_TR30_D2	302.22	110.22	115.62		116.23	0.003574		3.48		86.96	32.53	0.58
elsaValle	20	Max WS	UF_TR30_D3	319.30	110.22	115.78		116.41	0.003526		3.52		90.70	33.14	0.57
elsaValle	16.667	Max WS	UF_TR30_D1	265.71	110.00	114.77		115.42	0.004602		3.55	0.43	75.21	23.32	0.62
elsaValle	16.667	Max WS	UF_TR30_D5	316.14	110.00	115.24		115.94	0.004347	0.02	3.71	0.55	86.30	24.31	0.61
elsaValle	16.667	Max WS	UF_TR30_D7	318.93	110.00	115.26		115.97	0.004330	0.04	3.72	0.56	86.89	24.36	0.61
elsaValle	16.667	Max WS	UF_TR30_D2	302.19	110.00	115.08		115.78	0.004545		3.70	0.52	82.43	23.97	0.62
elsaValle	16.667	Max WS	UF_TR30_D3	319.05	110.00	115.25		115.96	0.004386	0.03	3.73	0.56	86.56	24.33	0.61
elsaValle	15	Max WS	UF_TR30_D1	265.71	109.92	114.45		115.07	0.004105	1.04	3.64	0.67	89.54	33.79	0.61
elsaValle	15	Max WS	UF_TR30_D5	316.16	109.92	115.00		115.62	0.003457	1.13	3.67	0.72	108.46	34.85	0.57
elsaValle	15	Max WS	UF_TR30_D7	318.93	109.92	115.03		115.65	0.003433	1.14	3.67	0.72	109.42	34.90	0.57
elsaValle	15	Max WS	UF_TR30_D2	302.19	109.92	114.80		115.44	0.003777	1.12	3.71	0.71	101.56	34.48	0.59
elsaValle	15	Max WS	UF_TR30_D3	318.78	109.92	115.01		115.64	0.003492	1.14	3.69	0.72	108.71	34.86	0.57
elsaValle	14.000	Max WS	UF_TR30_D1	265.71	109.87	114.38		114.80	0.003431		2.88		92.28	31.61	0.54
elsaValle	14.000	Max WS	UF_TR30_D5	316.16	109.87	114.98		115.39	0.002782		2.82	0.09	112.04	33.82	0.49
elsaValle	14.000	Max WS	UF_TR30_D7	318.94	109.87	115.01		115.42	0.002754		2.82	0.11	113.04	33.91	0.49
elsaValle	14.000	Max WS	UF_TR30_D2	302.19	109.87	114.76		115.18	0.003116		2.89		104.66	33.06	0.52
elsaValle	14.000	Max WS	UF_TR30_D3	318.60	109.87	114.99		115.40	0.002808		2.84	0.10	112.25	33.84	0.50
elsaValle	13.000	Max WS	UF_TR30_D1	265.71	109.64	114.18		114.67	0.003160	0.19	3.25	1.05	99.97	33.46	0.53
elsaValle	13.000	Max WS	UF_TR30_D5	316.16	109.64	114.80		115.29	0.002622	0.32	3.27	1.05	121.77	36.52	0.49
elsaValle	13.000	Max WS	UF_TR30_D7	318.94	109.64	114.83		115.32	0.002604	0.32	3.28	1.06	122.87	36.63	0.49
elsaValle	13.000	Max WS	UF_TR30_D2	302.15	109.64	114.57		115.07	0.002915	0.28	3.33	1.06	113.26	35.60	0.52
elsaValle	13.000	Max WS	UF_TR30_D3	318.49	109.64	114.81		115.30	0.002651	0.32	3.29	1.06	121.92	36.53	0.50
elsaValle	12.000	Max WS	UF_TR30_D1	265.70	109.50	113.79	113.77	114.94	0.012347		4.83	1.39	60.50	28.01	0.96
elsaValle	12.000	Max WS	UF_TR30_D5	316.19	109.50	114.51		115.44	0.007714		4.38	1.23	82.96	33.62	0.79
elsaValle	12.000	Max WS	UF_TR30_D7	318.99	109.50	114.54		115.46	0.007655		4.39	1.24	83.77	33.71	0.78
elsaValle	12.000	Max WS	UF_TR30_D2	302.12	109.50	114.26	113.95	115.29	0.009227		4.59	1.22	74.75	32.60	0.85
elsaValle	12.000	Max WS	UF_TR30_D3	318.72	109.50	114.52		115.46	0.007785		4.41	1.24	83.17	33.64	0.79
elsaValle	11.000	Max WS	UF_TR30_D1	265.67	109.30	113.40		114.17	0.005120	0.55	4.08	1.07	86.74	46.79	0.69
elsaValle	11.000	Max WS	UF_TR30_D5	316.14	109.30	114.27		114.83	0.002998	0.79	3.61	1.05	128.62	49.24	0.54
elsaValle	11.000	Max WS	UF_TR30_D7	318.91	109.30	114.31		114.86	0.002958	0.79	3.60	1.06	130.29	49.30	0.54
elsaValle	11.000	Max WS	UF_TR30_D2	302.05	109.30	113.95		114.60	0.003722	0.74	3.82	1.08	112.86	48.53	0.60
elsaValle	11.000	Max WS	UF_TR30_D3	318.21	109.30	114.27		114.84	0.003037	0.79	3.63	1.06	128.64	49.24	0.55
elsaValle	10	Max WS	UF_TR30_D1	265.68	109.16	113.50		113.80	0.002012	1.04	2.68	0.58	137.86	44.31	0.44
elsaValle	10	Max WS	UF_TR30_D5	316.15	109.16	114.37		114.63	0.001380	1.00	2.54	0.59	177.05	46.40	0.37
elsaValle	10	Max WS	UF_TR30_D7	318.92	109.16	114.40		114.66	0.001370	1.00	2.54	0.59	178.58	46.48	0.37
elsaValle	10	Max WS	UF_TR30_D2	302.05	109.16	114.05		114.33	0.001616	1.03	2.62	0.60	162.42	45.63	0.40
elsaValle	10	Max WS	UF_TR30_D3	318.25	109.16	114.37		114.63	0.001398	1.01	2.55	0.60	177.08	46.40	0.38
elsaValle	2	Max WS	UF_TR30_D1	265.63	109.31	113.32		113.93	0.005184	1.39	3.88	0.56	98.30	39.33	0.68
elsaValle	2	Max WS	UF_TR30_D5	316.10	109.31	114.20		114.67	0.003072	1.32	3.49	0.65	133.20	39.87	0.54
elsaValle	2	Max WS	UF_TR30_D7	318.85	109.31	114.23		114.70	0.003039	1.32	3.49	0.66	134.50	39.87	0.54
elsaValle	2	Max WS	UF_TR30_D2	301.97	109.31	113.87		114.40	0.003783	1.37	3.67	0.64	120.14	39.87	0.59
elsaValle	2	Max WS	UF_TR30_D3	318.12	109.31	114.19		114.68	0.003116	1.33	3.51	0.66	133.14	39.87	0.54
elsaValle	1	Max WS	UF_TR30_D1	267.28	109.28	113.27	112.78	113.93	0.005319	1.22	3.87	0.75	92.40	39.05	0.69
elsaValle	1	Max WS	UF_TR30_D5	324.31	109.28	114.13	113.07	114.66	0.003260	1.23	3.54	0.70	126.13	39.95	0.56
elsaValle	1	Max WS	UF_TR30_D7	326.64	109.28	114.16	113.09	114.69	0.003204	1.23	3.53	0.70	127.52	39.95	0.56
elsaValle	1	Max WS	UF_TR30_D2	304.05	109.28	113.82	112.98	114.39	0.003817	1.23	3.64	0.68	114.05	39.95	0.60
elsaValle	1	Max WS	UF_TR30_D3	324.71	109.28	114.13	113.07	114.66	0.003249	1.23	3.54	0.70	126.37	39.95	0.56

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FIUME ELSA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsaMonte	30	Max WS	UF_TR200_D5	222.95	188.37	194.12		194.38	0.002633	0.63	2.77	0.46	197.79	219.40	0.45
elsaMonte	30	Max WS	UF_TR200_D1	136.69	188.37	193.49		193.80	0.003077	0.51	2.65	0.31	89.58	121.70	0.48
elsaMonte	30	Max WS	UF_TR200_D2	198.90	188.37	193.95		194.24	0.002850	0.60	2.79	0.43	163.35	194.91	0.47
elsaMonte	30	Max WS	UF_TR200_D7	195.58	188.37	193.93		194.22	0.002860	0.60	2.79	0.43	159.40	191.70	0.47
elsaMonte	30	Max WS	UF_TR200_D3	226.27	188.37	194.14		194.40	0.002610	0.63	2.76	0.46	202.23	221.93	0.45
elsaMonte	28.7			Lat Struct											
elsaMonte	20	Max WS	UF_TR200_D5	122.97	188.12	192.94		193.37	0.004319	0.71	2.94	0.33	49.26	36.99	0.55
elsaMonte	20	Max WS	UF_TR200_D1	95.10	188.12	192.47		192.86	0.004821	0.55	2.78		35.97	17.42	0.57
elsaMonte	20	Max WS	UF_TR200_D2	115.51	188.12	192.81		193.24	0.004552	0.68	2.93	0.24	44.52	34.60	0.56
elsaMonte	20	Max WS	UF_TR200_D7	114.83	188.12	192.82		193.24	0.004407	0.68	2.89	0.25	45.05	35.21	0.56
elsaMonte	20	Max WS	UF_TR200_D3	123.56	188.12	192.93		193.37	0.004397	0.71	2.96	0.33	49.04	36.92	0.56
elsaMonte	10	Max WS	UF_TR200_D5	135.41	187.91	192.31		192.48	0.001529	0.49	1.97	0.45	104.85	70.07	0.36
elsaMonte	10	Max WS	UF_TR200_D1	106.38	187.91	191.71		191.91	0.002327	0.50	2.10	0.40	67.23	54.59	0.43
elsaMonte	10	Max WS	UF_TR200_D2	130.49	187.91	192.09		192.29	0.001950	0.52	2.12	0.46	89.81	64.33	0.40
elsaMonte	10	Max WS	UF_TR200_D7	129.24	187.91	192.20		192.38	0.001616	0.49	1.98	0.44	97.54	67.34	0.37
elsaMonte	10	Max WS	UF_TR200_D3	136.61	187.91	192.24		192.43	0.001713	0.51	2.06	0.46	100.06	68.30	0.38
elsaMonte	5	Max WS	UF_TR200_D5	119.87	187.16	192.16		192.25	0.000642	0.37	1.44	0.38	122.89	57.88	0.24
elsaMonte	5	Max WS	UF_TR200_D1	93.98	187.16	191.56		191.66	0.000795	0.37	1.42	0.34	90.77	50.59	0.26
elsaMonte	5	Max WS	UF_TR200_D2	113.91	187.16	191.94		192.03	0.000744	0.39	1.49	0.38	110.37	55.15	0.26
elsaMonte	5	Max WS	UF_TR200_D7	114.34	187.16	192.05		192.14	0.000656	0.37	1.43	0.37	116.96	56.61	0.24
elsaMonte	5	Max WS	UF_TR200_D3	118.88	187.16	192.09		192.18	0.000682	0.38	1.46	0.38	118.88	57.02	0.25
elsa1	790	Max WS	UF_TR200_D5	187.65	186.88	192.16		192.36	0.001518	0.48	2.20	0.56	132.02	68.76	0.37
elsa1	790	Max WS	UF_TR200_D1	145.52	186.88	191.56		191.78	0.001913	0.43	2.19	0.49	93.84	60.15	0.40
elsa1	790	Max WS	UF_TR200_D2	174.83	186.88	191.94		192.15	0.001714	0.48	2.24	0.55	117.14	65.54	0.39
elsa1	790	Max WS	UF_TR200_D7	180.58	186.88	192.05		192.26	0.001587	0.48	2.20	0.55	124.97	67.25	0.37
elsa1	790	Max WS	UF_TR200_D3	184.83	186.88	192.09		192.30	0.001597	0.48	2.23	0.56	127.25	67.75	0.37
elsa1	789.9			Lat Struct											
elsa1	780	Max WS	UF_TR200_D5	203.54	185.97	190.67	189.91	191.63	0.005560		4.34		46.91	60.78	0.71
elsa1	780	Max WS	UF_TR200_D1	170.77	185.97	190.24	189.58	191.10	0.005835		4.10		41.62	56.43	0.72
elsa1	780	Max WS	UF_TR200_D2	193.32	185.97	190.54	189.80	191.47	0.005632		4.27		45.31	59.47	0.71
elsa1	780	Max WS	UF_TR200_D7	198.64	185.97	190.60	189.85	191.55	0.005597		4.31		46.14	60.15	0.71
elsa1	780	Max WS	UF_TR200_D3	200.42	185.97	190.63	189.88	191.58	0.005589		4.32		46.41	60.37	0.71
elsa1	770			Bridge											
elsa1	760.00	Max WS	UF_TR200_D5	203.53	185.81	189.57	189.70	191.22	0.014128		5.67		35.88	54.83	1.07
elsa1	760.00	Max WS	UF_TR200_D1	170.75	185.81	189.30	189.37	190.71	0.013845		5.26		32.49	50.97	1.04
elsa1	760.00	Max WS	UF_TR200_D2	193.30	185.81	189.48	189.60	191.06	0.014185		5.56		34.75	53.54	1.06
elsa1	760.00	Max WS	UF_TR200_D7	198.64	185.81	189.54	189.65	191.14	0.014056		5.61		35.42	54.30	1.06
elsa1	760.00	Max WS	UF_TR200_D3	200.40	185.81	189.55	189.67	191.17	0.014080		5.63		35.59	54.49	1.06
elsa1	759.9			Lat Struct											
elsa1	750.00	Max WS	UF_TR200_D5	203.54	184.99	189.11		189.42	0.002806		2.50	0.34	85.66	42.62	0.48
elsa1	750.00	Max WS	UF_TR200_D1	170.73	184.99	188.85		189.12	0.002726		2.33	0.25	75.14	37.88	0.47
elsa1	750.00	Max WS	UF_TR200_D2	193.24	184.99	189.02		189.32	0.002827		2.46	0.31	81.80	40.95	0.48
elsa1	750.00	Max WS	UF_TR200_D7	198.65	184.99	189.07		189.38	0.002787		2.47	0.33	84.19	41.99	0.48
elsa1	750.00	Max WS	UF_TR200_D3	200.36	184.99	189.09		189.40	0.002791		2.48	0.34	84.75	42.23	0.48
elsa1	740.00	Max WS	UF_TR200_D5	201.73	183.63	188.90		189.10	0.001707		1.94		103.95	36.27	0.37
elsa1	740.00	Max WS	UF_TR200_D1	170.73	183.63	188.65		188.81	0.001632		1.80		94.70	35.85	0.35
elsa1	740.00	Max WS	UF_TR200_D2	193.19	183.63	188.81		189.00	0.001740		1.92		100.45	36.11	0.37
elsa1	740.00	Max WS	UF_TR200_D7	198.66	183.63	188.87		189.06	0.001723		1.94		102.60	36.21	0.37
elsa1	740.00	Max WS	UF_TR200_D3	200.35	183.63	188.88		189.07	0.001728		1.94		103.08	36.23	0.37
elsa1	730.00	Max WS	UF_TR200_D5	182.68	183.79	188.05		188.73	0.006541	0.67	3.73	0.81	56.80	30.82	0.72
elsa1	730.00	Max WS	UF_TR200_D1	166.73	183.79	187.77	187.50	188.51	0.008015	0.54	3.85	0.77	48.40	29.42	0.78
elsa1	730.00	Max WS	UF_TR200_D2	184.26	183.79	187.92	187.66	188.70	0.007916	0.65	3.98	0.83	52.87	30.17	0.78
elsa1	730.00	Max WS	UF_TR200_D7	187.39	183.79	187.99		188.75	0.007448	0.67	3.92	0.84	54.98	30.53	0.76
elsa1	730.00	Max WS	UF_TR200_D3	188.44	183.79	188.00		188.76	0.007424	0.68	3.93	0.84	55.31	30.58	0.76
elsa1	720.00	Max WS	UF_TR200_D5	136.34	183.02	187.63		187.72	0.000743	0.28	1.35	0.26	122.17	68.83	0.25
elsa1	720.00	Max WS	UF_TR200_D1	137.26	183.02	186.88		187.07	0.002179	0.36	1.91	0.20	77.03	53.70	0.41
elsa1	720.00	Max WS	UF_TR200_D2	155.56	183.02	187.28		187.44	0.001547	0.36	1.79	0.31	99.42	59.96	0.36
elsa1	720.00	Max WS	UF_TR200_D7	160.13	183.02	187.45		187.59	0.001306	0.35	1.72	0.31	109.78	64.09	0.33
elsa1	720.00	Max WS	UF_TR200_D3	161.68	183.02	187.47		187.61	0.001287	0.35	1.72	0.32	111.42	64.74	0.33
elsa1	710.00	Max WS	UF_TR200_D5	122.96	182.95	187.54		187.63	0.000690	0.43	1.41	0.23	129.99	93.86	0.25
elsa1	710.00	Max WS	UF_TR200_D1	123.07	182.95	186.74		186.94	0.002073	0.56	2.04	0.11	69.78	46.77	0.41
elsa1	710.00	Max WS	UF_TR200_D2	148.55	182.95	187.15		187.34	0.001704	0.60	2.04	0.24	96.41	79.64	0.38
elsa1	710.00	Max WS	UF_TR200_D7	157.43	182.95	187.32		187.51	0.001503	0.60	2.00	0.28	110.91	85.29	0.36
elsa1	710.00	Max WS	UF_TR200_D3	159.64	182.95	187.35		187.53	0.001493	0.60	2.00	0.29	113.08	86.11	0.36
elsa1	700.00	Max WS	UF_TR200_D5	188.91	182.81	187.38		187.44	0.000454	0.44	1.26	0.44	224.05	208.55	0.21
elsa1	700.00	Max WS	UF_TR200_D1	138.95	182.81	186.72		186.77	0.000536	0.39	1.20	0.37	169.92	123.66	0.22
elsa1	700.00	Max WS	UF_TR200_D2	171.23	182.81	187.14		187.20	0.000485	0.43	1.25	0.42	204.42	145.29	0.21
elsa1	700.00	Max WS	UF_TR200_D7	182.23	182.81	187.32		187.38	0.000451	0.43	1.25	0.43	218.90	191.94	0.21
elsa1	700.00	Max WS	UF_TR200_D3	185.53	182.81	187.34		187.40	0.000456	0.43	1.26	0.43	220.91	198.44	0.21
elsa1	690.00	Max WS	UF_TR200_D5	311.24	182.61	187.06		187.58	0.004074	0.57	3.20		101.79	226.04	0.60
elsa1	690.00	Max WS	UF_TR200_D1	181.42	182.61	186.34		186.66	0.003659	0.15	2.50		72.66	169.42	0.54
elsa1	690.00	Max WS	UF_TR200_D2	243.32	182.61	186.72		187.14	0.003813	0.34	2.85		87.68	190.55	0.57
elsa1	690.00	Max WS	UF_TR200_D7	269.54	182.61	186.87		187.32	0.003843	0.45	2.97		93.99	198.12	0.58
elsa1	690.00	Max WS	UF_TR200_D3	275.45	182.61	186.89		187.35	0.003920	0.46	3.01		94.77	199.05	0.58
elsa1	680.00	Max WS	UF_TR200_D5	308.28	182.49	186.89		187.27	0.002828	0.36	2.75		114.29	264.60	0.51
elsa1	680.00	Max WS	UF_TR200_D1	181.43	182.49	186.27		186.49	0.002097	0.12	2.04		89.16	212.38	0.42
elsa1	680.00	Max WS	UF_TR200_D2	243.56	182.49	186.64		186.93	0.002338	0.26	2.37		104.02	228.80	0.45
elsa1	680.00	Max WS	UF_TR200_D7	267.71	182.49	186.79		187.10	0.002369	0.31	2.47		110.29	236.40	0.46
elsa1	680.00	Max WS	UF_TR200_D3	276.72	182.49	186.81		187.14	0.002493	0.32	2.54		110.87	238.98	0.47
elsa1	670.00	Max WS	UF_TR200_D5	305.65	182.37	186.64		187.18	0.004626	0.53	3.27		104.64	307.46	0.63
elsa1	670.00	Max WS	UF_TR200_D1	181.42	182.37	186.00		186.34	0.004135	0.27	2.59		71.82	197.32	0.57
elsa1	670.00	Max WS	UF_TR200_D2	243.56	182.37	186.36		186.79	0.004317	0.43	2.94		88.79	217.76	0.60
elsa1	670.00	Max WS	UF_TR200_D7	266.27	182.37	186.53		186.98	0.004094	0.46	2.99		97.84	267.50	0.59
elsa1	670.00	Max WS	UF_TR200_D3	276.70	182.37	186.53		187.01	0.004387	0.48	3.10		98.17	269.85	0.61
elsa1	660.00	Max WS	UF_TR200_D5	302.88	182.25	186.61		186.71	0.001029	0.28	1.71	0.39	407.42	374.04	0.31
elsa1	660.00	Max WS	UF_TR200_D1	181.41	182.25	185.97		186.10	0.001371	0.21	1.70	0.27	196.68	289.68	0.34
elsa1	660.00	Max WS	UF_TR200_D2	243.56	182.25	186.35		186.45	0.001119	0.27	1.68	0.34	311.93	336.07	0.32

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa1	660.00	Max WS	UF_TR200_D7	264.97	182.25	186.51		186.60	0.000955	0.27	1.61	0.35	370.69	361.18	0.29
elsa1	660.00	Max WS	UF_TR200_D3	276.69	182.25	186.50		186.60	0.001070	0.28	1.70	0.37	365.74	359.58	0.31
elsa1	650.00	Max WS	UF_TR200_D5	305.48	181.97	186.40		186.64	0.002650	0.35	2.31	0.59	191.30	196.13	0.47
elsa1	650.00	Max WS	UF_TR200_D1	182.38	181.97	185.78		185.98	0.002780		2.00	0.42	99.38	67.19	0.46
elsa1	650.00	Max WS	UF_TR200_D2	244.51	181.97	186.14		186.37	0.002716	0.22	2.17	0.53	144.23	170.71	0.47
elsa1	650.00	Max WS	UF_TR200_D7	274.04	181.97	186.30		186.53	0.002534	0.30	2.20	0.55	172.86	185.51	0.46
elsa1	650.00	Max WS	UF_TR200_D3	277.56	181.97	186.28		186.52	0.002690	0.30	2.25	0.57	169.37	183.43	0.47
elsa1	640.00	Max WS	UF_TR200_D5	304.33	182.67	186.19	186.44	187.07	0.010114	0.67	4.41	0.33	112.03	156.23	0.90
elsa1	640.00	Max WS	UF_TR200_D1	182.13	182.67	185.56		186.36	0.010873		3.97		45.87	23.32	0.90
elsa1	640.00	Max WS	UF_TR200_D2	244.30	182.67	185.91	186.23	186.85	0.011269	0.40	4.36		72.36	131.64	0.94
elsa1	640.00	Max WS	UF_TR200_D7	274.09	182.67	186.10	186.35	186.95	0.009973	0.58	4.27		97.59	147.59	0.89
elsa1	640.00	Max WS	UF_TR200_D3	277.04	182.67	186.06	186.35	186.99	0.010929	0.57	4.43		92.35	143.94	0.93
elsa1	630.00	Max WS	UF_TR200_D5	303.69	181.81	186.01		186.30	0.002795	0.64	2.72		203.81	152.80	0.49
elsa1	630.00	Max WS	UF_TR200_D1	181.63	181.81	185.36		185.61	0.002577	0.47	2.35		121.43	112.38	0.46
elsa1	630.00	Max WS	UF_TR200_D2	244.05	181.81	185.72		185.98	0.002668	0.60	2.54		163.39	124.95	0.48
elsa1	630.00	Max WS	UF_TR200_D7	274.03	181.81	185.92		186.18	0.002564	0.61	2.57		190.39	143.51	0.47
elsa1	630.00	Max WS	UF_TR200_D3	276.20	181.81	185.87		186.15	0.002790	0.63	2.66		183.05	138.16	0.49
elsa1	620.00	Max WS	UF_TR200_D5	303.47	181.76	185.97		186.27	0.002983	0.66	2.80		205.04	159.63	0.51
elsa1	620.00	Max WS	UF_TR200_D1	181.14	181.76	185.33		185.58	0.002733	0.50	2.42		121.01	111.05	0.48
elsa1	620.00	Max WS	UF_TR200_D2	243.88	181.76	185.68		185.96	0.002911	0.61	2.65		161.93	130.50	0.50
elsa1	620.00	Max WS	UF_TR200_D7	274.05	181.76	185.88		186.16	0.002765	0.61	2.66		191.08	152.00	0.49
elsa1	620.00	Max WS	UF_TR200_D3	275.77	181.76	185.82		186.12	0.003036	0.64	2.77		182.36	145.91	0.51
elsa1	610.00	Max WS	UF_TR200_D5	303.50	181.69	185.97		186.23	0.002364	0.60	2.62		220.94	165.30	0.46
elsa1	610.00	Max WS	UF_TR200_D1	181.29	181.69	185.34		185.55	0.002088	0.46	2.19		134.19	114.00	0.42
elsa1	610.00	Max WS	UF_TR200_D2	243.88	181.69	185.68		185.92	0.002295	0.54	2.45		176.19	138.73	0.44
elsa1	610.00	Max WS	UF_TR200_D7	274.07	181.69	185.89		186.13	0.002186	0.55	2.48		206.77	159.41	0.44
elsa1	610.00	Max WS	UF_TR200_D3	275.78	181.69	185.83		186.09	0.002391	0.57	2.57		197.94	153.72	0.46
elsa1	600.00	Max WS	UF_TR200_D5	303.86	181.52	186.02	184.95	186.18	0.001351	0.47	2.19	0.56	311.48	225.19	0.36
elsa1	600.00	Max WS	UF_TR200_D1	181.58	181.52	185.38	184.21	185.51	0.001223	0.38	1.84	0.45	188.85	155.72	0.33
elsa1	600.00	Max WS	UF_TR200_D2	243.96	181.52	185.73	184.66	185.88	0.001328	0.42	2.06	0.52	249.30	194.54	0.35
elsa1	600.00	Max WS	UF_TR200_D7	274.15	181.52	185.93	184.80	186.08	0.001252	0.43	2.08	0.53	291.15	216.43	0.34
elsa1	600.00	Max WS	UF_TR200_D3	276.16	181.52	185.87	184.81	186.04	0.001375	0.44	2.15	0.55	279.66	211.96	0.36
elsa1	595.00			Bridge											
elsa1	590.00	Max WS	UF_TR200_D5	303.52	181.38	185.99		186.14	0.001187	0.44	2.07	0.49	318.40	231.75	0.34
elsa1	590.00	Max WS	UF_TR200_D1	181.55	181.38	185.36		185.48	0.001020	0.35	1.71	0.38	195.61	158.26	0.30
elsa1	590.00	Max WS	UF_TR200_D2	243.98	181.38	185.70		185.84	0.001150	0.39	1.94	0.45	255.82	200.66	0.33
elsa1	590.00	Max WS	UF_TR200_D7	274.07	181.38	185.90		186.04	0.001094	0.40	1.96	0.46	298.68	223.77	0.32
elsa1	590.00	Max WS	UF_TR200_D3	275.98	181.38	185.85		186.00	0.001202	0.41	2.04	0.48	286.40	218.95	0.34
elsa1	580.00	Max WS	UF_TR200_D5	303.52	181.38	186.01		186.10	0.000562	0.31	1.57	0.36	403.94	260.91	0.24
elsa1	580.00	Max WS	UF_TR200_D1	181.57	181.38	185.39		185.45	0.000427	0.23	1.24	0.27	263.44	190.62	0.20
elsa1	580.00	Max WS	UF_TR200_D2	243.91	181.38	185.72		185.80	0.000511	0.27	1.43	0.34	334.00	230.46	0.23
elsa1	580.00	Max WS	UF_TR200_D7	274.19	181.38	185.92		186.00	0.000507	0.28	1.47	0.35	381.55	250.04	0.23
elsa1	580.00	Max WS	UF_TR200_D3	275.96	181.38	185.87		185.96	0.000546	0.29	1.51	0.36	368.46	244.24	0.23
elsa1	570.00	Max WS	UF_TR200_D5	303.54	181.38	185.98		186.13	0.001135	0.46	2.05	0.13	337.44	425.79	0.32
elsa1	570.00	Max WS	UF_TR200_D1	181.37	181.38	185.35		185.47	0.000929	0.36	1.67		191.03	138.31	0.28
elsa1	570.00	Max WS	UF_TR200_D2	243.82	181.38	185.68		185.83	0.001117	0.42	1.94		242.52	224.31	0.32
elsa1	570.00	Max WS	UF_TR200_D7	274.08	181.38	185.89		186.03	0.001062	0.44	1.95	0.08	300.46	419.69	0.31
elsa1	570.00	Max WS	UF_TR200_D3	275.66	181.38	185.83		185.99	0.001171	0.45	2.03	0.04	276.27	415.66	0.33
elsa1	560.00	Max WS	UF_TR200_D5	331.01	181.23	185.86		186.10	0.003161	0.76	2.81	0.28	256.61	203.39	0.52
elsa1	560.00	Max WS	UF_TR200_D1	193.73	181.23	185.24		185.44	0.003030	0.66	2.39		152.34	126.15	0.49
elsa1	560.00	Max WS	UF_TR200_D2	259.58	181.23	185.57		185.80	0.003231	0.69	2.66	0.16	201.78	174.04	0.51
elsa1	560.00	Max WS	UF_TR200_D7	257.14	181.23	185.78		185.94	0.002195	0.61	2.30	0.21	240.59	196.23	0.43
elsa1	560.00	Max WS	UF_TR200_D3	293.60	181.23	185.72		185.96	0.003151	0.72	2.72	0.23	230.13	191.41	0.51
elsa1	550.00	Max WS	UF_TR200_D5	331.07	181.17	185.69		186.05	0.004238	0.76	3.11	0.18	206.17	176.94	0.59
elsa1	550.00	Max WS	UF_TR200_D1	193.72	181.17	185.10		185.36	0.003701	0.67	2.56		123.20	102.90	0.53
elsa1	550.00	Max WS	UF_TR200_D2	259.55	181.17	185.41		185.74	0.004211	0.70	2.91		160.51	143.52	0.58
elsa1	550.00	Max WS	UF_TR200_D7	251.35	181.17	185.68		185.89	0.002506	0.58	2.38	0.13	203.64	175.65	0.45
elsa1	550.00	Max WS	UF_TR200_D3	293.61	181.17	185.56		185.90	0.004212	0.72	3.00	0.09	183.45	162.81	0.58
elsa1	540.00	Max WS	UF_TR200_D5	330.35	181.11	185.56		185.97	0.004197	0.69	3.19	0.38	190.91	178.42	0.59
elsa1	540.00	Max WS	UF_TR200_D1	193.71	181.11	185.01		185.27	0.003299	0.61	2.48		117.99	94.11	0.51
elsa1	540.00	Max WS	UF_TR200_D2	259.56	181.11	185.29		185.63	0.003821	0.67	2.86	0.22	149.66	129.51	0.56
elsa1	540.00	Max WS	UF_TR200_D7	243.50	181.11	185.62		185.82	0.002059	0.50	2.26	0.28	201.41	182.21	0.42
elsa1	540.00	Max WS	UF_TR200_D3	293.59	181.11	185.43		185.81	0.004055	0.66	3.04	0.31	168.94	156.71	0.58
elsa1	530.00	Max WS	UF_TR200_D5	215.51	180.91	185.43		185.57	0.001420	0.37	1.79		177.91	145.21	0.35
elsa1	530.00	Max WS	UF_TR200_D1	193.70	180.91	184.93		185.13	0.002117	0.41	2.06		121.38	92.63	0.42
elsa1	530.00	Max WS	UF_TR200_D2	259.53	180.91	185.19		185.46	0.002730	0.52	2.41		147.69	109.83	0.48
elsa1	530.00	Max WS	UF_TR200_D7	237.90	180.91	185.56		185.71	0.001455	0.39	1.83		198.35	159.78	0.36
elsa1	530.00	Max WS	UF_TR200_D3	293.59	180.91	185.32		185.62	0.003007	0.54	2.57		162.49	125.43	0.51
elsa1	520.00	Max WS	UF_TR200_D5	214.82	180.91	185.43		185.54	0.001382	0.36	1.58	0.11	188.71	154.22	0.33
elsa1	520.00	Max WS	UF_TR200_D1	193.69	180.91	184.90		185.09	0.002333	0.35	1.97		119.75	105.42	0.43
elsa1	520.00	Max WS	UF_TR200_D2	259.53	180.91	185.17		185.40	0.003185	0.50	2.22		151.94	132.28	0.50
elsa1	520.00	Max WS	UF_TR200_D7	232.30	180.91	185.56		185.67	0.001277	0.38	1.58	0.15	209.77	160.53	0.32
elsa1	520.00	Max WS	UF_TR200_D3	293.57	180.91	185.30		185.55	0.003240	0.54	2.32	0.10	169.45	139.91	0.51
elsa1	513			Lat Struct											
elsa1	510.00	Max WS	UF_TR200_D5	228.22	180.79	185.39		185.58	0.002090	0.52	2.17	0.17	166.88	134.26	0.42
elsa1	510.00	Max WS	UF_TR200_D1	148.13	180.79	184.82		185.00	0.002356	0.36	1.99		101.04	102.78	0.43
elsa1	510.00	Max WS	UF_TR200_D2	186.49	180.79	185.11		185.30	0.002202	0.45	2.08	0.10	133.10	115.21	0.42
elsa1	510.00	Max WS	UF_TR200_D7	231.91	180.79	185.42		185.61	0.002054	0.53	2.16	0.18	171.09	136.69	0.41
elsa1	510.00	Max WS	UF_TR200_D3	206.29	180.79	185.25		185.44	0.002131	0.49	2.12	0.14	149.46	123.70	0.42
elsa1	500.00	Max WS	UF_TR200_D5	227.82	180.50	185.17		185.46	0.003134	0.61	2.57		131.23	97.05	0.50
elsa1	500.00	Max WS	UF_TR200_D1	148.12	180.50	184.60		184.86	0.003293	0.44	2.30		82.88	75.02	0.50
elsa1	500.00	Max WS	UF_TR200_D2	186.48	180.50	184.90		185.17	0.003185	0.53	2.44		106.57	86.22	0.50
elsa1	500.00	Max WS	UF_TR200_D7	232.14	180.50	185.20		185.49	0.003100	0.61	2.58		134.42	98.37	0.50
elsa1	500.00	Max WS	UF_TR200_D3	206.27	180.50	185.03		185.31	0.003143	0.57	2.50		118.72	91.72	0.50
elsa1	490.00	Max WS	UF_TR200_D5	227.09	180.30	185.03		185.28	0.002719	0.54	2.29		122.79	78.39	0.47
elsa1	490.00	Max WS	UF_TR200_D1	148.10	180.30	184.47		184.67	0.002864	0.40	2.02		83.12	62.82	0.46
elsa1	490.00	Max WS	UF_TR200_D2	186.43	180.30	184.77		184.99	0.002744	0.48	2.15		103.04	71.07	0.46
elsa1	490.00	Max WS	UF_TR200_D7	232.02	180.30	185.06		185.31	0.002704	0.55	2.30		125.41	79.31	0.47

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa1	490.00	Max WS	UF_TR200_D3	206.27	180.30	184.90		185.14	0.002721	0.51	2.22		112.89	74.81	0.46
elsa1	480.00	Max WS	UF_TR200_D5	226.50	180.19	184.88		185.13	0.002688	0.44	2.24		110.82	63.44	0.47
elsa1	480.00	Max WS	UF_TR200_D1	148.10	180.19	184.34		184.53	0.002239	0.23	1.90		80.39	48.92	0.42
elsa1	480.00	Max WS	UF_TR200_D2	186.41	180.19	184.62		184.84	0.002590	0.35	2.08		95.45	57.91	0.45
elsa1	480.00	Max WS	UF_TR200_D7	231.89	180.19	184.91		185.16	0.002686	0.45	2.26		112.98	64.09	0.47
elsa1	480.00	Max WS	UF_TR200_D3	206.26	180.19	184.75		184.99	0.002662	0.40	2.16		103.23	61.12	0.46
elsa1	470.00	Max WS	UF_TR200_D5	225.94	180.08	184.79		185.04	0.002200	0.43	2.23		117.44	67.17	0.43
elsa1	470.00	Max WS	UF_TR200_D1	148.09	180.08	184.28		184.45	0.001871	0.30	1.83		87.18	52.67	0.38
elsa1	470.00	Max WS	UF_TR200_D2	186.40	180.08	184.55		184.76	0.002039	0.38	2.04		102.21	59.00	0.41
elsa1	470.00	Max WS	UF_TR200_D7	231.50	180.08	184.82		185.07	0.002215	0.44	2.25		119.74	68.31	0.43
elsa1	470.00	Max WS	UF_TR200_D3	206.26	180.08	184.67		184.90	0.002125	0.40	2.14		109.81	63.21	0.42
elsa1	460.00	Max WS	UF_TR200_D5	224.92	179.41	184.69		184.88	0.001893	0.58	2.06		134.44	67.95	0.40
elsa1	460.00	Max WS	UF_TR200_D1	148.08	179.41	184.18		184.33	0.001652	0.38	1.73		100.77	64.97	0.36
elsa1	460.00	Max WS	UF_TR200_D2	186.39	179.41	184.45		184.62	0.001779	0.49	1.90		118.47	66.56	0.38
elsa1	460.00	Max WS	UF_TR200_D7	231.45	179.41	184.72		184.92	0.001923	0.59	2.08		136.68	68.15	0.40
elsa1	460.00	Max WS	UF_TR200_D3	206.26	179.41	184.57		184.76	0.001844	0.54	1.98		126.75	67.28	0.39
elsa1	450.00	Max WS	UF_TR200_D5	225.17	179.29	184.53		184.80	0.003072	0.70	2.48		125.24	76.57	0.49
elsa1	450.00	Max WS	UF_TR200_D1	148.07	179.29	184.02		184.25	0.003040	0.46	2.19		87.22	74.45	0.48
elsa1	450.00	Max WS	UF_TR200_D2	186.39	179.29	184.29		184.54	0.003026	0.60	2.34		107.55	75.59	0.48
elsa1	450.00	Max WS	UF_TR200_D7	231.22	179.29	184.56		184.83	0.003079	0.72	2.50		127.86	76.72	0.49
elsa1	450.00	Max WS	UF_TR200_D3	206.25	179.29	184.42		184.68	0.003034	0.65	2.41		117.08	76.12	0.49
elsa1	440.00	Max WS	UF_TR200_D5	227.71	179.20	184.17		184.58	0.005718	0.65	2.91		90.18	63.26	0.65
elsa1	440.00	Max WS	UF_TR200_D1	148.06	179.20	183.67		184.01	0.006138	0.40	2.57		61.46	52.82	0.65
elsa1	440.00	Max WS	UF_TR200_D2	186.38	179.20	183.94		184.31	0.005770	0.55	2.73		76.14	58.25	0.64
elsa1	440.00	Max WS	UF_TR200_D7	230.19	179.20	184.21		184.61	0.005483	0.66	2.88		92.61	64.12	0.64
elsa1	440.00	Max WS	UF_TR200_D3	206.25	179.20	184.05		184.44	0.005733	0.60	2.82		82.99	60.65	0.64
elsa1	430.00	Max WS	UF_TR200_D5	226.95	178.92	183.51		183.92	0.004600	0.56	2.93		100.19	81.68	0.60
elsa1	430.00	Max WS	UF_TR200_D1	148.02	178.92	183.00		183.34	0.004602		2.58		57.29	28.33	0.58
elsa1	430.00	Max WS	UF_TR200_D2	186.34	178.92	183.28		183.65	0.004500	0.43	2.74		82.19	75.16	0.58
elsa1	430.00	Max WS	UF_TR200_D7	226.30	178.92	183.54		183.93	0.004343	0.56	2.87		102.90	82.61	0.58
elsa1	430.00	Max WS	UF_TR200_D3	206.24	178.92	183.40		183.79	0.004482	0.50	2.82		91.88	78.74	0.59
elsa1	420.00	Max WS	UF_TR200_D5	226.24	178.75	183.25		183.53	0.002855	0.56	2.62		154.84	134.78	0.48
elsa1	420.00	Max WS	UF_TR200_D1	148.00	178.75	182.67	181.68	183.00	0.003525	0.26	2.60		77.10	130.34	0.52
elsa1	420.00	Max WS	UF_TR200_D2	186.33	178.75	182.98		183.28	0.003159	0.45	2.62		117.99	133.25	0.50
elsa1	420.00	Max WS	UF_TR200_D7	229.21	178.75	183.29		183.56	0.002765	0.57	2.59		159.44	134.97	0.48
elsa1	420.00	Max WS	UF_TR200_D3	206.20	178.75	183.14		183.42	0.002912	0.51	2.59		139.02	134.13	0.49
elsa1	410.00	Max WS	UF_TR200_D5	226.16	178.54	183.16		183.25	0.000999	0.46	1.58		256.06	159.41	0.29
elsa1	410.00	Max WS	UF_TR200_D1	147.99	178.54	182.42		182.55	0.001606	0.33	1.72		139.38	155.53	0.35
elsa1	410.00	Max WS	UF_TR200_D2	186.32	178.54	182.87		182.96	0.001097	0.40	1.57		209.40	157.87	0.30
elsa1	410.00	Max WS	UF_TR200_D7	225.74	178.54	183.20		183.28	0.000943	0.45	1.55		261.70	159.60	0.28
elsa1	410.00	Max WS	UF_TR200_D3	206.10	178.54	183.04		183.13	0.001003	0.43	1.55		237.00	158.78	0.29
elsa1	400.00	Max WS	UF_TR200_D5	226.12	177.99	182.95		183.11	0.001383	0.45	1.91		164.50	96.53	0.35
elsa1	400.00	Max WS	UF_TR200_D1	147.90	177.99	182.17		182.34	0.001671	0.18	1.84		91.51	90.87	0.37
elsa1	400.00	Max WS	UF_TR200_D2	186.24	177.99	182.66		182.81	0.001362	0.36	1.81		136.70	94.45	0.34
elsa1	400.00	Max WS	UF_TR200_D7	224.61	177.99	182.99		183.15	0.001298	0.45	1.86		168.48	96.83	0.34
elsa1	400.00	Max WS	UF_TR200_D3	205.68	177.99	182.84		182.99	0.001313	0.41	1.83		153.95	95.75	0.34
elsa1	390.00	Max WS	UF_TR200_D5	226.10	177.52	182.59		183.04	0.004553	0.47	3.03		86.56	60.76	0.59
elsa1	390.00	Max WS	UF_TR200_D1	147.59	177.52	181.69		182.14	0.004442		2.96		49.85	18.67	0.58
elsa1	390.00	Max WS	UF_TR200_D2	185.85	177.52	182.33		182.72	0.004427	0.33	2.81		71.70	53.02	0.58
elsa1	390.00	Max WS	UF_TR200_D7	223.17	177.52	182.64		183.06	0.004115	0.48	2.91		89.98	62.10	0.57
elsa1	390.00	Max WS	UF_TR200_D3	205.47	177.52	182.50		182.91	0.004224	0.42	2.86		81.50	58.24	0.57
elsa1	380.00	Max WS	UF_TR200_D5	208.18	176.78	182.26		182.38	0.000782	0.12	1.53		138.66	55.23	0.27
elsa1	380.00	Max WS	UF_TR200_D1	121.70	176.78	181.49		181.55	0.000507		1.15		106.23	34.80	0.21
elsa1	380.00	Max WS	UF_TR200_D2	173.86	176.78	182.01		182.11	0.000690	0.04	1.38		126.06	46.10	0.25
elsa1	380.00	Max WS	UF_TR200_D7	210.04	176.78	182.33		182.44	0.000750	0.13	1.52		142.36	57.63	0.26
elsa1	380.00	Max WS	UF_TR200_D3	196.61	176.78	182.22		182.33	0.000725	0.11	1.47		136.44	53.73	0.25
elsa1	370.00	Max WS	UF_TR200_D5	206.45	176.33	182.23		182.32	0.000500	0.12	1.28		162.12	46.31	0.21
elsa1	370.00	Max WS	UF_TR200_D1	121.52	176.33	181.47		181.52	0.000316		0.94		128.65	39.63	0.17
elsa1	370.00	Max WS	UF_TR200_D2	173.45	176.33	181.99		182.06	0.000438	0.06	1.15		150.92	45.86	0.20
elsa1	370.00	Max WS	UF_TR200_D7	227.93	176.33	182.26		182.36	0.000596	0.13	1.40		163.34	46.36	0.23
elsa1	370.00	Max WS	UF_TR200_D3	197.52	176.33	182.20		182.28	0.000472	0.11	1.23		160.54	46.25	0.21
elsa1	369.99			Lat Struct											
elsa1	360.00	Max WS	UF_TR200_D5	219.38	175.89	182.12		182.36	0.001514	0.22	2.16		103.61	33.08	0.36
elsa1	360.00	Max WS	UF_TR200_D1	117.98	175.89	181.36		181.47	0.000755		1.44		81.88	23.84	0.25
elsa1	360.00	Max WS	UF_TR200_D2	154.69	175.89	181.85		181.99	0.000947	0.07	1.64		94.86	32.66	0.28
elsa1	360.00	Max WS	UF_TR200_D7	209.18	175.89	182.12		182.33	0.001377	0.21	2.06		103.60	33.08	0.34
elsa1	360.00	Max WS	UF_TR200_D3	182.51	175.89	182.04		182.21	0.001118	0.16	1.83		101.10	32.96	0.31
elsa1	350.00	Max WS	UF_TR200_D5	197.69	175.95	182.06		182.27	0.001327	0.21	2.04		98.75	30.39	0.33
elsa1	350.00	Max WS	UF_TR200_D1	117.90	175.95	181.33		181.44	0.000753		1.48		79.57	21.10	0.24
elsa1	350.00	Max WS	UF_TR200_D2	155.02	175.95	181.80		181.95	0.001006	0.08	1.71		90.93	30.05	0.28
elsa1	350.00	Max WS	UF_TR200_D7	210.82	175.95	182.06		182.30	0.001515	0.22	2.18		98.61	30.38	0.35
elsa1	350.00	Max WS	UF_TR200_D3	182.95	175.95	181.99		182.18	0.001203	0.17	1.92		96.59	30.30	0.31
elsa1	340.00	Max WS	UF_TR200_D5	198.75	176.04	182.08		182.23	0.000876	0.19	1.73		117.65	34.52	0.27
elsa1	340.00	Max WS	UF_TR200_D1	117.68	176.04	181.33		181.41	0.000512		1.25		94.29	25.05	0.21
elsa1	340.00	Max WS	UF_TR200_D2	156.34	176.04	181.80		181.91	0.000678	0.09	1.46		108.08	34.25	0.24
elsa1	340.00	Max WS	UF_TR200_D7	215.97	176.04	182.04		182.23	0.001064	0.20	1.89		116.40	34.49	0.30
elsa1	340.00	Max WS	UF_TR200_D3	189.02	176.04	181.99		182.13	0.000854	0.16	1.68		114.37	34.43	0.27
elsa1	330.00	Max WS	UF_TR200_D5	198.47	176.09	182.08		182.19	0.000602	0.17	1.42		142.00	42.84	0.23
elsa1	330.00	Max WS	UF_TR200_D1	117.69	176.09	181.33		181.39	0.000387		1.05		112.12	33.66	0.18
elsa1	330.00	Max WS	UF_TR200_D2	155.89	176.09	181.81		181.89	0.000466	0.09	1.21		130.54	42.33	0.20
elsa1	330.00	Max WS	UF_TR200_D7	216.13	176.09	182.07		182.19	0.000724	0.19	1.56		141.24	42.81	0.26
elsa1	330.00	Max WS	UF_TR200_D3	188.35	176.09	182.01		182.10	0.000577	0.15	1.38		138.73	42.70	0.23
elsa1	325			Lat Struct											
elsa1	320.00	Max WS	UF_TR200_D5	197.64	176.22	182.05		182.17	0.000716	0.21	1.55		130.88	40.38	0.25
elsa1	320.00	Max WS	UF_TR200_D1	124.55	176.22	181.28		181.35	0.000547		1.22		101.84	31.26	0.22
elsa1	320.00	Max WS	UF_TR200_D2	161.93	176.22	181.75		181.85	0.000618	0.12	1.38		119.00	39.91	0.23
elsa1	320.00	Max WS	UF_TR200_D7	222.97	176.22	181.97		182.13	0.000974	0.22	1.79		127.65	40.25	0.30
elsa1	320.00	Max WS	UF_TR200_D3	192.18	176.22	181.93		182.06	0.000743	0.18	1.55		126.36	40.20	0.26

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa1	310.00	Max WS	UF_TR200_D5	188.56	176.41	181.86		182.03	0.001334	0.19	1.87		102.23	34.85	0.33
elsa1	310.00	Max WS	UF_TR200_D1	120.15	176.41	181.13		181.25	0.001148		1.53		78.67	29.77	0.30
elsa1	310.00	Max WS	UF_TR200_D2	153.24	176.41	181.63		181.77	0.001100	0.11	1.64		94.44	34.44	0.30
elsa1	310.00	Max WS	UF_TR200_D7	201.61	176.41	181.82		182.03	0.001575	0.19	2.02		101.06	34.79	0.36
elsa1	310.00	Max WS	UF_TR200_D3	172.73	176.41	181.84		181.99	0.001140	0.17	1.72		101.55	34.81	0.31
elsa1	309	Max WS	UF_TR200_D5	238.99	176.11	181.71		181.97	0.001846	0.27	2.26		107.75	35.14	0.39
elsa1	309	Max WS	UF_TR200_D1	145.67	176.11	180.99		181.15	0.001422		1.75		83.32	30.09	0.34
elsa1	309	Max WS	UF_TR200_D2	185.27	176.11	181.47		181.65	0.001400	0.17	1.89		99.22	34.69	0.34
elsa1	309	Max WS	UF_TR200_D7	231.20	176.11	181.63		181.89	0.001859	0.24	2.24		105.00	34.99	0.39
elsa1	309	Max WS	UF_TR200_D3	209.36	176.11	181.65		181.86	0.001498	0.22	2.01		105.65	35.03	0.35
elsa2	300.00	Max WS	UF_TR200_D5	271.18	175.47	181.71		181.80	0.000443	0.27	1.36	0.21	308.79	214.10	0.21
elsa2	300.00	Max WS	UF_TR200_D1	185.04	175.47	180.99		181.07	0.000459	0.17	1.22	0.09	174.83	153.59	0.21
elsa2	300.00	Max WS	UF_TR200_D2	230.44	175.47	181.47		181.55	0.000419	0.22	1.27	0.17	258.58	195.78	0.20
elsa2	300.00	Max WS	UF_TR200_D7	266.36	175.47	181.63		181.72	0.000466	0.26	1.38	0.21	292.23	208.75	0.21
elsa2	300.00	Max WS	UF_TR200_D3	256.83	175.47	181.65		181.73	0.000425	0.25	1.32	0.20	296.12	210.02	0.20
elsa2	299.91			Lat Struct											
elsa2	290.00	Max WS	UF_TR200_D5	270.06	175.60	181.56		181.80	0.001668		2.17		124.60	37.29	0.38
elsa2	290.00	Max WS	UF_TR200_D1	185.02	175.60	180.86		181.04	0.001531		1.86		99.32	35.42	0.36
elsa2	290.00	Max WS	UF_TR200_D2	230.36	175.60	181.33		181.53	0.001486		1.98		116.33	36.69	0.36
elsa2	290.00	Max WS	UF_TR200_D7	265.74	175.60	181.48		181.72	0.001738		2.19		121.54	37.07	0.39
elsa2	290.00	Max WS	UF_TR200_D3	256.21	175.60	181.51		181.73	0.001569		2.09		122.75	37.16	0.37
elsa2	280.00	Max WS	UF_TR200_D5	270.63	175.52	181.25		181.69	0.003753		2.96		91.50	30.11	0.54
elsa2	280.00	Max WS	UF_TR200_D1	184.93	175.52	180.60		180.93	0.003448		2.55		72.39	28.17	0.51
elsa2	280.00	Max WS	UF_TR200_D2	230.35	175.52	181.07		181.43	0.003265		2.68		86.06	29.77	0.50
elsa2	280.00	Max WS	UF_TR200_D7	265.76	175.52	181.16		181.61	0.003954		2.99		88.83	29.94	0.55
elsa2	280.00	Max WS	UF_TR200_D3	256.13	175.52	181.22		181.63	0.003451		2.82		90.71	30.06	0.52
elsa2	270.00	Max WS	UF_TR200_D5	270.73	175.70	181.37		181.49	0.000835	0.02	1.60	0.31	211.11	110.47	0.27
elsa2	270.00	Max WS	UF_TR200_D1	184.99	175.70	180.69		180.79	0.000680		1.39	0.16	146.27	80.98	0.24
elsa2	270.00	Max WS	UF_TR200_D2	230.31	175.70	181.17		181.28	0.000714		1.46	0.25	190.38	101.46	0.25
elsa2	270.00	Max WS	UF_TR200_D7	265.65	175.70	181.27		181.40	0.000875		1.62	0.30	200.91	106.09	0.27
elsa2	270.00	Max WS	UF_TR200_D3	256.06	175.70	181.34		181.45	0.000771		1.53	0.29	207.83	109.03	0.26
elsa2	260.00	Max WS	UF_TR200_D5	337.15	175.55	181.15		181.36	0.001389	0.07	2.10	0.37	188.61	92.65	0.35
elsa2	260.00	Max WS	UF_TR200_D1	236.12	175.55	180.48		180.65	0.001259		1.84	0.26	137.66	64.36	0.33
elsa2	260.00	Max WS	UF_TR200_D2	302.30	175.55	180.94		181.14	0.001365		2.02	0.34	170.57	81.81	0.35
elsa2	260.00	Max WS	UF_TR200_D7	320.84	175.55	181.06		181.27	0.001367	0.03	2.05	0.36	181.33	88.27	0.35
elsa2	260.00	Max WS	UF_TR200_D3	330.96	175.55	181.10		181.31	0.001408	0.05	2.10	0.36	184.13	89.98	0.36
elsa2	250.00	Max WS	UF_TR200_D5	337.37	174.96	181.02		181.29	0.001462	0.25	2.37	0.36	205.48	146.99	0.37
elsa2	250.00	Max WS	UF_TR200_D1	236.21	174.96	180.37		180.57	0.001330	0.07	2.03	0.39	139.96	68.40	0.34
elsa2	250.00	Max WS	UF_TR200_D2	301.17	174.96	180.81		181.06	0.001425	0.20	2.26	0.36	178.29	115.68	0.36
elsa2	250.00	Max WS	UF_TR200_D7	321.22	174.96	180.94		181.20	0.001433	0.23	2.32	0.35	194.38	135.55	0.36
elsa2	250.00	Max WS	UF_TR200_D3	330.47	174.96	180.97		181.23	0.001476	0.24	2.36	0.36	198.19	139.52	0.37
elsa2	240.00	Max WS	UF_TR200_D5	334.26	175.51	180.84		181.16	0.002178	0.70	2.80	0.53	225.54	165.61	0.44
elsa2	240.00	Max WS	UF_TR200_D1	235.95	175.51	180.11		180.45	0.002783	0.49	2.76	0.48	130.38	109.69	0.49
elsa2	240.00	Max WS	UF_TR200_D2	299.32	175.51	180.62		180.93	0.002234	0.64	2.73	0.55	192.89	133.74	0.45
elsa2	240.00	Max WS	UF_TR200_D7	319.78	175.51	180.76		181.07	0.002180	0.68	2.76	0.55	212.01	149.28	0.44
elsa2	240.00	Max WS	UF_TR200_D3	327.40	175.51	180.79		181.10	0.002224	0.69	2.80	0.54	216.08	154.38	0.45
elsa2	230.00	Max WS	UF_TR200_D5	336.79	175.11	180.71		181.01	0.002000	0.42	2.66	0.51	212.13	151.45	0.43
elsa2	230.00	Max WS	UF_TR200_D1	233.56	175.11	179.95		180.26	0.002453	0.24	2.56	0.37	120.47	102.83	0.45
elsa2	230.00	Max WS	UF_TR200_D2	299.33	175.11	180.49		180.78	0.002023	0.37	2.58	0.50	181.93	128.22	0.42
elsa2	230.00	Max WS	UF_TR200_D7	321.85	175.11	180.62		180.92	0.001991	0.40	2.62	0.51	200.12	138.13	0.42
elsa2	230.00	Max WS	UF_TR200_D3	328.79	175.11	180.65		180.95	0.002020	0.41	2.65	0.52	203.42	139.85	0.43
elsa2	220.00	Max WS	UF_TR200_D5	321.77	174.79	180.69		180.86	0.001221	0.55	2.08	0.45	265.05	156.97	0.33
elsa2	220.00	Max WS	UF_TR200_D1	231.48	174.79	179.90		180.08	0.001495	0.38	2.00	0.48	169.75	104.55	0.35
elsa2	220.00	Max WS	UF_TR200_D2	289.09	174.79	180.47		180.64	0.001214	0.50	2.00	0.48	234.14	130.42	0.32
elsa2	220.00	Max WS	UF_TR200_D7	309.13	174.79	180.61		180.78	0.001218	0.53	2.05	0.46	252.83	146.27	0.32
elsa2	220.00	Max WS	UF_TR200_D3	315.21	174.79	180.63		180.81	0.001241	0.54	2.08	0.46	256.37	150.79	0.33
elsa2	210.00	Max WS	UF_TR200_D5	281.24	174.53	180.66		180.78	0.000564	0.44	1.55	0.12	223.75	112.05	0.23
elsa2	210.00	Max WS	UF_TR200_D1	217.08	174.53	179.86		179.97	0.000667	0.34	1.49		163.69	56.30	0.24
elsa2	210.00	Max WS	UF_TR200_D2	257.03	174.53	180.44		180.55	0.000565	0.41	1.50	0.10	202.05	85.55	0.23
elsa2	210.00	Max WS	UF_TR200_D7	271.90	174.53	180.58		180.69	0.000563	0.43	1.53	0.11	215.04	101.24	0.23
elsa2	210.00	Max WS	UF_TR200_D3	276.68	174.53	180.61		180.72	0.000572	0.43	1.55	0.11	217.54	106.58	0.23
elsa2	200.00	Max WS	UF_TR200_D5	286.30	174.16	180.58		180.73	0.000733	0.49	1.79	0.27	213.03	96.42	0.27
elsa2	200.00	Max WS	UF_TR200_D1	220.24	174.16	179.75		179.91	0.000949	0.39	1.77	0.21	146.45	70.18	0.30
elsa2	200.00	Max WS	UF_TR200_D2	261.65	174.16	180.36		180.51	0.000744	0.46	1.74	0.27	192.97	84.64	0.27
elsa2	200.00	Max WS	UF_TR200_D7	276.95	174.16	180.50		180.65	0.000736	0.48	1.77	0.26	205.42	92.13	0.27
elsa2	200.00	Max WS	UF_TR200_D3	281.00	174.16	180.53		180.68	0.000742	0.48	1.78	0.27	207.62	93.39	0.27
elsa2	190.00	Max WS	UF_TR200_D5	321.69	173.85	180.54		180.67	0.000635	0.45	1.75	0.37	292.96	132.74	0.25
elsa2	190.00	Max WS	UF_TR200_D1	231.09	173.85	179.72		179.85	0.000730	0.33	1.66	0.31	194.59	106.74	0.26
elsa2	190.00	Max WS	UF_TR200_D2	289.38	173.85	180.32		180.45	0.000629	0.42	1.69	0.34	264.71	125.79	0.25
elsa2	190.00	Max WS	UF_TR200_D7	309.53	173.85	180.46		180.59	0.000633	0.44	1.73	0.36	282.46	130.20	0.25
elsa2	190.00	Max WS	UF_TR200_D3	314.28	173.85	180.49		180.62	0.000638	0.44	1.74	0.36	285.57	130.95	0.25
elsa2	180.00	Max WS	UF_TR200_D5	328.59	173.54	180.48		180.64	0.000953	0.56	2.04	0.49	297.27	145.58	0.30
elsa2	180.00	Max WS	UF_TR200_D1	232.48	173.54	179.64		179.81	0.001207	0.44	2.02	0.43	186.95	116.47	0.33
elsa2	180.00	Max WS	UF_TR200_D2	294.54	173.54	180.26		180.42	0.000961	0.52	1.98	0.47	266.12	137.59	0.30
elsa2	180.00	Max WS	UF_TR200_D7	315.81	173.54	180.40		180.56	0.000956	0.55	2.02	0.48	285.68	142.61	0.30
elsa2	180.00	Max WS	UF_TR200_D3	320.45	173.54	180.42		180.58	0.000961	0.55	2.03	0.49	289.08	143.48	0.30
elsa2	170.00	Max WS	UF_TR200_D5	327.12	173.30	180.48		180.59	0.000520	0.40	1.63	0.35	345.07	160.61	0.23
elsa2	170.00	Max WS	UF_TR200_D1	232.25	173.30	179.64		179.75	0.000598	0.29	1.55	0.29	223.25	129.73	0.24
elsa2	170.00	Max WS	UF_TR200_D2	293.60	173.30	180.26		180.36	0.000515	0.37	1.57	0.33	310.62	153.27	0.23
elsa2	170.00	Max WS	UF_TR200_D7	314.80	173.30	180.40		180.51	0.000519	0.39	1.61	0.34	332.25	158.15	0.23
elsa2	170.00	Max WS	UF_TR200_D3	319.19	173.30	180.42		180.53	0.000522	0.39	1.62	0.35	336.06	158.88	0.23
elsa2	160.00	Max WS	UF_TR200_D5	335.52	173.04	180.42		180.57	0.000732	0.38	1.89	0.42	283.63	129.89	0.27
elsa2	160.00	Max WS	UF_TR200_D1	233.12	173.04	179.58		179.72	0.000778	0.21	1.73	0.33	186.24	104.44	0.27
elsa2	160.00	Max WS	UF_TR200_D2	302.38	173.04	180.20		180.34	0.000724	0.34	1.82	0.39	256.05	122.82	0.27
elsa2	160.00	Max WS	UF_TR200_D7	323.49	173.04	180.34		180.49	0.000731	0.36	1.87	0.41	273.28	127.29	0.27
elsa2	160.00	Max WS	UF_TR200_D3	327.73	173.04	180.36		180.51	0.000735	0.37	1.88	0.41	276.31	128.06	0.27
elsa3	150.00	Max WS	UF_TR200_D5	318.45	172.77	180.37		180.56	0.000812	0.43	2.02	0.38	225.25	100.42	0.28
elsa3	150.00	Max WS	UF_TR200_D1	233.44	172.77	179.54		179.71	0.000880	0.28	1.87	0.30	153.01	73.73	0.28

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa3	150.00	Max WS	UF_TR200_D2	291.16	172.77	180.15		180.33	0.000812	0.39	1.96	0.35	204.08	93.50	0.28
elsa3	150.00	Max WS	UF_TR200_D7	308.71	172.77	180.29		180.47	0.000815	0.42	2.00	0.37	217.24	97.86	0.28
elsa3	150.00	Max WS	UF_TR200_D3	312.30	172.77	180.31		180.50	0.000818	0.42	2.01	0.37	219.57	98.62	0.28
elsa3	149.99			Lat Struct											
elsa3	140.00	Max WS	UF_TR200_D5	319.83	172.65	180.31		180.55	0.001138	0.47	2.21	0.43	185.31	74.53	0.32
elsa3	140.00	Max WS	UF_TR200_D1	233.35	172.65	179.48		179.70	0.001281	0.27	2.07	0.26	126.30	62.05	0.33
elsa3	140.00	Max WS	UF_TR200_D2	292.17	172.65	180.10		180.32	0.001149	0.42	2.16	0.37	169.11	74.53	0.32
elsa3	140.00	Max WS	UF_TR200_D7	310.06	172.65	180.23		180.46	0.001147	0.46	2.20	0.41	179.27	74.53	0.32
elsa3	140.00	Max WS	UF_TR200_D3	313.69	172.65	180.26		180.49	0.001151	0.46	2.21	0.42	181.02	74.53	0.32
elsa3	130.00	Max WS	UF_TR200_D5	329.75	172.88	180.27		180.44	0.000727	0.34	1.89	0.36	232.25	96.30	0.27
elsa3	130.00	Max WS	UF_TR200_D1	233.61	172.88	179.46		179.60	0.000721	0.18	1.68	0.26	162.83	74.25	0.26
elsa3	130.00	Max WS	UF_TR200_D2	297.31	172.88	180.07		180.22	0.000698	0.30	1.80	0.33	212.85	90.68	0.26
elsa3	130.00	Max WS	UF_TR200_D7	318.27	172.88	180.20		180.36	0.000721	0.33	1.86	0.35	224.82	94.18	0.27
elsa3	130.00	Max WS	UF_TR200_D3	322.04	172.88	180.22		180.39	0.000725	0.33	1.87	0.35	226.95	94.79	0.27
elsa3	120.00	Max WS	UF_TR200_D5	316.05	173.05	180.30		180.40	0.000400	0.45	1.51	0.32	325.16	124.19	0.21
elsa3	120.00	Max WS	UF_TR200_D1	225.49	173.05	179.47		179.56	0.000405	0.37	1.37	0.24	229.96	104.71	0.20
elsa3	120.00	Max WS	UF_TR200_D2	284.75	173.05	180.09		180.18	0.000384	0.42	1.45	0.29	299.39	120.44	0.20
elsa3	120.00	Max WS	UF_TR200_D7	304.54	173.05	180.22		180.32	0.000395	0.44	1.49	0.31	315.52	122.80	0.20
elsa3	120.00	Max WS	UF_TR200_D3	308.58	173.05	180.24		180.34	0.000398	0.44	1.50	0.31	318.29	123.20	0.21
elsa3	110.00	Max WS	UF_TR200_D5	257.50	173.18	180.30		180.40	0.000482	0.29	1.54	0.35	247.30	97.75	0.22
elsa3	110.00	Max WS	UF_TR200_D1	194.49	173.18	179.46		179.56	0.000575	0.29	1.49	0.31	173.24	78.02	0.23
elsa3	110.00	Max WS	UF_TR200_D2	235.61	173.18	180.08		180.19	0.000482	0.29	1.50	0.34	226.86	92.72	0.22
elsa3	110.00	Max WS	UF_TR200_D7	249.45	173.18	180.22		180.32	0.000483	0.29	1.53	0.35	239.57	95.88	0.22
elsa3	110.00	Max WS	UF_TR200_D3	252.29	173.18	180.24		180.35	0.000485	0.29	1.54	0.35	241.80	96.42	0.22
elsa3	100.00	Max WS	UF_TR200_D5	231.65	172.98	180.30		180.39	0.000423	0.47	1.43		179.73	37.74	0.20
elsa3	100.00	Max WS	UF_TR200_D1	185.81	172.98	179.45		179.54	0.000489	0.44	1.39		147.67	37.74	0.21
elsa3	100.00	Max WS	UF_TR200_D2	215.39	172.98	180.08		180.17	0.000420	0.46	1.39		171.57	37.74	0.20
elsa3	100.00	Max WS	UF_TR200_D7	225.17	172.98	180.22		180.31	0.000420	0.47	1.41		176.74	37.74	0.20
elsa3	100.00	Max WS	UF_TR200_D3	227.55	172.98	180.24		180.34	0.000423	0.47	1.42		177.61	37.74	0.20
elsa3	90.00	Max WS	UF_TR200_D5	238.80	172.88	180.26		180.38	0.000418	0.42	1.55	0.38	185.99	43.24	0.21
elsa3	90.00	Max WS	UF_TR200_D1	198.84	172.88	179.40		179.51	0.000524	0.40	1.55	0.33	148.99	42.03	0.22
elsa3	90.00	Max WS	UF_TR200_D2	227.38	172.88	180.04		180.15	0.000438	0.42	1.54	0.37	176.30	42.93	0.21
elsa3	90.00	Max WS	UF_TR200_D7	234.46	172.88	180.18		180.30	0.000425	0.42	1.54	0.38	182.40	43.13	0.21
elsa3	90.00	Max WS	UF_TR200_D3	235.92	172.88	180.21		180.32	0.000423	0.42	1.55	0.38	183.47	43.16	0.21
elsa3	89	Max WS	UF_TR200_D5	281.19	172.82	180.17		180.34	0.000635	0.50	1.88	0.42	177.90	43.42	0.25
elsa3	89	Max WS	UF_TR200_D1	229.82	172.82	179.30		179.47	0.000772	0.47	1.86	0.33	141.40	41.00	0.27
elsa3	89	Max WS	UF_TR200_D2	268.53	172.82	179.94		180.11	0.000672	0.49	1.88	0.40	168.07	42.78	0.26
elsa3	89	Max WS	UF_TR200_D7	276.32	172.82	180.09		180.26	0.000648	0.49	1.88	0.41	174.27	43.18	0.26
elsa3	89	Max WS	UF_TR200_D3	277.78	172.82	180.11		180.28	0.000644	0.49	1.88	0.41	175.35	43.25	0.25
elsa3	88	Max WS	UF_TR200_D5	288.30	172.77	180.19		180.33	0.000524	0.58	1.72	0.39	223.65	57.03	0.23
elsa3	88	Max WS	UF_TR200_D1	233.51	172.77	179.33		179.46	0.000643	0.53	1.71	0.35	175.96	53.69	0.25
elsa3	88	Max WS	UF_TR200_D2	274.80	172.77	179.97		180.10	0.000556	0.57	1.73	0.39	210.75	56.04	0.24
elsa3	88	Max WS	UF_TR200_D7	283.13	172.77	180.11		180.24	0.000535	0.58	1.72	0.39	218.87	56.66	0.23
elsa3	88	Max WS	UF_TR200_D3	284.64	172.77	180.14		180.27	0.000532	0.58	1.72	0.39	220.29	56.77	0.23
elsa3	87.1	Max WS	UF_TR200_D5	288.32	173.18	179.84	177.88	180.52	0.002540	1.66	3.84		87.52	44.07	0.51
elsa3	87.1	Max WS	UF_TR200_D1	233.50	173.18	179.01	177.42	179.63	0.002857	1.53	3.68		73.87	38.42	0.52
elsa3	87.1	Max WS	UF_TR200_D2	274.80	173.18	179.62	177.76	180.29	0.002643	1.64	3.82		83.87	43.58	0.51
elsa3	87.1	Max WS	UF_TR200_D7	283.16	173.18	179.76	177.83	180.43	0.002573	1.65	3.83		86.18	43.89	0.51
elsa3	87.1	Max WS	UF_TR200_D3	284.65	173.18	179.78	177.84	180.46	0.002562	1.65	3.83		86.58	43.95	0.51
elsa3	87.05			Bridge											
elsa3	87	Max WS	UF_TR200_D5	288.26	173.18	178.86		179.87	0.004836	1.93	4.69		71.46	40.65	0.68
elsa3	87	Max WS	UF_TR200_D1	233.43	173.18	178.12		179.09	0.005648	1.76	4.54		59.46	38.81	0.71
elsa3	87	Max WS	UF_TR200_D2	274.60	173.18	178.60		179.64	0.005322	1.92	4.74		67.22	40.00	0.71
elsa3	87	Max WS	UF_TR200_D7	283.14	173.18	178.78		179.80	0.004941	1.92	4.69		70.17	40.45	0.68
elsa3	87	Max WS	UF_TR200_D3	284.65	173.18	178.80		179.82	0.004927	1.92	4.69		70.47	40.50	0.68
elsa3	86.2	Max WS	UF_TR200_D5	299.57	172.62	179.20		179.42	0.000986	0.54	2.11	0.41	166.35	49.83	0.31
elsa3	86.2	Max WS	UF_TR200_D1	236.38	172.62	178.41		178.62	0.001204	0.43	2.06	0.25	127.42	48.20	0.33
elsa3	86.2	Max WS	UF_TR200_D2	282.58	172.62	178.92		179.14	0.001101	0.52	2.13	0.37	152.33	49.25	0.32
elsa3	86.2	Max WS	UF_TR200_D7	293.49	172.62	179.12		179.33	0.001011	0.54	2.11	0.40	162.15	49.66	0.31
elsa3	86.2	Max WS	UF_TR200_D3	295.22	172.62	179.14		179.35	0.001008	0.54	2.11	0.40	163.12	49.70	0.31
elsa3	86.1	Max WS	UF_TR200_D5	297.57	172.57	179.16		179.41	0.001113	0.59	2.28	0.45	153.61	44.93	0.33
elsa3	86.1	Max WS	UF_TR200_D1	230.09	172.57	178.39		178.62	0.001227	0.48	2.14	0.33	120.32	41.32	0.33
elsa3	86.1	Max WS	UF_TR200_D2	275.97	172.57	178.89		179.14	0.001171	0.56	2.26	0.41	141.73	43.68	0.33
elsa3	86.1	Max WS	UF_TR200_D7	289.21	172.57	179.08		179.33	0.001113	0.58	2.26	0.43	150.15	44.57	0.33
elsa3	86.1	Max WS	UF_TR200_D3	291.62	172.57	179.10		179.35	0.001117	0.58	2.27	0.44	150.92	44.65	0.33
elsa3	86.094			Lat Struct											
elsa3	86.09	Max WS	UF_TR200_D5	338.88	172.23	178.33		178.89	0.003368	0.71	3.52	0.45	138.19	75.30	0.54
elsa3	86.09	Max WS	UF_TR200_D1	233.20	172.23	177.74		178.18	0.003006	0.45	3.01	0.27	96.63	64.48	0.50
elsa3	86.09	Max WS	UF_TR200_D2	298.58	172.23	178.14		178.65	0.003195	0.62	3.32	0.39	124.14	72.28	0.53
elsa3	86.09	Max WS	UF_TR200_D7	325.59	172.23	178.27		178.82	0.003285	0.68	3.45	0.43	134.22	74.46	0.54
elsa3	86.09	Max WS	UF_TR200_D3	327.67	172.23	178.28		178.83	0.003304	0.68	3.46	0.43	134.72	74.56	0.54
elsa3	86.08	Max WS	UF_TR200_D5	302.99	171.84	177.55		178.01	0.002806	0.29	3.08	0.74	123.95	80.40	0.50
elsa3	86.08	Max WS	UF_TR200_D1	226.52	171.84	176.98		177.36	0.002863	0.03	2.80	0.52	89.62	39.84	0.49
elsa3	86.08	Max WS	UF_TR200_D2	270.16	171.84	177.36		177.78	0.002721	0.20	2.93	0.66	109.33	68.00	0.49
elsa3	86.08	Max WS	UF_TR200_D7	300.95	171.84	177.50		177.97	0.002922	0.26	3.11	0.74	119.85	79.84	0.51
elsa3	86.08	Max WS	UF_TR200_D3	295.63	171.84	177.54		177.98	0.002705	0.28	3.01	0.73	123.00	80.27	0.49
elsa3	86.077	Max WS	UF_TR200_D5	279.02	171.76	177.51		177.88	0.001896	0.60	2.81	0.76	118.64	36.13	0.43
elsa3	86.077	Max WS	UF_TR200_D1	216.11	171.76	176.93		177.25	0.001906	0.52	2.56	0.62	98.07	35.39	0.42
elsa3	86.077	Max WS	UF_TR200_D2	250.37	171.76	177.32		177.66	0.001794	0.56	2.65	0.70	111.84	35.89	0.42
elsa3	86.077	Max WS	UF_TR200_D7	276.19	171.76	177.45		177.83	0.001951	0.60	2.83	0.76	116.54	36.06	0.44
elsa3	86.077	Max WS	UF_TR200_D3	274.45	171.76	177.50		177.86	0.001851	0.59	2.77	0.75	118.25	36.12	0.43
elsa3	86.06	Max WS	UF_TR200_D5	300.39	171.40	177.28		177.47	0.001243	0.56	2.20	0.46	233.41	115.58	0.34
elsa3	86.06	Max WS	UF_TR200_D1	219.05	171.40	176.66		176.85	0.001368	0.47	2.07	0.31	165.32	104.66	0.35
elsa3	86.06	Max WS	UF_TR200_D2	260.37	171.40	177.11		177.28	0.001130	0.51	2.04	0.40	214.09	113.16	0.32
elsa3	86.06	Max WS	UF_TR200_D7	295.66	171.40	177.20		177.40	0.001308	0.57	2.23	0.45	224.77	114.32	0.35
elsa3	86.06	Max WS	UF_TR200_D3	292.67	171.40	177.27		177.46	0.001187	0.55	2.14	0.45	232.74	115.43	0.33
elsa3	86.0599			Lat Struct											

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa3	86.0469			Lat Struct											
elsa3	86.04	Max WS	UF_TR200_D5	230.46	170.72	177.17		177.27	0.000580	0.28	1.53	0.53	205.90	67.16	0.24
elsa3	86.04	Max WS	UF_TR200_D1	177.42	170.72	176.50		176.59	0.000664	0.24	1.46	0.47	159.88	61.65	0.25
elsa3	86.04	Max WS	UF_TR200_D2	200.37	170.72	177.01		177.09	0.000507	0.24	1.40	0.47	195.30	67.16	0.22
elsa3	86.04	Max WS	UF_TR200_D7	227.89	170.72	177.09		177.19	0.000611	0.28	1.55	0.53	200.33	67.16	0.24
elsa3	86.04	Max WS	UF_TR200_D3	221.97	170.72	177.17		177.26	0.000537	0.27	1.48	0.51	206.09	67.16	0.23
elsa3	86.02	Max WS	UF_TR200_D5	168.50	169.88	177.05		177.10	0.000252	0.25	1.17	0.40	228.72	60.32	0.16
elsa3	86.02	Max WS	UF_TR200_D1	164.13	169.88	176.30		176.38	0.000433	0.29	1.40	0.44	183.97	60.32	0.20
elsa3	86.02	Max WS	UF_TR200_D2	159.17	169.88	176.89		176.94	0.000253	0.24	1.15	0.39	219.16	60.32	0.16
elsa3	86.02	Max WS	UF_TR200_D7	167.82	169.88	176.96		177.01	0.000267	0.25	1.19	0.40	223.37	60.32	0.16
elsa3	86.02	Max WS	UF_TR200_D3	164.99	169.88	177.05		177.10	0.000241	0.24	1.15	0.39	229.16	60.32	0.15
elsa4	86.01	Max WS	UF_TR200_D5	211.09	169.86	177.05		177.13	0.000338	0.38	1.53	0.51	230.69	52.32	0.19
elsa4	86.01	Max WS	UF_TR200_D1	217.04	169.86	176.30		176.44	0.000586	0.43	1.86	0.59	191.88	52.32	0.25
elsa4	86.01	Max WS	UF_TR200_D2	205.98	169.86	176.89		176.98	0.000355	0.38	1.54	0.51	222.40	52.32	0.19
elsa4	86.01	Max WS	UF_TR200_D7	209.98	169.86	176.96		177.05	0.000353	0.38	1.55	0.52	226.05	52.32	0.19
elsa4	86.01	Max WS	UF_TR200_D3	209.90	169.86	177.05		177.14	0.000332	0.37	1.52	0.51	231.07	52.32	0.19
elsa4	86.009			Lat Struct											
elsa4	86.0089			Lat Struct											
elsa4	86	Max WS	UF_TR200_D5	279.20	169.44	176.61	173.50	176.85	0.001015	0.54	2.21	0.32	142.29	38.39	0.30
elsa4	86	Max WS	UF_TR200_D1	294.97	169.44	175.60	173.62	176.27	0.002727		3.62		81.38	30.29	0.50
elsa4	86	Max WS	UF_TR200_D2	279.32	169.44	176.41	173.50	176.68	0.001165	0.54	2.31	0.28	134.59	38.39	0.32
elsa4	86	Max WS	UF_TR200_D7	279.55	169.44	176.50	173.50	176.76	0.001097	0.54	2.27	0.30	138.02	38.39	0.31
elsa4	86	Max WS	UF_TR200_D3	279.39	169.44	176.62	173.49	176.86	0.001012	0.54	2.21	0.32	142.55	38.39	0.30
elsa4	85.95			Bridge											
elsa4	85.9	Max WS	UF_TR200_D5	279.20	169.44	175.50		176.12	0.002605		3.50		79.83	25.71	0.49
elsa4	85.9	Max WS	UF_TR200_D1	294.73	169.44	174.73		175.68	0.004906		4.32		68.20	24.94	0.65
elsa4	85.9	Max WS	UF_TR200_D2	279.20	169.44	175.28		175.96	0.003006		3.65		76.48	25.39	0.52
elsa4	85.9	Max WS	UF_TR200_D7	279.38	169.44	175.37		176.03	0.002824		3.58		77.95	25.53	0.51
elsa4	85.9	Max WS	UF_TR200_D3	278.80	169.44	175.51		176.13	0.002582		3.49		79.98	25.73	0.48
elsa4	85.799			Lat Struct											
elsa4	85.39			Lat Struct											
elsa4	85.3	Max WS	UF_TR200_D5	367.33	168.18	174.55		175.06	0.002138	1.17	3.53	0.82	155.87	41.60	0.47
elsa4	85.3	Max WS	UF_TR200_D1	308.80	168.18	173.98		174.47	0.002298	1.07	3.41	0.76	132.54	40.49	0.48
elsa4	85.3	Max WS	UF_TR200_D2	349.01	168.18	174.38		174.88	0.002174	1.14	3.49	0.80	148.91	41.29	0.47
elsa4	85.3	Max WS	UF_TR200_D7	358.07	168.18	174.46		174.96	0.002166	1.15	3.51	0.81	152.08	41.43	0.47
elsa4	85.3	Max WS	UF_TR200_D3	368.35	168.18	174.57		175.07	0.002129	1.17	3.53	0.82	156.45	41.63	0.47
elsa4	85.29			Lat Struct											
elsa4	85.2	Max WS	UF_TR200_D5	349.33	167.89	173.61		174.16	0.002424	1.02	3.78	1.11	152.80	46.31	0.51
elsa4	85.2	Max WS	UF_TR200_D1	305.80	167.89	172.99		173.62	0.003077	0.97	3.93	1.09	124.44	45.31	0.57
elsa4	85.2	Max WS	UF_TR200_D2	337.33	167.89	173.43		174.01	0.002606	1.01	3.83	1.10	144.49	46.31	0.53
elsa4	85.2	Max WS	UF_TR200_D7	343.52	167.89	173.51		174.08	0.002538	1.02	3.82	1.11	148.12	46.31	0.52
elsa4	85.2	Max WS	UF_TR200_D3	348.01	167.89	173.66		174.19	0.002316	1.01	3.71	1.09	155.10	46.31	0.50
elsa4	85.19			Lat Struct											
elsa4	85.185			Lat Struct											
elsa4	85.1	Max WS	UF_TR200_D5	377.37	167.44	172.88		173.55	0.002830	0.76	3.78	0.66	132.90	50.75	0.54
elsa4	85.1	Max WS	UF_TR200_D1	309.58	167.44	172.27		172.92	0.003147	0.67	3.66	0.61	104.59	42.71	0.56
elsa4	85.1	Max WS	UF_TR200_D2	356.67	167.44	172.73		173.39	0.002849	0.73	3.72	0.64	125.46	48.73	0.54
elsa4	85.1	Max WS	UF_TR200_D7	366.28	167.44	172.79		173.45	0.002875	0.75	3.76	0.65	128.15	49.47	0.55
elsa4	85.1	Max WS	UF_TR200_D3	379.97	167.44	172.94		173.60	0.002735	0.76	3.75	0.65	135.99	51.57	0.54
elsa4	85.099			Lat Struct											
elsa4	85.05	Max WS	UF_TR200_D5	377.31	167.33	172.59		172.95	0.001683	0.46	2.66	0.46	149.65	42.37	0.41
elsa4	85.05	Max WS	UF_TR200_D1	309.55	167.33	171.91		172.26	0.002026	0.40	2.61	0.36	122.08	38.59	0.43
elsa4	85.05	Max WS	UF_TR200_D2	358.88	167.33	172.42		172.77	0.001745	0.45	2.64	0.44	142.57	41.43	0.41
elsa4	85.05	Max WS	UF_TR200_D7	366.27	167.33	172.49		172.84	0.001727	0.45	2.65	0.45	145.18	41.77	0.41
elsa4	85.05	Max WS	UF_TR200_D3	382.42	167.33	172.65		173.01	0.001652	0.47	2.66	0.47	152.12	42.71	0.40
elsa	85.029			Lat Struct											
elsa	85.01	Max WS	UF_TR200_D5	389.73	167.43	172.67		172.82	0.000716	0.31	1.79	0.56	256.97	70.63	0.27
elsa	85.01	Max WS	UF_TR200_D1	320.49	167.43	171.99		172.14	0.000871	0.22	1.77	0.51	209.04	69.15	0.29
elsa	85.01	Max WS	UF_TR200_D2	372.26	167.43	172.50		172.65	0.000749	0.29	1.78	0.55	244.96	70.28	0.27
elsa	85.01	Max WS	UF_TR200_D7	378.77	167.43	172.57		172.72	0.000736	0.30	1.78	0.56	249.44	70.41	0.27
elsa	85.01	Max WS	UF_TR200_D3	395.72	167.43	172.73		172.88	0.000706	0.32	1.79	0.57	261.04	70.74	0.27
elsa	85	Max WS	UF_TR200_D5	389.73	167.43	172.34		172.96	0.002409		3.47		112.16	69.95	0.51
elsa	85	Max WS	UF_TR200_D1	320.49	167.43	171.70		172.25	0.002646		3.30		96.98	67.89	0.52
elsa	85	Max WS	UF_TR200_D2	372.26	167.43	172.18		172.78	0.002464		3.43		108.37	69.62	0.51
elsa	85	Max WS	UF_TR200_D7	378.77	167.43	172.24		172.85	0.002444		3.45		109.79	69.75	0.51
elsa	85	Max WS	UF_TR200_D3	395.72	167.43	172.40		173.02	0.002392		3.49		113.44	70.07	0.51
elsa	82.5			Culvert											
elsa	80	Max WS	UF_TR200_D5	389.72	167.43	169.08	170.60	175.18	0.110267		10.94		35.62	35.47	2.83
elsa	80	Max WS	UF_TR200_D1	320.49	167.43	168.94	170.23	173.92	0.101827		9.88		32.44	34.72	2.68
elsa	80	Max WS	UF_TR200_D2	372.26	167.43	169.04	170.51	174.86	0.108223		10.68		34.84	35.29	2.80
elsa	80	Max WS	UF_TR200_D7	378.77	167.43	169.06	170.54	174.99	0.109109		10.78		35.12	35.36	2.81
elsa	80	Max WS	UF_TR200_D3	395.72	167.43	169.09	170.64	175.28	0.110698		11.02		35.90	35.54	2.84
elsa	79.875	Max WS	UF_TR200_D5	389.72	167.43	168.27	170.05	184.76	0.216068		17.98		21.67	31.30	6.90
elsa	79.875	Max WS	UF_TR200_D1	320.48	167.43	168.18	169.76	182.66	0.221884		16.85		19.01	30.92	6.86
elsa	79.875	Max WS	UF_TR200_D2	373.15	167.43	168.25	169.98	184.28	0.217606		17.73		21.04	31.21	6.90
elsa	79.875	Max WS	UF_TR200_D7	379.18	167.43	168.25	170.01	184.46	0.217064		17.83		21.27	31.25	6.90
elsa	79.875	Max WS	UF_TR200_D3	396.62	167.43	168.27	170.08	184.93	0.214905		18.07		21.95	31.34	6.90
elsa	79	Max WS	UF_TR200_D5	389.73	160.03	162.24	162.76	164.16	0.006779		6.14		63.51	33.56	1.42
elsa	79	Max WS	UF_TR200_D1	320.49	160.03	161.98	162.46	163.73	0.007377		5.87		54.62	33.11	1.46
elsa	79	Max WS	UF_TR200_D2	372.94	160.03	162.18	162.69	164.06	0.006898		6.07		61.41	33.45	1.43
elsa	79	Max WS	UF_TR200_D7	378.77	160.03	162.20	162.72	164.10	0.006858		6.10		62.14	33.49	1.43

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa	79	Max WS	UF_TR200_D3	396.48	160.03	162.27	162.79	164.20	0.006740		6.16		64.32	33.60	1.42
elsa	78	Max WS	UF_TR200_D5	389.71	158.00	161.50	160.77	162.01	0.003938	0.77	3.22	0.59	139.12	63.62	0.60
elsa	78	Max WS	UF_TR200_D1	320.49	158.00	161.19	160.45	161.64	0.003946	0.63	3.00	0.59	119.84	60.93	0.59
elsa	78	Max WS	UF_TR200_D2	372.79	158.00	161.43	160.64	161.92	0.003941	0.74	3.17	0.57	134.49	63.17	0.59
elsa	78	Max WS	UF_TR200_D7	378.77	158.00	161.45	160.67	161.95	0.003942	0.75	3.19	0.57	136.11	63.34	0.59
elsa	78	Max WS	UF_TR200_D3	396.38	158.00	161.53	160.79	162.04	0.003936	0.78	3.24	0.60	140.93	63.79	0.60
elsa	77.5			Inl Struct											
elsa	77	Max WS	UF_TR200_D5	389.71	149.48	153.41		153.95	0.003589		3.25		119.91	32.25	0.54
elsa	77	Max WS	UF_TR200_D1	320.49	149.48	153.00		153.46	0.003442		3.00		106.93	31.89	0.52
elsa	77	Max WS	UF_TR200_D2	372.79	149.48	153.31		153.83	0.003554		3.19		116.84	32.16	0.53
elsa	77	Max WS	UF_TR200_D7	378.77	149.48	153.35		153.87	0.003566		3.21		117.94	32.19	0.54
elsa	77	Max WS	UF_TR200_D3	396.38	149.48	153.44		153.99	0.003604		3.27		121.09	32.28	0.54
elsa	76	Max WS	UF_TR200_D5	389.70	148.35	152.47		153.72	0.009341		4.95		78.78	23.52	0.86
elsa	76	Max WS	UF_TR200_D1	320.49	148.35	152.08		153.16	0.009083		4.60		69.70	23.07	0.84
elsa	76	Max WS	UF_TR200_D2	372.78	148.35	152.38		153.59	0.009281		4.87		76.62	23.41	0.86
elsa	76	Max WS	UF_TR200_D7	378.77	148.35	152.41		153.64	0.009302		4.89		77.39	23.45	0.86
elsa	76	Max WS	UF_TR200_D3	396.38	148.35	152.51		153.77	0.009369		4.98		79.62	23.56	0.86
elsa	75	Max WS	UF_TR200_D5	389.71	145.93	148.75	149.23	150.71	0.023116	0.53	6.21	0.33	62.89	29.96	1.35
elsa	75	Max WS	UF_TR200_D1	320.48	145.93	148.52	148.90	150.19	0.022790	0.22	5.72		56.01	29.17	1.31
elsa	75	Max WS	UF_TR200_D2	372.77	145.93	148.69	149.15	150.59	0.023045	0.47	6.09	0.26	61.25	29.77	1.34
elsa	75	Max WS	UF_TR200_D7	378.77	145.93	148.71	149.18	150.63	0.023050	0.49	6.13	0.29	61.85	29.84	1.34
elsa	75	Max WS	UF_TR200_D3	396.37	145.93	148.77	149.27	150.76	0.023141	0.55	6.25	0.35	63.53	30.03	1.35
elsa	74.99			Lat Struct											
elsa	74.51	Max WS	UF_TR200_D5	389.70	143.37	145.74		146.25	0.009777	1.40	3.58	1.50	152.89	102.62	0.86
elsa	74.51	Max WS	UF_TR200_D1	320.48	143.37	145.54		145.99	0.010174	1.31	3.37	1.38	132.59	100.87	0.86
elsa	74.51	Max WS	UF_TR200_D2	372.77	143.37	145.69		146.19	0.009876	1.38	3.53	1.47	147.96	102.17	0.86
elsa	74.51	Max WS	UF_TR200_D7	378.77	143.37	145.71		146.21	0.009842	1.38	3.55	1.48	149.70	102.33	0.86
elsa	74.51	Max WS	UF_TR200_D3	396.36	143.37	145.76		146.27	0.009731	1.40	3.60	1.51	154.86	102.81	0.86
elsa	74	Max WS	UF_TR200_D5	389.70	141.40	144.17		144.93	0.008514		3.86	0.26	101.08	47.31	0.83
elsa	74	Max WS	UF_TR200_D1	320.48	141.40	143.90		144.57	0.008600		3.61	0.07	88.79	44.98	0.82
elsa	74	Max WS	UF_TR200_D2	372.77	141.40	144.11		144.84	0.008501		3.80	0.30	98.16	46.21	0.83
elsa	74	Max WS	UF_TR200_D7	378.76	141.40	144.13		144.87	0.008489		3.82	0.31	99.22	46.36	0.83
elsa	74	Max WS	UF_TR200_D3	396.36	141.40	144.19		144.96	0.008574		3.89	0.25	102.23	48.27	0.83
elsa	73.5	Max WS	UF_TR200_D5	389.69	138.38	141.80	142.09	142.95	0.010825	1.01	5.25	1.56	120.86	91.11	0.98
elsa	73.5	Max WS	UF_TR200_D1	320.48	138.38	141.54	141.79	142.63	0.011029	0.82	4.99	1.45	98.21	84.10	0.98
elsa	73.5	Max WS	UF_TR200_D2	372.77	138.38	141.74	141.99	142.87	0.010795	0.97	5.18	1.53	115.84	89.67	0.98
elsa	73.5	Max WS	UF_TR200_D7	378.75	138.38	141.76	142.02	142.90	0.010872	0.98	5.22	1.55	117.27	90.08	0.98
elsa	73.5	Max WS	UF_TR200_D3	396.35	138.38	141.83	142.11	142.98	0.010767	1.02	5.27	1.57	123.23	91.85	0.98
elsa	73	Max WS	UF_TR200_D5	389.69	137.84	141.38		142.23	0.008008	0.57	4.15	0.98	102.19	49.39	0.82
elsa	73	Max WS	UF_TR200_D1	320.48	137.84	141.12		141.85	0.007794	0.44	3.82	0.80	89.72	47.72	0.80
elsa	73	Max WS	UF_TR200_D2	372.77	137.84	141.33		142.15	0.007864	0.54	4.06	0.94	99.63	49.05	0.81
elsa	73	Max WS	UF_TR200_D7	378.75	137.84	141.34		142.17	0.007990	0.55	4.10	0.95	100.20	49.13	0.82
elsa	73	Max WS	UF_TR200_D3	396.35	137.84	141.41		142.27	0.007958	0.58	4.17	1.00	103.66	49.59	0.82
elsa	72	Max WS	UF_TR200_D5	390.19	135.69	138.86	138.78	139.67	0.009278	0.70	4.28	1.35	119.85	68.77	0.88
elsa	72	Max WS	UF_TR200_D1	324.93	135.69	138.65	138.56	139.37	0.009067	0.63	3.98	1.19	105.65	67.30	0.86
elsa	72	Max WS	UF_TR200_D2	376.96	135.69	138.82	138.74	139.61	0.009228	0.69	4.22	1.32	117.09	68.45	0.88
elsa	72	Max WS	UF_TR200_D7	379.25	135.69	138.83	138.74	139.62	0.009236	0.69	4.23	1.32	117.57	68.50	0.88
elsa	72	Max WS	UF_TR200_D3	399.35	135.69	138.89	138.81	139.72	0.009313	0.71	4.32	1.36	121.74	69.02	0.89
elsa	71.5	Max WS	UF_TR200_D5	390.19	135.45	138.14	138.87	140.42	0.026839	1.93	7.14	1.69	76.41	56.68	1.49
elsa	71.5	Max WS	UF_TR200_D1	324.92	135.45	137.94	138.53	140.03	0.026938	1.71	6.73	1.43	65.05	54.63	1.47
elsa	71.5	Max WS	UF_TR200_D2	376.96	135.45	138.10	138.83	140.35	0.026861	1.89	7.06	1.64	74.16	56.28	1.49
elsa	71.5	Max WS	UF_TR200_D7	379.25	135.45	138.11	138.83	140.36	0.026869	1.89	7.07	1.65	74.54	56.34	1.49
elsa	71.5	Max WS	UF_TR200_D3	399.34	135.45	138.17	138.90	140.48	0.026794	1.95	7.19	1.72	77.99	56.89	1.49
elsa	71	Max WS	UF_TR200_D5	390.18	129.90	133.10	133.21	134.17	0.012272	0.52	5.21	1.76	113.74	61.64	1.02
elsa	71	Max WS	UF_TR200_D1	324.92	129.90	132.87	132.98	133.84	0.012331	0.38	4.92	1.58	99.41	61.07	1.00
elsa	71	Max WS	UF_TR200_D2	376.96	129.90	133.06	133.17	134.10	0.012246	0.49	5.15	1.72	111.04	61.53	1.01
elsa	71	Max WS	UF_TR200_D7	379.25	129.90	133.07	133.18	134.11	0.012251	0.50	5.16	1.73	111.51	61.55	1.01
elsa	71	Max WS	UF_TR200_D3	399.35	129.90	133.13	133.24	134.21	0.012292	0.53	5.26	1.78	115.58	61.71	1.02
elsa	70	Max WS	UF_TR200_D5	391.31	125.09	128.38		129.16	0.008487		3.91	0.28	100.29	45.30	0.83
elsa	70	Max WS	UF_TR200_D1	324.91	125.09	128.07		128.79	0.009179		3.75		86.59	42.83	0.84
elsa	70	Max WS	UF_TR200_D2	377.51	125.09	128.32		129.09	0.008644		3.88	0.23	97.39	44.76	0.83
elsa	70	Max WS	UF_TR200_D7	389.23	125.09	128.37		129.15	0.008493		3.90	0.27	99.92	45.23	0.83
elsa	70	Max WS	UF_TR200_D3	399.91	125.09	128.42		129.21	0.008401		3.93	0.31	102.06	45.62	0.82
elsa	60	Max WS	UF_TR200_D5	391.27	122.30	127.29		127.98	0.004456	1.00	3.85	0.97	130.17	53.39	0.63
elsa	60	Max WS	UF_TR200_D1	324.84	122.30	126.87		127.53	0.004824	0.85	3.71	0.81	108.22	52.06	0.65
elsa	60	Max WS	UF_TR200_D2	377.41	122.30	127.20		127.88	0.004558	0.97	3.83	0.95	125.30	53.09	0.64
elsa	60	Max WS	UF_TR200_D7	389.44	122.30	127.28		127.97	0.004453	1.00	3.85	0.97	129.71	53.36	0.63
elsa	60	Max WS	UF_TR200_D3	399.85	122.30	127.34		128.03	0.004424	1.02	3.87	0.99	132.82	53.55	0.63
elsa	50	Max WS	UF_TR200_D5	391.23	121.69	126.98		127.23	0.001521	0.57	2.23	0.23	184.64	58.81	0.38
elsa	50	Max WS	UF_TR200_D1	324.75	121.69	126.49		126.73	0.001748	0.48	2.16	0.11	156.01	57.16	0.39
elsa	50	Max WS	UF_TR200_D2	377.32	121.69	126.88		127.13	0.001568	0.56	2.22	0.21	178.45	58.46	0.38
elsa	50	Max WS	UF_TR200_D7	389.60	121.69	126.97		127.22	0.001524	0.57	2.22	0.23	184.01	58.78	0.38
elsa	50	Max WS	UF_TR200_D3	399.81	121.69	127.04		127.29	0.001502	0.58	2.24	0.24	188.07	59.01	0.38
elsa	40	Max WS	UF_TR200_D5	391.22	119.80	126.20	124.87	126.85	0.002930	0.85	3.79	1.31	127.69	50.38	0.54
elsa	40	Max WS	UF_TR200_D1	324.73	119.80	125.71	124.51	126.29	0.002946	0.72	3.54	1.15	112.15	46.58	0.54
elsa	40	Max WS	UF_TR200_D2	377.30	119.80	126.09	124.80	126.73	0.002952	0.83	3.74	1.28	124.27	49.54	0.54
elsa	40	Max WS	UF_TR200_D7	390.29	119.80	126.18	124.87	126.84	0.002946	0.85	3.79	1.31	127.25	50.27	0.54
elsa	40	Max WS	UF_TR200_D3	399.80	119.80	126.25	124.92	126.92	0.002941	0.87	3.82	1.33	129.42	50.78	0.55
elsa	37.5			Bridge											
elsa	35	Max WS	UF_TR200_D5	391.22	119.80	125.05	124.87	126.31	0.007775	0.84	5.17	1.48	90.71	41.34	0.85
elsa	35	Max WS	UF_TR200_D1	324.73	119.80	124.69	124.51	125.81	0.007734	0.62	4.83	1.24	79.19	39.16	0.83
elsa	35	Max WS	UF_TR200_D2	377.30	119.80	124.98	124.80	126.21	0.007765	0.80	5.10	1.43	88.39	40.87	0.84
elsa	35	Max WS	UF_TR200_D7	390.29	119.80	125.05	124.87	126.31	0.007704	0.84	5.15	1.47	90.86	41.37	0.84
elsa	35	Max WS	UF_TR200_D3	399.81	119.80	125.09	124.92	126.38	0.007784	0.86	5.21	1.50	92.12	41.68	0.85
elsa	30	Max WS	UF_TR200_D5	392.00	117.37	121.94		122.78	0.006249		4.18	1.26	107.36	39.08	0.73
elsa	30	Max WS	UF_TR200_D1	325.50	117.37	121.59		122.34	0.006181		3.93	1.08	93.77	38.15	0.71
elsa	30	Max WS	UF_TR200_D2	378.07	117.37	121.87		122.69	0.006238		4.13	1.23	104.57	38.88	0.72

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsa	30	Max WS	UF_TR200_D7	396.79	117.37	121.98		122.82	0.006167		4.18	1.27	108.87	39.19	0.72
elsa	30	Max WS	UF_TR200_D3	400.58	117.37	121.99		122.84	0.006261		4.21	1.28	109.03	39.20	0.73
elsa	29.500	Max WS	UF_TR200_D5	392.00	115.99	120.70	120.47	121.64	0.006357	0.72	4.51	1.25	116.32	66.64	0.75
elsa	29.500	Max WS	UF_TR200_D1	325.49	115.99	120.35	120.00	121.23	0.006537	0.50	4.28	1.12	94.33	61.12	0.75
elsa	29.500	Max WS	UF_TR200_D2	378.05	115.99	120.63	120.40	121.56	0.006390	0.68	4.46	1.23	111.78	65.54	0.75
elsa	29.500	Max WS	UF_TR200_D7	397.76	115.99	120.75	120.51	121.68	0.006171	0.74	4.48	1.26	119.85	67.49	0.74
elsa	29.500	Max WS	UF_TR200_D3	400.57	115.99	120.74	120.52	121.69	0.006355	0.74	4.54	1.27	118.93	67.27	0.76
elsa	29.12			Lat Struct											
elsa	29	Max WS	UF_TR200_D5	384.26	114.62	119.80		120.46	0.003912	1.12	4.02	1.17	146.81	56.82	0.61
elsa	29	Max WS	UF_TR200_D1	325.43	114.62	119.44		120.06	0.004004	1.03	3.84	1.05	126.73	54.71	0.61
elsa	29	Max WS	UF_TR200_D2	356.43	114.62	119.78		120.36	0.003417	1.04	3.75	1.09	145.92	56.75	0.57
elsa	29	Max WS	UF_TR200_D7	397.83	114.62	119.84		120.53	0.004034	1.15	4.11	1.20	149.13	56.98	0.62
elsa	29	Max WS	UF_TR200_D3	371.17	114.62	119.81		120.42	0.003606	1.07	3.87	1.13	147.53	56.87	0.59
elsaValle	28.5	Max WS	UF_TR200_D5	417.79	115.00	119.48		120.33	0.005974	1.33	4.65	1.19	148.63	68.44	0.76
elsaValle	28.5	Max WS	UF_TR200_D1	334.05	115.00	119.13		119.89	0.005866	1.14	4.32	1.01	124.69	67.56	0.74
elsaValle	28.5	Max WS	UF_TR200_D2	430.64	115.00	119.52		120.38	0.006106	1.36	4.73	1.22	150.95	68.52	0.77
elsaValle	28.5	Max WS	UF_TR200_D7	423.17	115.00	119.51		120.35	0.005935	1.34	4.65	1.20	150.55	68.51	0.76
elsaValle	28.5	Max WS	UF_TR200_D3	429.85	115.00	119.52		120.38	0.006033	1.36	4.70	1.22	151.45	68.54	0.76
elsaValle	28.4			Lat Struct											
elsaValle	28.11			Lat Struct											
elsaValle	28	Max WS	UF_TR200_D5	400.46	114.13	118.82		119.43	0.003309	0.87	3.73	1.21	145.25	48.24	0.58
elsaValle	28	Max WS	UF_TR200_D1	332.14	114.13	118.39		118.95	0.003424	0.74	3.53	1.10	124.51	47.35	0.58
elsaValle	28	Max WS	UF_TR200_D2	407.07	114.13	118.83		119.46	0.003377	0.88	3.78	1.23	145.93	48.26	0.58
elsaValle	28	Max WS	UF_TR200_D7	405.62	114.13	118.87		119.48	0.003252	0.88	3.72	1.22	147.59	48.30	0.57
elsaValle	28	Max WS	UF_TR200_D3	408.08	114.13	118.87		119.49	0.003285	0.88	3.75	1.22	147.69	48.30	0.58
elsaValle	27.9			Lat Struct											
elsaValle	27.833	Max WS	UF_TR200_D5	388.60	113.48	118.80		119.25	0.002341	1.10	3.11	0.49	158.03	53.74	0.48
elsaValle	27.833	Max WS	UF_TR200_D1	322.10	113.48	118.36		118.76	0.002361	1.01	2.91	0.57	135.67	44.56	0.48
elsaValle	27.833	Max WS	UF_TR200_D2	392.45	113.48	118.82		119.27	0.002363	1.10	3.13	0.49	158.69	53.74	0.48
elsaValle	27.833	Max WS	UF_TR200_D7	393.31	113.48	118.85		119.29	0.002300	1.10	3.11	0.50	160.65	53.74	0.48
elsaValle	27.833	Max WS	UF_TR200_D3	395.46	113.48	118.85		119.30	0.002323	1.10	3.13	0.50	160.72	53.74	0.48
elsaValle	27.59			Lat Struct											
elsaValle	27.4			Lat Struct											
elsaValle	27	Max WS	UF_TR200_D5	344.38	112.53	118.36		118.72	0.001873	0.91	2.88	0.50	165.58	51.65	0.42
elsaValle	27	Max WS	UF_TR200_D1	293.83	112.53	117.83		118.19	0.002187	0.84	2.87	0.46	138.31	50.36	0.45
elsaValle	27	Max WS	UF_TR200_D2	346.18	112.53	118.36		118.73	0.001886	0.91	2.89	0.51	165.79	51.65	0.43
elsaValle	27	Max WS	UF_TR200_D7	350.69	112.53	118.42		118.78	0.001854	0.92	2.89	0.51	168.48	51.77	0.42
elsaValle	27	Max WS	UF_TR200_D3	350.35	112.53	118.41		118.77	0.001854	0.91	2.89	0.51	168.37	51.77	0.42
elsaValle	26.500	Max WS	UF_TR200_D5	302.97	112.40	118.18		118.45	0.001483	0.40	2.47	0.84	161.83	59.40	0.37
elsaValle	26.500	Max WS	UF_TR200_D1	259.49	112.40	117.57		117.87	0.001856	0.37	2.51	0.82	129.72	49.95	0.41
elsaValle	26.500	Max WS	UF_TR200_D2	303.87	112.40	118.18		118.45	0.001489	0.40	2.48	0.84	161.96	59.42	0.37
elsaValle	26.500	Max WS	UF_TR200_D7	307.36	112.40	118.24		118.51	0.001446	0.41	2.47	0.84	165.66	60.01	0.37
elsaValle	26.500	Max WS	UF_TR200_D3	307.34	112.40	118.24		118.51	0.001450	0.41	2.47	0.84	165.47	60.01	0.37
elsaValle	26.39			Lat Struct											
elsaValle	26	Max WS	UF_TR200_D5	408.05	111.88	117.51		118.01	0.002537	1.22	3.63	0.96	184.26	60.43	0.51
elsaValle	26	Max WS	UF_TR200_D1	332.90	111.88	116.86		117.38	0.003010	1.17	3.60	0.84	145.83	57.50	0.55
elsaValle	26	Max WS	UF_TR200_D2	406.58	111.88	117.51		118.01	0.002518	1.21	3.61	0.95	184.30	60.43	0.51
elsaValle	26	Max WS	UF_TR200_D7	416.04	111.88	117.57		118.07	0.002508	1.22	3.63	0.97	187.95	60.66	0.51
elsaValle	26	Max WS	UF_TR200_D3	415.16	111.88	117.57		118.07	0.002498	1.22	3.63	0.96	187.95	60.66	0.51
elsaValle	25.9			Lat Struct											
elsaValle	25	Max WS	UF_TR200_D5	407.91	110.22	116.92	114.94	117.53	0.002412		3.46		117.74	39.76	0.50
elsaValle	25	Max WS	UF_TR200_D1	332.73	110.22	116.25	114.47	116.79	0.002601		3.27		101.86	37.44	0.50
elsaValle	25	Max WS	UF_TR200_D2	406.85	110.22	116.92	114.94	117.53	0.002390		3.45		117.87	39.79	0.49
elsaValle	25	Max WS	UF_TR200_D7	416.13	110.22	116.98	114.99	117.60	0.002415		3.49		119.11	40.02	0.50
elsaValle	25	Max WS	UF_TR200_D3	415.16	110.22	116.98	114.98	117.60	0.002399		3.48		119.19	40.03	0.50
elsaValle	22.5			Bridge											
elsaValle	20	Max WS	UF_TR200_D5	407.91	110.22	116.53		117.25	0.003168		3.76		108.49	38.52	0.56
elsaValle	20	Max WS	UF_TR200_D1	332.67	110.22	115.87		116.53	0.003522		3.58		92.99	33.51	0.58
elsaValle	20	Max WS	UF_TR200_D2	406.72	110.22	116.54		117.25	0.003116		3.74		108.84	38.56	0.56
elsaValle	20	Max WS	UF_TR200_D7	416.07	110.22	116.58		117.31	0.003182		3.79		109.64	38.64	0.56
elsaValle	20	Max WS	UF_TR200_D3	415.01	110.22	116.59		117.31	0.003141		3.78		109.90	38.67	0.56
elsaValle	16.667	Max WS	UF_TR200_D5	407.87	110.00	116.09		116.86	0.003639	0.31	3.89	0.70	107.82	26.03	0.58
elsaValle	16.667	Max WS	UF_TR200_D1	332.65	110.00	115.36		116.08	0.004346	0.10	3.78	0.58	89.14	24.54	0.61
elsaValle	16.667	Max WS	UF_TR200_D2	406.49	110.00	116.12		116.87	0.003553	0.31	3.85	0.69	108.43	26.07	0.57
elsaValle	16.667	Max WS	UF_TR200_D7	416.05	110.00	116.14		116.92	0.003657	0.32	3.92	0.71	109.06	26.12	0.58
elsaValle	16.667	Max WS	UF_TR200_D3	414.82	110.00	116.16		116.93	0.003589	0.32	3.90	0.71	109.53	26.16	0.57
elsaValle	15	Max WS	UF_TR200_D5	407.89	109.92	115.97		116.59	0.002685	1.23	3.71	0.77	143.15	36.81	0.52
elsaValle	15	Max WS	UF_TR200_D1	332.59	109.92	115.12		115.76	0.003443	1.17	3.73	0.74	112.71	35.07	0.57
elsaValle	15	Max WS	UF_TR200_D2	406.18	109.92	116.00		116.61	0.002604	1.22	3.67	0.76	144.33	36.90	0.51
elsaValle	15	Max WS	UF_TR200_D7	415.94	109.92	116.02		116.65	0.002698	1.24	3.74	0.78	144.96	36.95	0.52
elsaValle	15	Max WS	UF_TR200_D3	414.50	109.92	116.05		116.66	0.002635	1.23	3.71	0.77	145.85	37.01	0.52
elsaValle	14.000	Max WS	UF_TR200_D5	407.90	109.87	116.01		116.40	0.001957	0.08	2.77	0.37	148.34	36.96	0.43
elsaValle	14.000	Max WS	UF_TR200_D1	332.59	109.87	115.11		115.53	0.002733		2.86	0.15	116.40	34.24	0.49
elsaValle	14.000	Max WS	UF_TR200_D2	406.20	109.87	116.04		116.42	0.001890	0.09	2.74	0.37	149.58	37.05	0.42
elsaValle	14.000	Max WS	UF_TR200_D7	415.93	109.87	116.06		116.45	0.001954	0.10	2.79	0.38	150.25	37.10	0.43
elsaValle	14.000	Max WS	UF_TR200_D3	414.55	109.87	116.08		116.47	0.001904	0.11	2.77	0.38	151.18	37.17	0.42
elsaValle	13.000	Max WS	UF_TR200_D5	407.89	109.64	115.85		116.34	0.002033	0.44	3.32	1.07	162.49	41.40	0.45
elsaValle	13.000	Max WS	UF_TR200_D1	332.59	109.64	114.93		115.43	0.002624	0.34	3.34	1.08	126.40	37.03	0.50
elsaValle	13.000	Max WS	UF_TR200_D2	405.88	109.64	115.89		116.37	0.001961	0.44	3.27	1.06	164.11	41.55	0.44
elsaValle	13.000	Max WS	UF_TR200_D7	415.83	109.64	115.90		116.40	0.002043	0.45	3.35	1.08	164.59	41.59	0.45
elsaValle	13.000	Max WS	UF_TR200_D3	414.23	109.64	115.93		116.42	0.001988	0.45	3.31	1.07	165.80	41.69	0.45
elsaValle	12.000	Max WS	UF_TR200_D5	407.90	109.50	115.52		116.31	0.004944	0.21	4.12	1.32	118.67	37.51	0.65
elsaValle	12.000	Max WS	UF_TR200_D1	332.59	109.50	114.62		115.57	0.007626		4.44	1.28	86.63	34.04	0.78

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
elsaValle	12.000	Max WS	UF_TR200_D2	405.73	109.50	115.56		116.33	0.004699	0.23	4.05	1.30	120.39	37.68	0.64
elsaValle	12.000	Max WS	UF_TR200_D7	415.73	109.50	115.57		116.37	0.004918	0.23	4.14	1.33	120.53	37.69	0.65
elsaValle	12.000	Max WS	UF_TR200_D3	413.85	109.50	115.60		116.38	0.004731	0.24	4.08	1.32	121.82	37.82	0.64
elsaValle	11.000	Max WS	UF_TR200_D5	407.60	109.30	115.53		115.97	0.001814	0.90	3.31	1.06	192.18	51.61	0.44
elsaValle	11.000	Max WS	UF_TR200_D1	332.59	109.30	114.40		114.97	0.002952	0.83	3.65	1.08	134.99	49.48	0.54
elsaValle	11.000	Max WS	UF_TR200_D2	405.58	109.30	115.59		116.01	0.001725	0.89	3.25	1.04	195.19	51.71	0.43
elsaValle	11.000	Max WS	UF_TR200_D7	415.54	109.30	115.59		116.03	0.001817	0.91	3.33	1.07	194.92	51.70	0.44
elsaValle	11.000	Max WS	UF_TR200_D3	413.47	109.30	115.63		116.06	0.001746	0.90	3.28	1.05	197.18	51.79	0.43
elsaValle	10	Max WS	UF_TR200_D5	407.61	109.16	115.58		115.84	0.001015	1.00	2.53	0.63	235.29	49.34	0.33
elsaValle	10	Max WS	UF_TR200_D1	332.59	109.16	114.49		114.76	0.001390	1.02	2.59	0.61	182.95	46.71	0.38
elsaValle	10	Max WS	UF_TR200_D2	405.54	109.16	115.64		115.88	0.000972	0.99	2.50	0.62	238.04	49.47	0.33
elsaValle	10	Max WS	UF_TR200_D7	415.61	109.16	115.64		115.89	0.001023	1.01	2.56	0.64	237.90	49.47	0.33
elsaValle	10	Max WS	UF_TR200_D3	413.60	109.16	115.68		115.93	0.000989	1.00	2.53	0.63	239.95	49.57	0.33
elsaValle	2	Max WS	UF_TR200_D5	407.57	109.31	115.41		115.84	0.002038	1.31	3.36	0.68	181.74	39.87	0.46
elsaValle	2	Max WS	UF_TR200_D1	313.43	109.31	114.33		114.76	0.002699	1.27	3.34	0.64	138.43	39.87	0.51
elsaValle	2	Max WS	UF_TR200_D2	405.49	109.31	115.48		115.89	0.001937	1.29	3.30	0.67	184.24	39.87	0.45
elsaValle	2	Max WS	UF_TR200_D7	415.30	109.31	115.46		115.90	0.002048	1.32	3.39	0.69	183.76	39.87	0.46
elsaValle	2	Max WS	UF_TR200_D3	412.79	109.31	115.51		115.93	0.001962	1.30	3.34	0.68	185.65	39.87	0.45
elsaValle	1	Max WS	UF_TR200_D5	419.23	109.28	115.34	113.52	115.81	0.002111	1.24	3.39	0.70	174.52	39.95	0.47
elsaValle	1	Max WS	UF_TR200_D1	334.09	109.28	114.27	113.11	114.79	0.003037	1.22	3.50	0.70	131.96	39.95	0.54
elsaValle	1	Max WS	UF_TR200_D2	424.65	109.28	115.38	113.54	115.85	0.002110	1.24	3.40	0.70	176.05	39.95	0.47
elsaValle	1	Max WS	UF_TR200_D7	426.65	109.28	115.39	113.54	115.87	0.002110	1.25	3.41	0.71	176.63	39.95	0.47
elsaValle	1	Max WS	UF_TR200_D3	430.74	109.28	115.42	113.56	115.90	0.002111	1.25	3.42	0.71	177.75	39.95	0.47

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DI RICORBOLI

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

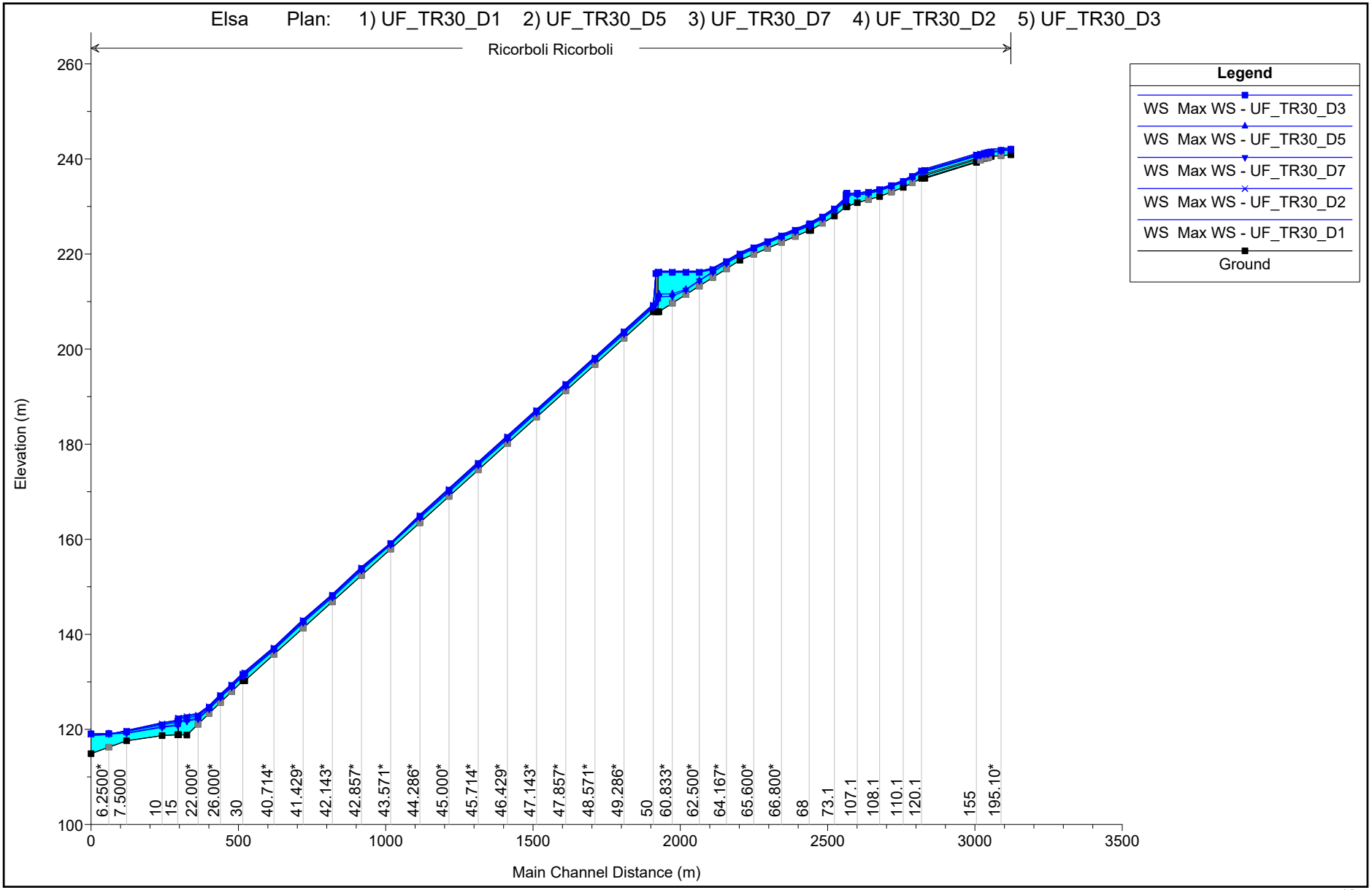
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DI RICORBOLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
Ricorboli Ricorboli
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
260
240
220
200
180
160
140
120
100
0
500
1000
1500
2000
2500
3000
3500
6.2500*
7.5000
10
15
22.000*
26.000*
30
40.714*
41.429*
42.143*
42.857*
43.571*
44.286*
45.000*
45.714*
46.429*
47.143*
47.857*
48.571*
49.286*
50
60.833*
62.500*
64.167*
65.600*
66.800*
68
73.1
107.1
108.1
110.1
120.1
155
195.10*

ALLEGATI

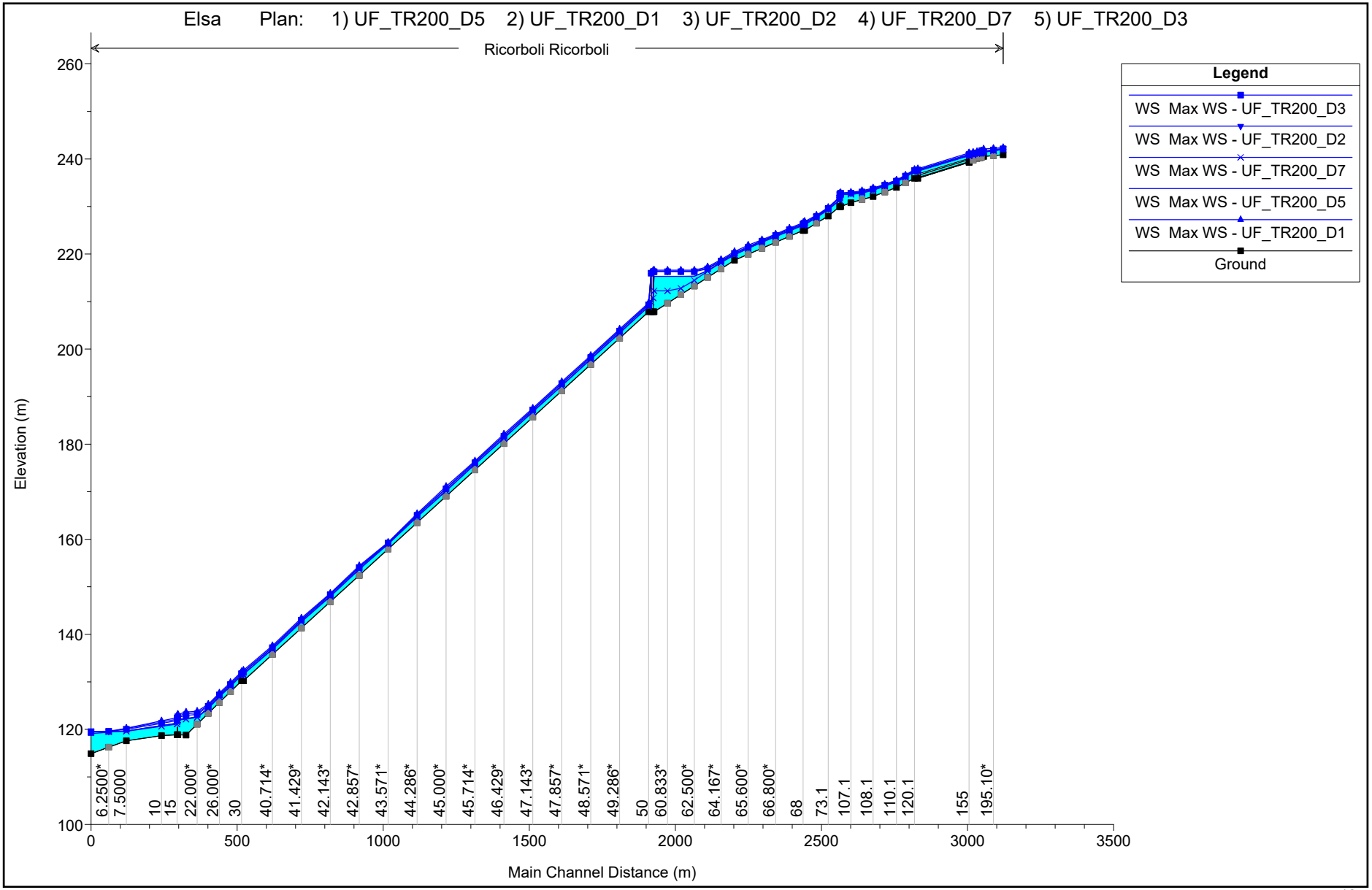
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DI RICORBOLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
Ricorboli Ricorboli
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
Main Channel Distance (m)
260
240
220
200
180
160
140
120
100
0
500
1000
1500
2000
2500
3000
3500
6.2500*
7.5000
10
15
22.000*
26.000*
30
40.714*
41.429*
42.143*
42.857*
43.571*
44.286*
45.000*
45.714*
46.429*
47.143*
47.857*
48.571*
49.286*
50
60.833*
62.500*
64.167*
65.600*
66.800*
68
73.1
107.1
108.1
110.1
120.1
155
195.10*

ALLEGATI

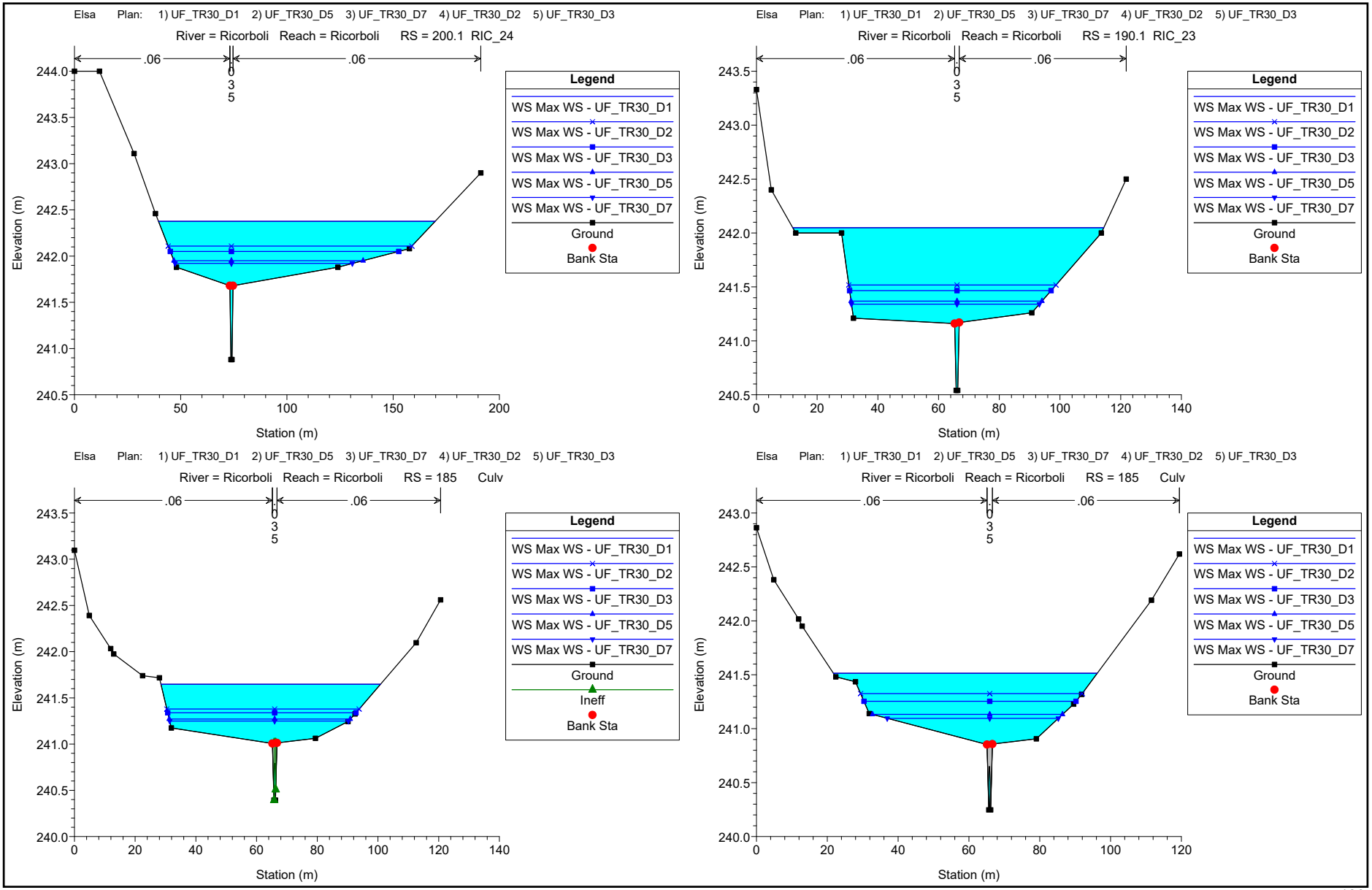
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

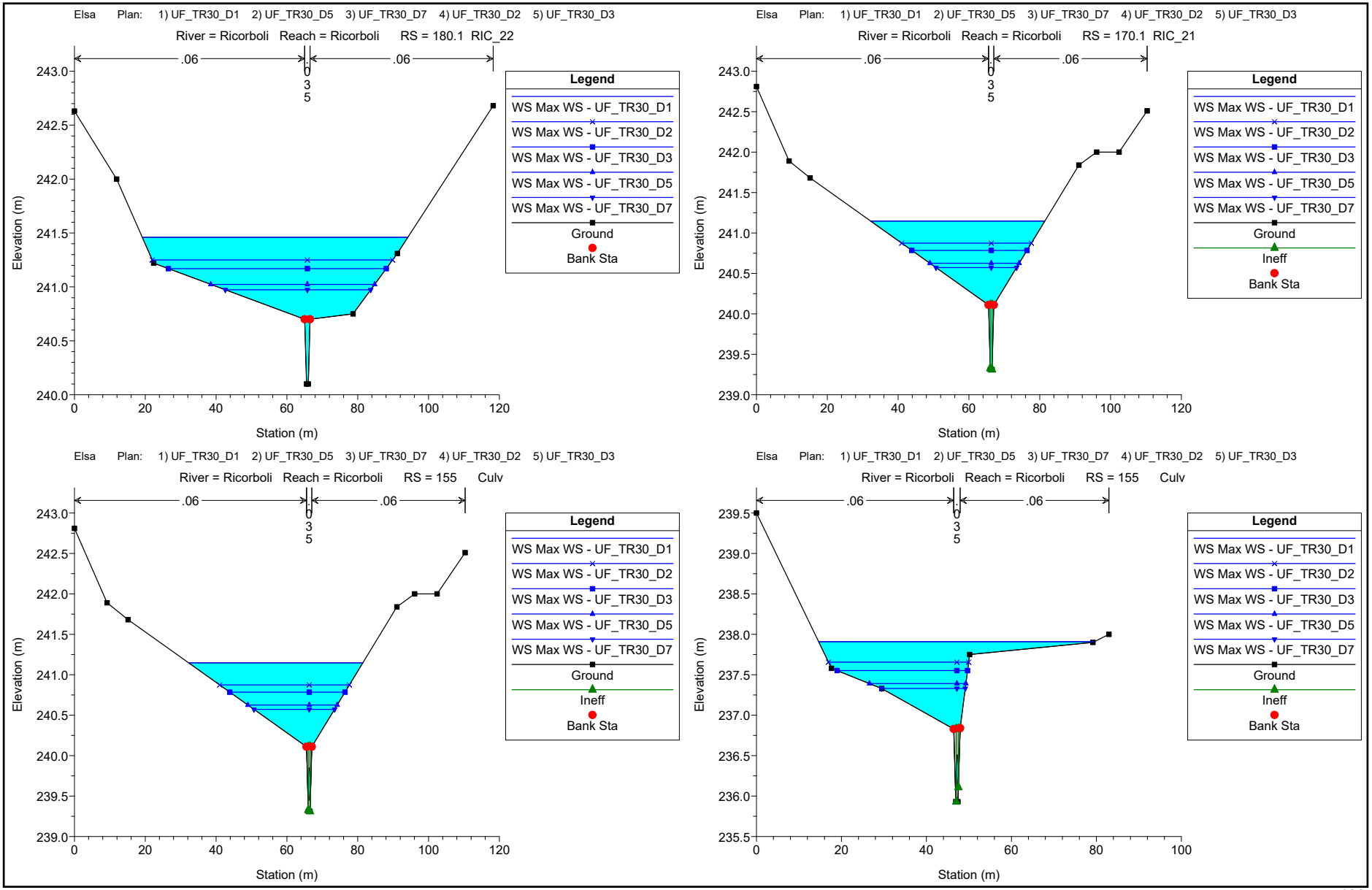
BOTRO DI RICORBOLI

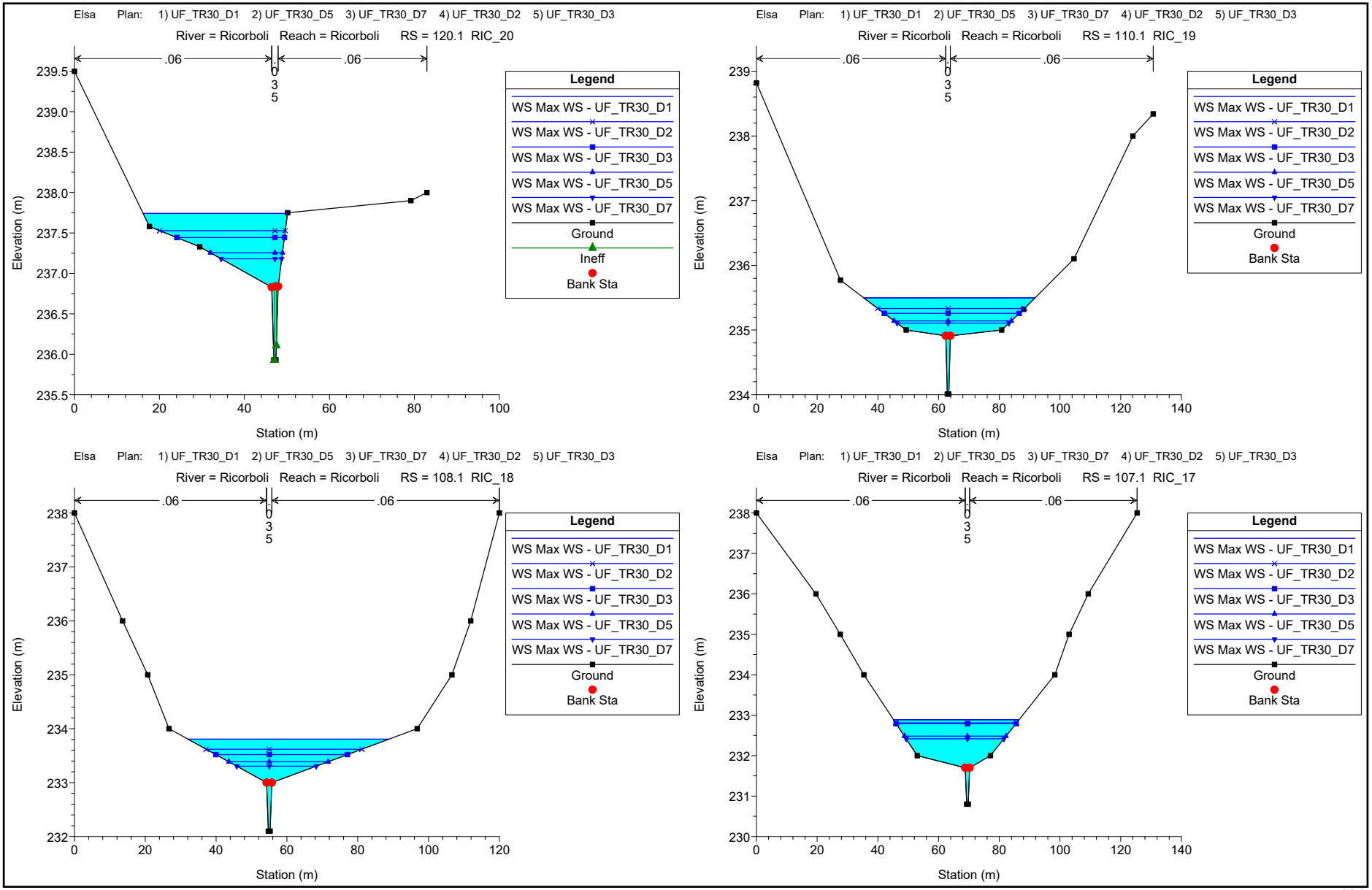
MODELLAZIONE PER TR=30 anni

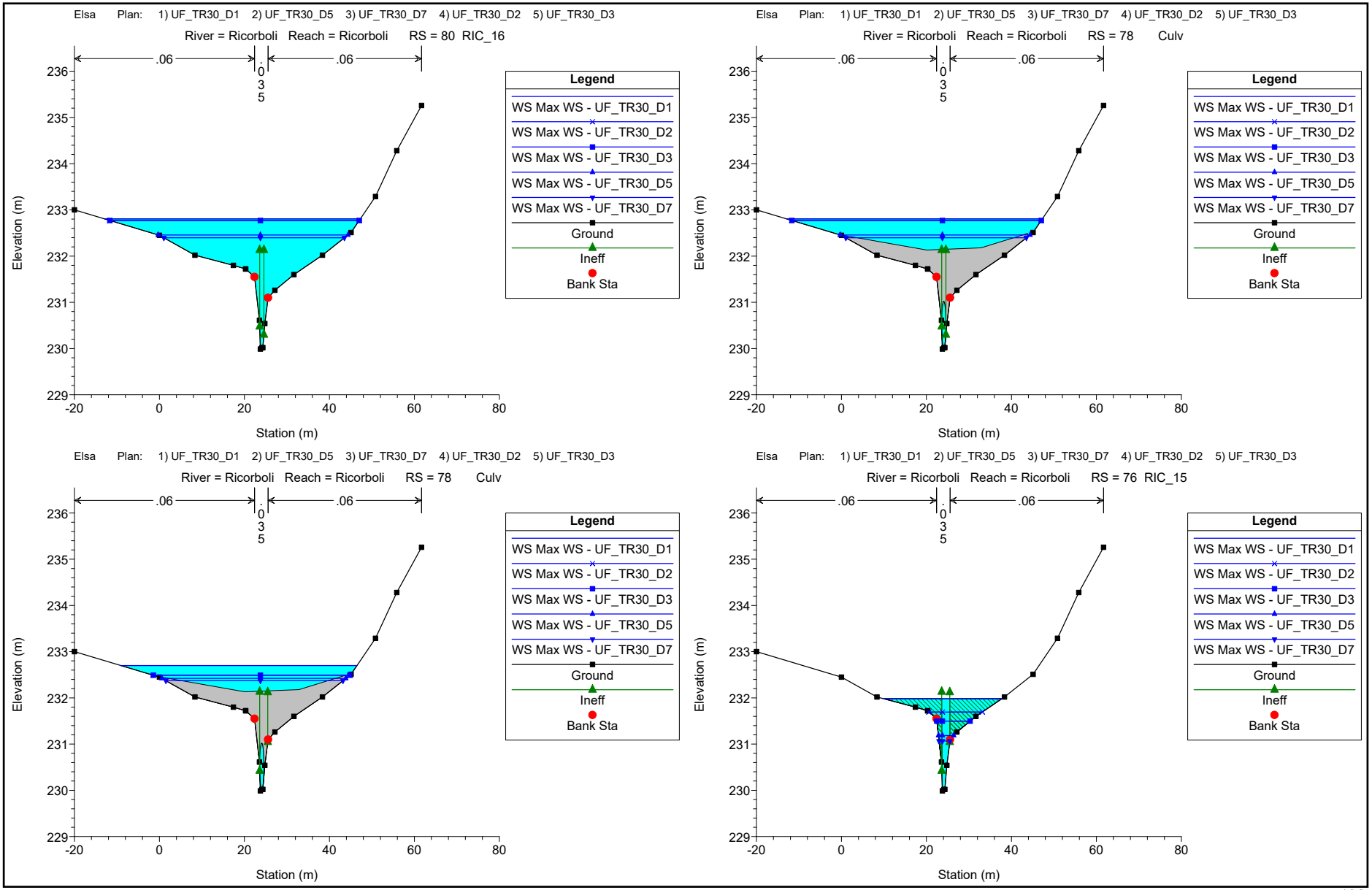
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

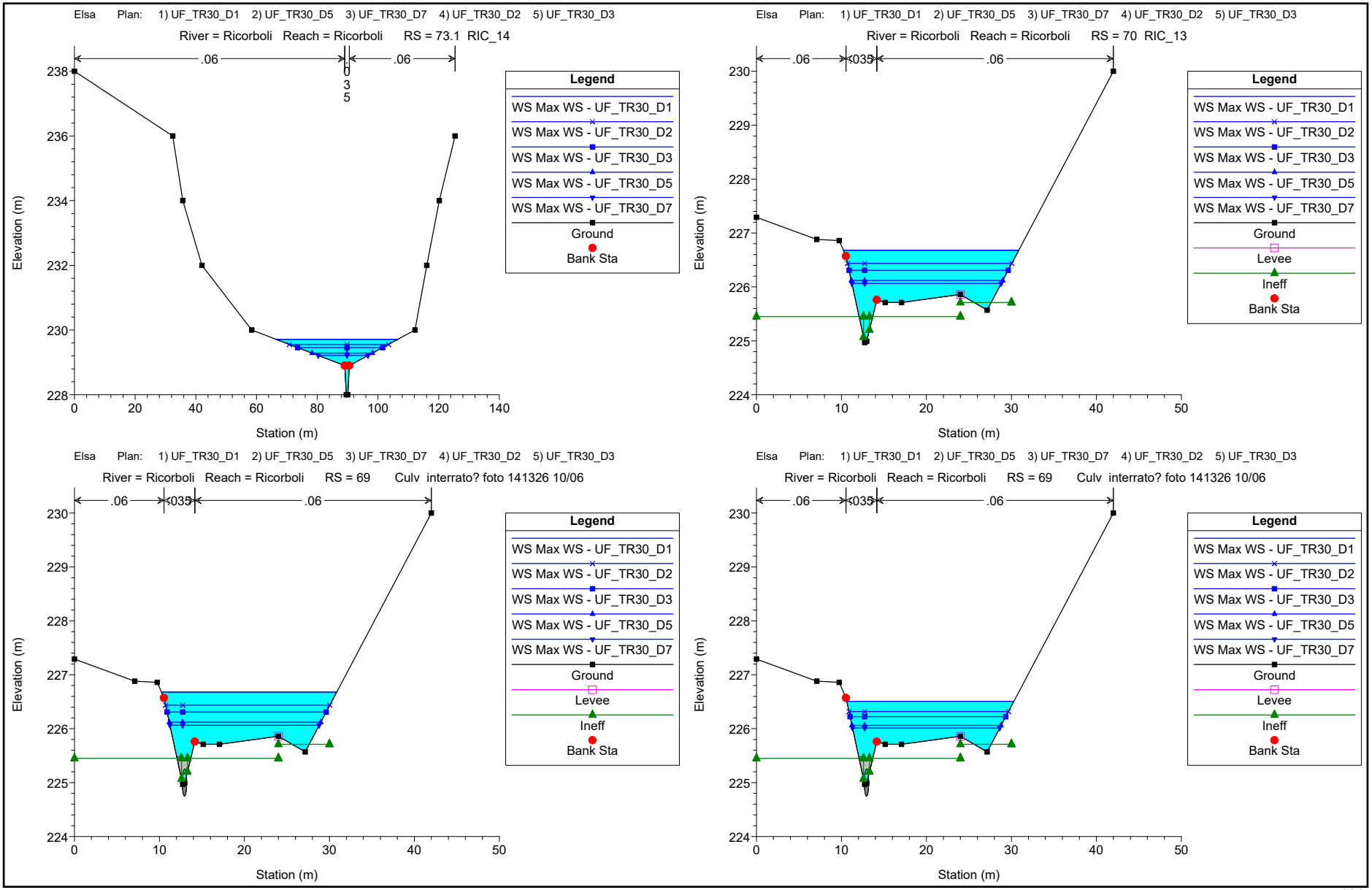
Sezioni Trasversali (da monte verso valle)

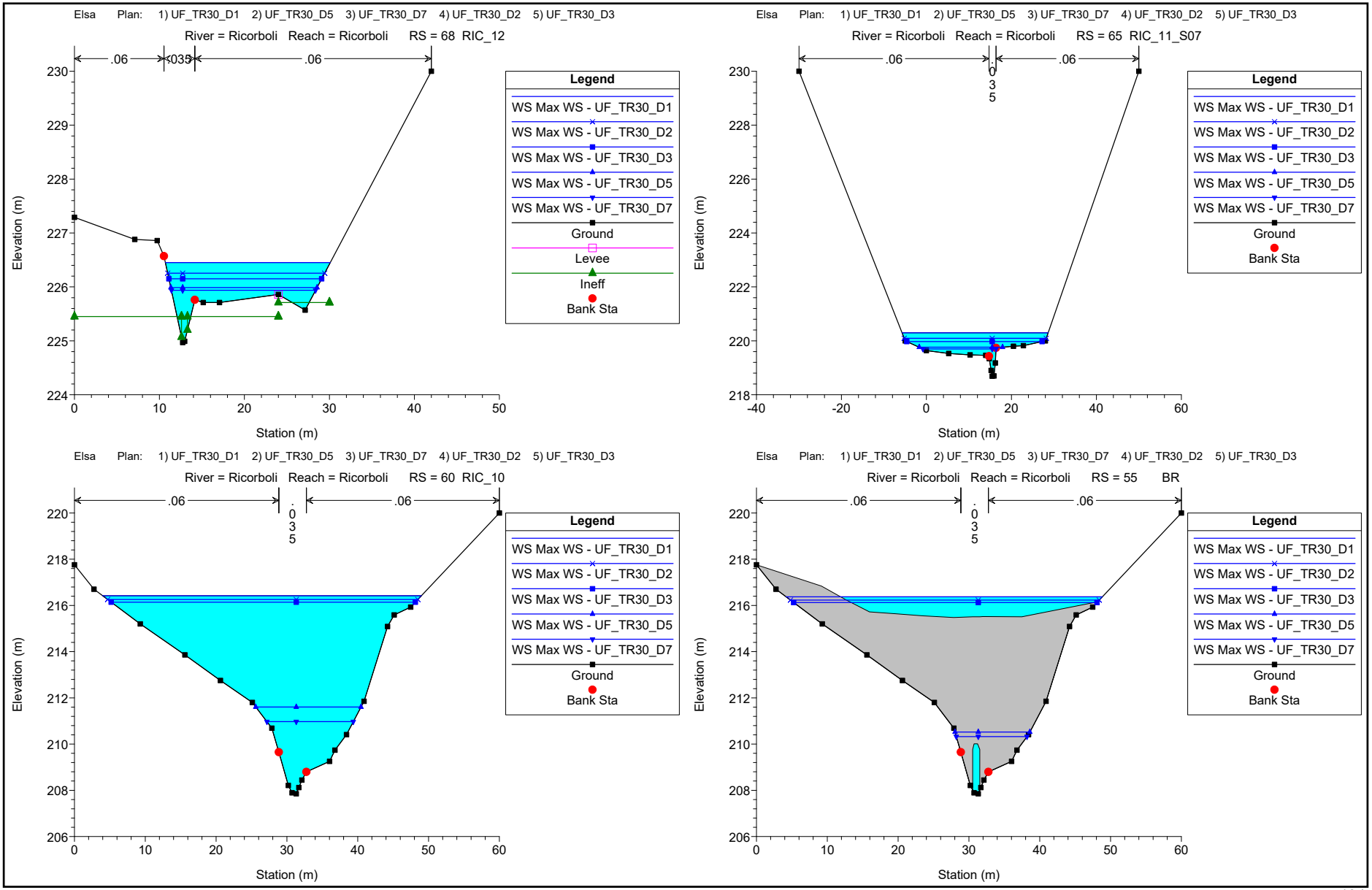

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 200.1 RIC_24
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 190.1 RIC_23
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 185 Culv
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 185 Culv
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

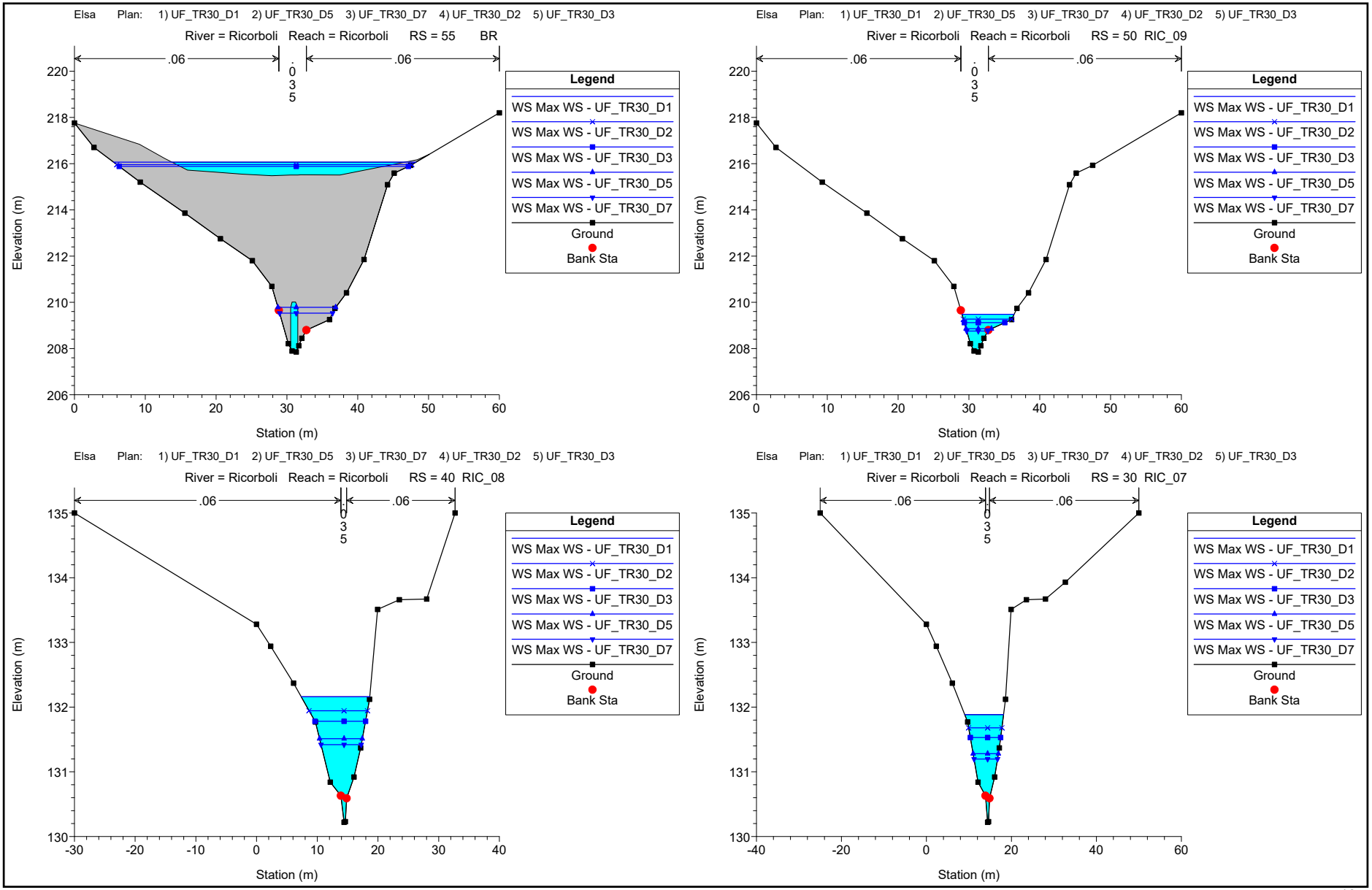

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 180.1 RIC_22
.06
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 170.1 RIC_21
Ineff
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 155 Culv
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 155 Culv

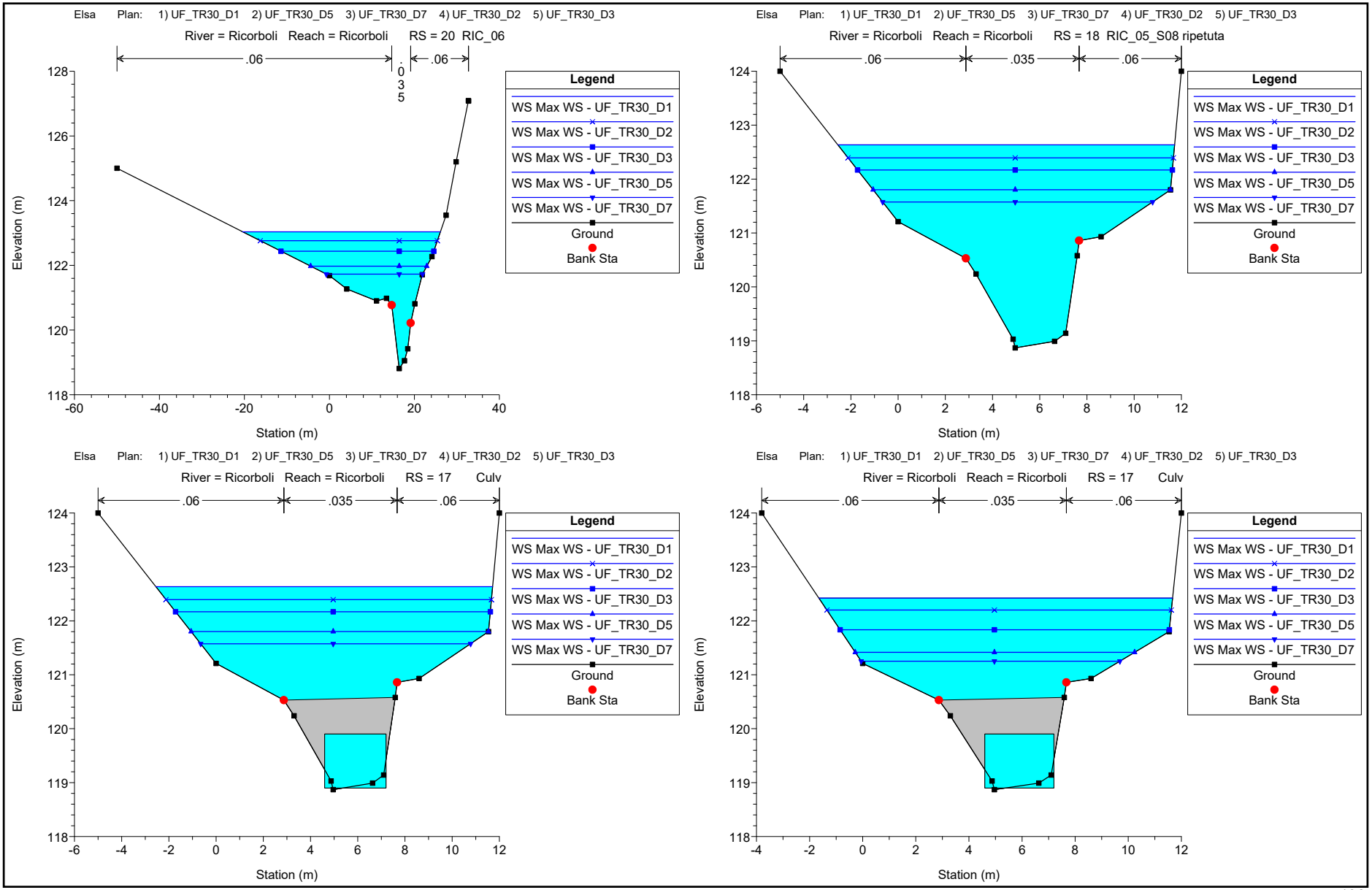

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 120.1 RIC_20
River = Ricorboli Reach = Ricorboli RS = 110.1 RIC_19
River = Ricorboli Reach = Ricorboli RS = 108.1 RIC_18
River = Ricorboli Reach = Ricorboli RS = 107.1 RIC_17
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta

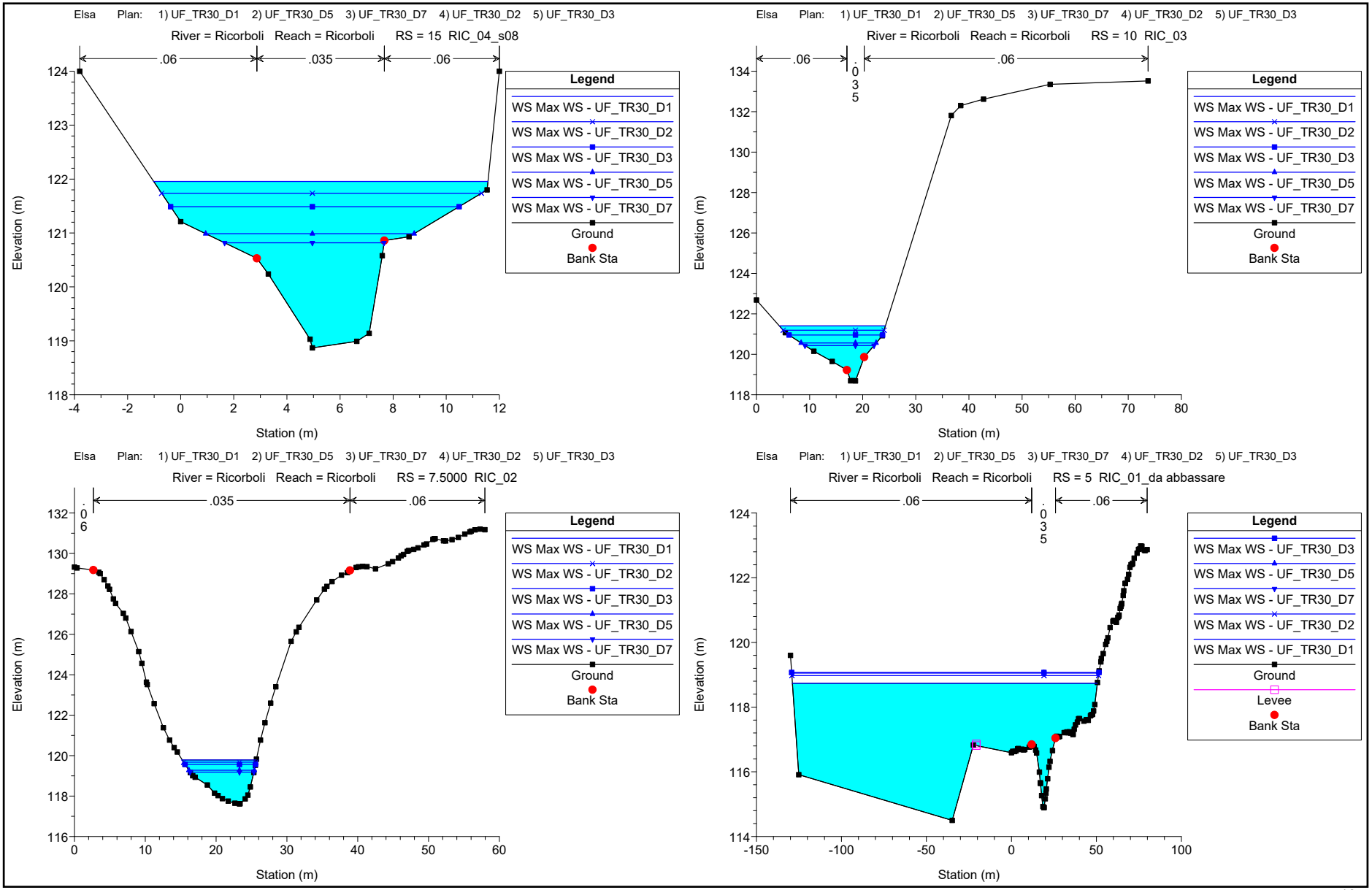

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 80 RIC_16
River = Ricorboli Reach = Ricorboli RS = 78 Culv
River = Ricorboli Reach = Ricorboli RS = 78 Culv
River = Ricorboli Reach = Ricorboli RS = 76 RIC_15
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 73.1 RIC_14
.06
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 70 RIC_13
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 69 Culv interrato? foto 141326 10/06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 69 Culv interrato? foto 141326 10/06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 68 RIC_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 65 RIC_11_S07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 60 RIC_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 55 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 55 BR
River = Ricorboli Reach = Ricorboli RS = 50 RIC_09
River = Ricorboli Reach = Ricorboli RS = 40 RIC_08
River = Ricorboli Reach = Ricorboli RS = 30 RIC_07
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 20 RIC_06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 18 RIC_05_S08 ripetuta
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 17 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 17 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 15 RIC_04_s08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 10 RIC_03
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 7.5000 RIC_02
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Ricorboli Reach = Ricorboli RS = 5 RIC_01_da abbassare
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta

ALLEGATI

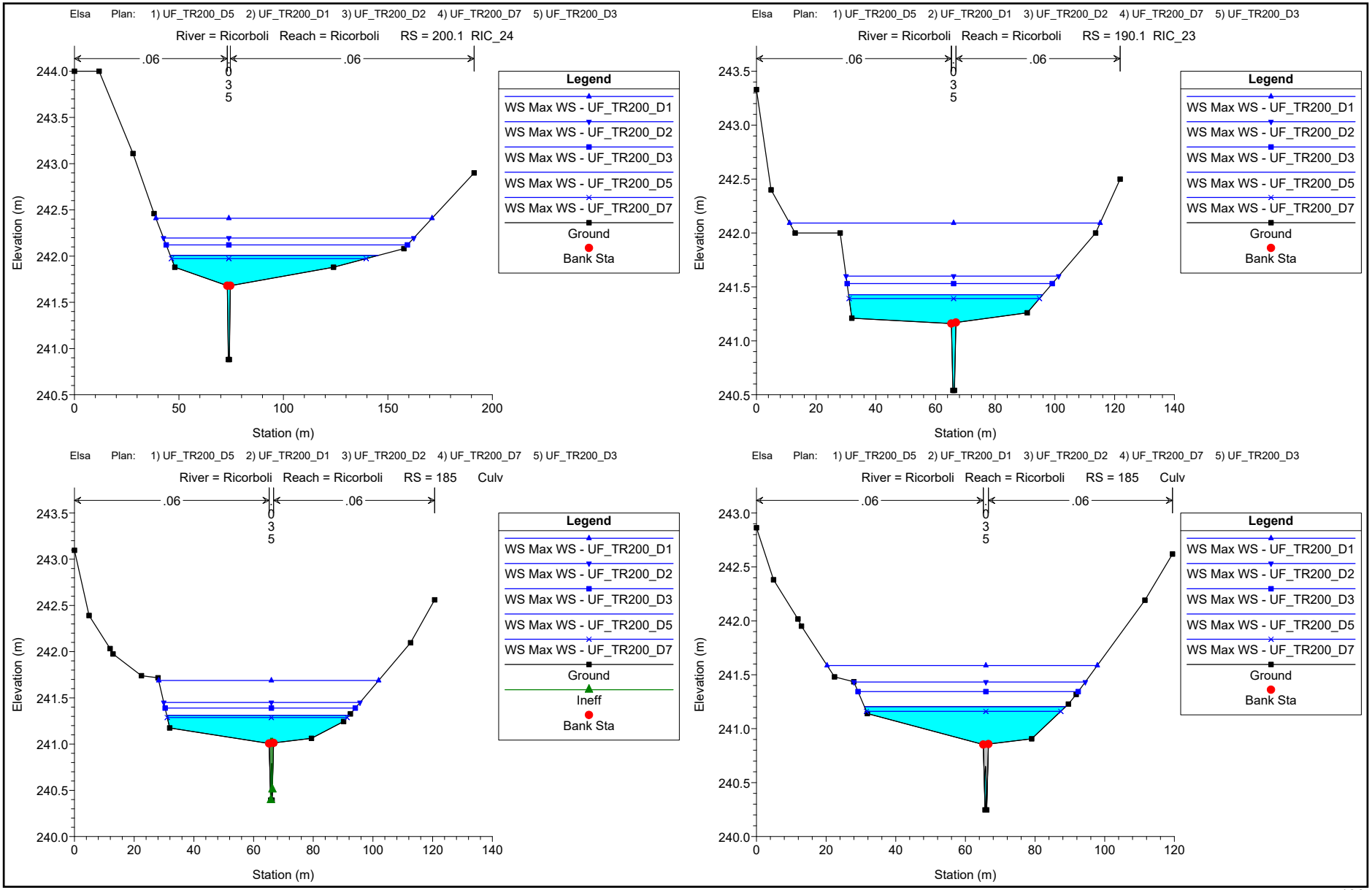
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

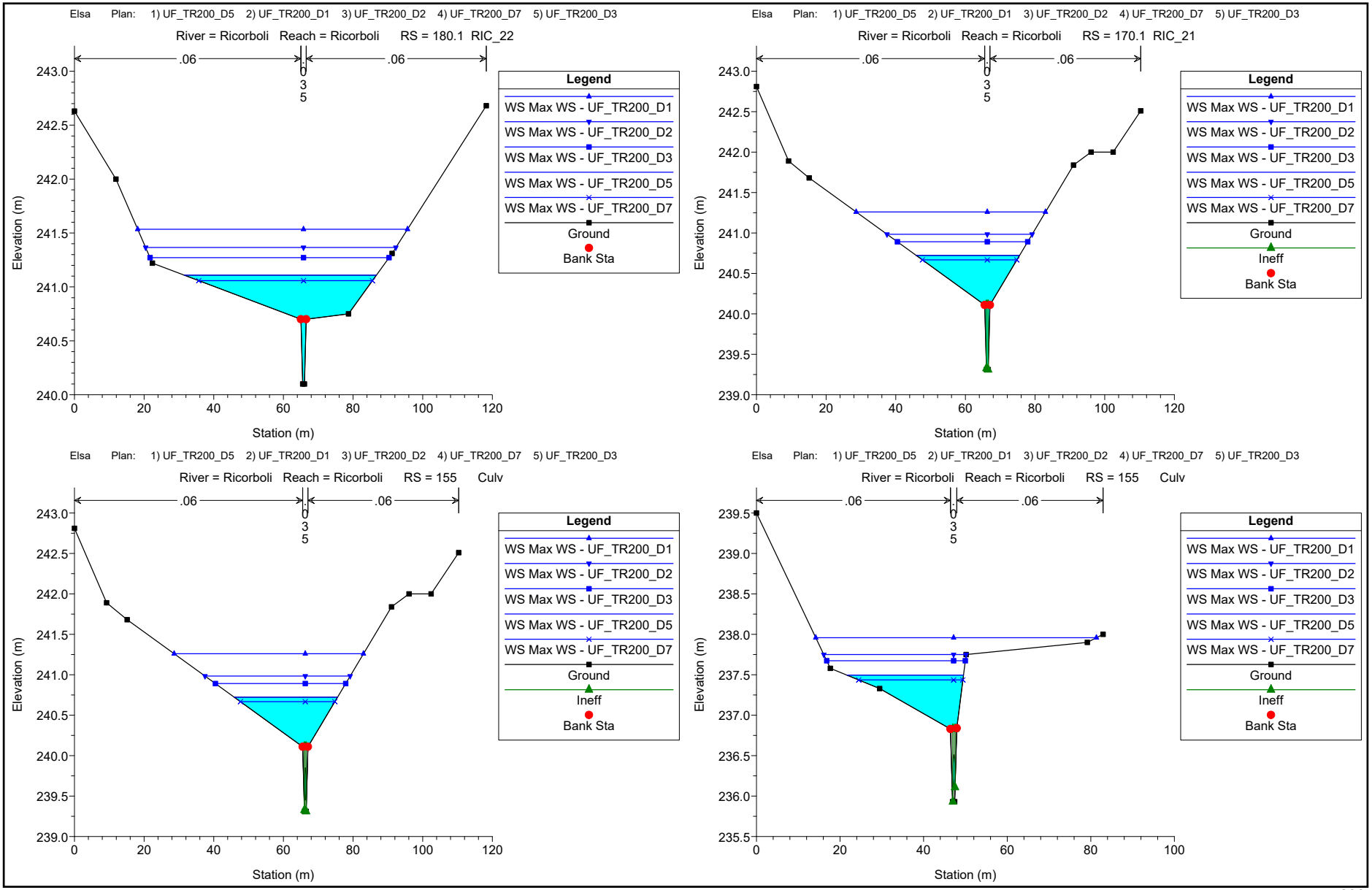
BOTRO DI RICORBOLI

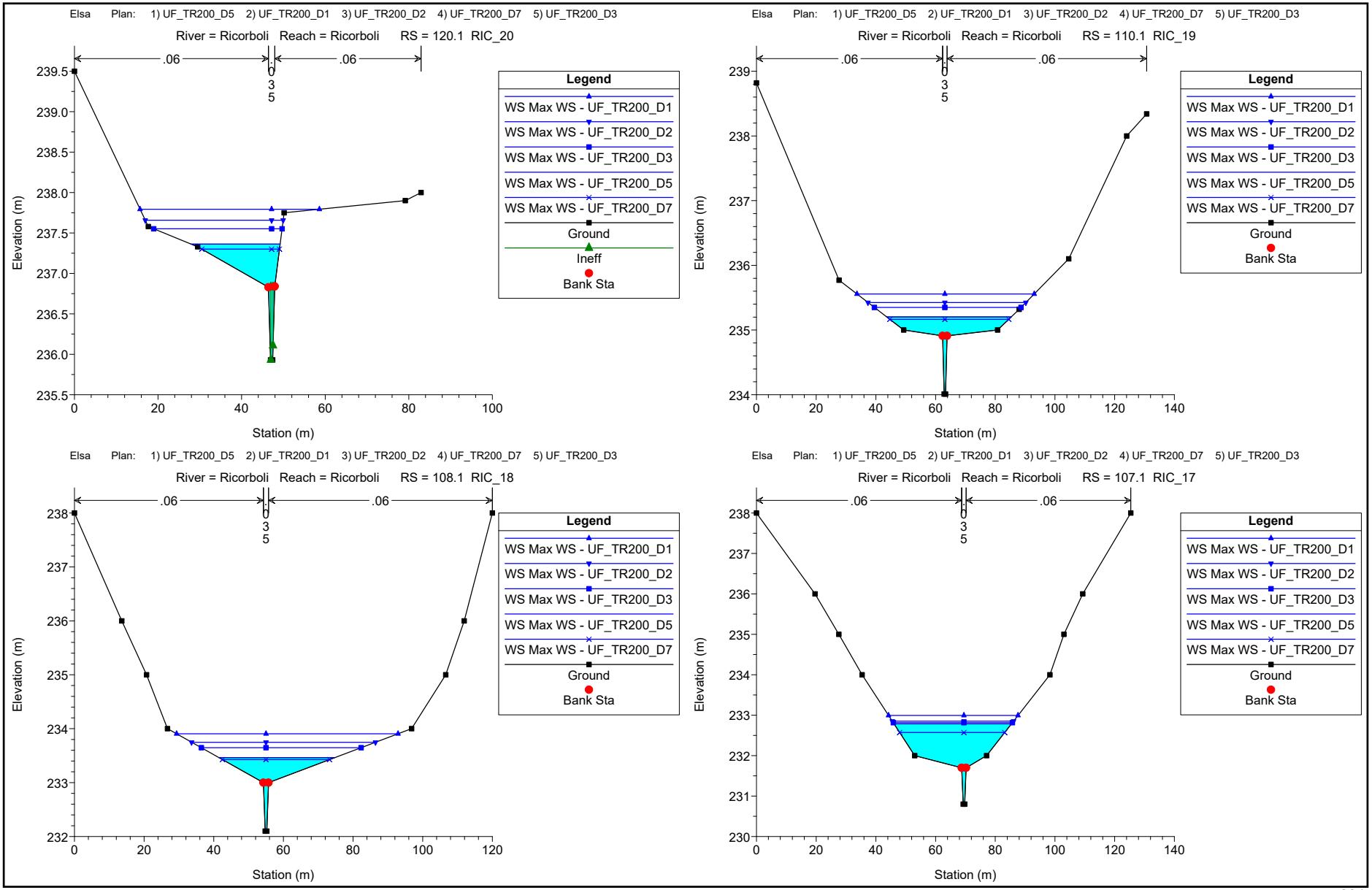
MODELLAZIONE PER TR=200 anni

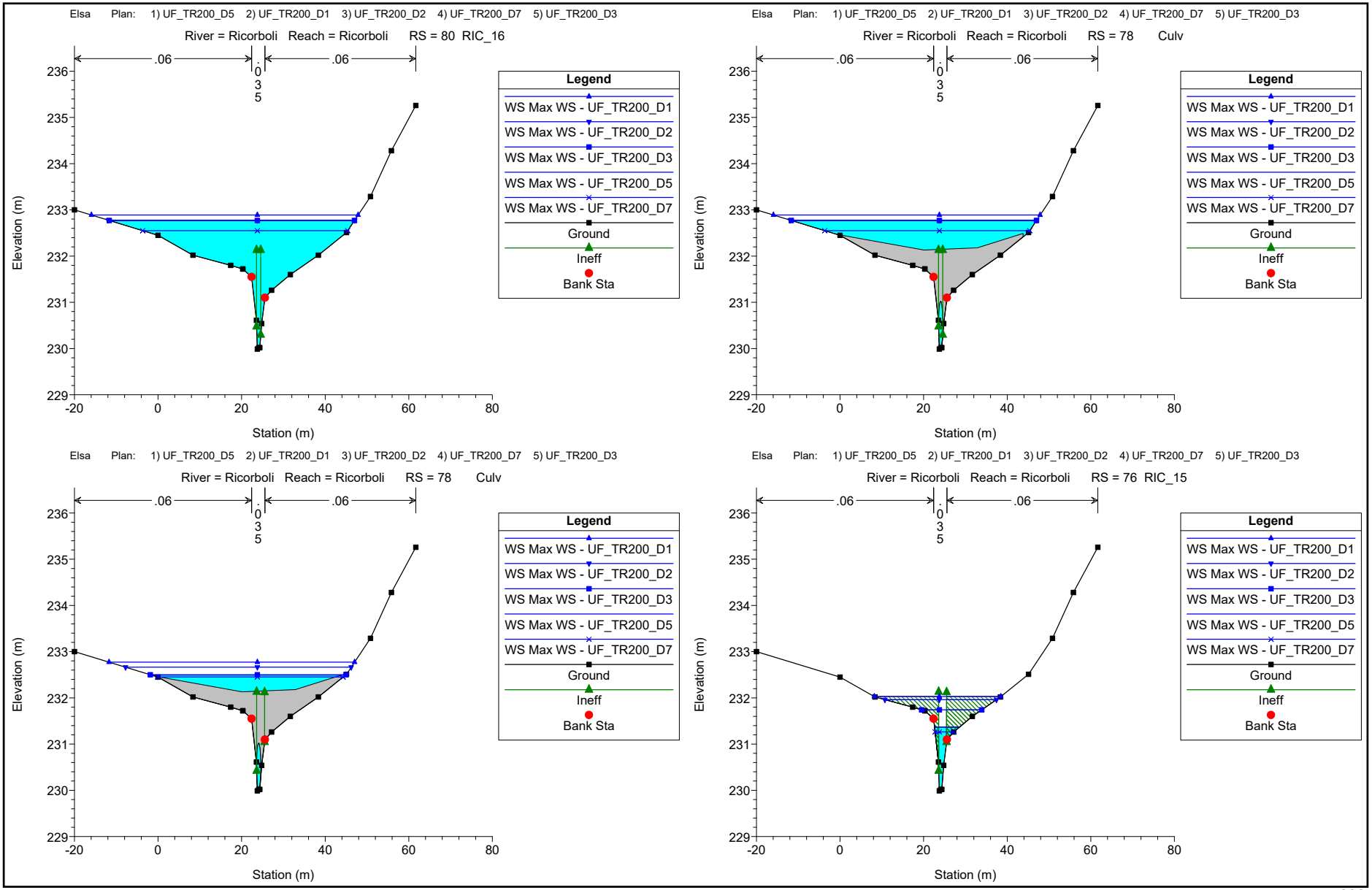
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 200.1 RIC_24
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 190.1 RIC_23
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 185 Culv
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 185 Culv
.06
.06
0
3
5
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 180.1 RIC_22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 170.1 RIC_21
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 155 Culv
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 155 Culv


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 120.1 RIC_20
River = Ricorboli Reach = Ricorboli RS = 110.1 RIC_19
River = Ricorboli Reach = Ricorboli RS = 108.1 RIC_18
River = Ricorboli Reach = Ricorboli RS = 107.1 RIC_17
.06
.06
0.35
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta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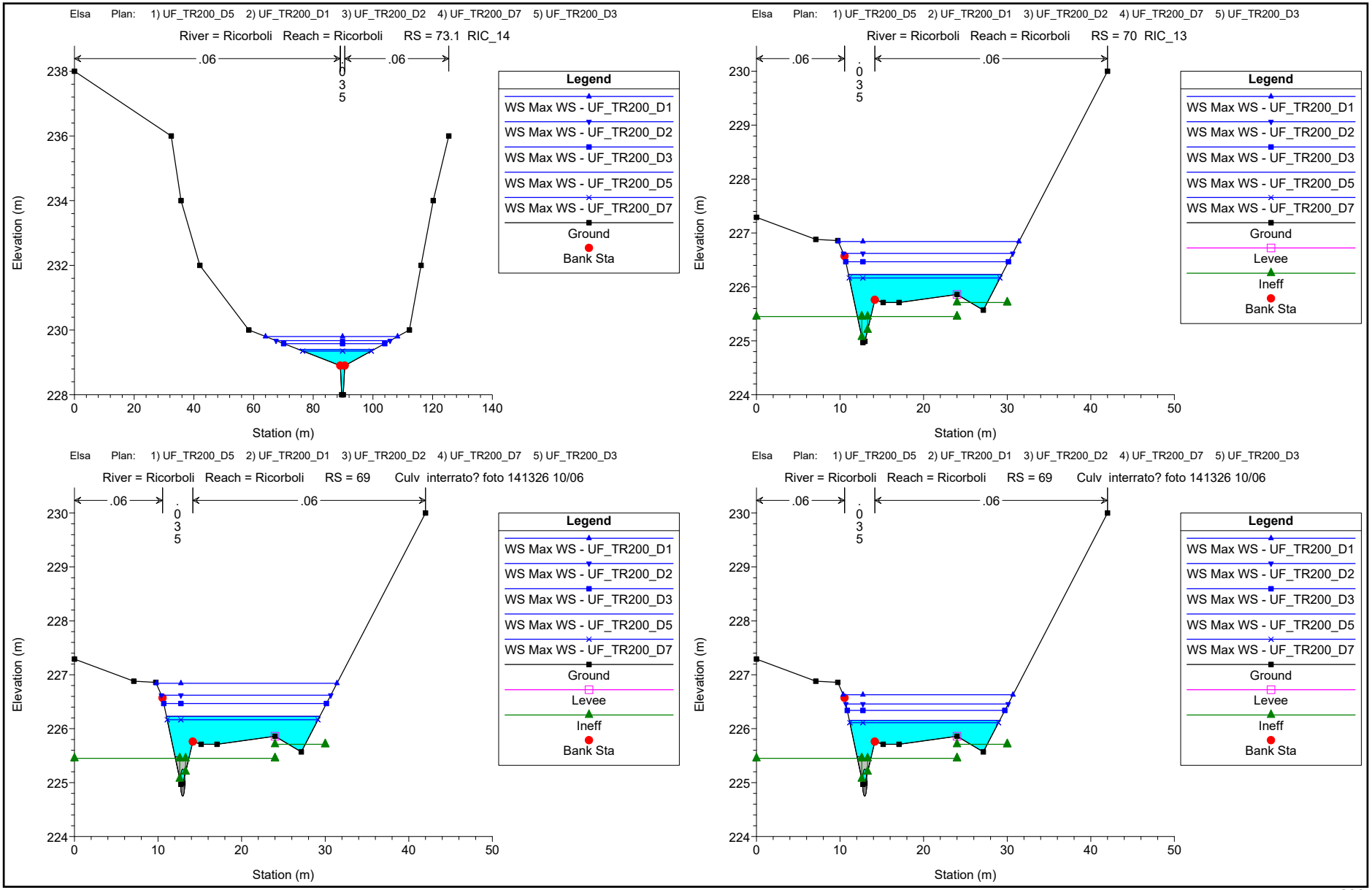
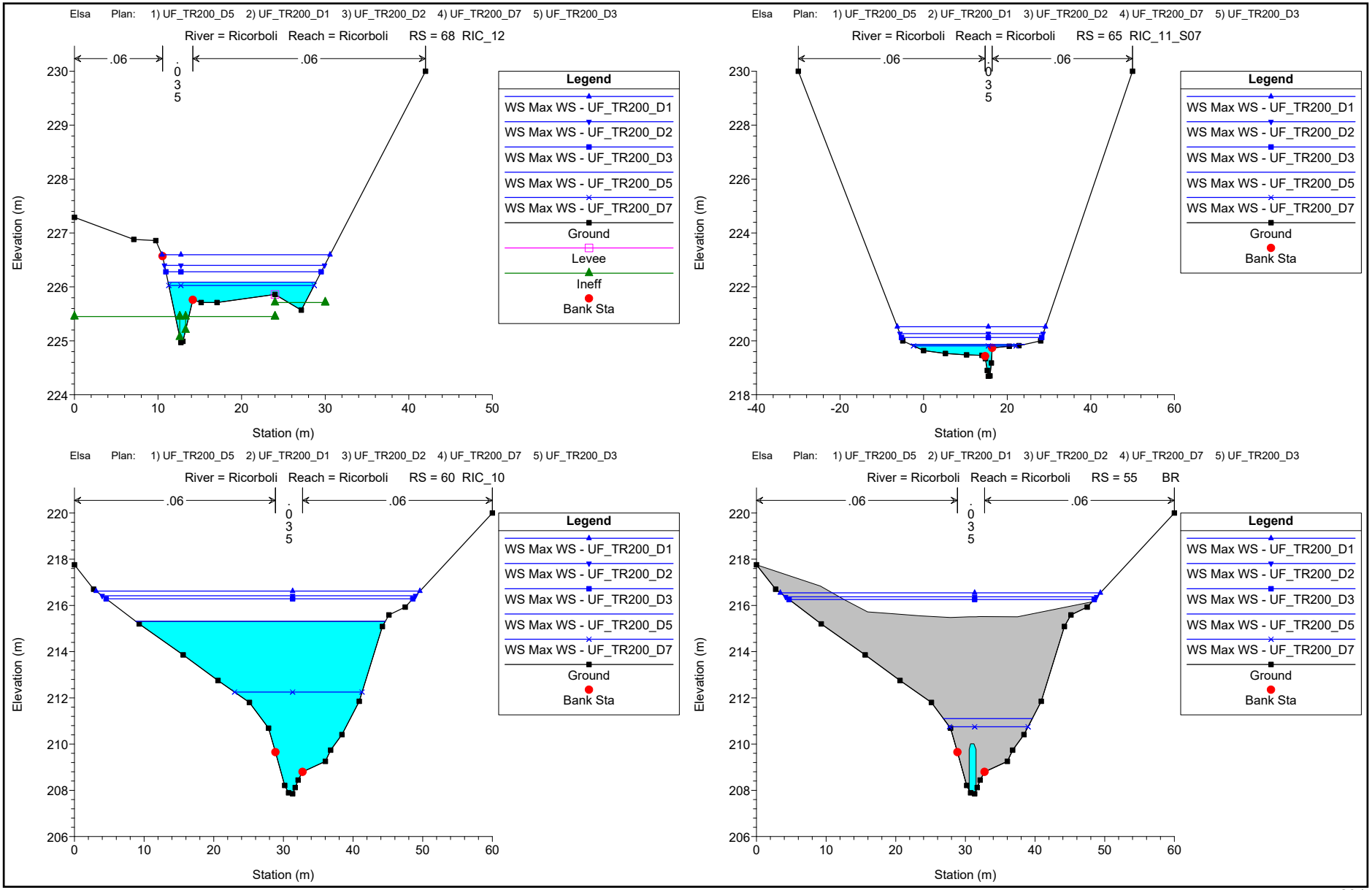
River = Ricorboli Reach = Ricorboli RS = 80 RIC_16
River = Ricorboli Reach = Ricorboli RS = 78 Culv
River = Ricorboli Reach = Ricorboli RS = 78 Culv
River = Ricorboli Reach = Ricorboli RS = 76 RIC_15
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 73.1 RIC_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 70 RIC_13
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 69 Culv interrato? foto 141326 10/06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 69 Culv interrato? foto 141326 10/06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Ineff
Bank Sta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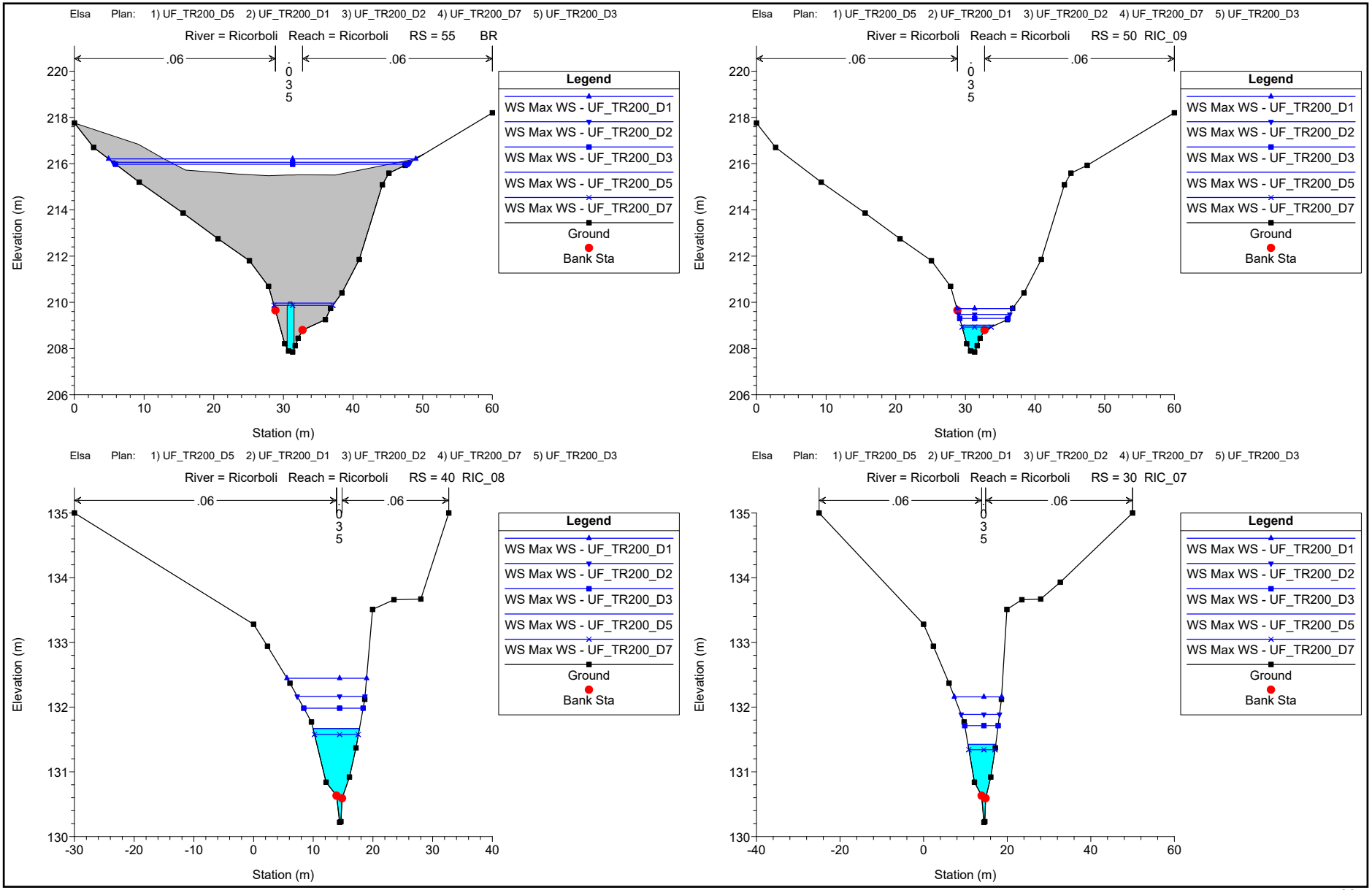
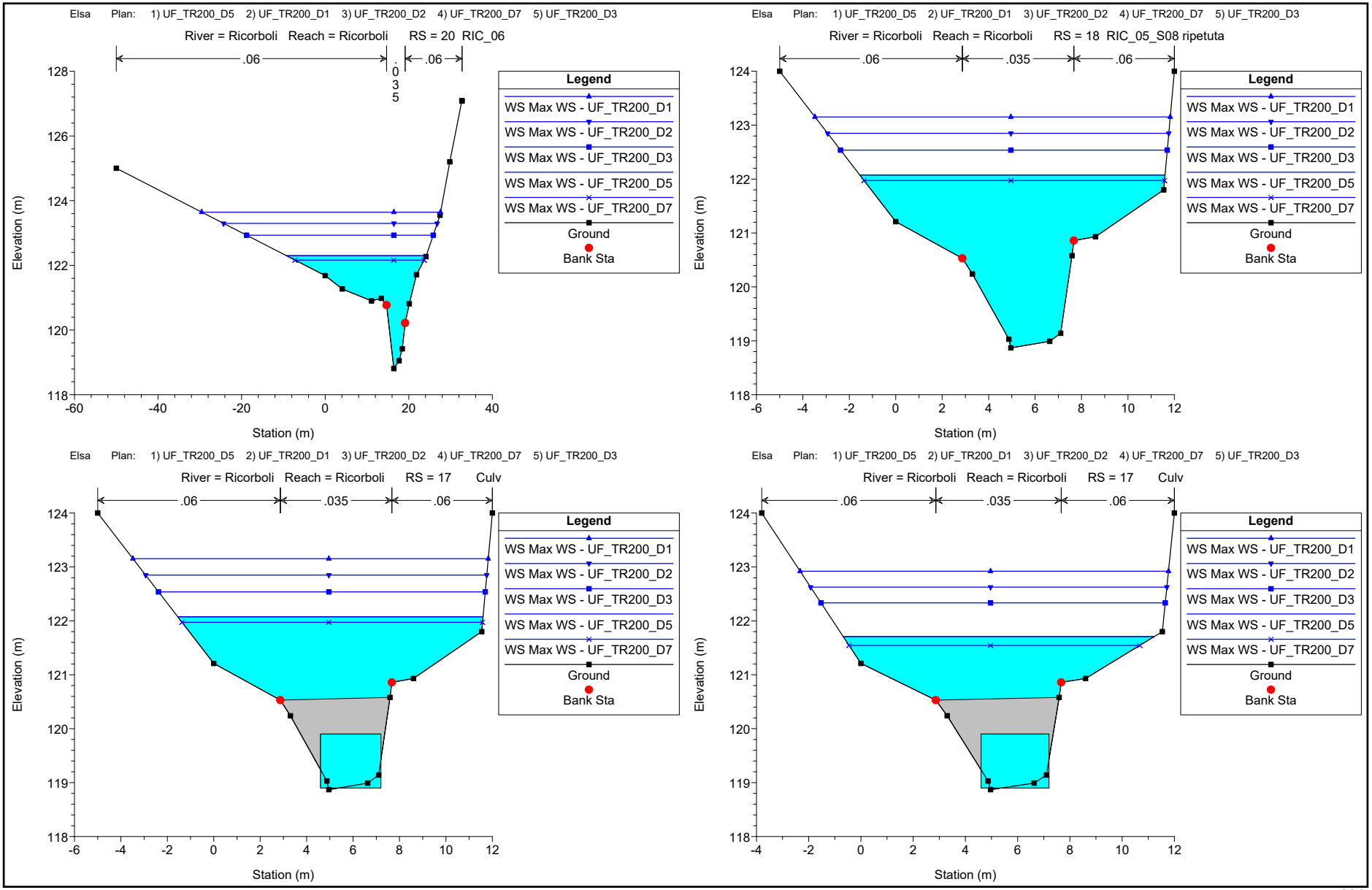
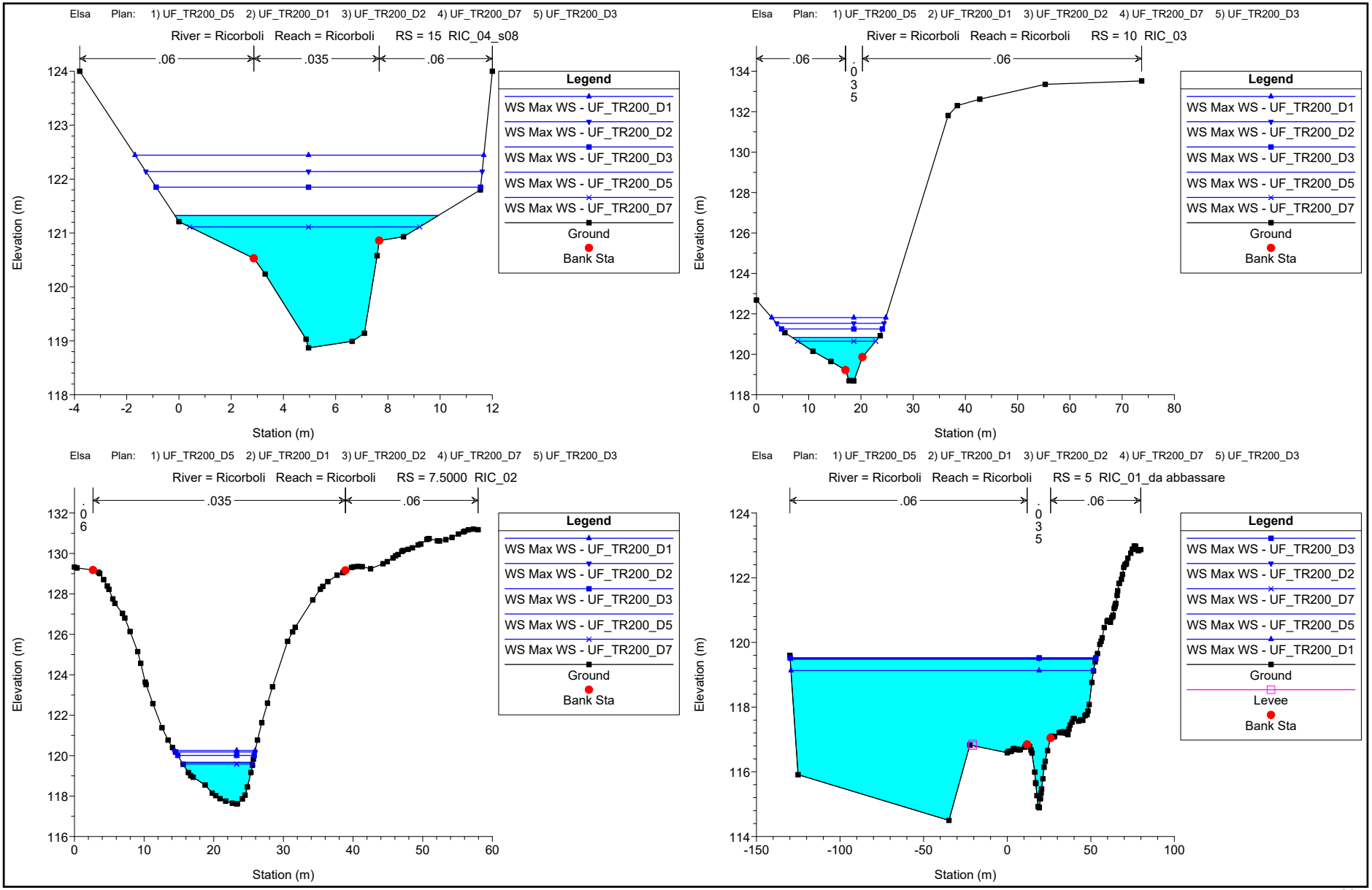
River = Ricorboli Reach = Ricorboli RS = 68 RIC_12
River = Ricorboli Reach = Ricorboli RS = 65 RIC_11_S07
River = Ricorboli Reach = Ricorboli RS = 60 RIC_10
River = Ricorboli Reach = Ricorboli RS = 55 BR
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 55 BR
River = Ricorboli Reach = Ricorboli RS = 50 RIC_09
River = Ricorboli Reach = Ricorboli RS = 40 RIC_08
River = Ricorboli Reach = Ricorboli RS = 30 RIC_07
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 20 RIC_06
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 18 RIC_05_S08 ripetuta
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 17 Culv
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 17 Culv
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 15 RIC_04_s08
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 10 RIC_03
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 7.5000 RIC_02
.06
.035
.06
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Ricorboli Reach = Ricorboli RS = 5 RIC_01_da abbassare
.06
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DI RICORBOLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Ricorboli Reach: Ricorboli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Ricorboli	200.1	Max WS	UF_TR30_D1	29.87	240.88	242.38		242.39	0.001970	0.47	1.07	0.45	63.45	130.25	0.31
Ricorboli	200.1	Max WS	UF_TR30_D5	8.20	240.88	241.95		242.00	0.009534	0.49	1.77	0.45	14.36	89.01	0.63
Ricorboli	200.1	Max WS	UF_TR30_D7	6.50	240.88	241.92		241.98	0.009725	0.44	1.74	0.41	11.79	83.47	0.63
Ricorboli	200.1	Max WS	UF_TR30_D2	20.20	240.88	242.11		242.15	0.007875	0.66	1.81	0.58	30.64	114.67	0.59
Ricorboli	200.1	Max WS	UF_TR30_D3	15.00	240.88	242.05		242.09	0.008396	0.61	1.80	0.53	24.15	107.50	0.60
Ricorboli	190.1	Max WS	UF_TR30_D1	3.97	240.54	242.05		242.05	0.000026	0.06	0.14	0.06	62.87	102.47	0.04
Ricorboli	190.1	Max WS	UF_TR30_D5	8.21	240.54	241.37		241.44	0.015565	0.66	2.07	0.56	10.95	62.90	0.84
Ricorboli	190.1	Max WS	UF_TR30_D7	6.50	240.54	241.34	241.36	241.41	0.015778	0.60	2.02	0.50	9.22	61.90	0.84
Ricorboli	190.1	Max WS	UF_TR30_D2	20.21	240.54	241.52		241.59	0.014541	0.95	2.32	0.82	20.76	68.27	0.84
Ricorboli	190.1	Max WS	UF_TR30_D3	15.01	240.54	241.47		241.53	0.013899	0.83	2.16	0.72	17.26	66.40	0.81
Ricorboli	185			Culvert											
Ricorboli	180.1	Max WS	UF_TR30_D1	38.67	240.10	241.46		241.53	0.008376	0.93	2.34	0.99	38.02	75.03	0.69
Ricorboli	180.1	Max WS	UF_TR30_D5	8.20	240.10	241.02		241.11	0.013509	0.58	2.17	0.76	9.85	46.32	0.81
Ricorboli	180.1	Max WS	UF_TR30_D7	6.50	240.10	240.97	240.99	241.07	0.015375	0.55	2.20	0.73	7.65	41.07	0.86
Ricorboli	180.1	Max WS	UF_TR30_D2	20.21	240.10	241.25		241.32	0.009879	0.72	2.22	0.89	22.94	67.87	0.73
Ricorboli	180.1	Max WS	UF_TR30_D3	14.94	240.10	241.17		241.24	0.010641	0.65	2.17	0.84	17.71	61.53	0.74
Ricorboli	170.1	Max WS	UF_TR30_D1	37.32	239.31	241.15		241.31	0.012605	1.21	3.18	1.21	27.07	49.18	0.81
Ricorboli	170.1	Max WS	UF_TR30_D5	8.20	239.31	240.63		240.77	0.011836	0.73	2.36	0.73	7.70	25.23	0.73
Ricorboli	170.1	Max WS	UF_TR30_D7	6.50	239.31	240.57		240.71	0.010931	0.66	2.19	0.66	6.42	22.79	0.70
Ricorboli	170.1	Max WS	UF_TR30_D2	20.20	239.31	240.87		241.05	0.014794	1.07	3.03	1.07	15.36	36.62	0.85
Ricorboli	170.1	Max WS	UF_TR30_D3	15.03	239.31	240.79		240.95	0.013831	0.95	2.80	0.95	12.30	32.56	0.81
Ricorboli	155			Culvert											
Ricorboli	120.1	Max WS	UF_TR30_D1	37.32	235.93	237.74	237.88	238.13	0.028568	1.74	4.45	1.57	17.98	33.97	1.16
Ricorboli	120.1	Max WS	UF_TR30_D5	8.20	235.93	237.26	237.38	237.61	0.025986	0.96	3.28	0.90	4.83	16.97	1.04
Ricorboli	120.1	Max WS	UF_TR30_D7	6.50	235.93	237.18	237.31	237.56	0.027391	0.86	3.20	0.81	3.66	14.24	1.05
Ricorboli	120.1	Max WS	UF_TR30_D2	20.20	235.93	237.53	237.66	237.92	0.029137	1.34	4.07	1.33	11.09	29.56	1.14
Ricorboli	120.1	Max WS	UF_TR30_D3	15.03	235.93	237.44	237.59	237.80	0.026617	1.19	3.71	1.16	8.75	25.33	1.08
Ricorboli	110.1	Max WS	UF_TR30_D1	36.66	234.01	235.50	235.48	235.67	0.021956	1.32	3.33	1.40	24.31	56.47	0.97
Ricorboli	110.1	Max WS	UF_TR30_D5	8.20	234.01	235.14	235.20	235.32	0.024242	0.76	2.76	0.79	7.36	38.65	0.96
Ricorboli	110.1	Max WS	UF_TR30_D7	6.50	234.01	235.11	235.16	235.30	0.023972	0.67	2.66	0.69	6.04	36.88	0.95
Ricorboli	110.1	Max WS	UF_TR30_D2	20.20	234.01	235.33	235.34	235.48	0.021599	1.07	2.99	1.13	15.69	48.34	0.94
Ricorboli	110.1	Max WS	UF_TR30_D3	15.00	234.01	235.26	235.29	235.42	0.023413	0.98	2.95	1.03	12.12	44.47	0.97
Ricorboli	108.1	Max WS	UF_TR30_D1	35.01	232.10	233.81		233.99	0.018780	1.25	3.44	1.25	24.38	56.78	0.93
Ricorboli	108.1	Max WS	UF_TR30_D5	8.20	232.10	233.39	233.45	233.61	0.019982	0.79	2.80	0.79	6.62	28.05	0.90
Ricorboli	108.1	Max WS	UF_TR30_D7	6.50	232.10	233.31	233.40	233.60	0.025566	0.76	2.99	0.76	4.56	22.45	1.00
Ricorboli	108.1	Max WS	UF_TR30_D2	20.20	232.10	233.62	233.65	233.82	0.020165	1.08	3.24	1.08	15.00	44.01	0.94
Ricorboli	108.1	Max WS	UF_TR30_D3	15.01	232.10	233.52	233.58	233.75	0.022899	1.03	3.27	1.03	10.95	37.17	0.99
Ricorboli	107.1	Max WS	UF_TR30_D1	33.60	230.80	232.89		232.95	0.004166	0.96	1.90	0.84	33.81	41.34	0.45
Ricorboli	107.1	Max WS	UF_TR30_D5	8.20	230.80	232.48		232.50	0.001280	0.40	0.89	0.36	18.59	33.44	0.24
Ricorboli	107.1	Max WS	UF_TR30_D7	6.50	230.80	232.42		232.43	0.001124	0.35	0.81	0.32	16.44	32.17	0.22
Ricorboli	107.1	Max WS	UF_TR30_D2	20.20	230.80	232.81		232.84	0.001979	0.63	1.27	0.56	30.61	39.80	0.31
Ricorboli	107.1	Max WS	UF_TR30_D3	14.96	230.80	232.79		232.81	0.001151	0.48	0.96	0.42	29.95	39.49	0.24
Ricorboli	80	Max WS	UF_TR30_D1	33.16	229.99	232.81		232.86	0.001696	0.48	1.59	0.64	46.89	60.19	0.35
Ricorboli	80	Max WS	UF_TR30_D5	8.20	229.99	232.46		232.47	0.000320	0.18	0.61	0.22	28.64	44.68	0.15
Ricorboli	80	Max WS	UF_TR30_D7	6.50	229.99	232.40		232.40	0.000251	0.15	0.53	0.19	25.95	42.49	0.13
Ricorboli	80	Max WS	UF_TR30_D2	11.97	229.99	232.77		232.78	0.000245	0.18	0.60	0.24	44.88	58.71	0.13
Ricorboli	80	Max WS	UF_TR30_D3	11.97	229.99	232.77		232.78	0.000245	0.18	0.60	0.24	44.87	58.69	0.13
Ricorboli	78			Culvert											
Ricorboli	76	Max WS	UF_TR30_D1	33.15	229.99	231.98	232.31	238.06	0.118580		10.92		3.04	27.81	2.76
Ricorboli	76	Max WS	UF_TR30_D5	8.20	229.99	231.18	231.62	232.66	0.072622		5.39		1.52	3.58	1.92
Ricorboli	76	Max WS	UF_TR30_D7	6.50	229.99	231.07	231.44	232.34	0.077141		5.00		1.30	2.56	1.93
Ricorboli	76	Max WS	UF_TR30_D2	20.20	229.99	231.69	232.13	235.05	0.085192		8.11		2.49	12.55	2.26
Ricorboli	76	Max WS	UF_TR30_D3	15.02	229.99	231.50	232.13	234.07	0.081178		7.10		2.12	7.84	2.15
Ricorboli	73.1	Max WS	UF_TR30_D1	32.56	228.00	229.71	229.79	230.04	0.027186	1.51	4.16	1.51	17.86	40.19	1.12
Ricorboli	73.1	Max WS	UF_TR30_D5	8.20	228.00	229.29	229.40	229.64	0.027749	0.93	3.30	0.93	5.04	19.90	1.06
Ricorboli	73.1	Max WS	UF_TR30_D7	6.50	228.00	229.21	229.35	229.61	0.030764	0.85	3.30	0.85	3.70	16.38	1.10
Ricorboli	73.1	Max WS	UF_TR30_D2	20.20	228.00	229.55	229.64	229.87	0.026313	1.28	3.78	1.28	12.08	32.64	1.08
Ricorboli	73.1	Max WS	UF_TR30_D3	15.01	228.00	229.46	229.56	229.78	0.027335	1.18	3.65	1.17	9.12	28.00	1.08
Ricorboli	70	Max WS	UF_TR30_D1	32.34	224.97	226.68		226.89	0.010632	0.24	2.75	1.52	18.06	20.63	0.84
Ricorboli	70	Max WS	UF_TR30_D5	8.20	224.97	226.12		226.23	0.009521		1.92	0.81	7.31	17.82	0.74
Ricorboli	70	Max WS	UF_TR30_D7	6.50	224.97	226.06		226.16	0.008894		1.78	0.71	6.32	17.56	0.71
Ricorboli	70	Max WS	UF_TR30_D2	20.20	224.97	226.44		226.60	0.010591		2.41	1.26	13.20	19.32	0.81
Ricorboli	70	Max WS	UF_TR30_D3	15.01	224.97	226.31		226.45	0.010569		2.26	1.11	10.78	18.72	0.80
Ricorboli	69			Culvert											
Ricorboli	68	Max WS	UF_TR30_D1	32.34	224.97	226.45	226.50	226.84	0.025397		3.76	1.98	13.50	19.40	1.26
Ricorboli	68	Max WS	UF_TR30_D5	8.20	224.97	225.99	226.07	226.26	0.025760		2.87	1.01	5.03	17.21	1.19
Ricorboli	68	Max WS	UF_TR30_D7	6.50	224.97	225.94	226.02	226.20	0.025944		2.76	0.87	4.15	16.96	1.18
Ricorboli	68	Max WS	UF_TR30_D2	20.20	224.97	226.26	226.32	226.58	0.025338		3.40	1.61	9.78	18.47	1.23
Ricorboli	68	Max WS	UF_TR30_D3	15.01	224.97	226.15	226.22	226.45	0.025802		3.22	1.41	7.89	17.97	1.22
Ricorboli	65	Max WS	UF_TR30_D1	30.23	218.69	220.30		220.44	0.011106	1.36	2.67	1.01	21.53	34.40	0.74
Ricorboli	65	Max WS	UF_TR30_D5	8.20	218.69	219.76	219.86	220.06	0.031985	1.09	3.21	0.15	4.98	19.60	1.15
Ricorboli	65	Max WS	UF_TR30_D7	6.50	218.69	219.70	219.81	220.04	0.035477	0.97	3.24		3.88	17.22	1.21
Ricorboli	65	Max WS	UF_TR30_D2	20.20	218.69	220.09		220.25	0.015314	1.28	2.81	0.82	14.61	33.44	0.85
Ricorboli	65	Max WS	UF_TR30_D3	15.01	218.69	219.97	220.01	220.17	0.019618	1.23	2.94	0.64	10.63	31.84	0.94
Ricorboli	60	Max WS	UF_TR30_D1	28.87	207.85	216.42	210.01	216.42	0.000014	0.12	0.36	0.14	166.57	45.01	0.04
Ricorboli	60	Max WS	UF_TR30_D5	8.20	207.85	211.60	209.17	211.61	0.000067	0.10	0.43	0.19	28.53	14.87	0.08
Ricorboli	60	Max WS	UF_TR30_D7	6.50	207.85	210.97	209.03	210.98	0.000103	0.09	0.46	0.20	19.97	12.20	0.09
Ricorboli	60	Max WS	UF_TR30_D2	20.20	207.85	216.26	209.72	216.26	0.000007	0.09	0.26	0.10	159.35	43.81	0.03
Ricorboli	60	Max WS	UF_TR30_D3	15.00	207.85	216.14	209.55	216.14	0.000004	0.07	0.20	0.08	154.33	42.94	0.02
Ricorboli	55			Bridge											
Ricorboli	50	Max WS	UF_TR30_D1	28.87	207.85	209.48	210.01	211.27	0.057571		6.26	2.21	5.60	7.36	1.91
Ricorboli	50	Max WS	UF_TR30_D5	8.20	207.85	208.86	209.17	209.77	0.054301		4.23	0.37	1.95	3.59	1.73
Ricorboli	50	Max WS	UF_TR30_D7	6.50	207.85	208.75	209.03	209.58	0.057767		4.03		1.61	2.98	1.75
Ricorboli	50	Max WS	UF_TR30_D2	20.20	207.85	209.27	209.72	210.84	0.058094		5.72	1.55	4.12	6.84	1.89
Ricorboli	50	Max WS	UF_TR30_D3	15.00	207.85	209.12	209.55	210.47	0.057187		5.22	1.17	3.16	5.72	1.84
Ricorboli	40	Max WS	UF_TR30_D1	28.52	130.22	132.16	132.31	132.83	0.026135	2.22	5.48	2.38	10.17	11.31	1.31
Ricorboli	40	Max WS	UF_TR30_D5	8.20	130.22	131.51	131.51	131.81	0.017572	1.45	3.32	1.37	4.36	7.05	1.00
Ricorboli	40	Max WS	UF_TR30_D7	6.50	130.22	131.42	131.41	131.68	0.016504	1.32	3.04	1.23	3.73	6.63	0.95

HEC-RAS River: Ricorboli Reach: Ricorboli Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Ricorboli	40	Max WS	UF_TR30_D2	20.20	130.22	131.94	132.05	132.50	0.024141	2.03	4.83	2.07	7.89	9.63	1.23
Ricorboli	40	Max WS	UF_TR30_D3	15.00	130.22	131.78	131.80	132.23	0.021544	1.88	4.24	1.80	6.43	8.33	1.14
Ricorboli	30	Max WS	UF_TR30_D1	28.52	130.22	131.88	132.31	133.15	0.057216	3.09	7.24	3.10	7.33	9.15	1.88
Ricorboli	30	Max WS	UF_TR30_D5	8.20	130.22	131.28	131.51	132.00	0.051821	2.07	4.91	1.93	2.86	5.95	1.65
Ricorboli	30	Max WS	UF_TR30_D7	6.50	130.22	131.20	131.41	131.86	0.051587	1.89	4.59	1.77	2.38	5.53	1.62
Ricorboli	30	Max WS	UF_TR30_D2	20.20	130.22	131.68	132.05	132.76	0.055413	2.87	6.47	2.72	5.61	7.83	1.81
Ricorboli	30	Max WS	UF_TR30_D3	15.00	130.22	131.53	131.80	132.47	0.054528	2.59	5.92	2.45	4.49	7.14	1.76
Ricorboli	20	Max WS	UF_TR30_D1	28.35	118.81	123.04		123.06	0.000242	0.29	0.87	0.28	66.12	46.54	0.15
Ricorboli	20	Max WS	UF_TR30_D5	8.18	118.81	121.97		121.98	0.000139	0.15	0.52	0.15	26.72	27.34	0.11
Ricorboli	20	Max WS	UF_TR30_D7	6.49	118.81	121.73		121.74	0.000146	0.13	0.50	0.15	20.58	22.64	0.11
Ricorboli	20	Max WS	UF_TR30_D2	20.16	118.81	122.76		122.78	0.000193	0.24	0.74	0.23	53.97	41.67	0.13
Ricorboli	20	Max WS	UF_TR30_D3	15.00	118.81	122.44		122.45	0.000190	0.21	0.68	0.20	41.44	35.97	0.13
Ricorboli	18	Max WS	UF_TR30_D1	64.48	118.87	122.63		123.06	0.004223	1.20	3.24	1.17	27.68	14.27	0.58
Ricorboli	18	Max WS	UF_TR30_D5	22.25	118.87	121.80		121.94	0.001773	0.56	1.72	0.46	16.51	12.60	0.36
Ricorboli	18	Max WS	UF_TR30_D7	17.47	118.87	121.58		121.69	0.001645	0.47	1.55	0.38	13.78	11.44	0.34
Ricorboli	18	Max WS	UF_TR30_D2	52.91	118.87	122.39		122.77	0.003931	1.08	2.97	1.02	24.32	13.79	0.55
Ricorboli	18	Max WS	UF_TR30_D3	32.33	118.87	122.17		122.35	0.002046	0.72	2.03	0.66	21.26	13.33	0.39
Ricorboli	17			Culvert											
Ricorboli	15	Max WS	UF_TR30_D1	64.47	118.87	121.96	122.04	122.88	0.011448	1.58	4.56	1.35	18.36	12.59	0.92
Ricorboli	15	Max WS	UF_TR30_D5	21.99	118.87	120.99		121.41	0.008868	0.58	2.90	0.29	8.01	7.85	0.74
Ricorboli	15	Max WS	UF_TR30_D7	17.50	118.87	120.82		121.16	0.008307	0.41	2.62		6.84	6.00	0.71
Ricorboli	15	Max WS	UF_TR30_D2	52.91	118.87	121.74	121.81	122.57	0.011251	1.39	4.25	1.11	15.64	12.04	0.89
Ricorboli	15	Max WS	UF_TR30_D3	41.09	118.87	121.49	121.48	122.19	0.010739	1.14	3.85	0.89	12.79	10.86	0.86
Ricorboli	10	Max WS	UF_TR30_D1	64.45	118.68	121.40		121.96	0.008954	1.75	4.31	1.40	26.36	19.96	0.90
Ricorboli	10	Max WS	UF_TR30_D5	21.29	118.68	120.56		120.87	0.007304	1.10	2.90	0.69	11.62	14.13	0.75
Ricorboli	10	Max WS	UF_TR30_D7	16.47	118.68	120.44		120.68	0.006353	0.96	2.55	0.56	9.92	13.00	0.69
Ricorboli	10	Max WS	UF_TR30_D2	52.89	118.68	121.19	121.17	121.73	0.009424	1.64	4.15	1.27	22.20	18.98	0.90
Ricorboli	10	Max WS	UF_TR30_D3	39.71	118.68	120.95	120.91	121.43	0.009193	1.47	3.79	1.05	17.83	17.60	0.88
Ricorboli	7.5000	Max WS	UF_TR30_D1	64.38	117.61	119.79	119.98	120.78	0.017990		4.41		14.60	10.46	1.19
Ricorboli	7.5000	Max WS	UF_TR30_D5	22.08	117.61	119.28		119.55	0.007132		2.31		9.55	9.24	0.73
Ricorboli	7.5000	Max WS	UF_TR30_D7	17.33	117.61	119.19		119.39	0.005693		1.98		8.73	9.02	0.64
Ricorboli	7.5000	Max WS	UF_TR30_D2	52.35	117.61	119.68	119.76	120.45	0.015070		3.90		13.44	10.20	1.08
Ricorboli	7.5000	Max WS	UF_TR30_D3	40.15	117.61	119.57		120.11	0.011353		3.26		12.32	9.95	0.93
Ricorboli	5	Max WS	UF_TR30_D1	21.59	114.89	118.74		118.74	0.000001	0.04	0.06	0.02	499.91	179.44	0.01
Ricorboli	5	Max WS	UF_TR30_D5	21.46	114.89	119.06		119.06	0.000001	0.04	0.06	0.02	557.82	180.74	0.01
Ricorboli	5	Max WS	UF_TR30_D7	16.38	114.89	119.06		119.06	0.000001	0.03	0.04	0.02	557.27	180.73	0.01
Ricorboli	5	Max WS	UF_TR30_D2	24.82	114.89	118.98		118.98	0.000002	0.05	0.07	0.03	542.74	180.40	0.01
Ricorboli	5	Max WS	UF_TR30_D3	33.06	114.89	119.07		119.07	0.000002	0.06	0.09	0.03	560.24	180.80	0.02

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DI RICORBOLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Ricorboli Reach: Ricorboli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Ricorboli	200.1	Max WS	UF_TR200_D5	12.00	240.88	242.01		242.05	0.009206	0.57	1.82	0.50	19.64	99.41	0.63
Ricorboli	200.1	Max WS	UF_TR200_D1	36.18	240.88	242.41		242.43	0.002376	0.53	1.19	0.51	67.77	132.16	0.34
Ricorboli	200.1	Max WS	UF_TR200_D2	28.79	240.88	242.20		242.23	0.006776	0.71	1.78	0.64	40.93	119.77	0.56
Ricorboli	200.1	Max WS	UF_TR200_D7	9.70	240.88	241.97		242.02	0.009572	0.53	1.81	0.48	16.39	93.14	0.63
Ricorboli	200.1	Max WS	UF_TR200_D3	21.60	240.88	242.12		242.16	0.007840	0.68	1.82	0.59	32.11	115.41	0.59
Ricorboli	190.1	Max WS	UF_TR200_D5	12.01	240.54	241.43		241.49	0.014063	0.76	2.10	0.65	14.77	65.04	0.81
Ricorboli	190.1	Max WS	UF_TR200_D1	4.43	240.54	242.09		242.09	0.000026	0.06	0.14	0.06	67.34	104.05	0.04
Ricorboli	190.1	Max WS	UF_TR200_D2	28.99	240.54	241.60		241.68	0.014438	1.09	2.47	0.94	26.50	71.22	0.85
Ricorboli	190.1	Max WS	UF_TR200_D7	9.71	240.54	241.39		241.46	0.015016	0.71	2.09	0.60	12.47	63.76	0.83
Ricorboli	190.1	Max WS	UF_TR200_D3	21.61	240.54	241.53		241.61	0.014652	0.98	2.35	0.84	21.66	68.74	0.85
Ricorboli	185			Culvert											
Ricorboli	180.1	Max WS	UF_TR200_D5	12.00	240.10	241.11		241.18	0.011996	0.63	2.20	0.82	14.15	55.17	0.78
Ricorboli	180.1	Max WS	UF_TR200_D1	42.91	240.10	241.53		241.60	0.006876	0.91	2.21	0.95	43.67	77.48	0.63
Ricorboli	180.1	Max WS	UF_TR200_D2	28.92	240.10	241.37		241.43	0.008479	0.82	2.22	0.92	31.04	71.87	0.69
Ricorboli	180.1	Max WS	UF_TR200_D7	9.70	240.10	241.06		241.14	0.013084	0.60	2.20	0.79	11.48	49.85	0.81
Ricorboli	180.1	Max WS	UF_TR200_D3	21.61	240.10	241.27		241.34	0.009481	0.74	2.21	0.89	24.40	68.63	0.72
Ricorboli	170.1	Max WS	UF_TR200_D5	12.00	239.31	240.72		240.88	0.013075	0.87	2.63	0.87	10.37	29.70	0.78
Ricorboli	170.1	Max WS	UF_TR200_D1	42.88	239.31	241.26		241.40	0.010164	1.16	2.99	1.16	32.95	54.39	0.74
Ricorboli	170.1	Max WS	UF_TR200_D2	28.91	239.31	240.98		241.19	0.016663	1.24	3.40	1.24	19.67	41.68	0.91
Ricorboli	170.1	Max WS	UF_TR200_D7	9.70	239.31	240.67		240.82	0.012379	0.79	2.47	0.79	8.79	27.15	0.76
Ricorboli	170.1	Max WS	UF_TR200_D3	21.60	239.31	240.89		241.08	0.015308	1.10	3.11	1.10	16.01	37.43	0.87
Ricorboli	155			Culvert											
Ricorboli	120.1	Max WS	UF_TR200_D5	12.00	235.93	237.36	237.50	237.74	0.027816	1.13	3.62	1.08	6.86	21.28	1.09
Ricorboli	120.1	Max WS	UF_TR200_D1	42.88	235.93	237.79	237.95	238.21	0.030187	1.90	4.68	0.70	19.96	42.90	1.20
Ricorboli	120.1	Max WS	UF_TR200_D2	28.90	235.93	237.66	237.75	238.02	0.027387	1.53	4.20	1.44	15.18	32.99	1.12
Ricorboli	120.1	Max WS	UF_TR200_D7	9.70	235.93	237.30	237.42	237.67	0.027004	1.04	3.44	0.98	5.62	18.57	1.06
Ricorboli	120.1	Max WS	UF_TR200_D3	21.60	235.93	237.55	237.68	237.94	0.029104	1.37	4.11	1.36	11.79	30.73	1.14
Ricorboli	110.1	Max WS	UF_TR200_D5	12.00	234.01	235.20	235.25	235.38	0.025476	0.92	2.96	0.96	9.85	41.79	1.00
Ricorboli	110.1	Max WS	UF_TR200_D1	42.87	234.01	235.56	235.53	235.73	0.020995	1.37	3.36	1.46	27.76	59.40	0.96
Ricorboli	110.1	Max WS	UF_TR200_D2	28.89	234.01	235.43	235.43	235.59	0.021987	1.22	3.19	1.29	20.36	52.90	0.96
Ricorboli	110.1	Max WS	UF_TR200_D7	9.70	234.01	235.17	235.21	235.35	0.025457	0.84	2.88	0.87	8.29	39.86	0.99
Ricorboli	110.1	Max WS	UF_TR200_D3	21.60	234.01	235.35	235.36	235.50	0.021731	1.10	3.03	1.16	16.46	49.13	0.95
Ricorboli	108.1	Max WS	UF_TR200_D5	12.00	232.10	233.46	233.53	233.70	0.023003	0.95	3.16	0.95	8.92	33.20	0.98
Ricorboli	108.1	Max WS	UF_TR200_D1	42.83	232.10	233.91		234.07	0.016331	1.25	3.36	1.26	30.35	63.58	0.87
Ricorboli	108.1	Max WS	UF_TR200_D2	28.87	232.10	233.75	233.75	233.93	0.017972	1.16	3.27	1.16	21.21	52.81	0.90
Ricorboli	108.1	Max WS	UF_TR200_D7	9.70	232.10	233.43	233.49	233.64	0.020028	0.84	2.88	0.84	7.79	30.77	0.91
Ricorboli	108.1	Max WS	UF_TR200_D3	21.60	232.10	233.65	233.67	233.84	0.019179	1.09	3.21	1.09	16.22	45.87	0.92
Ricorboli	107.1	Max WS	UF_TR200_D5	11.99	230.80	232.79		232.80	0.000761	0.39	0.78	0.34	29.64	39.33	0.19
Ricorboli	107.1	Max WS	UF_TR200_D1	42.78	230.80	232.99		233.07	0.004808	1.09	2.12	0.95	38.28	43.38	0.49
Ricorboli	107.1	Max WS	UF_TR200_D2	28.86	230.80	232.85		232.90	0.003488	0.86	1.72	0.76	32.28	40.61	0.41
Ricorboli	107.1	Max WS	UF_TR200_D7	9.70	230.80	232.57		232.59	0.001174	0.41	0.89	0.37	21.69	35.19	0.23
Ricorboli	107.1	Max WS	UF_TR200_D3	21.60	230.80	232.81		232.85	0.002221	0.67	1.35	0.59	30.81	39.90	0.33
Ricorboli	80	Max WS	UF_TR200_D5	11.97	229.99	232.77		232.78	0.000245	0.18	0.60	0.24	44.85	58.68	0.13
Ricorboli	80	Max WS	UF_TR200_D1	42.77	229.99	232.89		232.96	0.002208	0.57	1.86	0.76	52.03	63.81	0.40
Ricorboli	80	Max WS	UF_TR200_D2	28.86	229.99	232.78		232.82	0.001394	0.43	1.43	0.57	45.30	59.01	0.31
Ricorboli	80	Max WS	UF_TR200_D7	9.70	229.99	232.55		232.56	0.000328	0.19	0.64	0.24	32.99	49.06	0.15
Ricorboli	80	Max WS	UF_TR200_D3	12.05	229.99	232.77		232.78	0.000249	0.18	0.60	0.24	44.87	58.69	0.13
Ricorboli	78			Culvert											
Ricorboli	76	Max WS	UF_TR200_D5	12.01	229.99	231.37	231.98	233.47	0.078337		6.42		1.87	5.98	2.07
Ricorboli	76	Max WS	UF_TR200_D1	42.77	229.99	232.03	232.43	241.57	0.179081		13.68		3.13	30.29	3.40
Ricorboli	76	Max WS	UF_TR200_D2	28.86	229.99	231.96	232.25	236.68	0.093465		9.61		3.00	26.73	2.44
Ricorboli	76	Max WS	UF_TR200_D7	9.70	229.99	231.26	231.77	232.98	0.074443		5.81		1.67	4.47	1.98
Ricorboli	76	Max WS	UF_TR200_D3	21.60	229.99	231.74	232.13	235.31	0.086569		8.37		2.58	14.41	2.29
Ricorboli	73.1	Max WS	UF_TR200_D5	12.00	228.00	229.40	229.50	229.71	0.025612	1.06	3.42	1.06	7.64	25.37	1.04
Ricorboli	73.1	Max WS	UF_TR200_D1	42.77	228.00	229.80	229.90	230.16	0.030024	1.69	4.54	1.69	21.47	44.25	1.18
Ricorboli	73.1	Max WS	UF_TR200_D2	28.85	228.00	229.67	229.75	229.99	0.026793	1.45	4.05	1.45	16.25	38.24	1.10
Ricorboli	73.1	Max WS	UF_TR200_D7	9.70	228.00	229.35	229.45	229.65	0.023950	0.96	3.20	0.96	6.44	22.99	1.00
Ricorboli	73.1	Max WS	UF_TR200_D3	21.60	228.00	229.58	229.67	229.88	0.025710	1.30	3.78	1.30	12.93	33.86	1.07
Ricorboli	70	Max WS	UF_TR200_D5	12.00	224.97	226.23		226.36	0.010324		2.14	1.00	9.30	18.34	0.78
Ricorboli	70	Max WS	UF_TR200_D1	42.77	224.97	226.84		227.10	0.011021	0.44	3.07	1.71	21.48	21.63	0.88
Ricorboli	70	Max WS	UF_TR200_D2	28.85	224.97	226.62		226.81	0.010483	0.14	2.63	1.45	16.83	20.26	0.83
Ricorboli	70	Max WS	UF_TR200_D7	9.70	224.97	226.17		226.28	0.009840		2.01	0.89	8.14	18.04	0.76
Ricorboli	70	Max WS	UF_TR200_D3	21.60	224.97	226.47		226.63	0.010637		2.45	1.30	13.80	19.47	0.82
Ricorboli	69			Culvert											
Ricorboli	68	Max WS	UF_TR200_D5	12.00	224.97	226.09	226.16	226.37	0.025193		3.06	1.25	6.77	17.68	1.20
Ricorboli	68	Max WS	UF_TR200_D1	42.77	224.97	226.60	226.63	227.04	0.025143	0.14	4.01	2.21	16.36	20.12	1.28
Ricorboli	68	Max WS	UF_TR200_D2	28.85	224.97	226.40	226.46	226.77	0.025259		3.66	1.89	12.51	19.15	1.25
Ricorboli	68	Max WS	UF_TR200_D7	9.70	224.97	226.03	226.11	226.30	0.026045		2.98	1.12	5.70	17.39	1.21
Ricorboli	68	Max WS	UF_TR200_D3	21.60	224.97	226.28	226.34	226.61	0.025357		3.45	1.66	10.24	18.58	1.24
Ricorboli	65	Max WS	UF_TR200_D5	11.71	218.69	219.87	219.93	220.12	0.026692	1.23	3.19	0.47	7.50	27.33	1.08
Ricorboli	65	Max WS	UF_TR200_D1	42.71	218.69	220.52		220.66	0.008712	1.43	2.62	1.15	29.35	35.45	0.67
Ricorboli	65	Max WS	UF_TR200_D2	28.84	218.69	220.27		220.41	0.011636	1.35	2.69	1.00	20.54	34.26	0.76
Ricorboli	65	Max WS	UF_TR200_D7	9.70	218.69	219.81	219.90	220.08	0.028513	1.16	3.16	0.29	6.11	24.55	1.10
Ricorboli	65	Max WS	UF_TR200_D3	21.60	218.69	220.12		220.28	0.014568	1.30	2.78	0.85	15.59	33.58	0.83
Ricorboli	60	Max WS	UF_TR200_D5	11.86	207.85	215.31	209.40	215.31	0.000005	0.06	0.19	0.08	121.75	35.82	0.02
Ricorboli	60	Max WS	UF_TR200_D1	42.56	207.85	216.62	210.40	216.63	0.000026	0.17	0.51	0.20	175.71	46.50	0.06
Ricorboli	60	Max WS	UF_TR200_D2	28.81	207.85	216.42	210.01	216.42	0.000014	0.12	0.36	0.14	166.52	45.01	0.04
Ricorboli	60	Max WS	UF_TR200_D7	9.70	207.85	212.25	209.29	212.25	0.000043	0.10	0.39	0.18	39.18	18.32	0.06
Ricorboli	60	Max WS	UF_TR200_D3	21.60	207.85	216.29	209.76	216.29	0.000008	0.09	0.28	0.11	160.68	44.03	0.03
Ricorboli	55			Bridge											
Ricorboli	50	Max WS	UF_TR200_D5	11.86	207.85	209.01	209.40	210.19	0.056982		4.85	0.87	2.57	4.81	1.81
Ricorboli	50	Max WS	UF_TR200_D1	42.56	207.85	209.73	210.40	211.92	0.059132	0.36	7.07	2.86	7.50	7.97	1.99
Ricorboli	50	Max WS	UF_TR200_D2	28.81	207.85	209.48	210.01	211.27	0.057682		6.26	2.20	5.58	7.35	1.92
Ricorboli	50	Max WS	UF_TR200_D7	9.70	207.85	208.93	209.29	209.94	0.053868		4.46	0.62	2.23	4.18	1.74
Ricorboli	50	Max WS	UF_TR200_D3	21.60	207.85	209.30	209.77	210.93	0.058601		5.84	1.68	4.35	6.92	1.90

HEC-RAS River: Ricorboli Reach: Ricorboli Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Ricorboli	40	Max WS	UF_TR200_D5	11.86	130.22	131.67	131.70	132.05	0.019857	1.71	3.85	1.62	5.53	7.78	1.08
Ricorboli	40	Max WS	UF_TR200_D1	42.52	130.22	132.45	132.65	133.25	0.027775	2.47	6.23	2.79	13.68	13.34	1.38
Ricorboli	40	Max WS	UF_TR200_D2	28.81	130.22	132.17	132.32	132.84	0.026267	2.23	5.50	2.39	10.23	11.35	1.31
Ricorboli	40	Max WS	UF_TR200_D7	9.70	130.22	131.58	131.59	131.92	0.018792	1.57	3.57	1.49	4.84	7.36	1.04
Ricorboli	40	Max WS	UF_TR200_D3	21.60	130.22	131.98	132.10	132.56	0.024649	2.07	4.96	2.13	8.28	9.94	1.25
Ricorboli	30	Max WS	UF_TR200_D5	11.86	130.22	131.43	131.70	132.28	0.053439	2.38	5.50	2.23	3.77	6.66	1.71
Ricorboli	30	Max WS	UF_TR200_D1	42.52	130.22	132.16	132.65	133.65	0.058335	3.31	8.18	3.55	10.15	11.30	1.95
Ricorboli	30	Max WS	UF_TR200_D2	28.80	130.22	131.89	132.32	133.17	0.057850	3.11	7.29	3.12	7.36	9.18	1.89
Ricorboli	30	Max WS	UF_TR200_D7	9.70	130.22	131.34	131.59	132.13	0.052978	2.22	5.18	2.06	3.24	6.26	1.68
Ricorboli	30	Max WS	UF_TR200_D3	21.60	130.22	131.72	132.10	132.83	0.055781	2.93	6.61	2.79	5.89	7.99	1.82
Ricorboli	20	Max WS	UF_TR200_D5	10.69	118.81	122.30		122.31	0.000125	0.16	0.54	0.16	36.61	33.51	0.10
Ricorboli	20	Max WS	UF_TR200_D1	42.50	118.81	123.64		123.66	0.000220	0.32	0.92	0.32	97.69	57.17	0.14
Ricorboli	20	Max WS	UF_TR200_D2	28.76	118.81	123.29		123.31	0.000167	0.26	0.76	0.25	78.77	51.11	0.12
Ricorboli	20	Max WS	UF_TR200_D7	9.68	118.81	122.16		122.17	0.000134	0.16	0.54	0.16	32.16	30.91	0.10
Ricorboli	20	Max WS	UF_TR200_D3	21.60	118.81	122.93		122.94	0.000167	0.23	0.71	0.23	61.30	44.67	0.12
Ricorboli	18	Max WS	UF_TR200_D5	29.44	118.87	122.08		122.24	0.001961	0.67	1.95	0.61	20.03	13.15	0.38
Ricorboli	18	Max WS	UF_TR200_D1	94.82	118.87	123.15		123.74	0.004909	1.48	3.86	1.46	35.35	15.30	0.64
Ricorboli	18	Max WS	UF_TR200_D2	76.25	118.87	122.85		123.34	0.004512	1.32	3.50	1.29	30.79	14.70	0.60
Ricorboli	18	Max WS	UF_TR200_D7	26.45	118.87	121.97		122.12	0.001870	0.63	1.85	0.55	18.69	12.94	0.37
Ricorboli	18	Max WS	UF_TR200_D3	59.69	118.87	122.54		122.94	0.004111	1.15	3.13	1.11	26.31	14.07	0.57
Ricorboli	17			Culvert											
Ricorboli	15	Max WS	UF_TR200_D5	35.34	118.87	121.32	121.31	121.99	0.011023	0.98	3.69	0.76	11.07	10.09	0.86
Ricorboli	15	Max WS	UF_TR200_D1	94.82	118.87	122.44	122.55	123.59	0.011886	1.94	5.22	1.82	24.68	13.36	0.96
Ricorboli	15	Max WS	UF_TR200_D2	76.25	118.87	122.14	122.25	123.17	0.011937	1.74	4.88	1.56	20.70	12.88	0.95
Ricorboli	15	Max WS	UF_TR200_D7	26.47	118.87	121.11	120.93	121.62	0.009682	0.71	3.20	0.49	9.06	8.81	0.79
Ricorboli	15	Max WS	UF_TR200_D3	59.69	118.87	121.85	121.95	122.76	0.011771	1.51	4.49	1.24	17.01	12.42	0.92
Ricorboli	10	Max WS	UF_TR200_D5	34.08	118.68	120.83	120.78	121.27	0.009176	1.39	3.62	0.95	15.69	16.54	0.87
Ricorboli	10	Max WS	UF_TR200_D1	94.80	118.68	121.82		122.48	0.009207	2.04	4.87	1.68	35.00	21.85	0.93
Ricorboli	10	Max WS	UF_TR200_D2	76.22	118.68	121.53	121.50	122.17	0.009807	1.92	4.67	1.55	28.95	20.54	0.95
Ricorboli	10	Max WS	UF_TR200_D7	24.01	118.68	120.65		120.97	0.007297	1.15	3.01	0.74	12.87	14.91	0.76
Ricorboli	10	Max WS	UF_TR200_D3	59.67	118.68	121.25	121.28	121.87	0.010422	1.78	4.45	1.39	23.44	19.28	0.96
Ricorboli	7.5000	Max WS	UF_TR200_D5	33.93	117.61	119.67		120.00	0.006454		2.54		13.35	10.18	0.71
Ricorboli	7.5000	Max WS	UF_TR200_D1	94.67	117.61	120.25	120.47	121.43	0.016767		4.80		19.72	11.58	1.17
Ricorboli	7.5000	Max WS	UF_TR200_D2	75.87	117.61	120.18	120.17	121.00	0.012215		4.03		18.84	11.38	1.00
Ricorboli	7.5000	Max WS	UF_TR200_D7	26.11	117.61	119.59		119.81	0.004561		2.08		12.55	10.00	0.59
Ricorboli	7.5000	Max WS	UF_TR200_D3	60.09	117.61	120.01		120.65	0.010279		3.54		16.96	10.98	0.91
Ricorboli	5	Max WS	UF_TR200_D5	33.51	114.89	119.48		119.48	0.000002	0.05	0.08	0.03	635.03	182.70	0.01
Ricorboli	5	Max WS	UF_TR200_D1	8.67	114.89	119.13		119.13	0.000000	0.02	0.02	0.01	571.00	181.05	0.00
Ricorboli	5	Max WS	UF_TR200_D2	74.47	114.89	119.52		119.52	0.000008	0.11	0.18	0.07	641.22	182.89	0.03
Ricorboli	5	Max WS	UF_TR200_D7	25.67	114.89	119.51		119.51	0.000001	0.04	0.06	0.02	640.16	182.84	0.01
Ricorboli	5	Max WS	UF_TR200_D3	58.67	114.89	119.52		119.53	0.000005	0.09	0.14	0.06	642.55	182.95	0.02

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

AFFLUENTE DEL FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

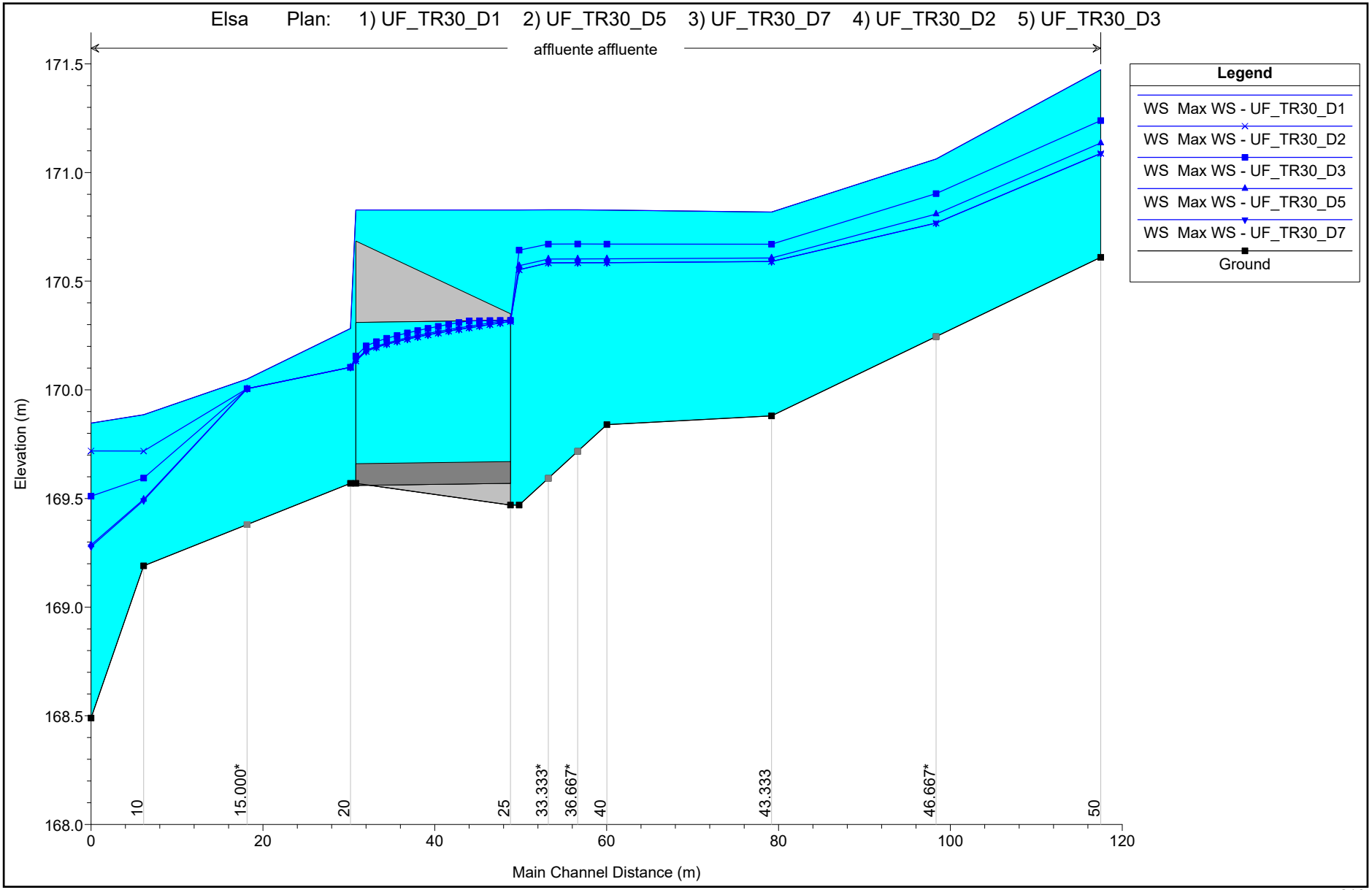
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

AFFLUENTE DEL FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
affluente affluente
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Elevation (m)
171.5
171.0
170.5
170.0
169.5
169.0
168.5
168.0
10
15.000*
20
25
33.333*
36.667*
40
43.333
46.667*
50
0
20
40
60
80
100
120
Main Channel Distance (m)

ALLEGATI

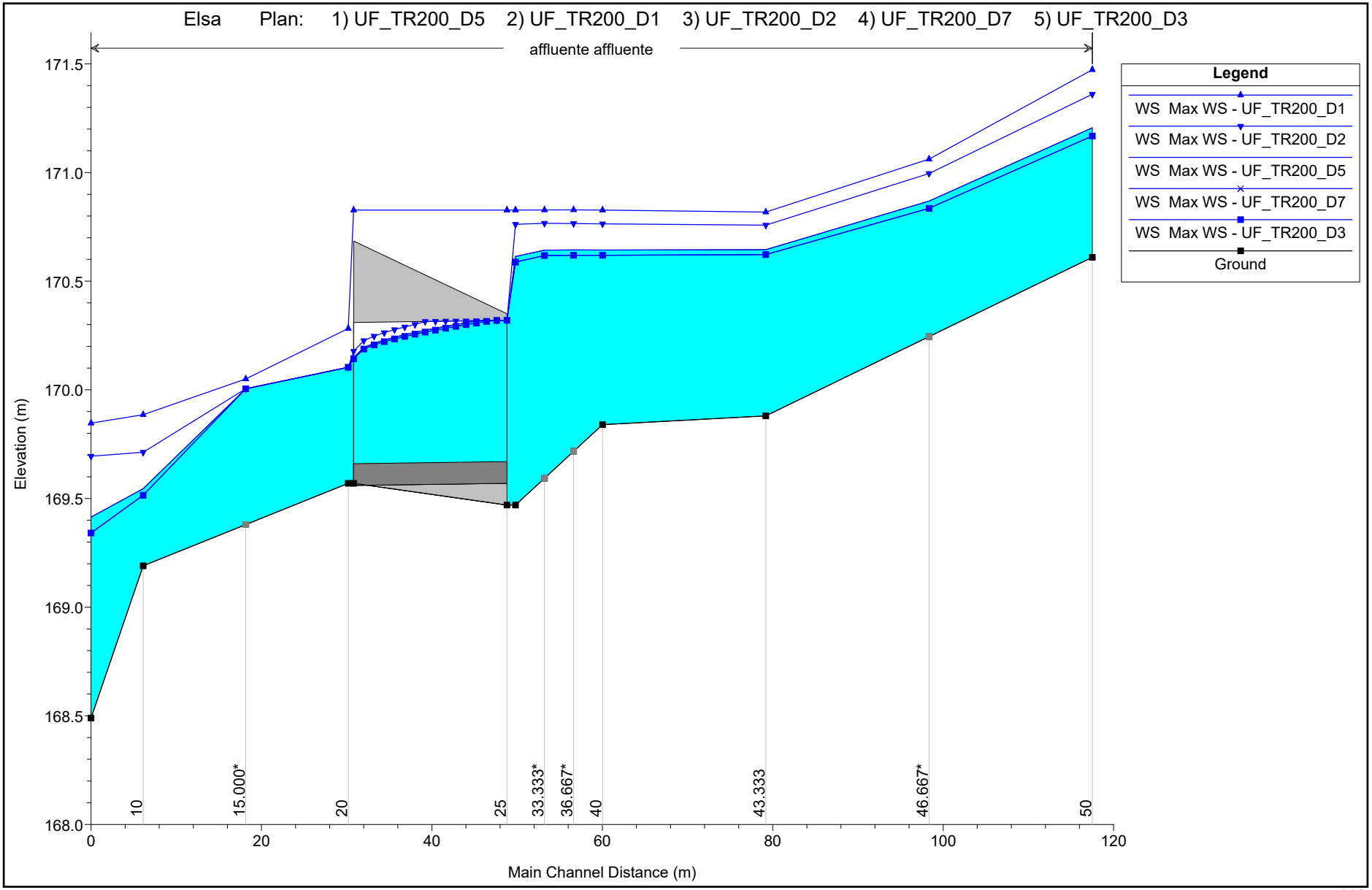
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

AFFLUENTE DEL FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
affluente affluente
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Elevation (m)
171.5
171.0
170.5
170.0
169.5
169.0
168.5
168.0
0
20
40
60
80
100
120
Main Channel Distance (m)
10
15.000*
20
25
33.333*
36.667*
40
43.333
46.667*
50

ALLEGATI

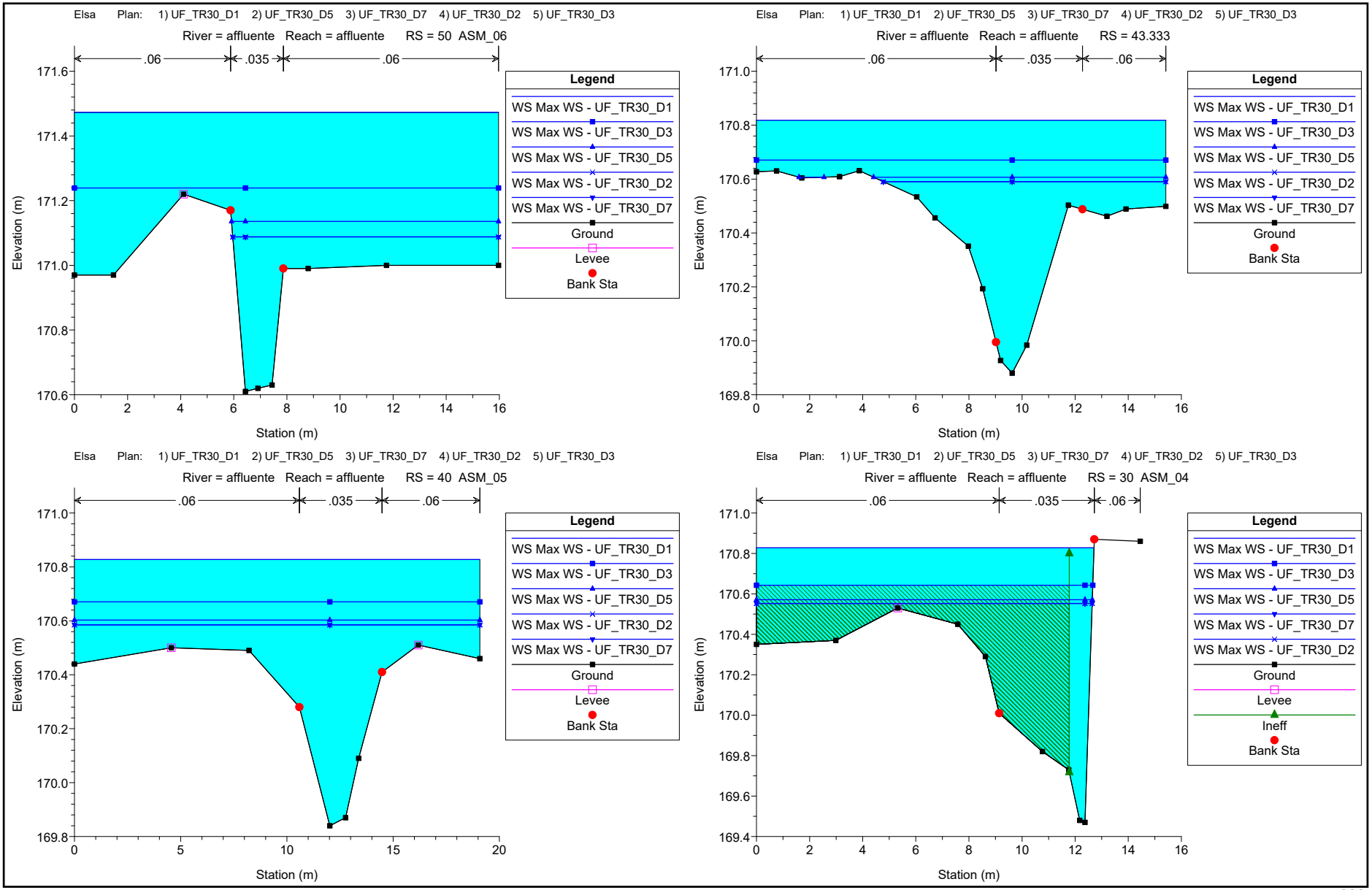
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

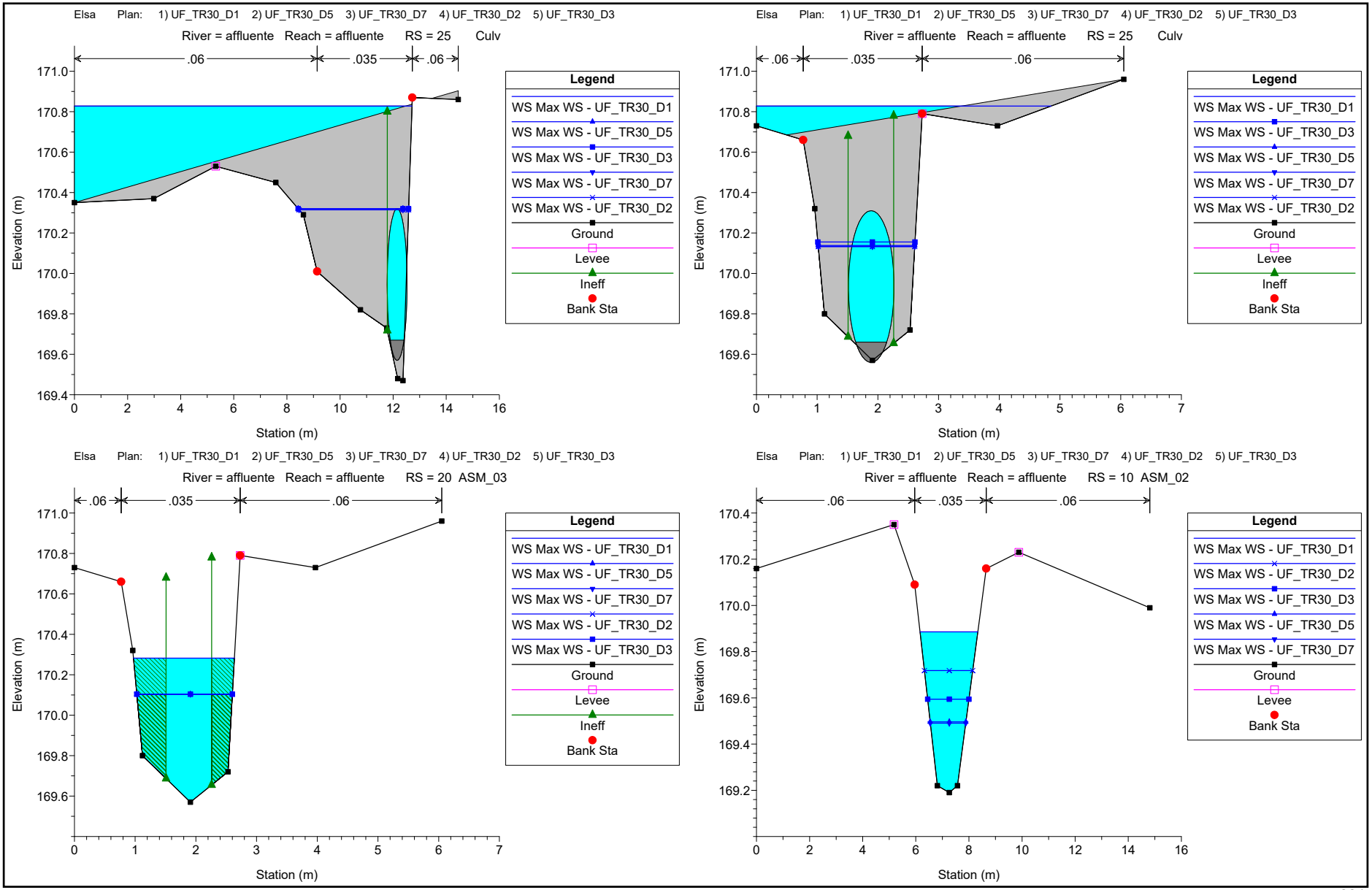
AFFLUENTE DEL FOSSO DI SAN MARZIALE

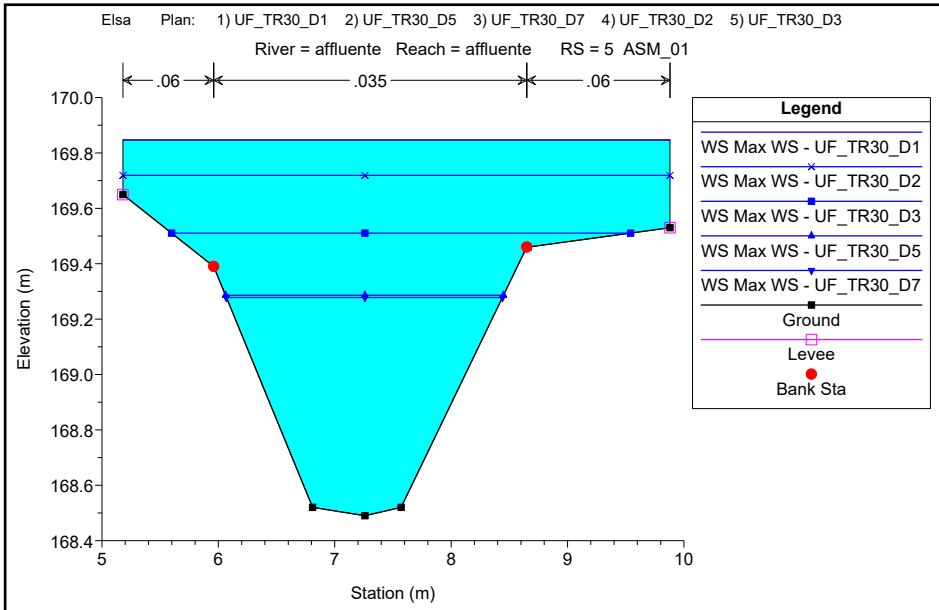
MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 50 ASM_06
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 43.333
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 40 ASM_05
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 30 ASM_04
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 20 ASM_03
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 10 ASM_02
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = affluente Reach = affluente RS = 5 ASM_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

ALLEGATI

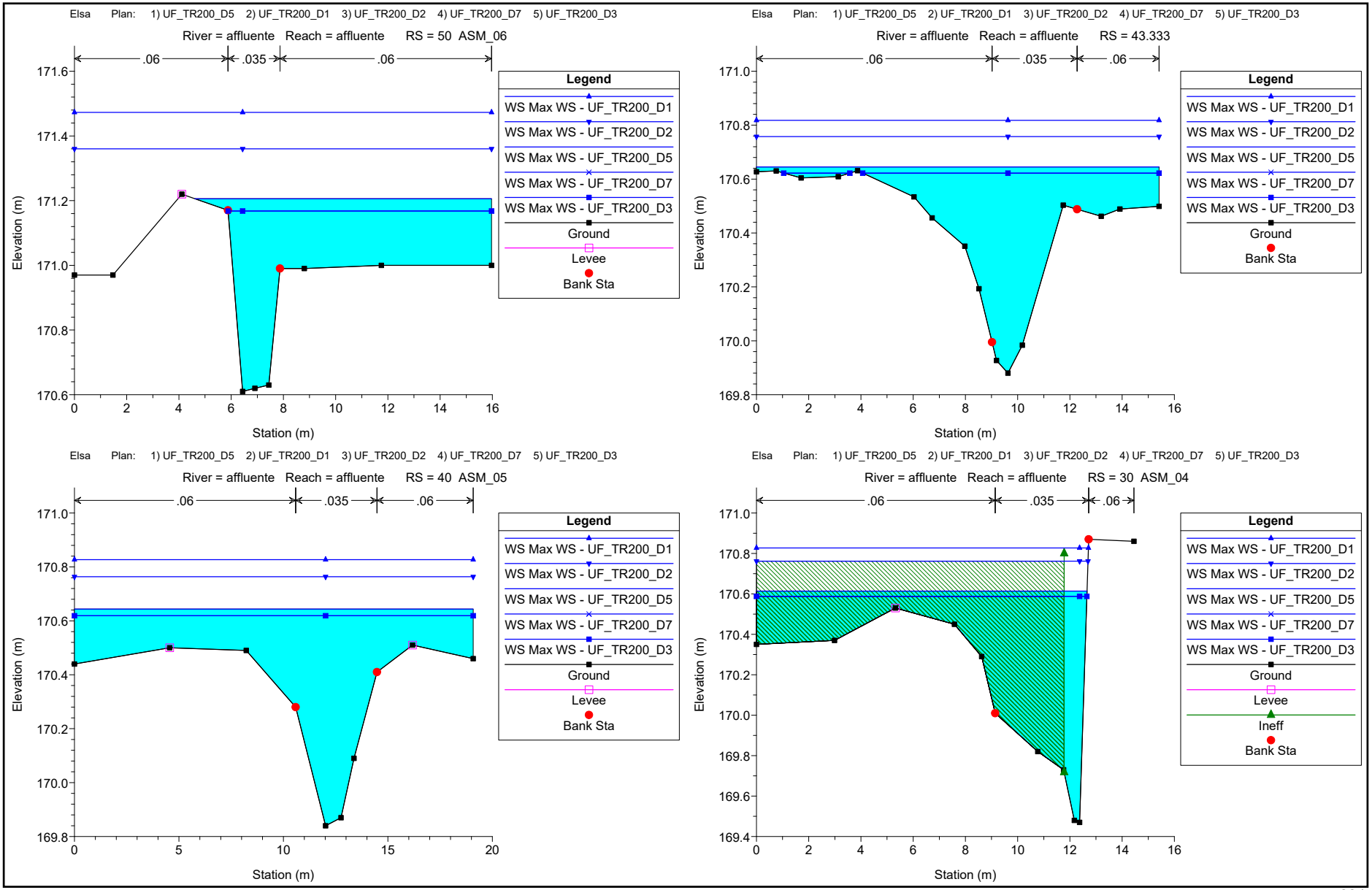
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

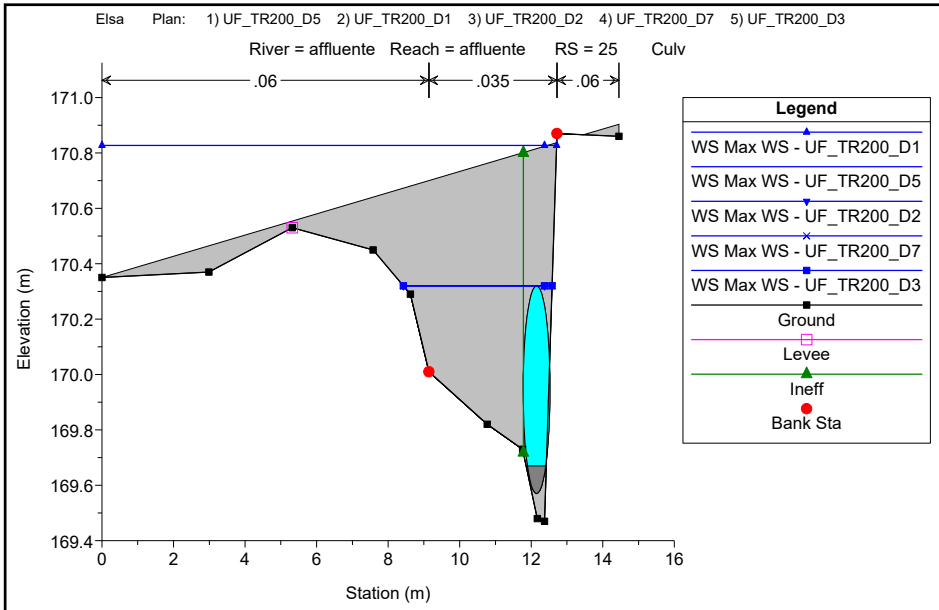
AFFLUENTE DEL FOSSO DI SAN MARZIALE

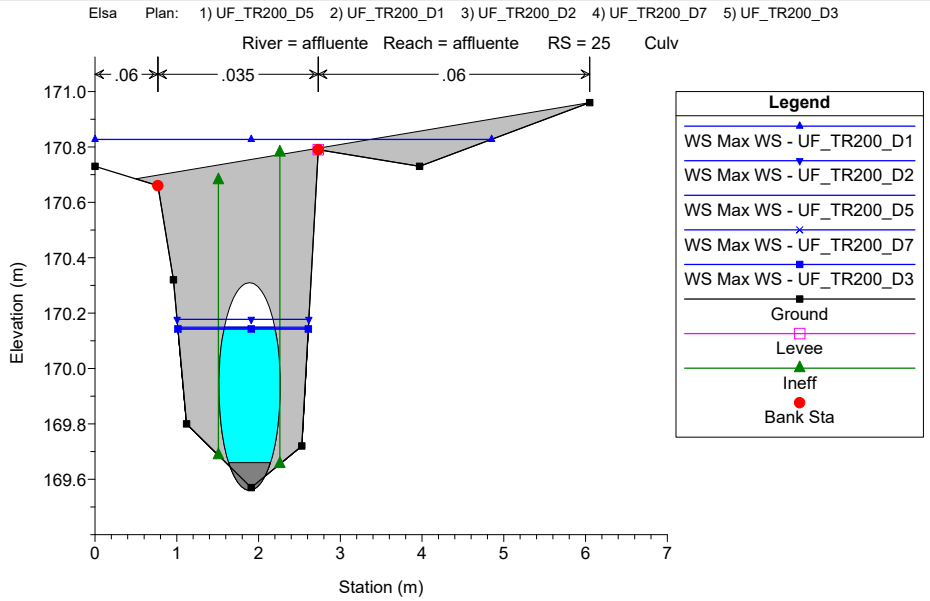
MODELLAZIONE PER TR=200 anni

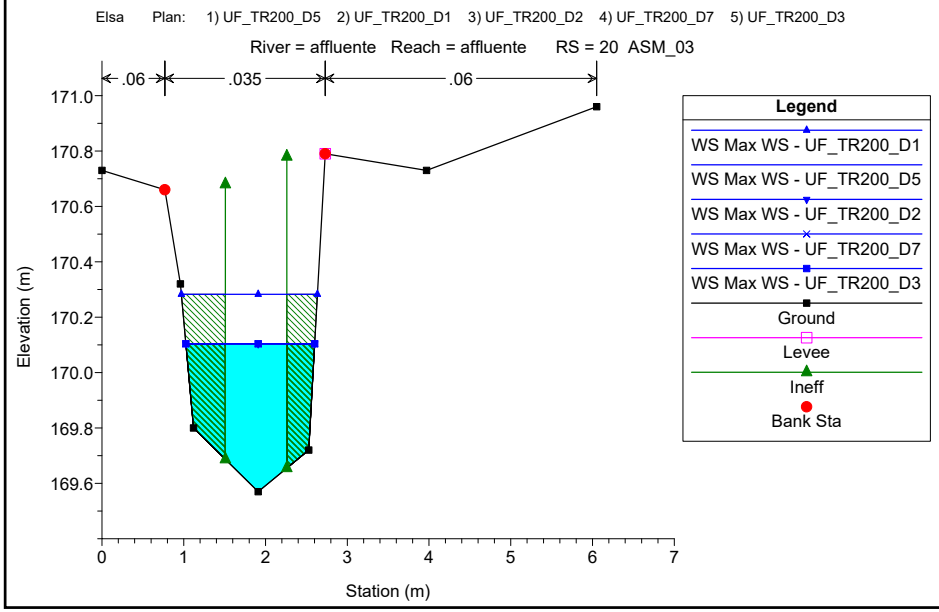
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

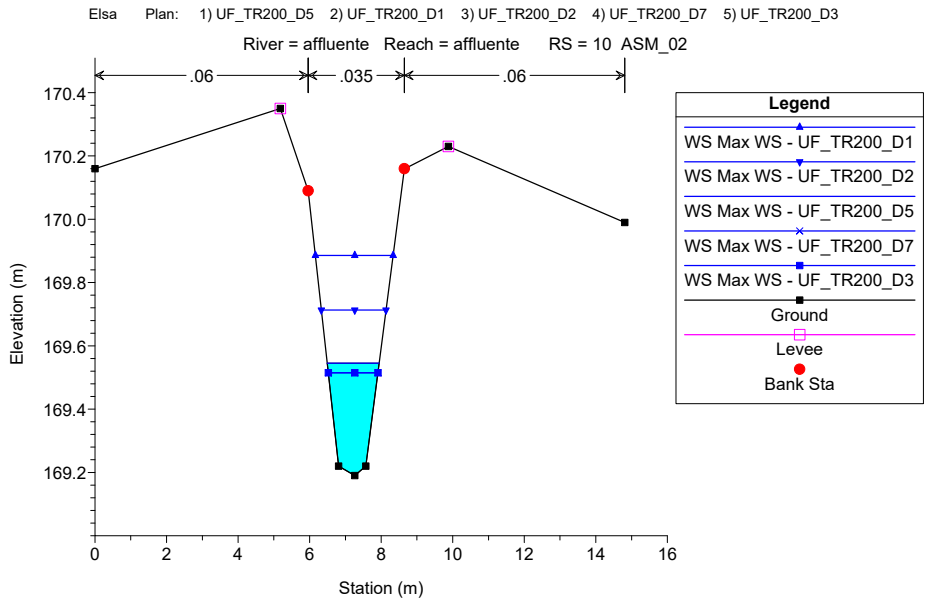
Sezioni Trasversali (da monte verso valle)

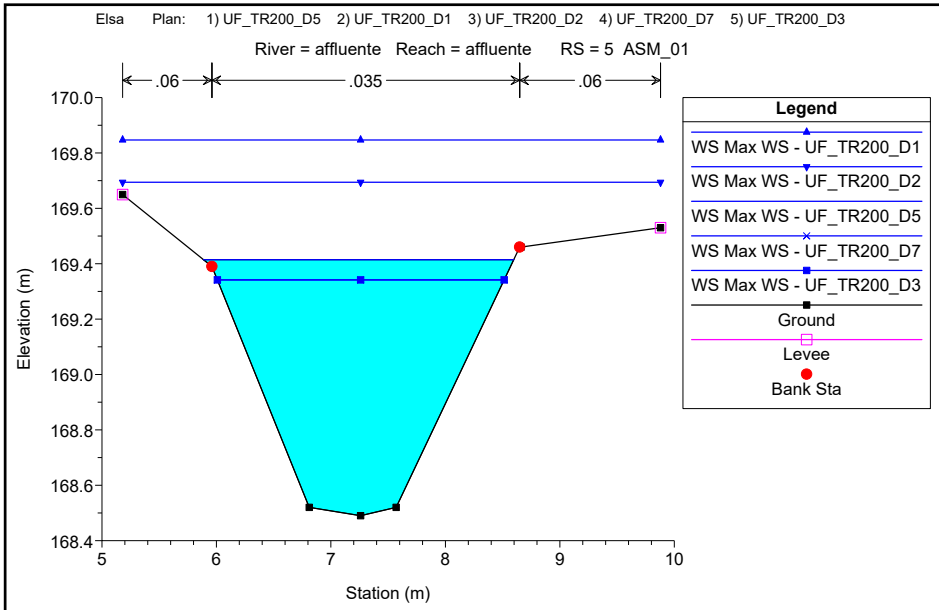

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 50 ASM_06
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 43.333
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 40 ASM_05
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 30 ASM_04
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 20 ASM_03
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 10 ASM_02
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = affluente Reach = affluente RS = 5 ASM_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

AFFLUENTE DEL FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: affluente Reach: affluente Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
affluente	50	Max WS	UF_TR30_D1	13.00	170.61	171.47	171.50	171.71	0.022550	1.24	3.13	1.47	7.55	15.97	1.16
affluente	50	Max WS	UF_TR30_D5	2.00	170.61	171.14	171.16	171.25	0.015435		1.74	0.55	1.92	10.06	0.87
affluente	50	Max WS	UF_TR30_D7	1.50	170.61	171.09	171.12	171.21	0.016503		1.69	0.43	1.43	10.01	0.89
affluente	50	Max WS	UF_TR30_D2	1.50	170.61	171.09	171.12	171.20	0.016429		1.69	0.43	1.44	10.01	0.89
affluente	50	Max WS	UF_TR30_D3	4.00	170.61	171.24	171.25	171.35	0.015270	0.55	1.99	0.78	3.81	15.97	0.90
affluente	49.99			Lat Struct											
affluente	49.98			Lat Struct											
affluente	43.333	Max WS	UF_TR30_D1	4.44	169.88	170.82		170.88	0.003853	0.45	1.30	0.47	5.85	15.41	0.52
affluente	43.333	Max WS	UF_TR30_D5	1.46	169.88	170.61		170.63	0.002601	0.27	0.82	0.21	2.64	11.95	0.40
affluente	43.333	Max WS	UF_TR30_D7	0.95	169.88	170.59		170.60	0.001277	0.19	0.56	0.13	2.46	10.64	0.28
affluente	43.333	Max WS	UF_TR30_D2	0.95	169.88	170.59		170.60	0.001274	0.19	0.56	0.13	2.46	10.64	0.28
affluente	43.333	Max WS	UF_TR30_D3	2.36	169.88	170.67		170.72	0.003860	0.29	1.09	0.33	3.57	15.41	0.49
affluente	40	Max WS	UF_TR30_D1	2.00	169.84	170.83		170.83	0.000304	0.15	0.41	0.14	8.49	19.08	0.15
affluente	40	Max WS	UF_TR30_D5	0.74	169.84	170.60		170.61	0.000236	0.07	0.28	0.06	4.21	19.08	0.12
affluente	40	Max WS	UF_TR30_D7	0.72	169.84	170.59		170.59	0.000264	0.07	0.29	0.06	3.87	19.08	0.13
affluente	40	Max WS	UF_TR30_D2	0.72	169.84	170.59		170.59	0.000263	0.07	0.29	0.06	3.87	19.08	0.13
affluente	40	Max WS	UF_TR30_D3	0.94	169.84	170.67		170.67	0.000205	0.08	0.29	0.08	5.50	19.08	0.12
affluente	30	Max WS	UF_TR30_D1	1.63	169.47	170.83		170.83	0.000190	0.12	0.33		7.40	12.71	0.10
affluente	30	Max WS	UF_TR30_D5	0.75	169.47	170.57		170.62	0.003904		1.00		0.75	12.65	0.34
affluente	30	Max WS	UF_TR30_D7	0.74	169.47	170.55		170.60	0.003982		1.00		0.73	12.64	0.35
affluente	30	Max WS	UF_TR30_D2	0.73	169.47	170.55		170.60	0.003984		1.00		0.73	12.64	0.35
affluente	30	Max WS	UF_TR30_D3	0.80	169.47	170.64		170.69	0.003619		0.99		0.81	12.66	0.33
affluente	25			Culvert											
affluente	20	Max WS	UF_TR30_D1	1.63	169.57	170.28	170.41	170.83	0.024029		3.28		0.50	1.66	1.29
affluente	20	Max WS	UF_TR30_D5	0.71	169.57	170.10		170.30	0.012842		1.95		0.36	1.58	0.89
affluente	20	Max WS	UF_TR30_D7	0.71	169.57	170.10		170.30	0.012842		1.95		0.36	1.58	0.89
affluente	20	Max WS	UF_TR30_D2	0.71	169.57	170.10		170.30	0.012840		1.95		0.36	1.58	0.89
affluente	20	Max WS	UF_TR30_D3	0.71	169.57	170.10		170.30	0.012840		1.95		0.36	1.58	0.89
affluente	10	Max WS	UF_TR30_D1	1.59	169.19	169.89		170.02	0.012231		1.61		0.99	2.17	0.76
affluente	10	Max WS	UF_TR30_D5	0.75	169.19	169.50	169.60	169.81	0.067548		2.48		0.30	1.35	1.67
affluente	10	Max WS	UF_TR30_D7	0.73	169.19	169.49	169.59	169.80	0.068264		2.47		0.30	1.34	1.68
affluente	10	Max WS	UF_TR30_D2	0.73	169.19	169.72		169.78	0.007790		1.12		0.65	1.82	0.59
affluente	10	Max WS	UF_TR30_D3	0.80	169.19	169.59	169.61	169.76	0.026836		1.81		0.44	1.55	1.08
affluente	5	Max WS	UF_TR30_D1	1.65	168.49	169.85		169.86	0.000542	0.15	0.57	0.17	3.39	4.70	0.18
affluente	5	Max WS	UF_TR30_D5	0.75	168.49	169.29		169.31	0.001542		0.62		1.22	2.39	0.28
affluente	5	Max WS	UF_TR30_D7	0.74	168.49	169.28		169.30	0.001557		0.61		1.20	2.37	0.28
affluente	5	Max WS	UF_TR30_D2	0.73	168.49	169.72		169.72	0.000176	0.07	0.30	0.07	2.79	4.70	0.10
affluente	5	Max WS	UF_TR30_D3	0.80	168.49	169.51		169.52	0.000569	0.06	0.44	0.03	1.84	3.94	0.17

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

AFFLUENTE DEL FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: affluente Reach: affluente Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
affluente	50	Max WS	UF_TR200_D5	3.10	170.61	171.21	171.22	171.34	0.016473	0.15	1.98	0.74	2.65	11.36	0.92
affluente	50	Max WS	UF_TR200_D1	13.00	170.61	171.47	171.50	171.71	0.022540	1.24	3.13	1.47	7.55	15.97	1.16
affluente	50	Max WS	UF_TR200_D2	8.10	170.61	171.36	171.38	171.54	0.019735	0.93	2.62	1.16	5.75	15.97	1.06
affluente	50	Max WS	UF_TR200_D7	2.40	170.61	171.17	171.18	171.28	0.015121		1.79	0.62	2.24	10.09	0.87
affluente	50	Max WS	UF_TR200_D3	2.40	170.61	171.17	171.18	171.28	0.015121		1.79	0.62	2.24	10.09	0.87
affluente	49.99			Lat Struct											
affluente	49.98			Lat Struct											
affluente	43.333	Max WS	UF_TR200_D5	1.98	169.88	170.65		170.69	0.003525	0.25	1.01	0.28	3.18	15.41	0.47
affluente	43.333	Max WS	UF_TR200_D1	4.44	169.88	170.82		170.87	0.003857	0.45	1.30	0.47	5.84	15.41	0.52
affluente	43.333	Max WS	UF_TR200_D2	3.51	169.88	170.76		170.81	0.003828	0.39	1.21	0.41	4.92	15.41	0.51
affluente	43.333	Max WS	UF_TR200_D7	1.66	169.88	170.62		170.65	0.002902	0.28	0.89	0.23	2.84	13.87	0.42
affluente	43.333	Max WS	UF_TR200_D3	1.66	169.88	170.62		170.65	0.002912	0.28	0.89	0.23	2.84	13.87	0.42
affluente	40	Max WS	UF_TR200_D5	0.82	169.84	170.64		170.65	0.000197	0.07	0.27	0.07	4.98	19.08	0.11
affluente	40	Max WS	UF_TR200_D1	2.00	169.84	170.83		170.83	0.000305	0.15	0.41	0.14	8.48	19.08	0.15
affluente	40	Max WS	UF_TR200_D2	1.44	169.84	170.76		170.77	0.000238	0.11	0.34	0.11	7.28	19.08	0.13
affluente	40	Max WS	UF_TR200_D7	0.77	169.84	170.62		170.62	0.000220	0.07	0.28	0.07	4.52	19.08	0.12
affluente	40	Max WS	UF_TR200_D3	0.77	169.84	170.62		170.62	0.000222	0.07	0.28	0.07	4.52	19.08	0.12
affluente	30	Max WS	UF_TR200_D5	0.78	169.47	170.61		170.66	0.003746		0.99		0.79	12.66	0.33
affluente	30	Max WS	UF_TR200_D1	1.63	169.47	170.83		170.83	0.000190	0.12	0.33		7.40	12.71	0.10
affluente	30	Max WS	UF_TR200_D2	0.87	169.47	170.76		170.81	0.003092		0.95		0.92	12.69	0.30
affluente	30	Max WS	UF_TR200_D7	0.76	169.47	170.59		170.64	0.003852		1.00		0.76	12.65	0.34
affluente	30	Max WS	UF_TR200_D3	0.76	169.47	170.59		170.64	0.003852		1.00		0.76	12.65	0.34
affluente	25			Culvert											
affluente	20	Max WS	UF_TR200_D5	0.71	169.57	170.10		170.30	0.012842		1.95		0.36	1.58	0.89
affluente	20	Max WS	UF_TR200_D1	1.63	169.57	170.28	170.40	170.83	0.023970		3.28		0.50	1.66	1.29
affluente	20	Max WS	UF_TR200_D2	0.71	169.57	170.10		170.30	0.012842		1.95		0.36	1.58	0.89
affluente	20	Max WS	UF_TR200_D7	0.71	169.57	170.10		170.30	0.012841		1.95		0.36	1.58	0.89
affluente	20	Max WS	UF_TR200_D3	0.71	169.57	170.10		170.30	0.012844		1.95		0.36	1.58	0.89
affluente	10	Max WS	UF_TR200_D5	0.78	169.19	169.55	169.61	169.77	0.041983		2.11		0.37	1.45	1.33
affluente	10	Max WS	UF_TR200_D1	1.59	169.19	169.89		170.02	0.012243		1.61		0.99	2.17	0.77
affluente	10	Max WS	UF_TR200_D2	0.87	169.19	169.71		169.81	0.011595		1.36		0.64	1.81	0.73
affluente	10	Max WS	UF_TR200_D7	0.76	169.19	169.51	169.60	169.79	0.056068		2.33		0.33	1.39	1.53
affluente	10	Max WS	UF_TR200_D3	0.76	169.19	169.51	169.60	169.79	0.056079		2.33		0.33	1.39	1.53
affluente	5	Max WS	UF_TR200_D5	0.78	168.49	169.41		169.43	0.000885	0.03	0.51		1.54	2.71	0.21
affluente	5	Max WS	UF_TR200_D1	1.69	168.49	169.85		169.86	0.000566	0.16	0.58	0.17	3.39	4.70	0.19
affluente	5	Max WS	UF_TR200_D2	0.87	168.49	169.69		169.70	0.000280	0.08	0.37	0.09	2.67	4.70	0.13
affluente	5	Max WS	UF_TR200_D7	0.76	168.49	169.34		169.36	0.001209		0.56		1.35	2.51	0.25
affluente	5	Max WS	UF_TR200_D3	0.76	168.49	169.34		169.36	0.001209		0.56		1.35	2.51	0.25

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

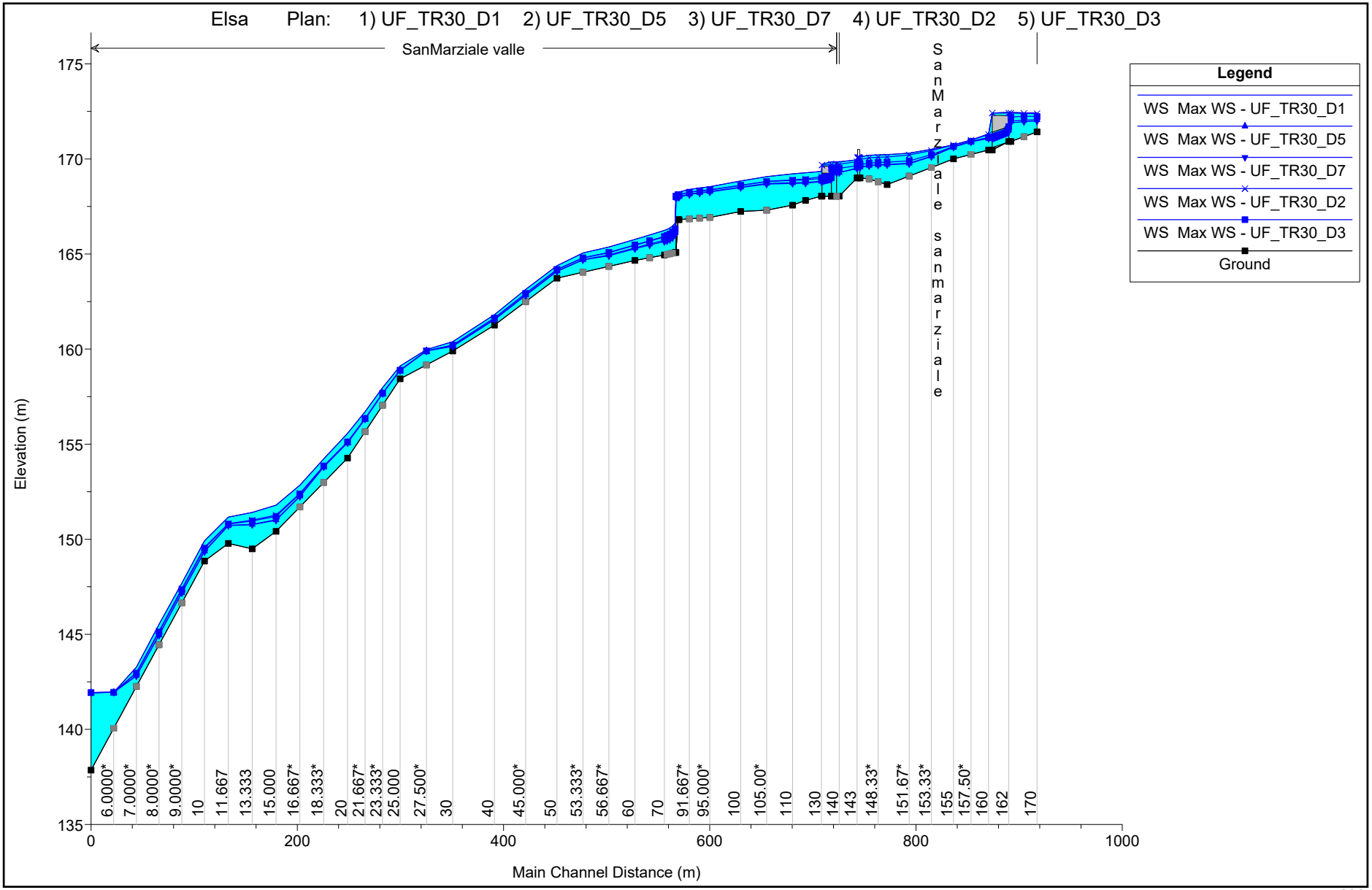
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
SanMarziale valle
SanMarziale sanmarziale
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
Ground
Elevation (m)
Main Channel Distance (m)
175
170
165
160
155
150
145
140
135
0
200
400
600
800
1000
6.0000*
7.0000*
8.0000*
9.0000*
10
11.667
13.333
15.000
16.667*
18.333*
20
21.667*
23.333*
25.000
27.500*
30
40
45.000*
50
53.333*
56.667*
60
70
91.667*
95.000*
100
105.00*
110
130
140
143
148.33*
151.67*
153.33*
155
157.50*
160
162
170

ALLEGATI

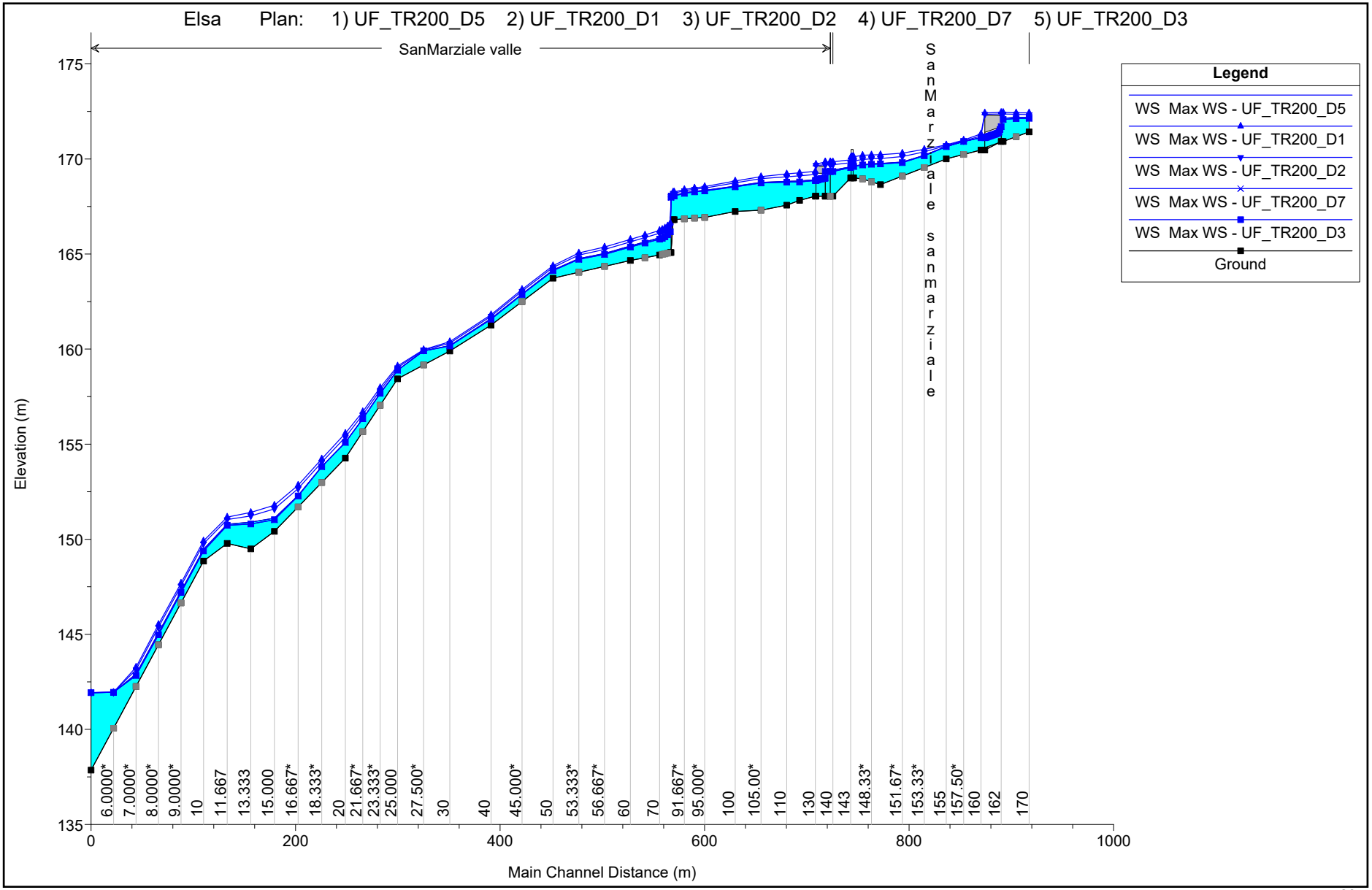
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
SanMarziale valle
SanMarziale sanmarziale
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Elevation (m)
Main Channel Distance (m)
175
170
165
160
155
150
145
140
135
0
200
400
600
800
1000
6.0000*
7.0000*
8.0000*
9.0000*
10
11.667
13.333
15.000
16.667*
18.333*
20
21.667*
23.333*
25.000
27.500*
30
40
45.000*
50
53.333*
56.667*
60
70
91.667*
95.000*
100
105.00*
110
130
140
143
148.33*
151.67*
153.33*
155
157.50*
160
162
170

ALLEGATI

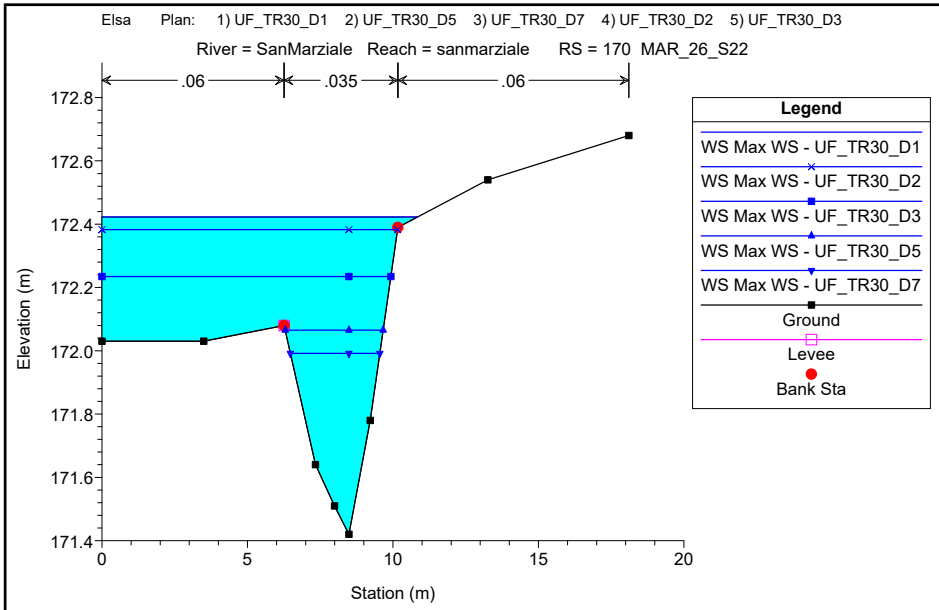
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

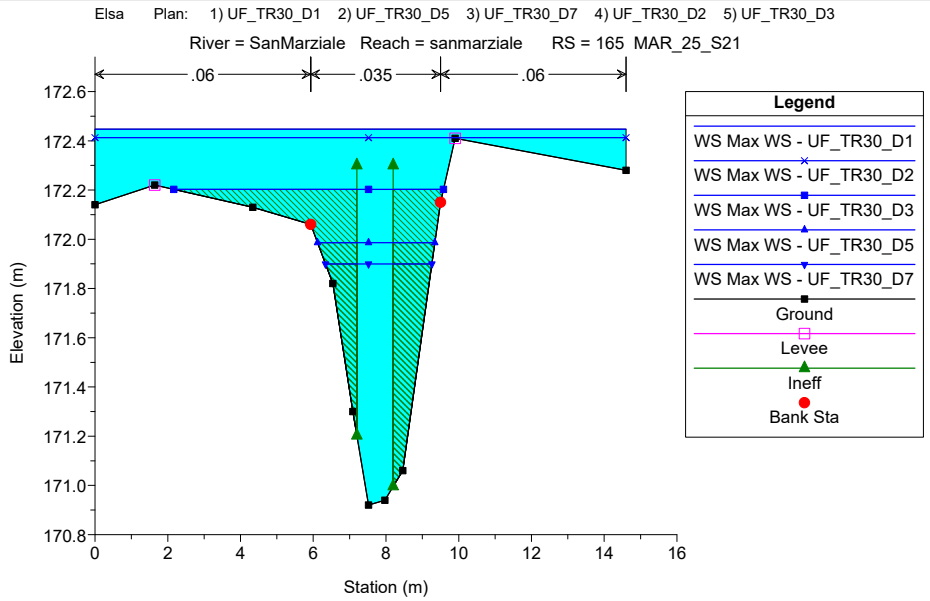
FOSSO DI SAN MARZIALE

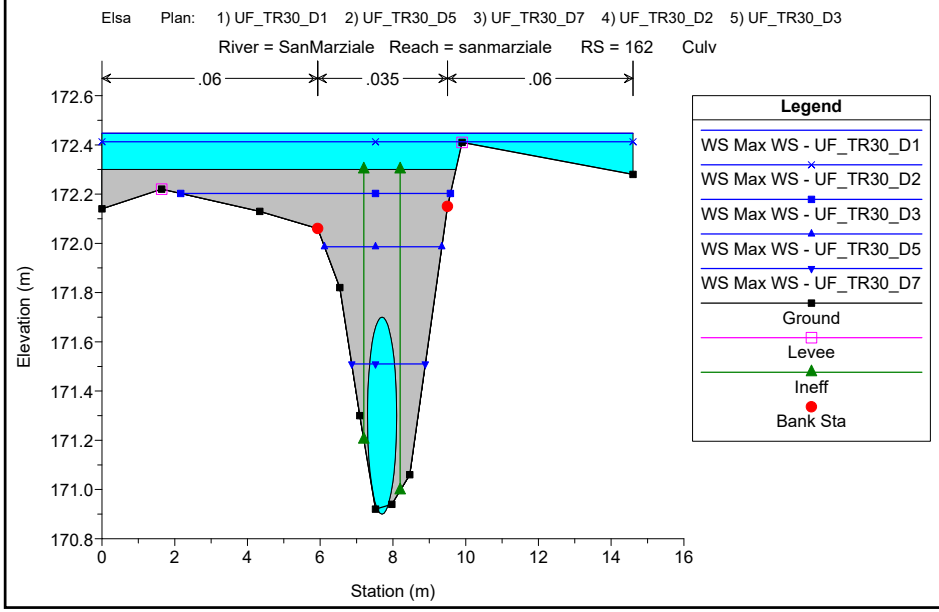
MODELLAZIONE PER TR=30 anni

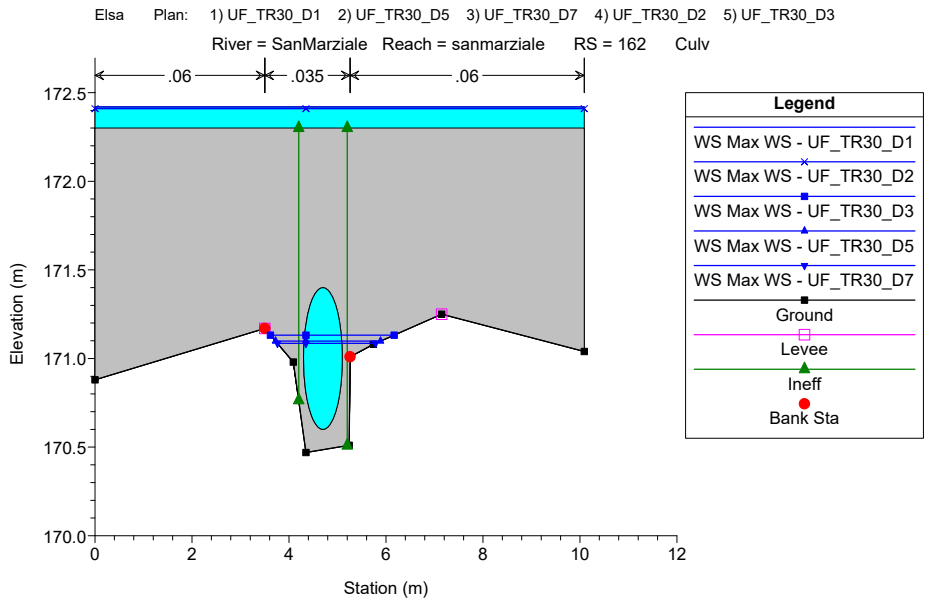
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

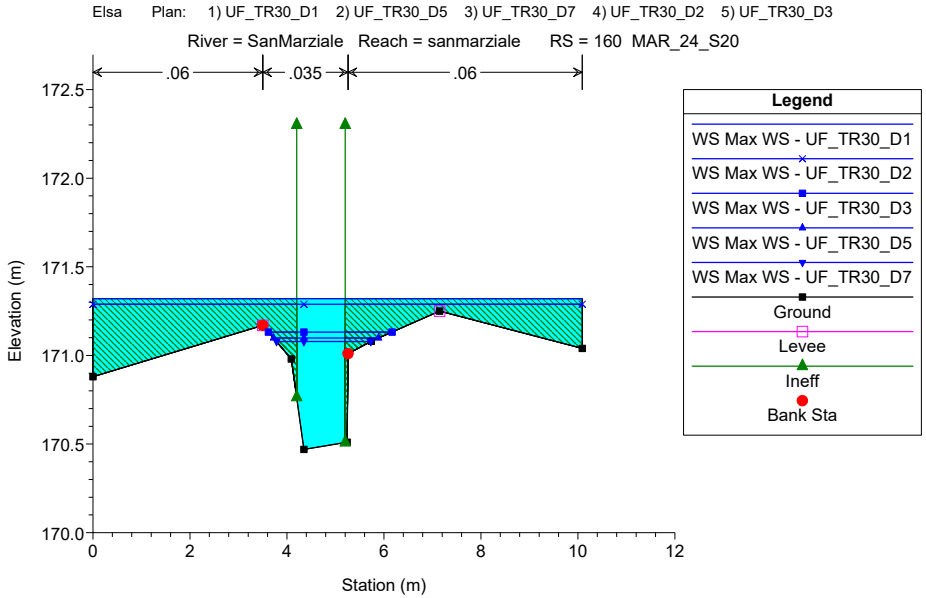
Sezioni Trasversali (da monte verso valle)

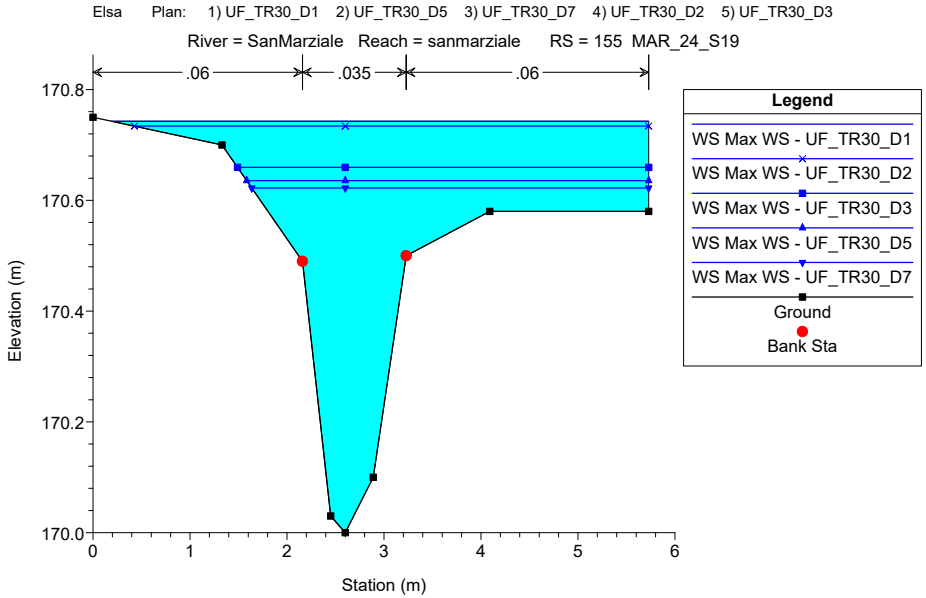

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 170 MAR_26_S22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

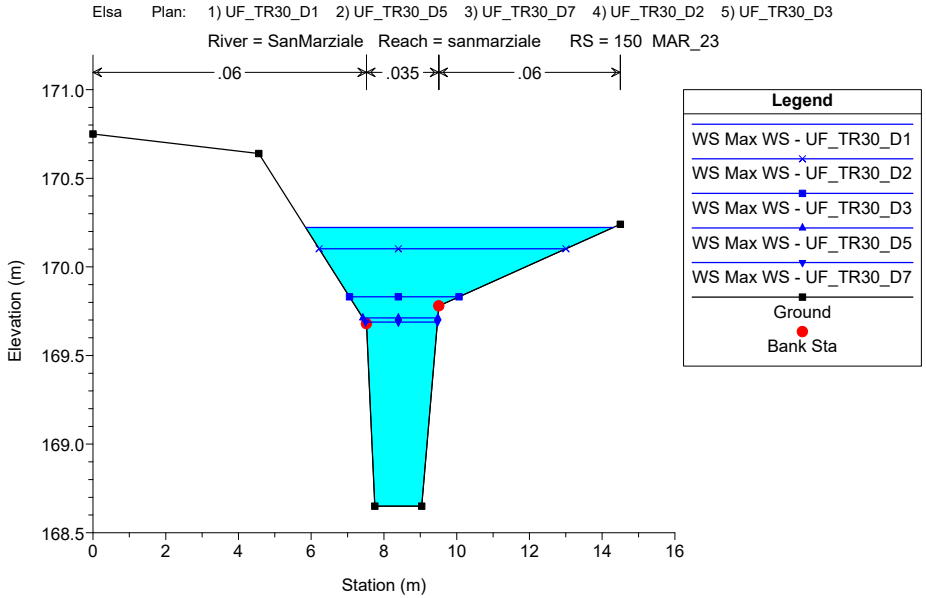

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 165 MAR_25_S21
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

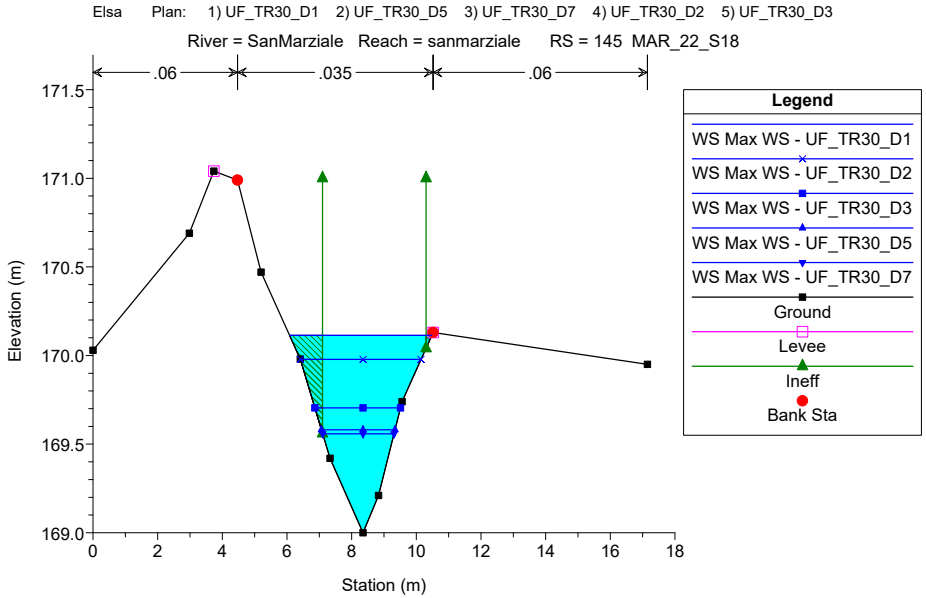

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 162 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

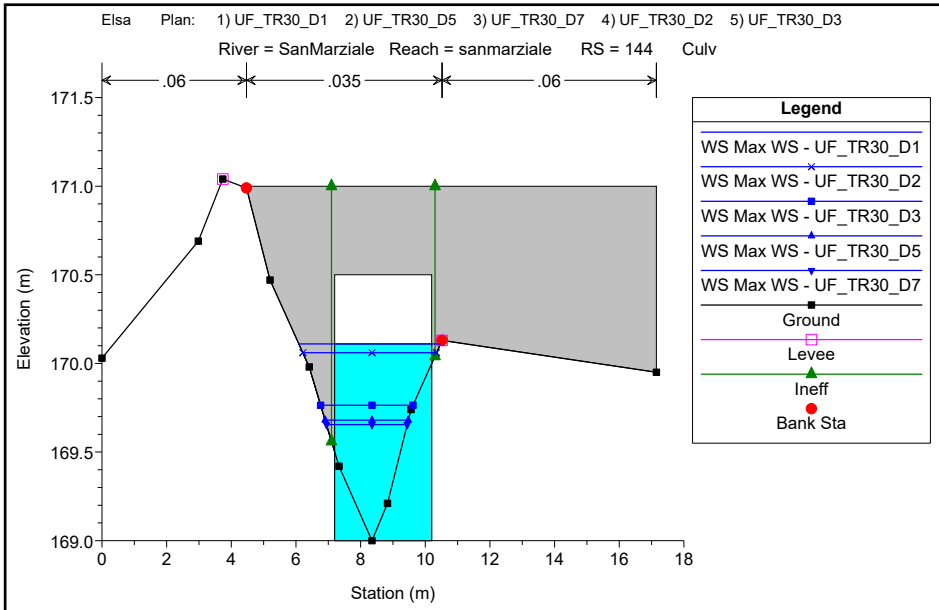

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 162 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

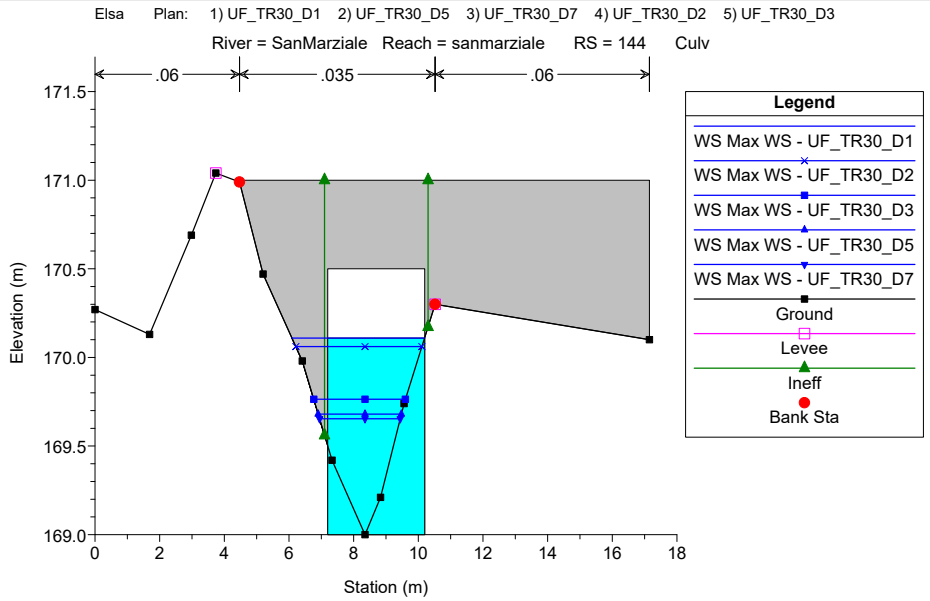

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 160 MAR_24_S20
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

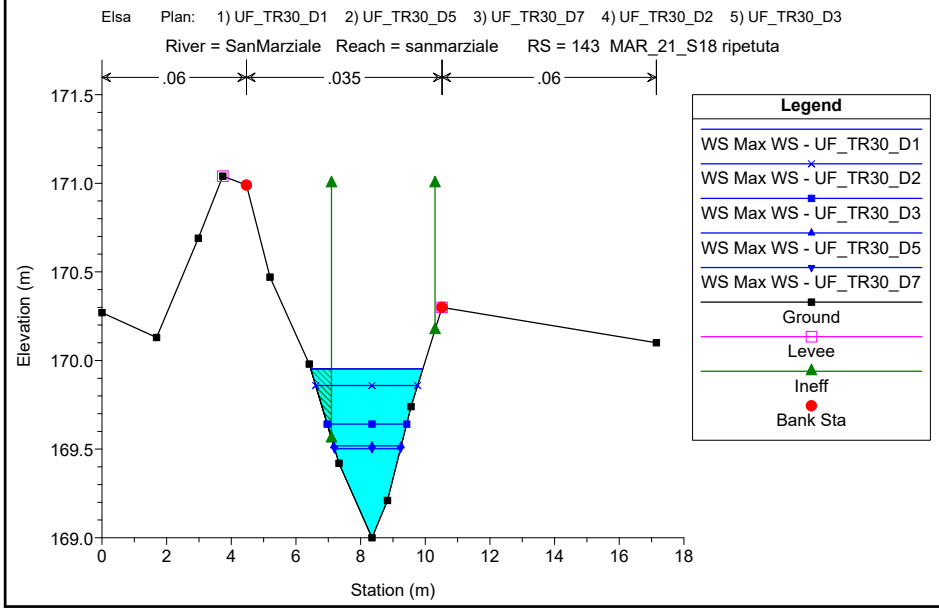

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 155 MAR_24_S19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

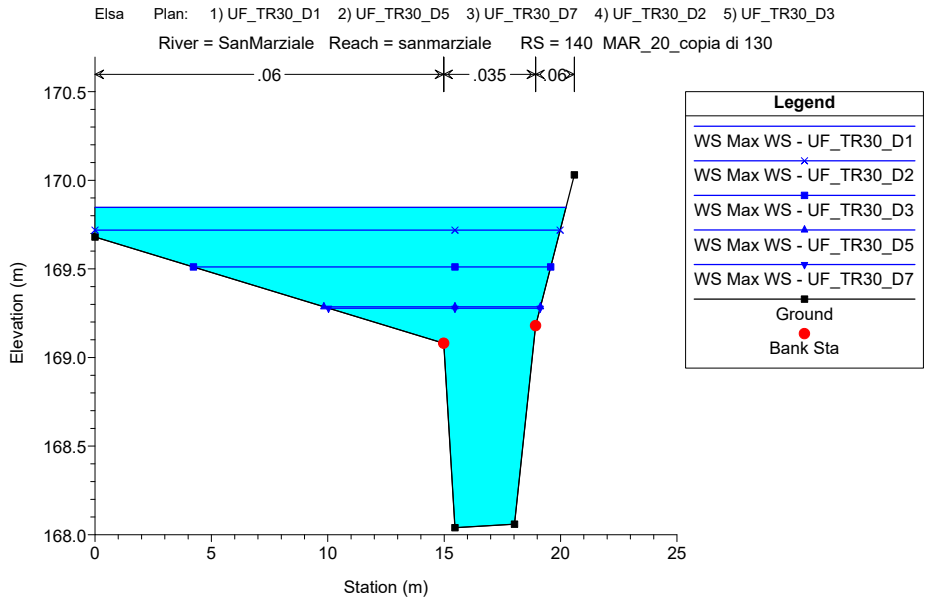

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 150 MAR_23
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

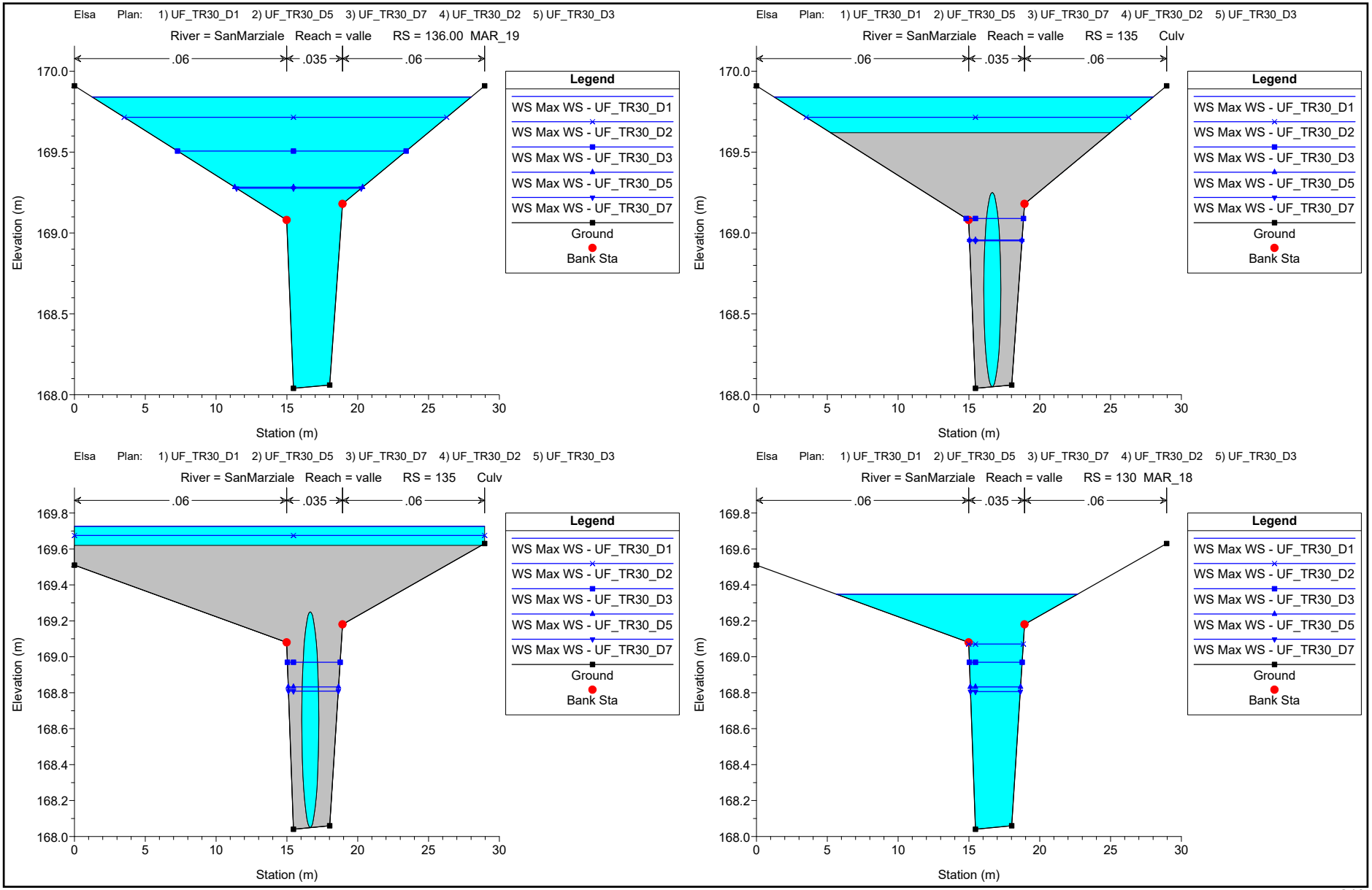

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 145 MAR_22_S18
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

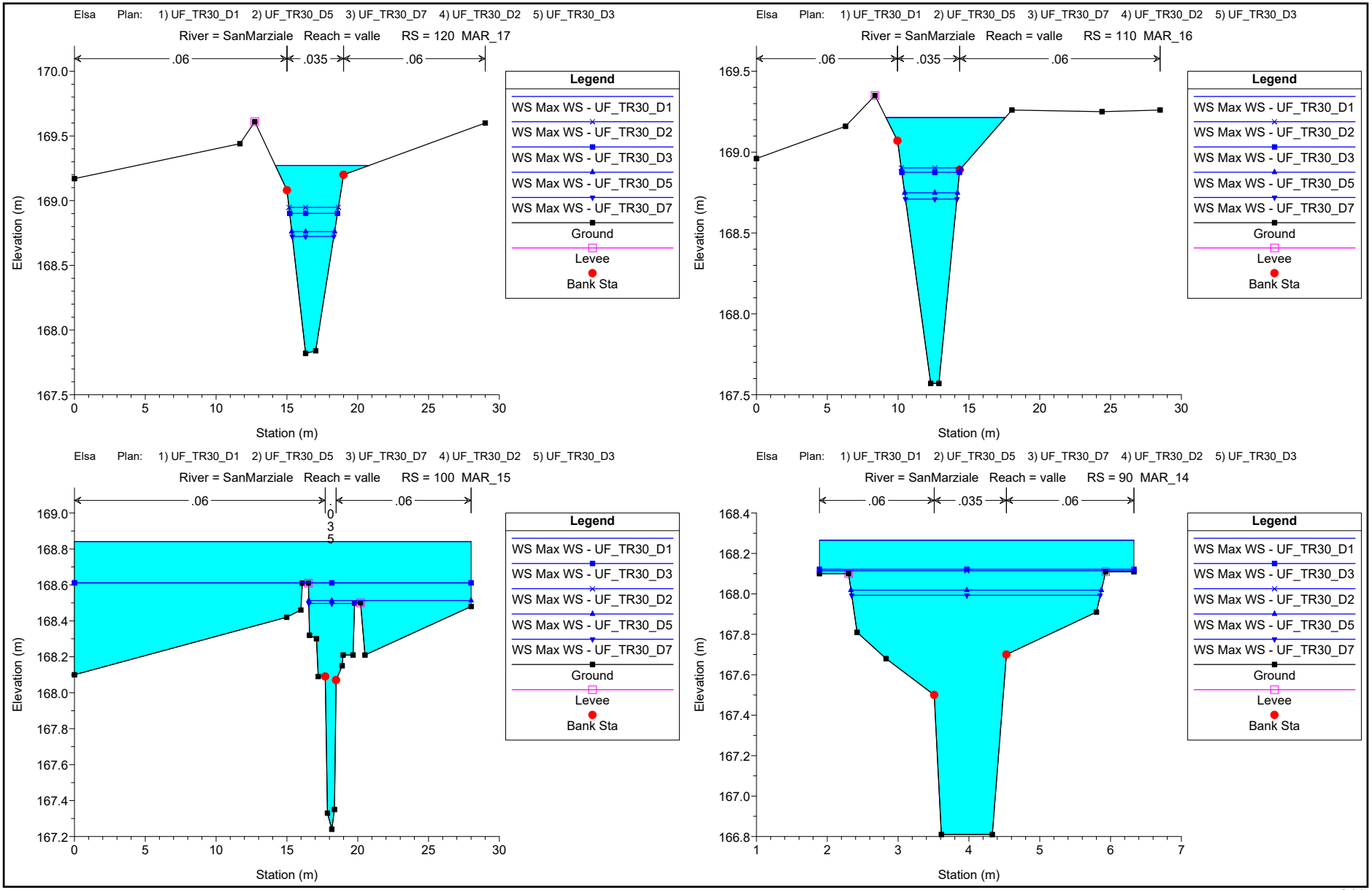

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 144 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

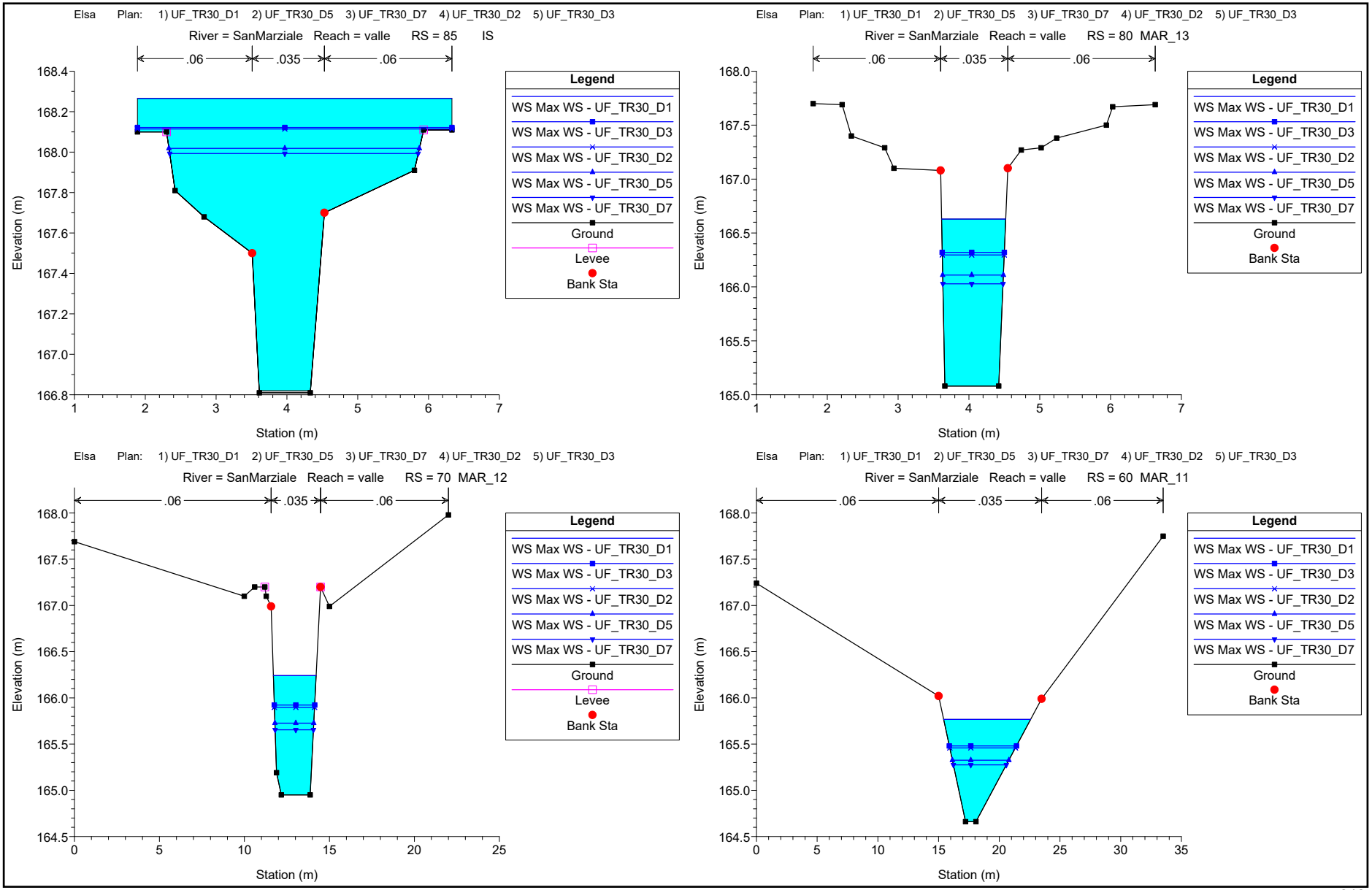

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 144 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

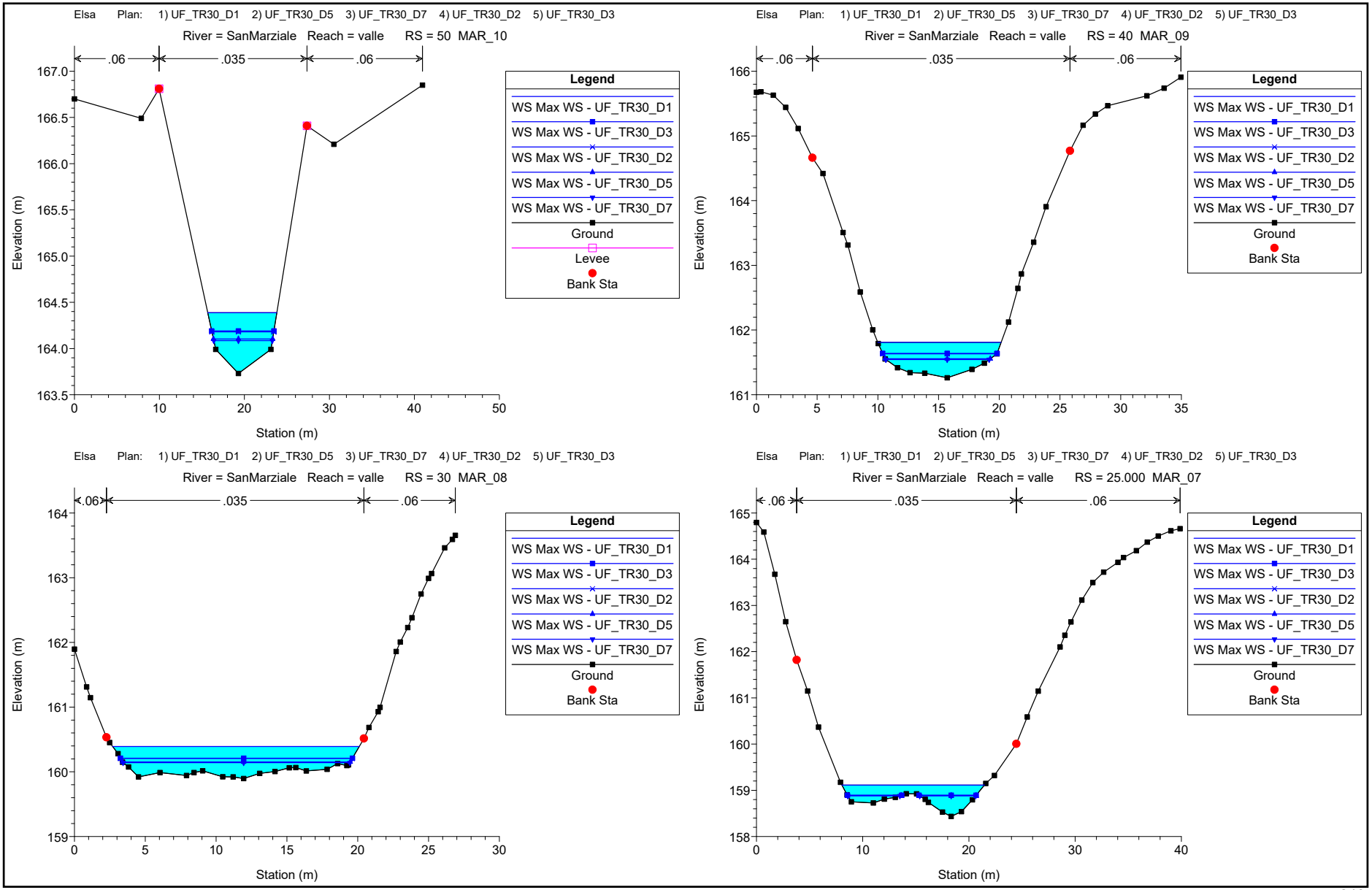

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 143 MAR_21_S18 ripetuta
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

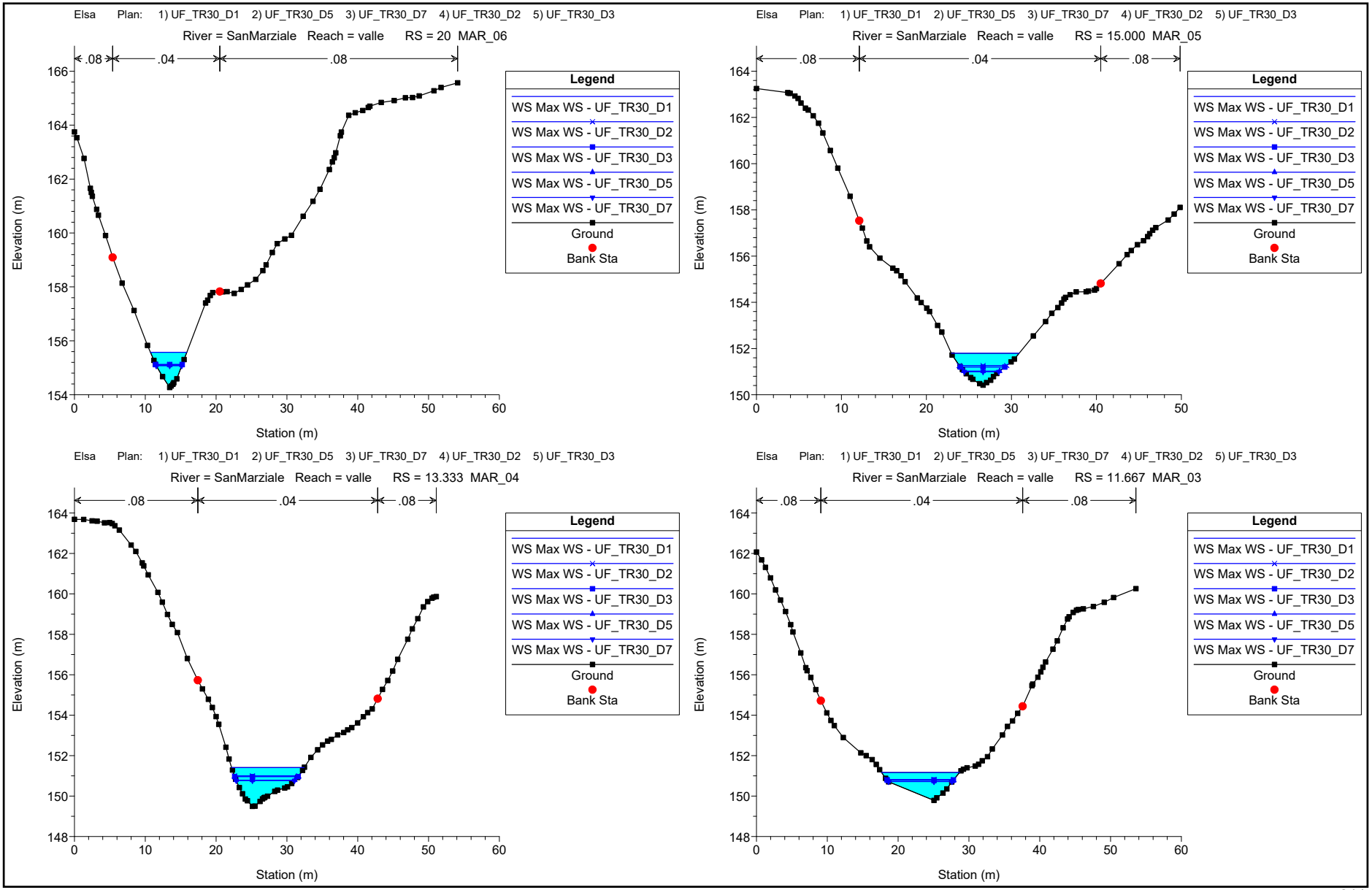

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = sanmarziale RS = 140 MAR_20_copia di 130
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

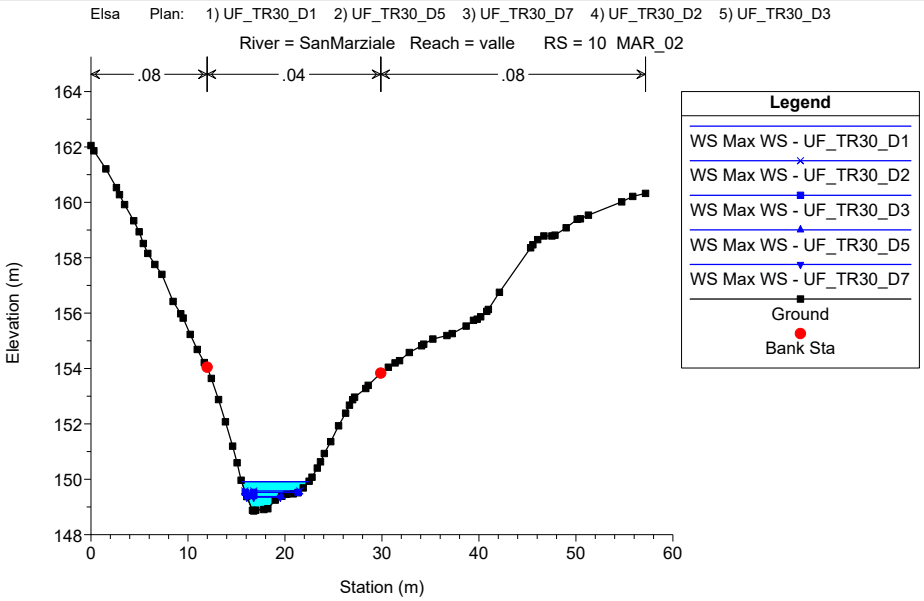

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 136.00 MAR_19
River = SanMarziale Reach = valle RS = 135 Culv
River = SanMarziale Reach = valle RS = 130 MAR_18
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

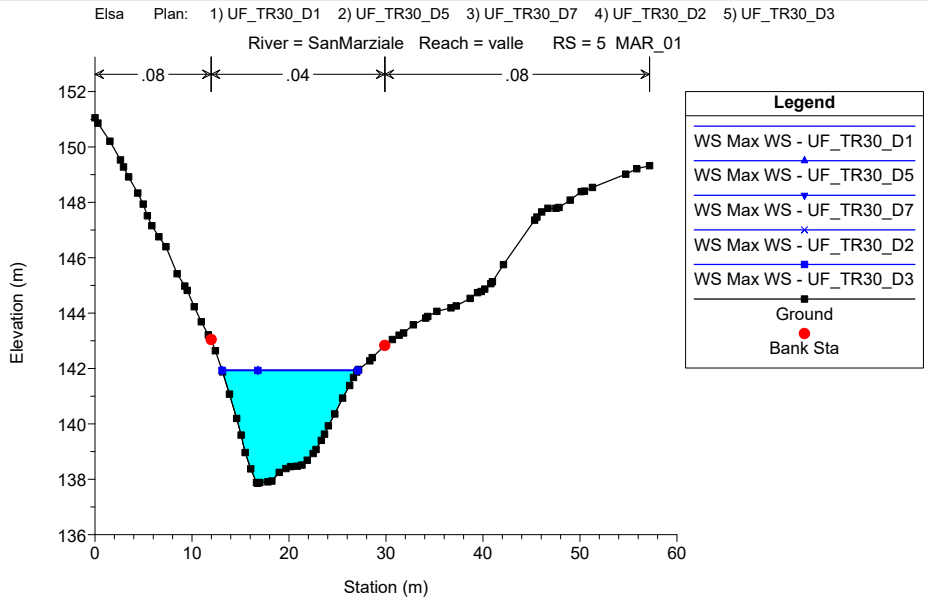

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 120 MAR_17
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 110 MAR_16
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 100 MAR_15
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 90 MAR_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 85 IS
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 80 MAR_13
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 70 MAR_12
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 60 MAR_11
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 50 MAR_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 40 MAR_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 30 MAR_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 25.000 MAR_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 20 MAR_06
River = SanMarziale Reach = valle RS = 15.000 MAR_05
River = SanMarziale Reach = valle RS = 13.333 MAR_04
River = SanMarziale Reach = valle RS = 11.667 MAR_03
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 10 MAR_02
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = SanMarziale Reach = valle RS = 5 MAR_01
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
Ground
Bank Sta

ALLEGATI

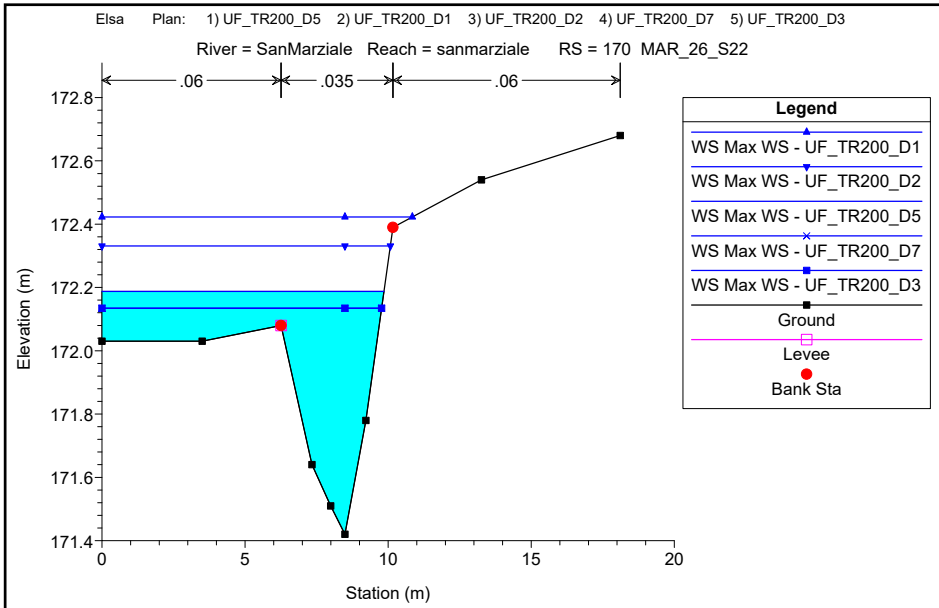
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

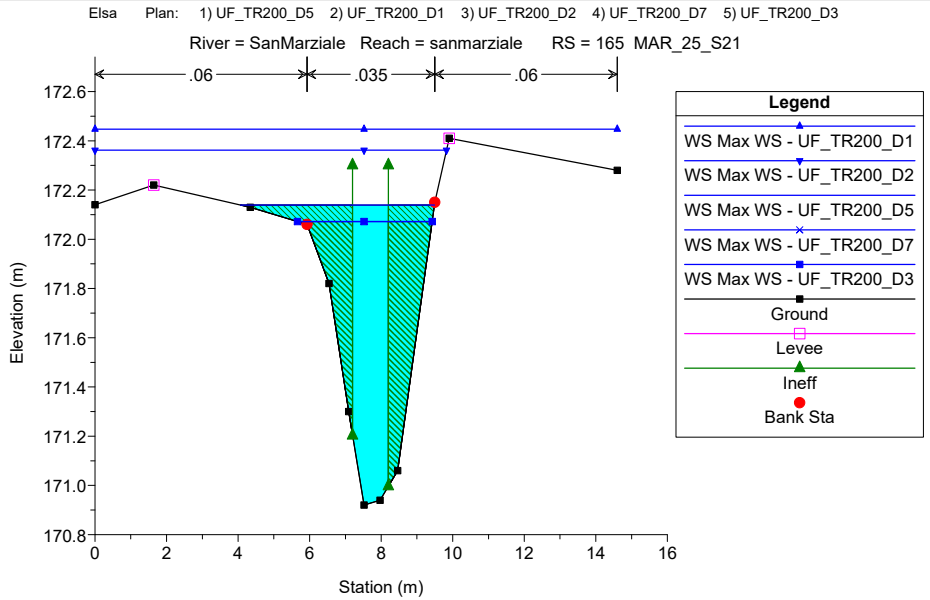
FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 170 MAR_26_S22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta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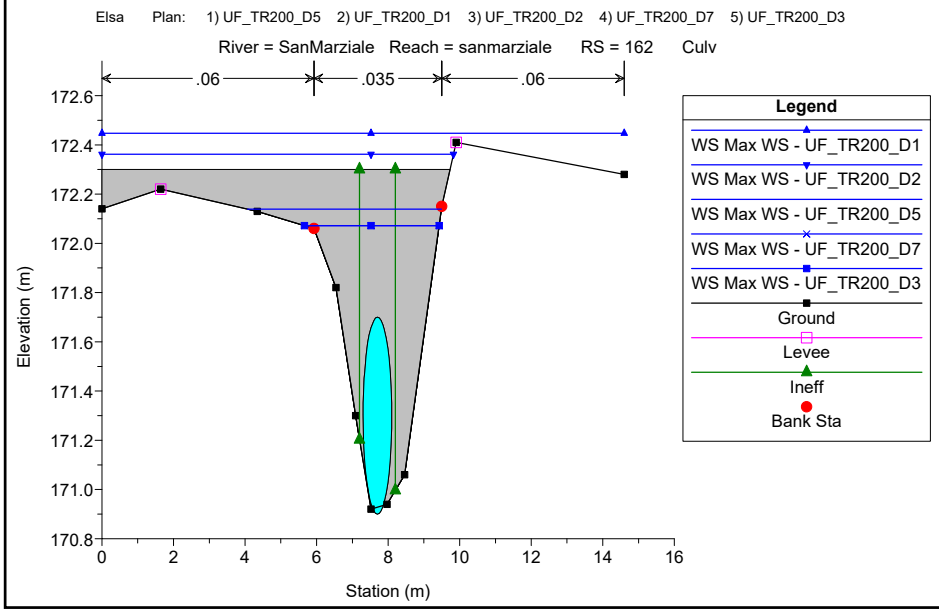
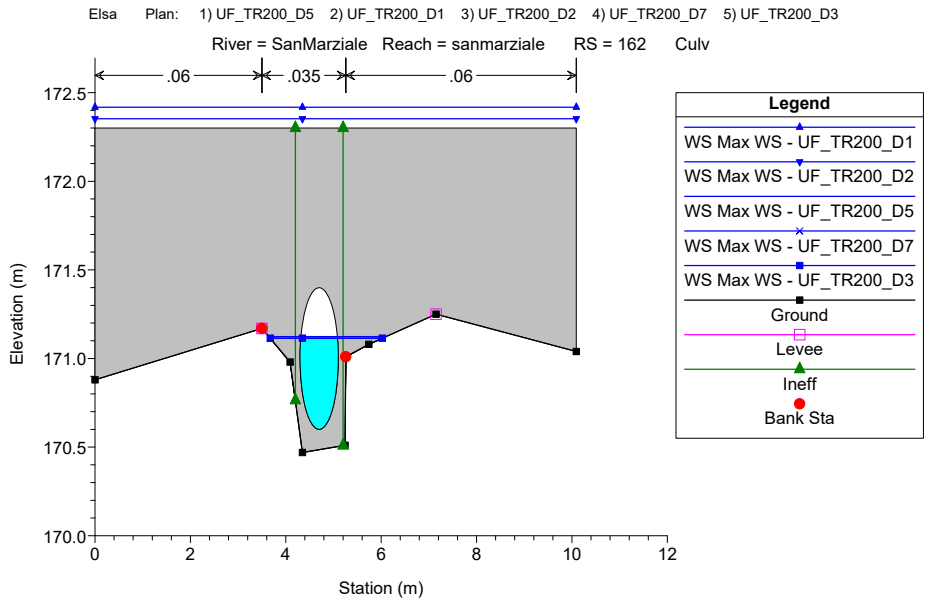
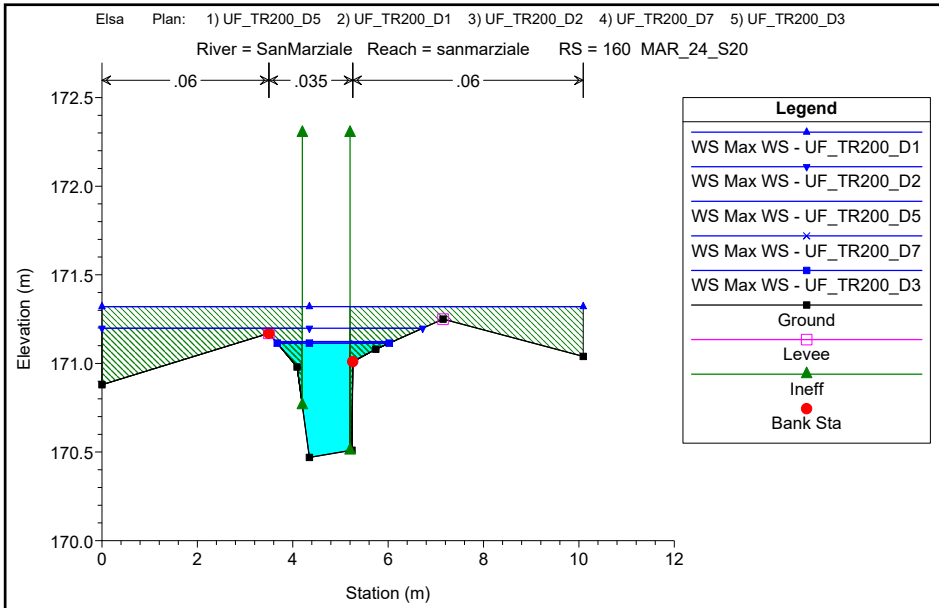
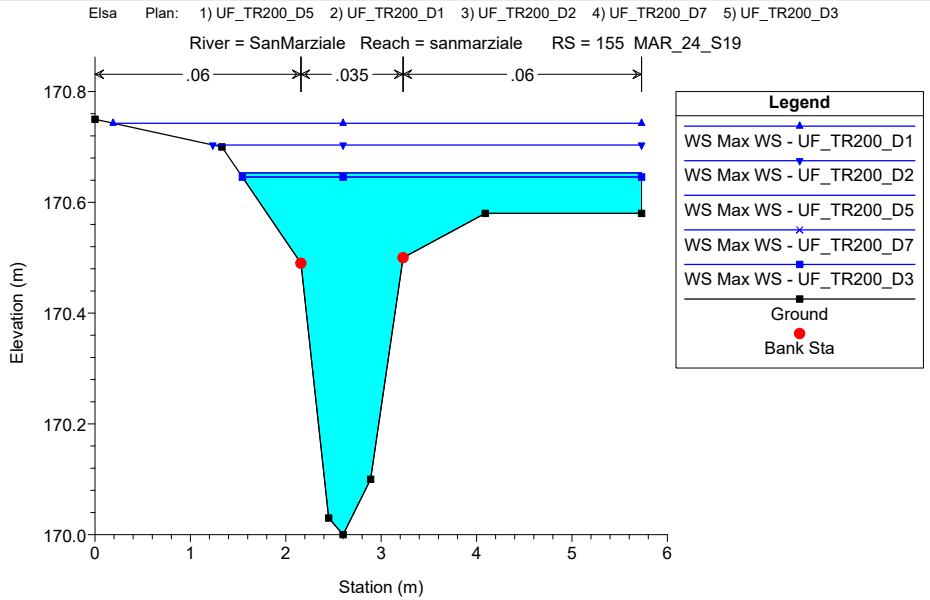
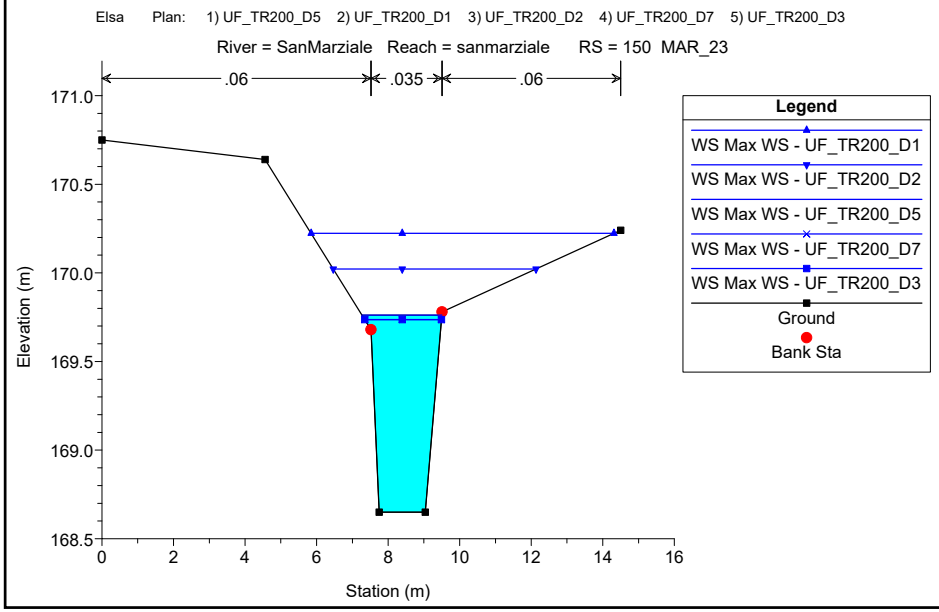
River = SanMarziale Reach = sanmarziale RS = 165 MAR_25_S21
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta

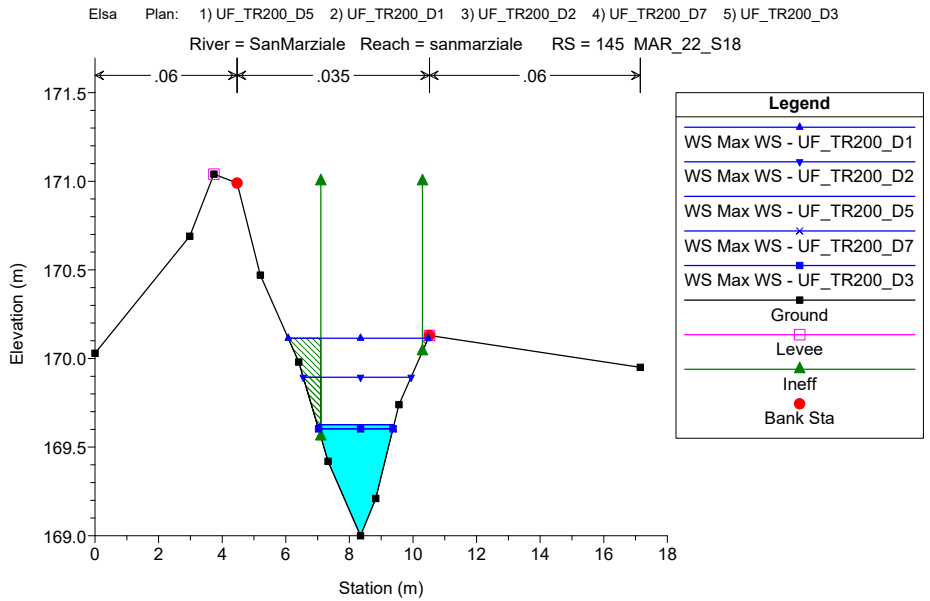

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 162 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta

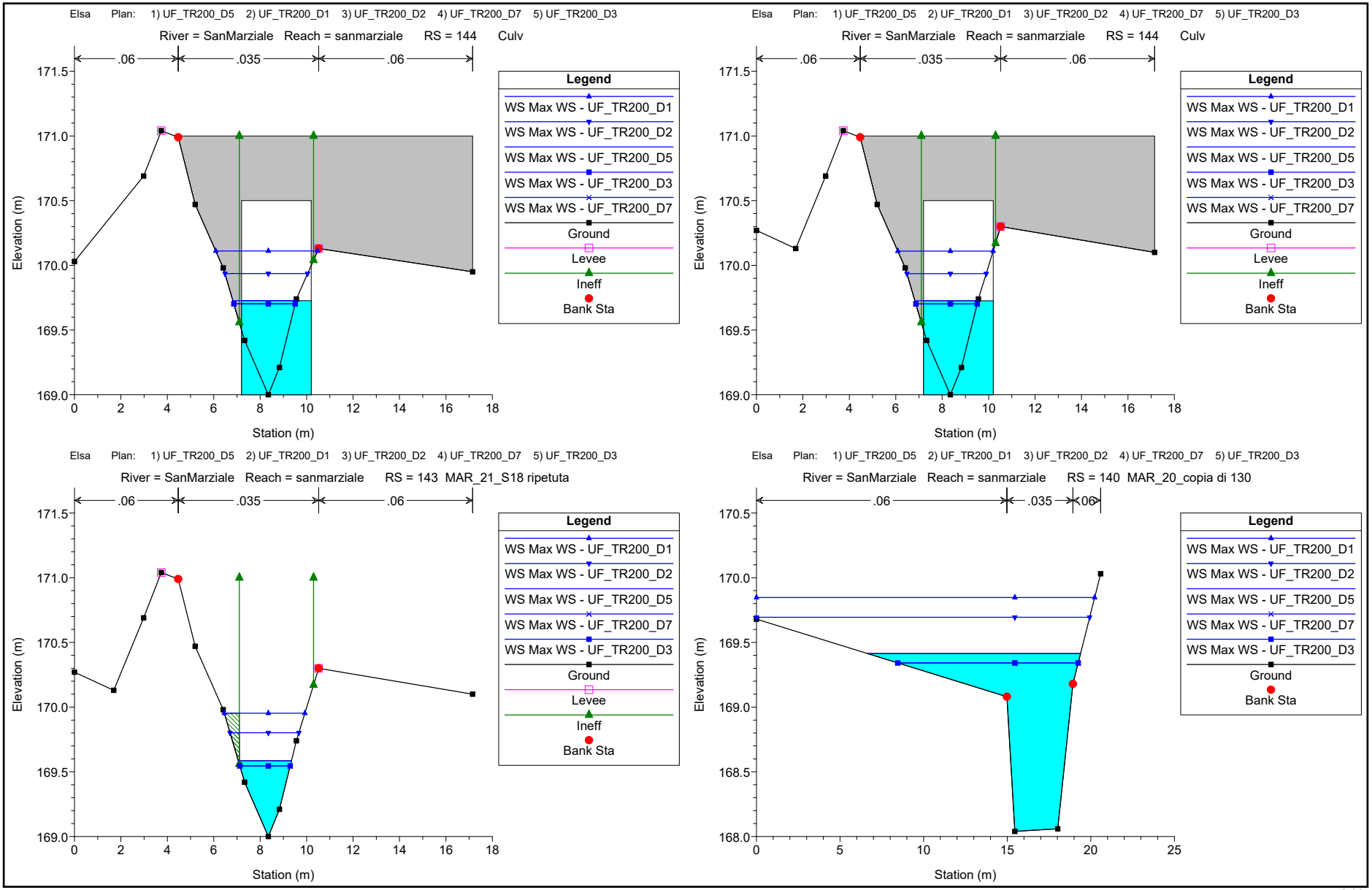

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 162 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta

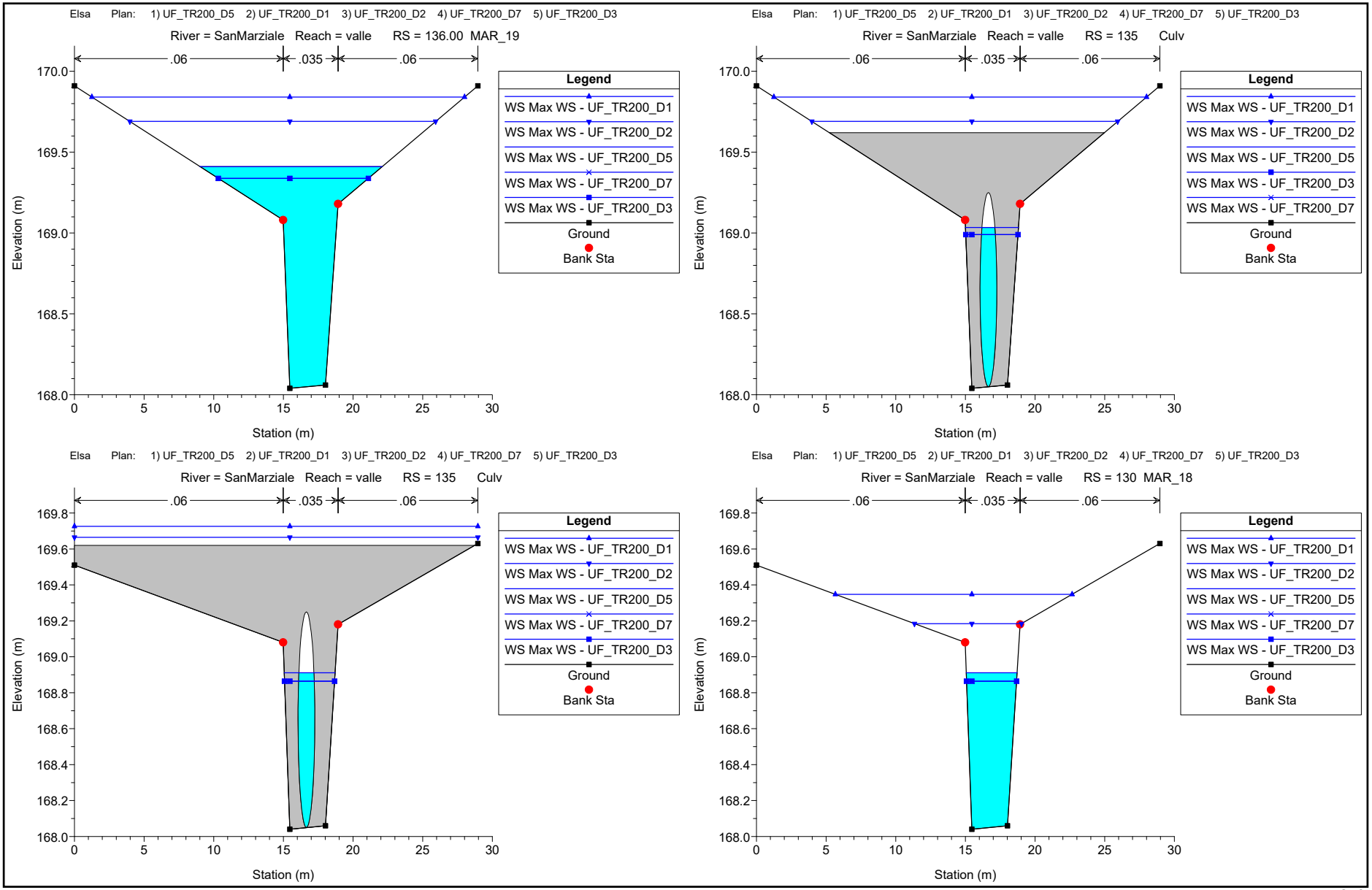

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 160 MAR_24_S20
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta

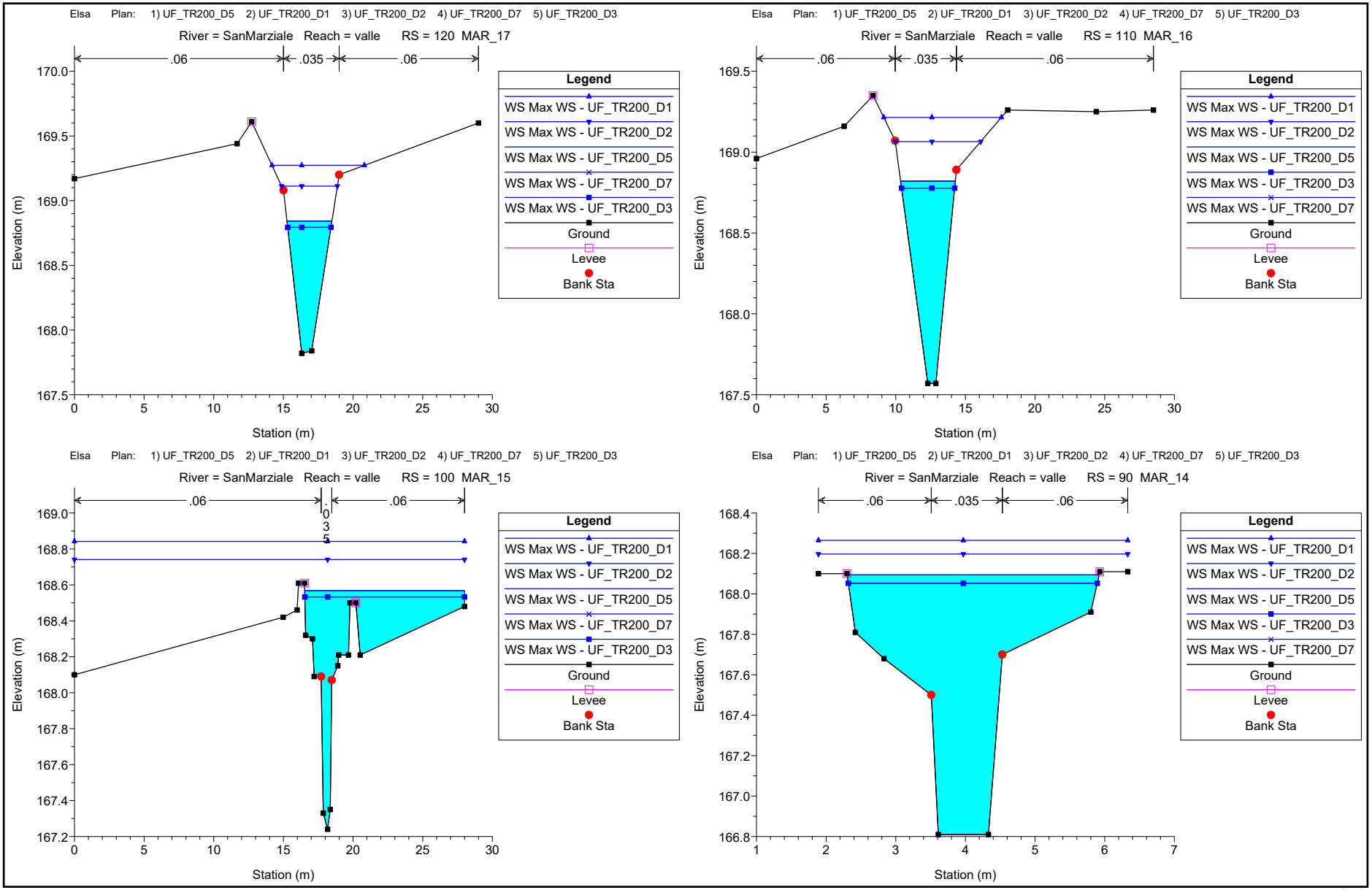

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 155 MAR_24_S19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta

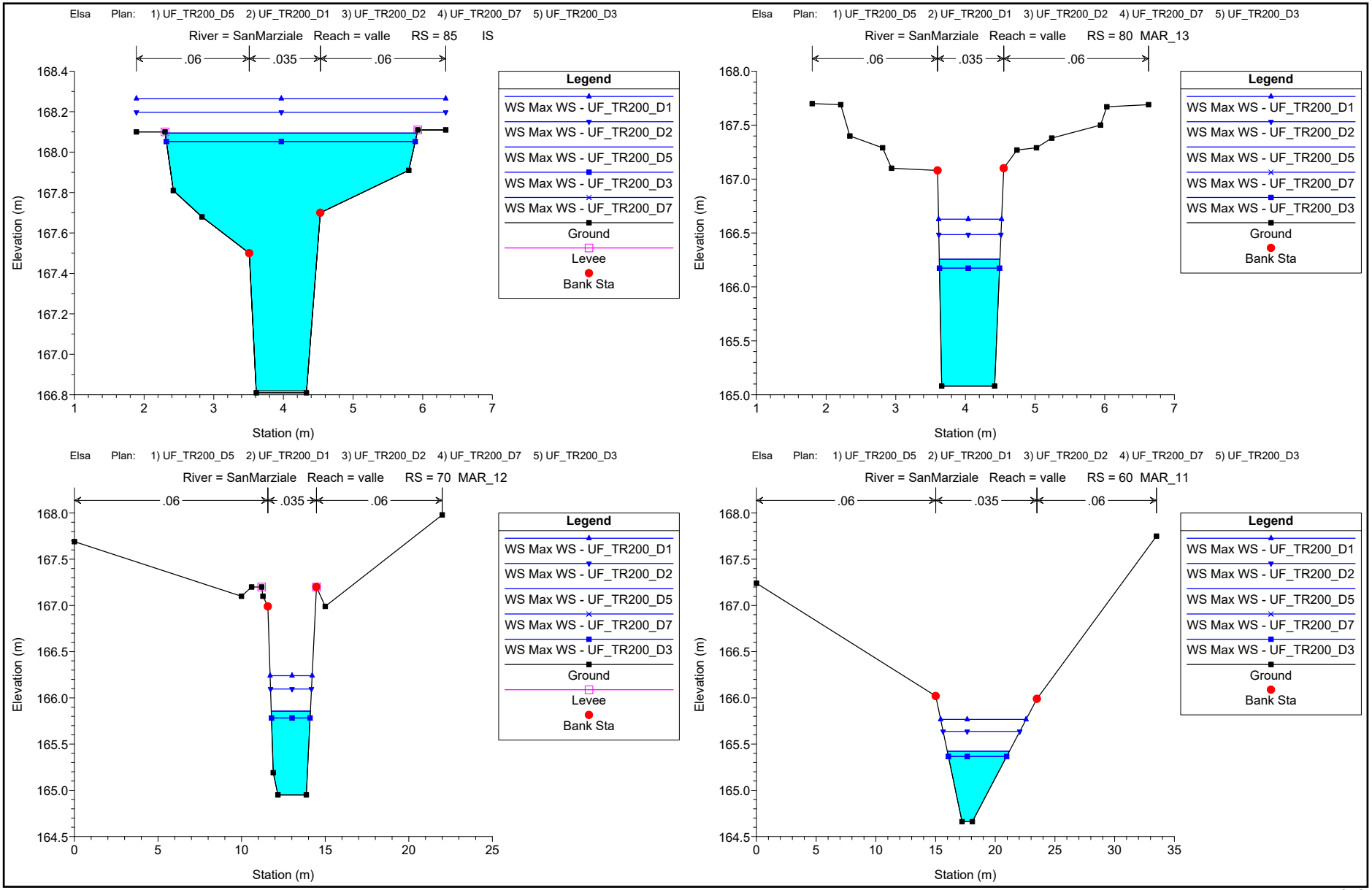

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 150 MAR_23
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta

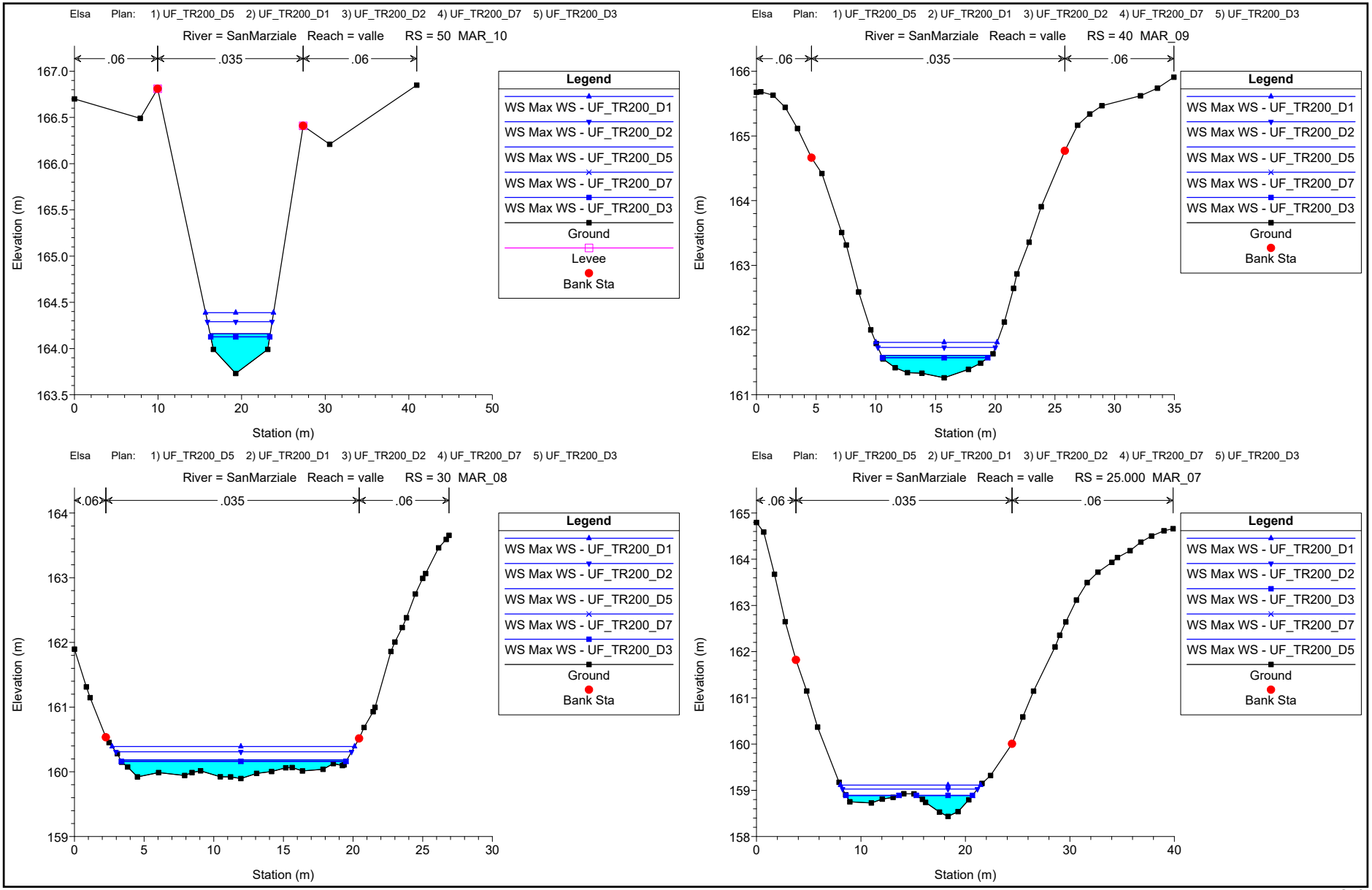

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 145 MAR_22_S18
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta

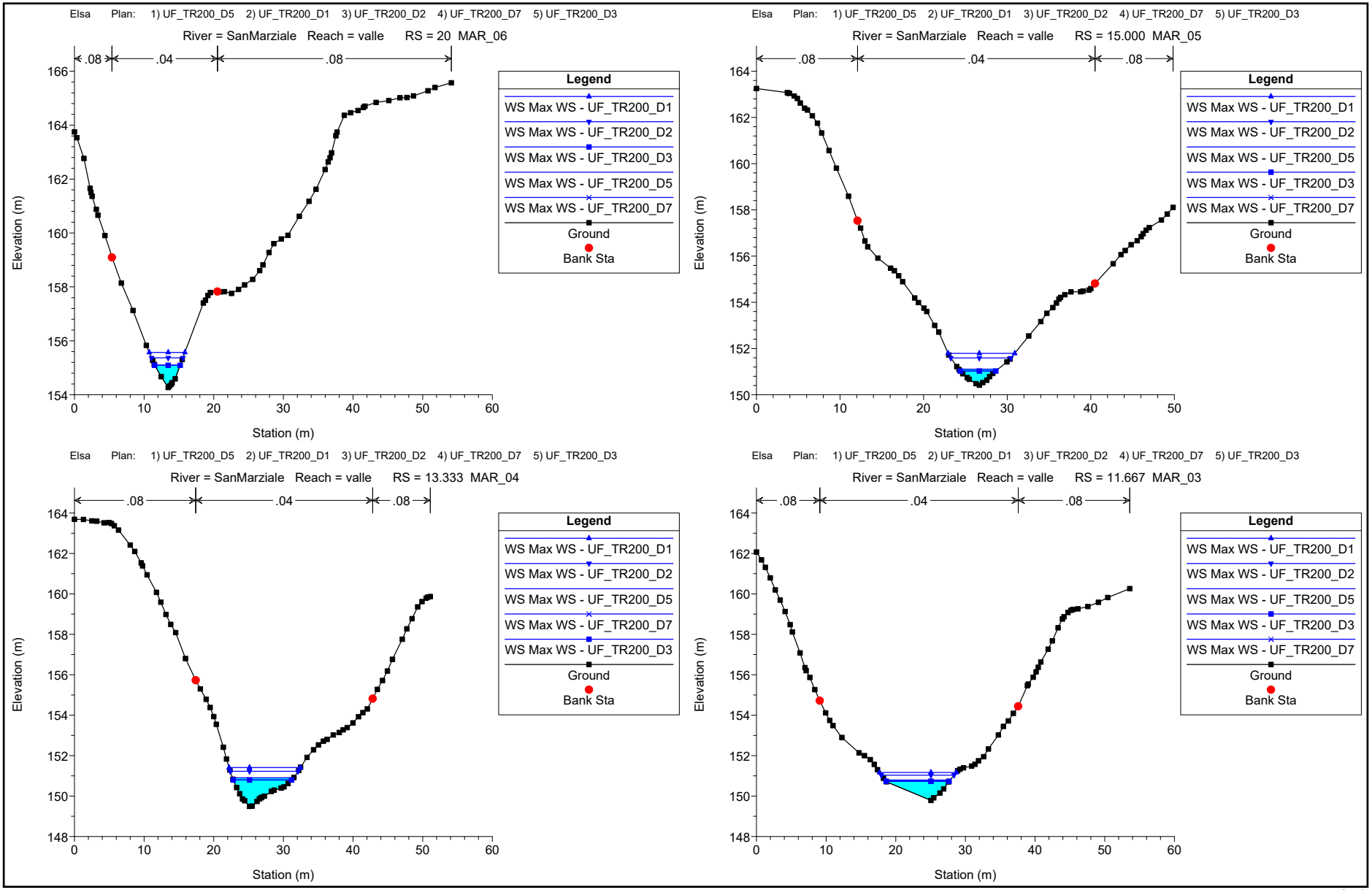

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 144 Culv
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 144 Culv
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 143 MAR_21_S18 ripetuta
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = sanmarziale RS = 140 MAR_20_copia di 130
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta

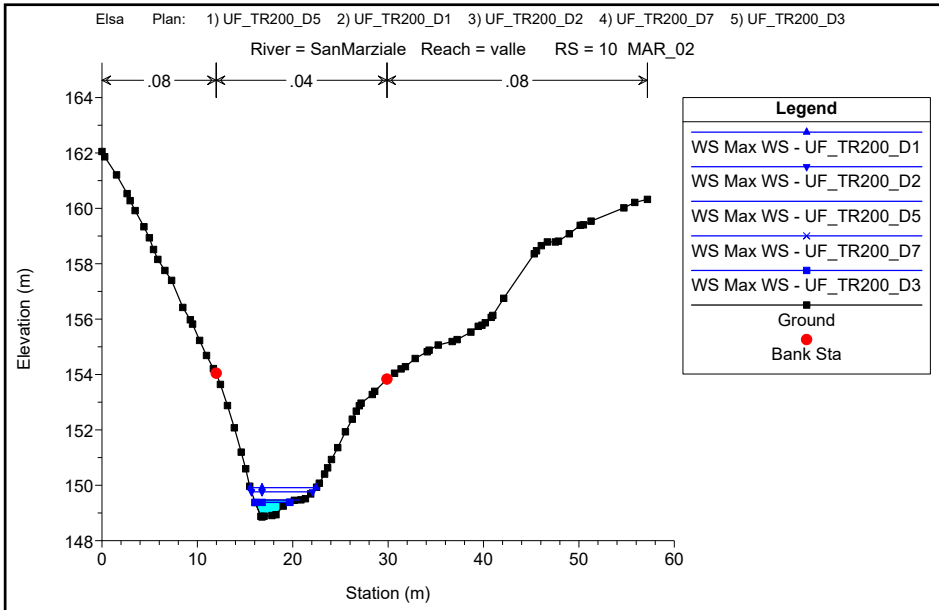

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 136.00 MAR_19
River = SanMarziale Reach = valle RS = 135 Culv
River = SanMarziale Reach = valle RS = 130 MAR_18
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta

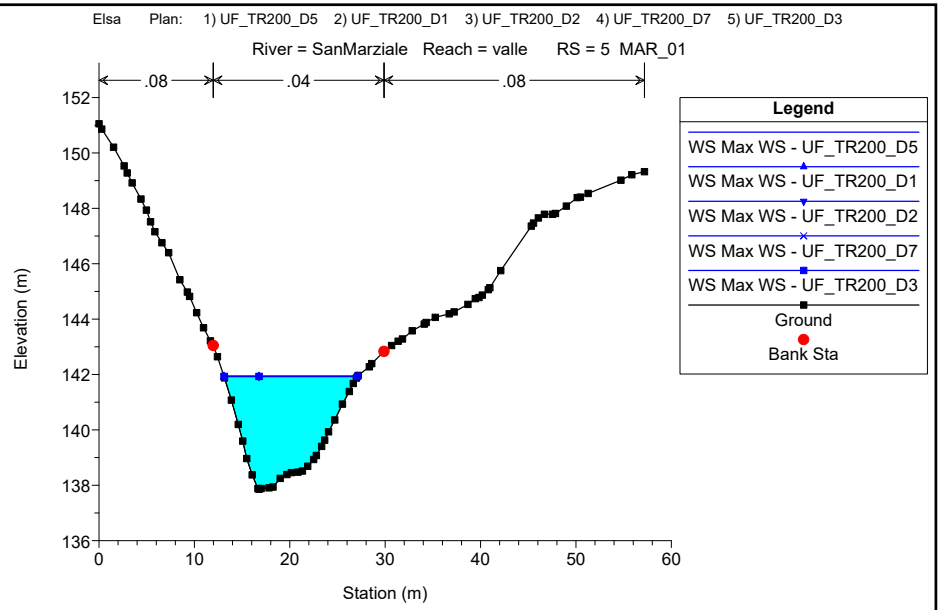

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 120 MAR_17
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 110 MAR_16
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 100 MAR_15
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 90 MAR_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 85 IS
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 80 MAR_13
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 70 MAR_12
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 60 MAR_11
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 50 MAR_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 40 MAR_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 30 MAR_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 25.000 MAR_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 20 MAR_06
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 15.000 MAR_05
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 13.333 MAR_04
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 11.667 MAR_03
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 10 MAR_02
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = SanMarziale Reach = valle RS = 5 MAR_01
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
Ground
Bank Sta

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
sanmarziale	170	Max WS	UF_TR30_D1	6.60	171.42	172.42		172.56	0.008404	0.77	1.86	0.10	4.96	10.84	0.73
sanmarziale	170	Max WS	UF_TR30_D5	1.10	171.42	172.07		172.11	0.004017		0.88		1.24	3.37	0.47
sanmarziale	170	Max WS	UF_TR30_D7	1.00	171.42	171.99		172.04	0.005894		0.99		1.01	3.07	0.55
sanmarziale	170	Max WS	UF_TR30_D2	5.60	171.42	172.38		172.50	0.007753	0.69	1.72		4.54	10.16	0.70
sanmarziale	170	Max WS	UF_TR30_D3	2.10	171.42	172.23		172.27	0.003049	0.30	0.94		3.05	9.93	0.42
sanmarziale	169.99			Lat Struct											
sanmarziale	169.98			Lat Struct											
sanmarziale	165	Max WS	UF_TR30_D1	2.76	170.92	172.45		172.47	0.000685	0.19	0.65	0.10	5.92	14.60	0.21
sanmarziale	165	Max WS	UF_TR30_D5	1.10	170.92	171.99		172.05	0.001669		1.09		1.01	3.23	0.35
sanmarziale	165	Max WS	UF_TR30_D7	1.00	170.92	171.90		171.96	0.001878		1.09		0.92	2.92	0.36
sanmarziale	165	Max WS	UF_TR30_D2	2.46	170.92	172.41		172.43	0.000644	0.17	0.62	0.07	5.41	14.60	0.20
sanmarziale	165	Max WS	UF_TR30_D3	1.27	170.92	172.20		172.26	0.001164		1.04		1.22	7.42	0.30
sanmarziale	162			Culvert											
sanmarziale	160	Max WS	UF_TR30_D1	2.76	170.47	171.32	171.43	171.91	0.023280		3.40		0.81	10.09	1.20
sanmarziale	160	Max WS	UF_TR30_D5	1.09	170.47	171.10		171.27	0.010575		1.85		0.59	2.17	0.77
sanmarziale	160	Max WS	UF_TR30_D7	1.00	170.47	171.08		171.24	0.009976		1.76		0.57	1.95	0.74
sanmarziale	160	Max WS	UF_TR30_D2	2.46	170.47	171.29	171.36	171.80	0.021143		3.15		0.78	10.09	1.14
sanmarziale	160	Max WS	UF_TR30_D3	1.27	170.47	171.13		171.34	0.011853		2.03		0.62	2.55	0.82
sanmarziale	155	Max WS	UF_TR30_D1	1.42	170.00	170.74	170.76	170.88	0.014353	0.35	1.84	0.60	1.19	5.54	0.78
sanmarziale	155	Max WS	UF_TR30_D5	1.01	170.00	170.64	170.68	170.81	0.020606	0.41	1.91	0.40	0.70	4.15	0.91
sanmarziale	155	Max WS	UF_TR30_D7	0.96	170.00	170.62	170.67	170.80	0.021347	0.39	1.91	0.35	0.65	4.09	0.92
sanmarziale	155	Max WS	UF_TR30_D2	1.39	170.00	170.73	170.76	170.87	0.014883	0.36	1.85	0.59	1.14	5.31	0.79
sanmarziale	155	Max WS	UF_TR30_D3	1.10	170.00	170.66	170.69	170.82	0.018720	0.43	1.88	0.46	0.80	4.24	0.87
sanmarziale	150	Max WS	UF_TR30_D1	3.41	168.65	170.22		170.28	0.002045	0.31	1.08	0.27	4.26	8.46	0.29
sanmarziale	150	Max WS	UF_TR30_D5	1.09	168.65	169.71		169.73	0.001241	0.04	0.63		1.73	2.06	0.21
sanmarziale	150	Max WS	UF_TR30_D7	1.00	168.65	169.69		169.71	0.001132	0.01	0.59		1.68	1.98	0.20
sanmarziale	150	Max WS	UF_TR30_D2	2.73	168.65	170.10		170.15	0.002012	0.26	1.01	0.22	3.34	6.78	0.29
sanmarziale	150	Max WS	UF_TR30_D3	1.44	168.65	169.83		169.86	0.001445	0.11	0.73	0.05	2.01	3.01	0.23
sanmarziale	145	Max WS	UF_TR30_D1	3.36	169.00	170.11		170.23	0.005654		1.54		2.18	4.40	0.60
sanmarziale	145	Max WS	UF_TR30_D5	1.09	169.00	169.58		169.70	0.014853		1.51		0.72	2.27	0.85
sanmarziale	145	Max WS	UF_TR30_D7	1.00	169.00	169.56		169.67	0.015542		1.49		0.67	2.21	0.86
sanmarziale	145	Max WS	UF_TR30_D2	2.67	169.00	169.98		170.10	0.006962		1.52		1.75	3.73	0.64
sanmarziale	145	Max WS	UF_TR30_D3	1.44	169.00	169.70		169.81	0.009392		1.42		1.01	2.65	0.70
sanmarziale	144			Culvert											
sanmarziale	143	Max WS	UF_TR30_D1	3.36	169.00	169.95		170.16	0.012152		2.02		1.66	3.47	0.84
sanmarziale	143	Max WS	UF_TR30_D5	1.09	169.00	169.52	169.54	169.69	0.026783		1.86		0.59	2.09	1.12
sanmarziale	143	Max WS	UF_TR30_D7	1.00	169.00	169.50	169.52	169.67	0.026270		1.80		0.55	2.04	1.10
sanmarziale	143	Max WS	UF_TR30_D2	3.04	169.00	169.86	169.84	170.10	0.016122		2.17		1.40	3.16	0.95
sanmarziale	143	Max WS	UF_TR30_D3	1.44	169.00	169.64		169.78	0.015219		1.67		0.86	2.46	0.88
sanmarziale	140	Max WS	UF_TR30_D1	3.48	168.04	169.85		169.85	0.000154	0.12	0.41	0.09	13.76	20.23	0.10
sanmarziale	140	Max WS	UF_TR30_D5	1.09	168.04	169.29		169.29	0.000111	0.04	0.26	0.02	4.66	9.31	0.08
sanmarziale	140	Max WS	UF_TR30_D7	1.11	168.04	169.28		169.28	0.000119	0.04	0.27	0.02	4.59	9.09	0.08
sanmarziale	140	Max WS	UF_TR30_D2	3.11	168.04	169.72		169.73	0.000193	0.11	0.43	0.09	11.19	19.98	0.11
sanmarziale	140	Max WS	UF_TR30_D3	1.45	168.04	169.51		169.51	0.000088	0.06	0.26	0.04	7.43	15.35	0.07
valle	137.99			Lat Struct											
valle	137.98			Lat Struct											
valle	136.00	Max WS	UF_TR30_D1	5.58	168.04	169.84		169.86	0.000409	0.18	0.66	0.16	14.52	26.74	0.17
valle	136.00	Max WS	UF_TR30_D5	1.93	168.04	169.28		169.29	0.000353	0.07	0.46	0.04	4.55	9.03	0.14
valle	136.00	Max WS	UF_TR30_D7	1.91	168.04	169.28		169.29	0.000356	0.07	0.46	0.04	4.49	8.80	0.14
valle	136.00	Max WS	UF_TR30_D2	4.02	168.04	169.72		169.73	0.000328	0.14	0.56	0.13	11.42	22.76	0.15
valle	136.00	Max WS	UF_TR30_D3	2.47	168.04	169.51		169.52	0.000260	0.10	0.45	0.08	7.37	16.14	0.13
valle	135			Culvert											
valle	130	Max WS	UF_TR30_D1	5.58	168.04	169.35		169.42	0.002231	0.21	1.21	0.15	5.93	17.02	0.37
valle	130	Max WS	UF_TR30_D5	1.93	168.04	168.83		168.87	0.001810		0.81		2.39	3.55	0.31
valle	130	Max WS	UF_TR30_D7	1.91	168.04	168.81		168.84	0.001985		0.83		2.30	3.52	0.33
valle	130	Max WS	UF_TR30_D2	4.02	168.04	169.07		169.15	0.003243		1.23		3.27	3.86	0.43
valle	130	Max WS	UF_TR30_D3	2.47	168.04	168.97		169.01	0.001734		0.85		2.89	3.73	0.31
valle	120	Max WS	UF_TR30_D1	5.83	167.82	169.27		169.41	0.004911	0.24	1.62	0.13	3.73	6.62	0.55
valle	120	Max WS	UF_TR30_D5	1.92	167.82	168.76		168.82	0.004115		1.11		1.74	3.02	0.47
valle	120	Max WS	UF_TR30_D7	1.95	167.82	168.72		168.80	0.005042		1.20		1.62	2.93	0.51
valle	120	Max WS	UF_TR30_D2	4.02	167.82	168.95		169.10	0.008059		1.71		2.34	3.49	0.67
valle	120	Max WS	UF_TR30_D3	2.48	167.82	168.90		168.97	0.003691		1.13		2.19	3.37	0.45
valle	110	Max WS	UF_TR30_D1	6.93	167.57	169.21		169.33	0.003497	0.17	1.51	0.29	5.07	8.43	0.48
valle	110	Max WS	UF_TR30_D5	2.00	167.57	168.75		168.78	0.001648		0.79		2.54	3.73	0.31
valle	110	Max WS	UF_TR30_D7	2.00	167.57	168.71		168.75	0.001904		0.83		2.40	3.63	0.33
valle	110	Max WS	UF_TR30_D2	4.10	167.57	168.90		168.99	0.003878		1.30	0.03	3.15	4.25	0.48
valle	110	Max WS	UF_TR30_D3	2.79	167.57	168.87		168.92	0.001994		0.92		3.03	4.07	0.34
valle	100	Max WS	UF_TR30_D1	9.87	167.24	168.84		168.86	0.003074	0.60	1.03	0.56	15.92	28.00	0.28
valle	100	Max WS	UF_TR30_D5	2.56	167.24	168.51		168.59	0.011202	0.69	1.65	0.55	2.92	11.46	0.51
valle	100	Max WS	UF_TR30_D7	2.25	167.24	168.50		168.65	0.016852	0.83	2.00	0.89	1.55	3.23	0.62
valle	100	Max WS	UF_TR30_D2	4.59	167.24	168.61		168.63	0.003391	0.45	0.96	0.40	9.46	28.00	0.28
valle	100	Max WS	UF_TR30_D3	4.32	167.24	168.61		168.63	0.002957	0.42	0.90	0.38	9.51	28.00	0.26
valle	90	Max WS	UF_TR30_D1	4.69	166.81	168.27	168.10	168.48	0.014157	1.05	2.38	0.94	2.82	4.44	0.66
valle	90	Max WS	UF_TR30_D5	2.85	166.81	168.02	167.95	168.20	0.014129	0.89	2.07	0.66	1.80	3.54	0.63
valle	90	Max WS	UF_TR30_D7	2.68	166.81	167.99	167.92	168.17	0.014102	0.86	2.04	0.62	1.71	3.51	0.63
valle	90	Max WS	UF_TR30_D2	3.53	166.81	168.11	168.03	168.33	0.015304	0.89	2.28	0.73	2.15	4.44	0.67
valle	90	Max WS	UF_TR30_D3	3.58	166.81	168.12	168.04	168.34	0.015232	0.90	2.28	0.74	2.18	4.44	0.67
valle	85			Inl Struct											
valle	80	Max WS	UF_TR30_D1	4.68	165.08	166.63	166.60	167.30	0.069644		3.63		1.29	0.91	0.97
valle	80	Max WS	UF_TR30_D5	2.85	165.08	166.11	166.18	166.71	0.072941		3.42		0.83	0.86	1.11
valle	80	Max WS	UF_TR30_D7	2.68	165.08	166.03	166.14	166.66	0.079909		3.51		0.76	0.85	1.18
valle	80	Max WS	UF_TR30_D2	3.53	165.08	166.30	166.34	166.94	0.073054		3.55		0.99	0.87	1.06
valle	80	Max WS	UF_TR30_D3	3.58	165.08	166.32	166.35	166.95	0.071736		3.53		1.01	0.88	1.05
valle	70	Max WS	UF_TR30_D1	7.91	164.95	166.24		166.64	0.017298		2.78		2.85	2.52	0.83

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
valle	70	Max WS	UF_TR30_D5	3.33	164.95	165.73		165.94	0.014227		2.06		1.61	2.29	0.79
valle	70	Max WS	UF_TR30_D7	2.75	164.95	165.65		165.84	0.013110		1.90		1.45	2.25	0.76
valle	70	Max WS	UF_TR30_D2	4.81	164.95	165.90		166.19	0.016276		2.40		2.01	2.36	0.83
valle	70	Max WS	UF_TR30_D3	5.04	164.95	165.92		166.23	0.016452		2.43		2.07	2.37	0.83
valle	60	Max WS	UF_TR30_D1	11.50	164.66	165.77	165.79	166.11	0.016814		2.59		4.44	7.17	1.05
valle	60	Max WS	UF_TR30_D5	3.39	164.66	165.33		165.50	0.015530		1.84		1.84	4.65	0.94
valle	60	Max WS	UF_TR30_D7	2.80	164.66	165.28		165.43	0.015078		1.74		1.61	4.36	0.91
valle	60	Max WS	UF_TR30_D2	5.23	164.66	165.46	165.45	165.68	0.016183		2.09		2.50	5.40	0.98
valle	60	Max WS	UF_TR30_D3	5.62	164.66	165.48	165.47	165.71	0.016432		2.14		2.62	5.53	0.99
valle	59.99			Lat Struct											
valle	59.98			Lat Struct											
valle	50	Max WS	UF_TR30_D1	13.13	163.73	164.39	164.58	165.01	0.043302		3.49		3.76	8.14	1.64
valle	50	Max WS	UF_TR30_D5	3.54	163.73	164.10	164.18	164.35	0.042404		2.20		1.61	6.97	1.46
valle	50	Max WS	UF_TR30_D7	3.18	163.73	164.09	164.15	164.32	0.044293		2.14		1.48	6.89	1.48
valle	50	Max WS	UF_TR30_D2	5.62	163.73	164.18	164.28	164.53	0.043101		2.61		2.16	7.28	1.53
valle	50	Max WS	UF_TR30_D3	5.91	163.73	164.19	164.30	164.55	0.043092		2.65		2.23	7.32	1.54
valle	40	Max WS	UF_TR30_D1	14.00	161.26	161.81	162.00	162.43	0.051853		3.48		4.02	10.16	1.77
valle	40	Max WS	UF_TR30_D5	3.59	161.26	161.56	161.63	161.81	0.058091		2.23		1.61	8.68	1.66
valle	40	Max WS	UF_TR30_D7	3.22	161.26	161.54	161.61	161.78	0.057861		2.15		1.50	8.51	1.64
valle	40	Max WS	UF_TR30_D2	5.92	161.26	161.63	161.73	161.97	0.054367		2.59		2.29	9.39	1.68
valle	40	Max WS	UF_TR30_D3	6.12	161.26	161.64	161.74	161.98	0.053202		2.60		2.35	9.43	1.66
valle	30	Max WS	UF_TR30_D1	14.66	159.90	160.39	160.43	160.65	0.023333		2.25		6.51	17.41	1.18
valle	30	Max WS	UF_TR30_D5	3.45	159.90	160.15	160.16	160.25	0.027314		1.37		2.52	16.09	1.10
valle	30	Max WS	UF_TR30_D7	3.03	159.90	160.14	160.15	160.23	0.026411		1.29		2.35	16.02	1.07
valle	30	Max WS	UF_TR30_D2	6.11	159.90	160.21	160.24	160.37	0.032740		1.80		3.39	16.36	1.27
valle	30	Max WS	UF_TR30_D3	6.26	159.90	160.21	160.24	160.38	0.032339		1.81		3.45	16.38	1.26
valle	25.000	Max WS	UF_TR30_D1	16.87	158.44	159.11	159.31	159.77	0.064784		3.58		4.71	13.41	1.93
valle	25.000	Max WS	UF_TR30_D5	6.61	158.44	158.89	159.05	159.51	0.146575		3.49		1.89	10.40	2.61
valle	25.000	Max WS	UF_TR30_D7	6.38	158.44	158.88	159.04	159.52	0.155162		3.53		1.81	10.17	2.67
valle	25.000	Max WS	UF_TR30_D2	6.57	158.44	158.89	159.04	159.49	0.139542		3.42		1.92	10.46	2.55
valle	25.000	Max WS	UF_TR30_D3	6.61	158.44	158.89	159.05	159.49	0.138339		3.42		1.94	10.51	2.54
valle	20	Max WS	UF_TR30_D1	17.98	154.27	155.57	155.94	156.72	0.063497		4.75		3.79	5.12	1.76
valle	20	Max WS	UF_TR30_D5	6.39	154.27	155.09	155.32	155.84	0.075630		3.82		1.67	3.66	1.80
valle	20	Max WS	UF_TR30_D7	6.13	154.27	155.07	155.31	155.81	0.076321		3.79		1.62	3.60	1.81
valle	20	Max WS	UF_TR30_D2	6.84	154.27	155.12	155.36	155.86	0.071391		3.81		1.80	3.78	1.76
valle	20	Max WS	UF_TR30_D3	6.79	154.27	155.12	155.36	155.86	0.072779		3.83		1.77	3.76	1.78
valle	15.000	Max WS	UF_TR30_D1	21.29	150.42	151.79	151.92	152.39	0.028139		3.42		6.23	7.97	1.23
valle	15.000	Max WS	UF_TR30_D5	5.82	150.42	151.02	151.28	151.88	0.121837		4.11		1.42	4.21	2.26
valle	15.000	Max WS	UF_TR30_D7	5.56	150.42	151.00	151.26	151.91	0.137076		4.24		1.31	4.06	2.38
valle	15.000	Max WS	UF_TR30_D2	8.39	150.42	151.27	151.42	151.79	0.048034		3.21		2.62	5.57	1.49
valle	15.000	Max WS	UF_TR30_D3	7.40	150.42	151.20	151.37	151.75	0.055650		3.27		2.26	5.21	1.59
valle	13.333	Max WS	UF_TR30_D1	22.66	149.49	151.41		151.61	0.006025		1.98		11.47	10.24	0.60
valle	13.333	Max WS	UF_TR30_D5	5.16	149.49	150.78		150.83	0.002456		0.92		5.62	8.30	0.36
valle	13.333	Max WS	UF_TR30_D7	4.23	149.49	150.77		150.80	0.001777		0.77		5.48	8.23	0.30
valle	13.333	Max WS	UF_TR30_D2	9.11	149.49	151.00		151.08	0.003304		1.21		7.53	9.08	0.42
valle	13.333	Max WS	UF_TR30_D3	7.79	149.49	150.96		151.02	0.002803		1.09		7.16	8.96	0.39
valle	11.667	Max WS	UF_TR30_D1	22.92	149.78	151.17		151.51	0.015130		2.59		8.85	11.02	0.92
valle	11.667	Max WS	UF_TR30_D5	4.60	149.78	150.73		150.78	0.004577		1.04		4.44	9.02	0.47
valle	11.667	Max WS	UF_TR30_D7	4.36	149.78	150.72		150.77	0.004389		1.00		4.34	8.97	0.46
valle	11.667	Max WS	UF_TR30_D2	9.22	149.78	150.82		150.97	0.011038		1.75		5.28	9.46	0.75
valle	11.667	Max WS	UF_TR30_D3	6.48	149.78	150.80		150.88	0.006072		1.27		5.09	9.36	0.55
valle	10	Max WS	UF_TR30_D1	22.92	148.86	149.91	150.35	151.40	0.099662		5.40		4.24	6.92	2.20
valle	10	Max WS	UF_TR30_D5	4.63	148.86	149.37	149.62	150.19	0.125805		4.00		1.16	3.56	2.24
valle	10	Max WS	UF_TR30_D7	4.33	148.86	149.35	149.60	150.17	0.130999		4.00		1.08	3.43	2.28
valle	10	Max WS	UF_TR30_D2	9.22	148.86	149.58	149.86	150.55	0.124309		4.37		2.11	5.67	2.29
valle	10	Max WS	UF_TR30_D3	7.87	148.86	149.53	149.80	150.46	0.134624		4.27		1.84	5.47	2.35
valle	5	Max WS	UF_TR30_D1	1.15	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR30_D5	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR30_D7	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR30_D2	1.15	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR30_D3	1.15	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO DI SAN MARZIALE

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
sanmarziale	170	Max WS	UF_TR200_D5	1.60	171.42	172.19		172.22	0.002612	0.23	0.83		2.59	9.85	0.39
sanmarziale	170	Max WS	UF_TR200_D1	6.60	171.42	172.42		172.56	0.008404	0.77	1.86	0.10	4.96	10.84	0.73
sanmarziale	170	Max WS	UF_TR200_D2	4.00	171.42	172.33		172.41	0.005487	0.52	1.38		4.02	10.08	0.58
sanmarziale	170	Max WS	UF_TR200_D7	1.30	171.42	172.13		172.17	0.002795	0.18	0.81		2.07	9.77	0.40
sanmarziale	170	Max WS	UF_TR200_D3	1.30	171.42	172.13		172.17	0.002795	0.18	0.81		2.07	9.77	0.40
sanmarziale	169.99			Lat Struct											
sanmarziale	169.98			Lat Struct											
sanmarziale	165	Max WS	UF_TR200_D5	1.22	170.92	172.14		172.20	0.001290		1.05		1.16	5.42	0.31
sanmarziale	165	Max WS	UF_TR200_D1	2.76	170.92	172.45		172.47	0.000685	0.19	0.65	0.10	5.92	14.60	0.21
sanmarziale	165	Max WS	UF_TR200_D2	1.71	170.92	172.36		172.37	0.000396	0.11	0.47	0.07	4.60	9.83	0.16
sanmarziale	165	Max WS	UF_TR200_D7	1.17	170.92	172.07		172.13	0.001442		1.07		1.09	3.76	0.33
sanmarziale	165	Max WS	UF_TR200_D3	1.17	170.92	172.07		172.13	0.001442		1.07		1.09	3.76	0.33
sanmarziale	162			Culvert											
sanmarziale	160	Max WS	UF_TR200_D5	1.22	170.47	171.12		171.32	0.011475		1.98		0.62	2.46	0.81
sanmarziale	160	Max WS	UF_TR200_D1	2.76	170.47	171.32	171.43	171.91	0.023277		3.40		0.81	10.09	1.20
sanmarziale	160	Max WS	UF_TR200_D2	1.71	170.47	171.20	171.17	171.51	0.015329		2.47		0.69	6.73	0.95
sanmarziale	160	Max WS	UF_TR200_D7	1.17	170.47	171.11		171.30	0.011077		1.93		0.61	2.35	0.79
sanmarziale	160	Max WS	UF_TR200_D3	1.17	170.47	171.11		171.30	0.011077		1.93		0.61	2.35	0.79
sanmarziale	155	Max WS	UF_TR200_D5	1.08	170.00	170.65	170.68	170.82	0.019245	0.43	1.89	0.44	0.77	4.22	0.88
sanmarziale	155	Max WS	UF_TR200_D1	1.42	170.00	170.74	170.76	170.88	0.014339	0.35	1.84	0.60	1.19	5.54	0.78
sanmarziale	155	Max WS	UF_TR200_D2	1.26	170.00	170.70	170.72	170.85	0.016023	0.44	1.85	0.54	0.99	4.50	0.82
sanmarziale	155	Max WS	UF_TR200_D7	1.05	170.00	170.65	170.68	170.81	0.019957	0.42	1.91	0.43	0.74	4.19	0.89
sanmarziale	155	Max WS	UF_TR200_D3	1.05	170.00	170.65	170.68	170.81	0.019957	0.42	1.91	0.43	0.74	4.19	0.89
sanmarziale	150	Max WS	UF_TR200_D5	1.29	168.65	169.76		169.79	0.001484	0.07	0.71		1.84	2.23	0.24
sanmarziale	150	Max WS	UF_TR200_D1	3.40	168.65	170.22		170.28	0.002037	0.31	1.08	0.27	4.26	8.47	0.29
sanmarziale	150	Max WS	UF_TR200_D2	2.27	168.65	170.02		170.06	0.001842	0.21	0.93	0.17	2.84	5.67	0.27
sanmarziale	150	Max WS	UF_TR200_D7	1.19	168.65	169.74		169.76	0.001354	0.05	0.67		1.78	2.15	0.22
sanmarziale	150	Max WS	UF_TR200_D3	1.19	168.65	169.74		169.76	0.001354	0.05	0.67		1.78	2.15	0.22
sanmarziale	145	Max WS	UF_TR200_D5	1.29	169.00	169.63		169.75	0.013883		1.57		0.83	2.41	0.83
sanmarziale	145	Max WS	UF_TR200_D1	3.36	169.00	170.11		170.24	0.005641		1.54		2.18	4.41	0.59
sanmarziale	145	Max WS	UF_TR200_D2	2.27	169.00	169.89		170.01	0.007621		1.51		1.51	3.39	0.66
sanmarziale	145	Max WS	UF_TR200_D7	1.19	169.00	169.60		169.72	0.014321		1.54		0.77	2.34	0.84
sanmarziale	145	Max WS	UF_TR200_D3	1.19	169.00	169.60		169.72	0.014323		1.54		0.77	2.34	0.84
sanmarziale	144			Culvert											
sanmarziale	143	Max WS	UF_TR200_D5	1.29	169.00	169.58	169.58	169.74	0.020106		1.77		0.73	2.29	0.99
sanmarziale	143	Max WS	UF_TR200_D1	3.36	169.00	169.95		170.16	0.012162		2.02		1.66	3.47	0.84
sanmarziale	143	Max WS	UF_TR200_D2	2.27	169.00	169.80		169.97	0.012405		1.81		1.25	2.96	0.83
sanmarziale	143	Max WS	UF_TR200_D7	1.19	169.00	169.55	169.56	169.72	0.024409		1.84		0.64	2.17	1.08
sanmarziale	143	Max WS	UF_TR200_D3	1.19	169.00	169.55	169.56	169.72	0.024411		1.84		0.64	2.17	1.08
sanmarziale	140	Max WS	UF_TR200_D5	1.30	168.04	169.41		169.42	0.000099	0.05	0.27	0.04	6.08	12.76	0.08
sanmarziale	140	Max WS	UF_TR200_D1	3.45	168.04	169.85		169.85	0.000151	0.12	0.40	0.09	13.77	20.23	0.10
sanmarziale	140	Max WS	UF_TR200_D2	2.31	168.04	169.69		169.70	0.000117	0.08	0.33	0.07	10.70	19.93	0.09
sanmarziale	140	Max WS	UF_TR200_D7	1.19	168.04	169.34		169.34	0.000108	0.04	0.26	0.03	5.22	10.79	0.08
sanmarziale	140	Max WS	UF_TR200_D3	1.19	168.04	169.34		169.34	0.000108	0.04	0.26	0.03	5.22	10.79	0.08
valle	137.99			Lat Struct											
valle	137.98			Lat Struct											
valle	136.00	Max WS	UF_TR200_D5	2.24	168.04	169.41		169.42	0.000301	0.09	0.46	0.07	5.96	13.09	0.14
valle	136.00	Max WS	UF_TR200_D1	5.57	168.04	169.84		169.86	0.000408	0.18	0.66	0.16	14.53	26.75	0.17
valle	136.00	Max WS	UF_TR200_D2	3.55	168.04	169.69		169.70	0.000279	0.13	0.51	0.11	10.85	21.96	0.14
valle	136.00	Max WS	UF_TR200_D7	2.06	168.04	169.34		169.35	0.000332	0.08	0.46	0.06	5.09	10.77	0.14
valle	136.00	Max WS	UF_TR200_D3	2.06	168.04	169.34		169.35	0.000332	0.08	0.46	0.06	5.09	10.77	0.14
valle	135			Culvert											
valle	130	Max WS	UF_TR200_D5	2.24	168.04	168.91		168.95	0.001773		0.84		2.67	3.65	0.31
valle	130	Max WS	UF_TR200_D1	5.58	168.04	169.35		169.42	0.002234	0.21	1.21	0.15	5.92	17.01	0.37
valle	130	Max WS	UF_TR200_D2	3.55	168.04	169.18		169.23	0.001703	0.10	0.95	0.01	3.91	7.69	0.31
valle	130	Max WS	UF_TR200_D7	2.06	168.04	168.86		168.90	0.001813		0.82		2.50	3.59	0.31
valle	130	Max WS	UF_TR200_D3	2.06	168.04	168.86		168.90	0.001813		0.82		2.50	3.59	0.31
valle	120	Max WS	UF_TR200_D5	2.24	167.82	168.84		168.91	0.003866		1.12		1.99	3.23	0.46
valle	120	Max WS	UF_TR200_D1	5.82	167.82	169.27		169.41	0.004888	0.24	1.62	0.13	3.73	6.63	0.54
valle	120	Max WS	UF_TR200_D2	3.66	167.82	169.11		169.19	0.003580	0.06	1.24		2.95	4.00	0.45
valle	120	Max WS	UF_TR200_D7	2.06	167.82	168.79		168.86	0.004061		1.12		1.83	3.10	0.47
valle	120	Max WS	UF_TR200_D3	2.06	167.82	168.79		168.86	0.004062		1.12		1.83	3.10	0.47
valle	110	Max WS	UF_TR200_D5	2.45	167.57	168.82		168.86	0.001872		0.87		2.82	3.92	0.33
valle	110	Max WS	UF_TR200_D1	6.87	167.57	169.21		169.33	0.003426	0.17	1.49	0.29	5.08	8.45	0.47
valle	110	Max WS	UF_TR200_D2	4.38	167.57	169.07		169.13	0.002437		1.13	0.16	3.99	6.13	0.39
valle	110	Max WS	UF_TR200_D7	2.18	167.57	168.78		168.81	0.001745		0.82		2.65	3.81	0.32
valle	110	Max WS	UF_TR200_D3	2.18	167.57	168.78		168.81	0.001744		0.82		2.65	3.81	0.32
valle	100	Max WS	UF_TR200_D5	3.52	167.24	168.57		168.66	0.012960	0.81	1.83	0.71	3.55	11.47	0.55
valle	100	Max WS	UF_TR200_D1	9.90	167.24	168.84		168.86	0.003075	0.61	1.03	0.56	15.95	28.00	0.28
valle	100	Max WS	UF_TR200_D2	7.33	167.24	168.74		168.76	0.003136	0.54	0.99	0.49	13.12	28.00	0.28
valle	100	Max WS	UF_TR200_D7	2.92	167.24	168.53		168.62	0.012050	0.74	1.73	0.61	3.15	11.46	0.53
valle	100	Max WS	UF_TR200_D3	2.92	167.24	168.53		168.62	0.012056	0.74	1.73	0.61	3.15	11.46	0.53
valle	90	Max WS	UF_TR200_D5	3.39	166.81	168.09	168.01	168.29	0.014382	0.99	2.18	0.80	2.07	3.62	0.65
valle	90	Max WS	UF_TR200_D1	4.68	166.81	168.26	168.10	168.48	0.014167	1.05	2.38	0.94	2.82	4.44	0.66
valle	90	Max WS	UF_TR200_D2	4.13	166.81	168.20	168.10	168.41	0.014572	0.98	2.33	0.85	2.51	4.44	0.66
valle	90	Max WS	UF_TR200_D7	3.08	166.81	168.05	167.98	168.24	0.014247	0.94	2.12	0.73	1.92	3.57	0.64
valle	90	Max WS	UF_TR200_D3	3.09	166.81	168.05	167.98	168.24	0.014233	0.94	2.12	0.73	1.92	3.57	0.64
valle	85			Inl Struct											
valle	80	Max WS	UF_TR200_D5	3.39	165.08	166.26	166.31	166.89	0.073371		3.53		0.96	0.87	1.07
valle	80	Max WS	UF_TR200_D1	4.68	165.08	166.63	166.60	167.30	0.069702		3.63		1.29	0.91	0.97
valle	80	Max WS	UF_TR200_D2	4.13	165.08	166.48	166.48	167.13	0.069602		3.56		1.16	0.89	1.00
valle	80	Max WS	UF_TR200_D7	3.08	165.08	166.17	166.24	166.79	0.073312		3.47		0.89	0.86	1.09
valle	80	Max WS	UF_TR200_D3	3.09	165.08	166.17	166.24	166.79	0.073328		3.47		0.89	0.86	1.09
valle	70	Max WS	UF_TR200_D5	4.47	164.95	165.86		166.14	0.016034		2.34		1.91	2.34	0.83
valle	70	Max WS	UF_TR200_D1	7.90	164.95	166.24		166.63	0.017282		2.78		2.84	2.52	0.83
valle	70	Max WS	UF_TR200_D2	6.53	164.95	166.10		166.45	0.016866		2.63		2.49	2.45	0.83
valle	70	Max WS	UF_TR200_D7	3.81	164.95	165.78		166.03	0.015112		2.19		1.74	2.31	0.81
valle	70	Max WS	UF_TR200_D3	3.81	164.95	165.78		166.03	0.015117		2.19		1.74	2.31	0.81
valle	60	Max WS	UF_TR200_D5	4.72	164.66	165.42	165.41	165.64	0.016169		2.04		2.32	5.21	0.98
valle	60	Max WS	UF_TR200_D1	11.48	164.66	165.77	165.79	166.11	0.016806		2.59		4.44	7.16	1.05

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
valle	60	Max WS	UF_TR200_D2	8.53	164.66	165.64	165.65	165.93	0.016812		2.40		3.55	6.42	1.03
valle	60	Max WS	UF_TR200_D7	3.91	164.66	165.37	165.35	165.56	0.015849		1.93		2.03	4.88	0.96
valle	60	Max WS	UF_TR200_D3	3.91	164.66	165.37	165.35	165.56	0.015854		1.93		2.03	4.88	0.96
valle	59.99			Lat Struct											
valle	59.98			Lat Struct											
valle	50	Max WS	UF_TR200_D5	4.97	163.73	164.16	164.25	164.47	0.042027		2.48		2.01	7.20	1.50
valle	50	Max WS	UF_TR200_D1	13.11	163.73	164.39	164.58	165.01	0.043280		3.49		3.76	8.14	1.64
valle	50	Max WS	UF_TR200_D2	9.35	163.73	164.29	164.44	164.79	0.044095		3.13		2.98	7.73	1.61
valle	50	Max WS	UF_TR200_D7	4.06	163.73	164.13	164.20	164.40	0.041837		2.30		1.76	7.06	1.47
valle	50	Max WS	UF_TR200_D3	4.06	163.73	164.13	164.20	164.40	0.041839		2.30		1.76	7.06	1.47
valle	40	Max WS	UF_TR200_D5	5.11	161.26	161.61	161.70	161.92	0.056499		2.50		2.05	9.15	1.68
valle	40	Max WS	UF_TR200_D1	13.99	161.26	161.81	162.00	162.43	0.051849		3.48		4.02	10.16	1.77
valle	40	Max WS	UF_TR200_D2	9.86	161.26	161.73	161.87	162.20	0.049797		3.03		3.25	9.83	1.68
valle	40	Max WS	UF_TR200_D7	4.18	161.26	161.57	161.66	161.87	0.061642		2.40		1.74	8.82	1.72
valle	40	Max WS	UF_TR200_D3	4.18	161.26	161.57	161.66	161.87	0.061642		2.40		1.74	8.82	1.72
valle	30	Max WS	UF_TR200_D5	5.16	159.90	160.19	160.22	160.33	0.032673		1.69		3.05	16.26	1.24
valle	30	Max WS	UF_TR200_D1	14.64	159.90	160.39	160.43	160.65	0.023333		2.25		6.50	17.41	1.18
valle	30	Max WS	UF_TR200_D2	10.22	159.90	160.31	160.34	160.51	0.024242		2.00		5.12	16.92	1.16
valle	30	Max WS	UF_TR200_D7	4.26	159.90	160.16	160.19	160.29	0.035344		1.61		2.65	16.13	1.27
valle	30	Max WS	UF_TR200_D3	4.26	159.90	160.16	160.19	160.29	0.035354		1.61		2.65	16.13	1.27
valle	25.000	Max WS	UF_TR200_D5	6.63	158.44	158.89	159.05	159.52	0.148295		3.51		1.89	10.39	2.63
valle	25.000	Max WS	UF_TR200_D1	16.85	158.44	159.11	159.31	159.77	0.064778		3.58		4.70	13.41	1.93
valle	25.000	Max WS	UF_TR200_D2	11.46	158.44	159.03	159.19	159.55	0.071788		3.22		3.56	12.90	1.96
valle	25.000	Max WS	UF_TR200_D7	6.61	158.44	158.89	159.05	159.51	0.146592		3.49		1.89	10.40	2.61
valle	25.000	Max WS	UF_TR200_D3	6.71	158.44	158.89	159.05	159.51	0.145911		3.50		1.92	10.46	2.61
valle	20	Max WS	UF_TR200_D5	6.43	154.27	155.09	155.33	155.84	0.075490		3.82		1.68	3.67	1.80
valle	20	Max WS	UF_TR200_D1	17.95	154.27	155.57	155.94	156.72	0.063452		4.74		3.79	5.12	1.76
valle	20	Max WS	UF_TR200_D2	12.09	154.27	155.37	155.67	156.31	0.064570		4.30		2.81	4.50	1.74
valle	20	Max WS	UF_TR200_D7	6.39	154.27	155.09	155.32	155.84	0.075643		3.82		1.67	3.66	1.80
valle	20	Max WS	UF_TR200_D3	6.46	154.27	155.09	155.33	155.84	0.075527		3.83		1.69	3.67	1.80
valle	15.000	Max WS	UF_TR200_D5	6.23	150.42	151.11	151.30	151.72	0.073241		3.46		1.80	4.71	1.79
valle	15.000	Max WS	UF_TR200_D1	21.27	150.42	151.79	151.92	152.39	0.028133		3.41		6.23	7.97	1.23
valle	15.000	Max WS	UF_TR200_D2	14.39	150.42	151.60	151.69	152.07	0.028016		3.05		4.73	7.20	1.20
valle	15.000	Max WS	UF_TR200_D7	5.88	150.42	151.03	151.28	151.88	0.120405		4.10		1.44	4.23	2.25
valle	15.000	Max WS	UF_TR200_D3	5.93	150.42	151.03	151.28	151.88	0.119620		4.10		1.45	4.25	2.24
valle	13.333	Max WS	UF_TR200_D5	6.04	149.49	150.90		150.94	0.002122		0.91		6.61	8.76	0.34
valle	13.333	Max WS	UF_TR200_D1	22.63	149.49	151.41		151.61	0.006021		1.97		11.47	10.24	0.60
valle	13.333	Max WS	UF_TR200_D2	15.39	149.49	151.22		151.35	0.004646		1.60		9.61	9.74	0.52
valle	13.333	Max WS	UF_TR200_D7	4.64	149.49	150.80		150.83	0.001861		0.81		5.76	8.37	0.31
valle	13.333	Max WS	UF_TR200_D3	4.64	149.49	150.80		150.83	0.001861		0.81		5.76	8.37	0.31
valle	11.667	Max WS	UF_TR200_D5	6.09	149.78	150.79		150.87	0.005581		1.21		5.02	9.33	0.53
valle	11.667	Max WS	UF_TR200_D1	22.90	149.78	151.17		151.51	0.015128		2.59		8.84	11.02	0.92
valle	11.667	Max WS	UF_TR200_D2	15.56	149.78	151.04		151.26	0.011516		2.09		7.44	10.44	0.79
valle	11.667	Max WS	UF_TR200_D7	4.68	149.78	150.73		150.79	0.004679		1.05		4.46	9.03	0.48
valle	11.667	Max WS	UF_TR200_D3	4.75	149.78	150.73		150.79	0.004750		1.06		4.48	9.04	0.48
valle	10	Max WS	UF_TR200_D5	6.17	148.86	149.47	149.71	150.29	0.126196		4.01		1.54	4.77	2.25
valle	10	Max WS	UF_TR200_D1	22.90	148.86	149.91	150.35	151.40	0.099580		5.40		4.24	6.92	2.20
valle	10	Max WS	UF_TR200_D2	15.56	148.86	149.77	150.11	150.93	0.099487		4.79		3.25	6.40	2.14
valle	10	Max WS	UF_TR200_D7	4.69	148.86	149.38	149.62	150.18	0.121865		3.96		1.18	3.61	2.21
valle	10	Max WS	UF_TR200_D3	4.69	148.86	149.38	149.62	150.18	0.121864		3.96		1.18	3.61	2.21
valle	5	Max WS	UF_TR200_D5	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR200_D1	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR200_D2	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR200_D7	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01
valle	5	Max WS	UF_TR200_D3	1.13	137.86	141.93	138.23	141.93	0.000001		0.03		35.68	14.00	0.01

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SCARNA

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

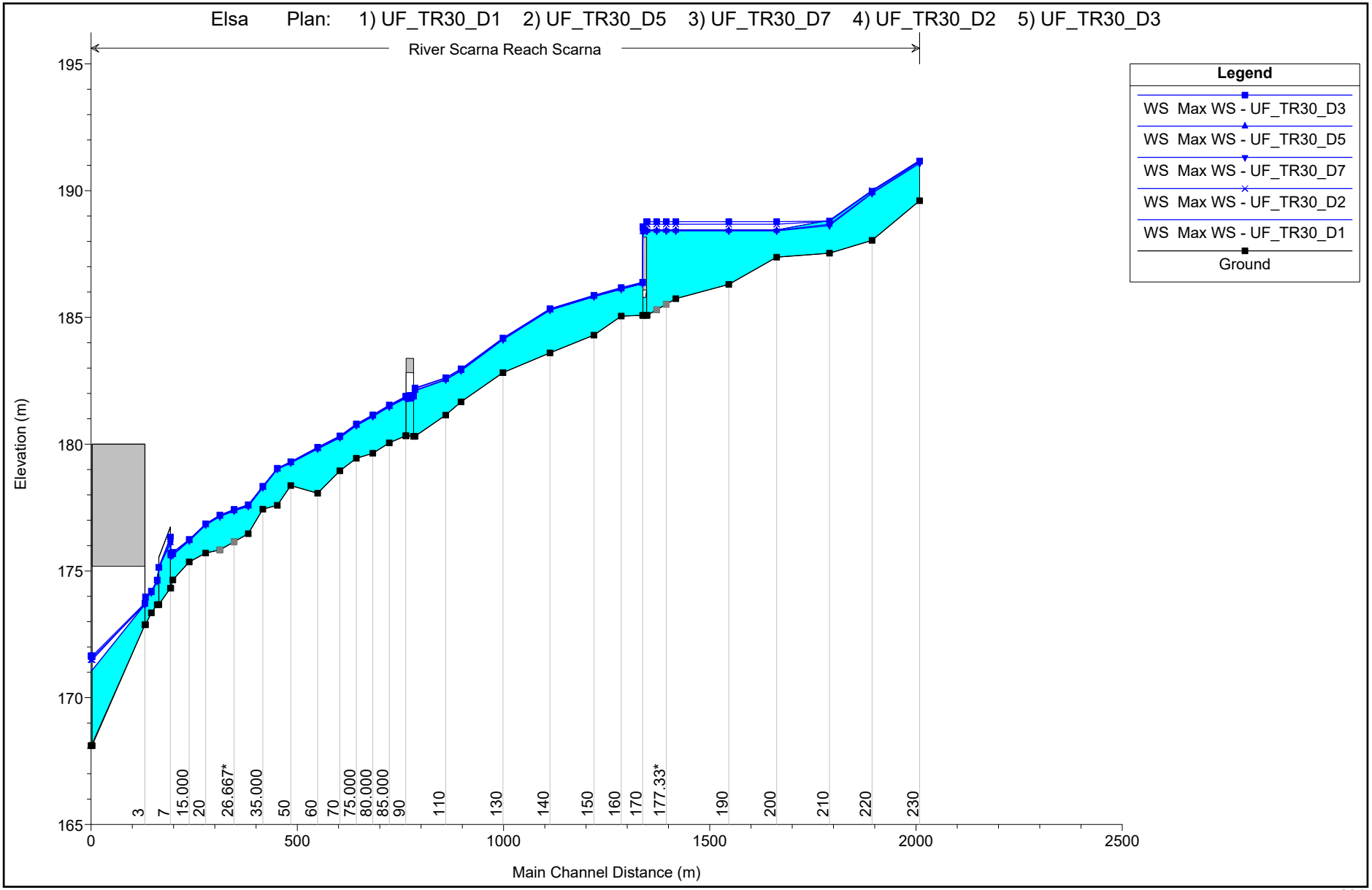
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SCARNA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River Scarna Reach Scarna
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
195
190
185
180
175
170
165
0
500
1000
1500
2000
2500
3
7
15.000
20
26.667*
35.000
50
60
70
75.000
80.000
85.000
90
110
130
140
150
160
170
177.33*
190
200
210
220
230

ALLEGATI

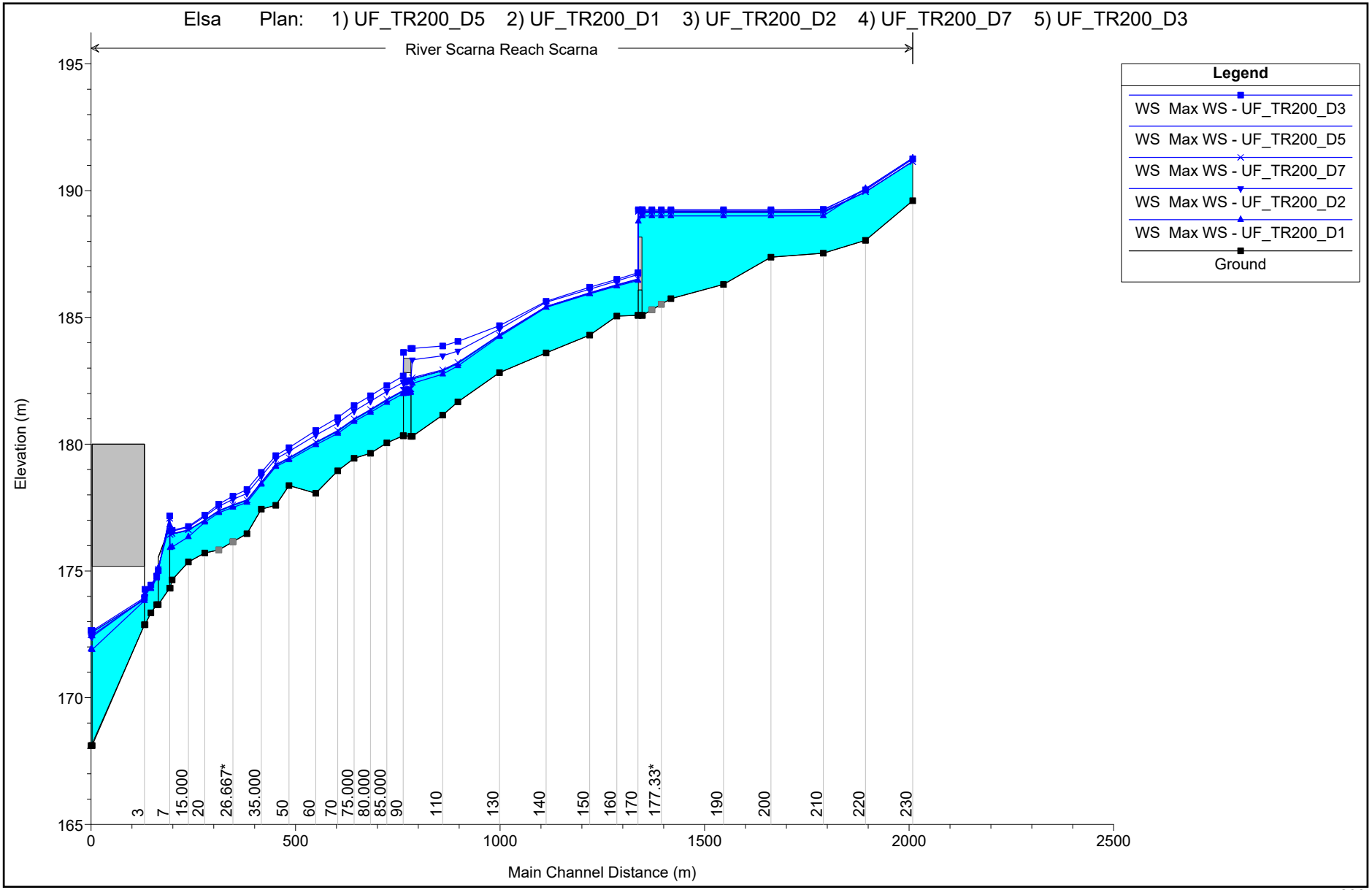
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SCARNA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River Scarna Reach Scarna
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
Main Channel Distance (m)
195
190
185
180
175
170
165
0
500
1000
1500
2000
2500
3
7
15.000
20
26.667*
35.000
50
60
70
75.000
80.000
85.000
90
110
130
140
150
160
170
177.33*
190
200
210
220
230

ALLEGATI

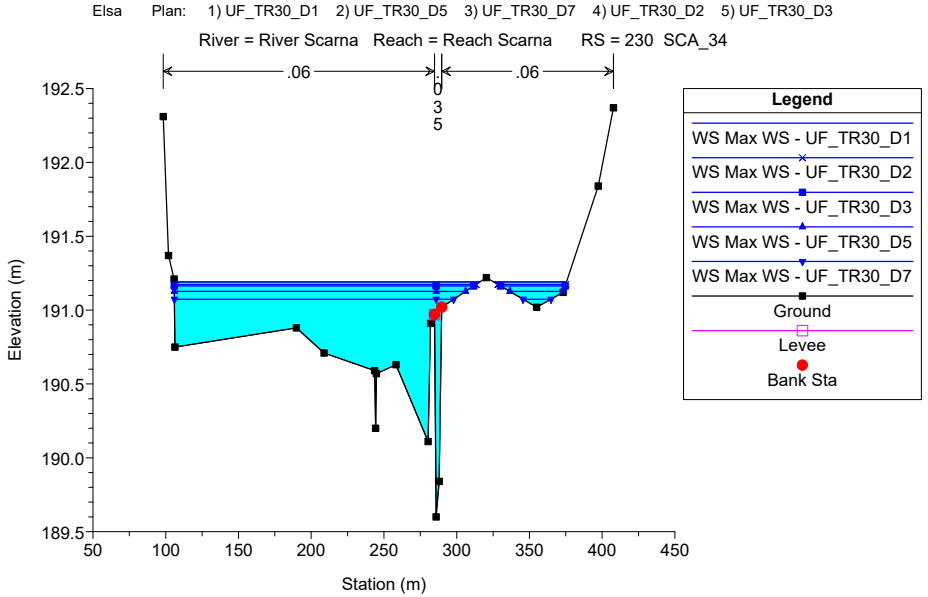
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SCARNA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)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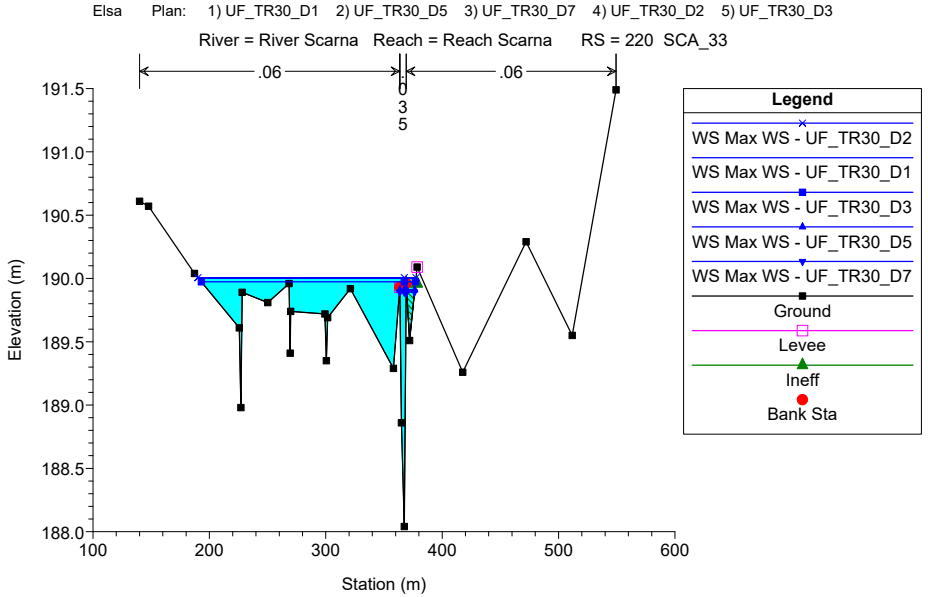
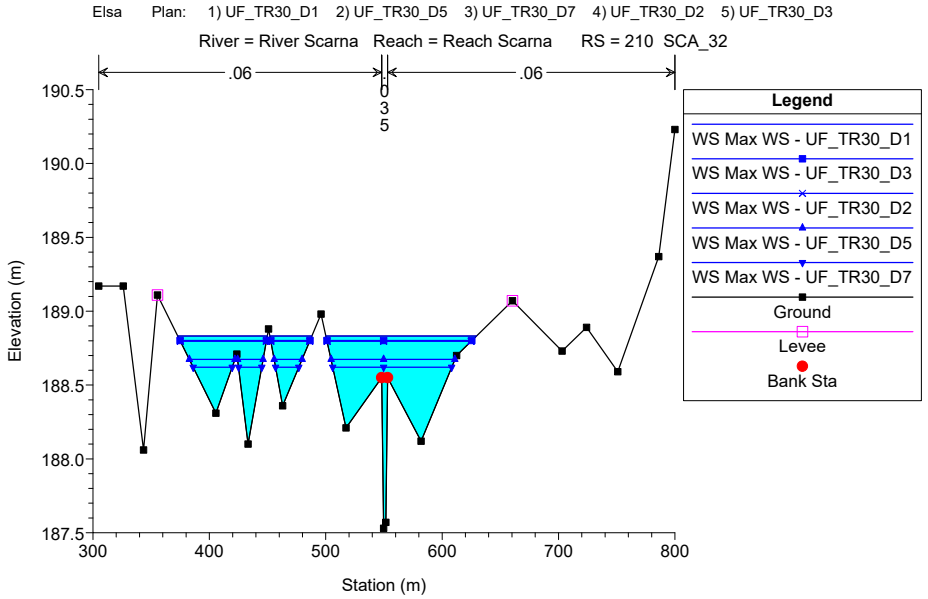
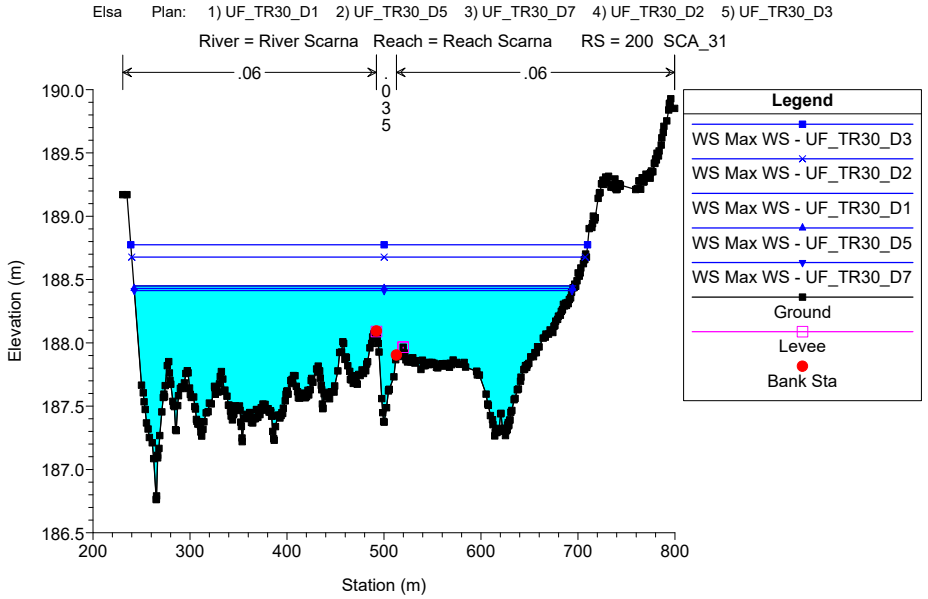
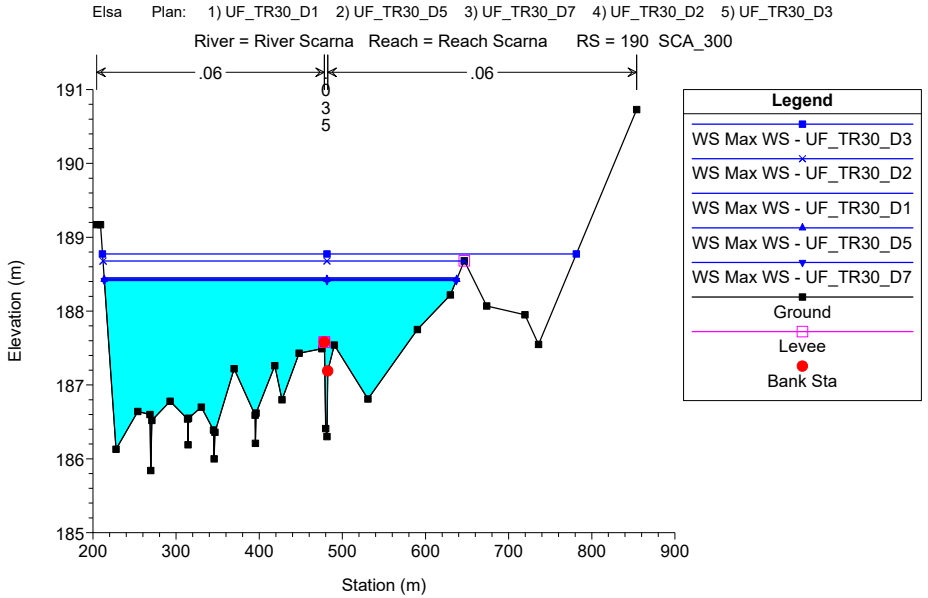
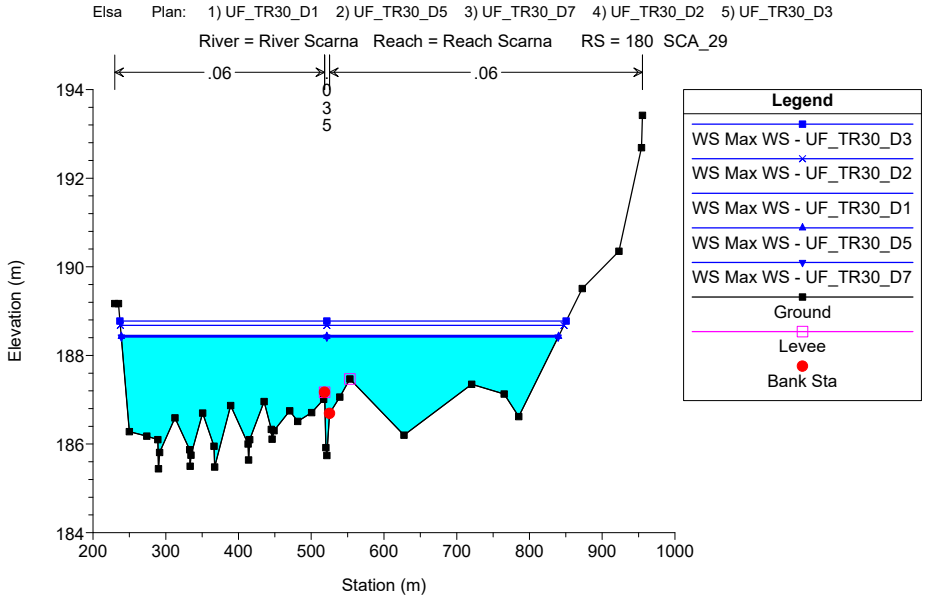
River = River Scarna Reach = Reach Scarna RS = 230 SCA_34
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

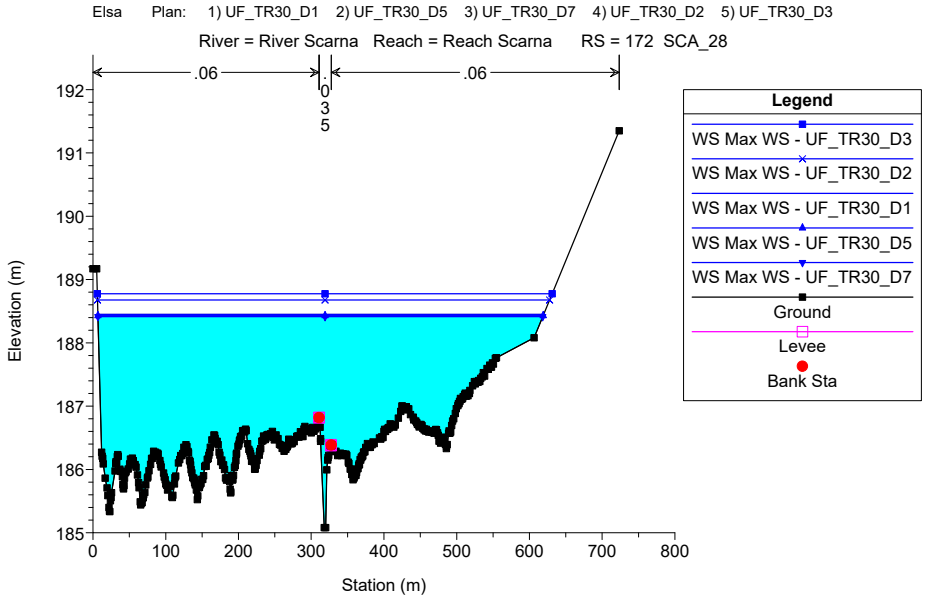

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 220 SCA_33
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta

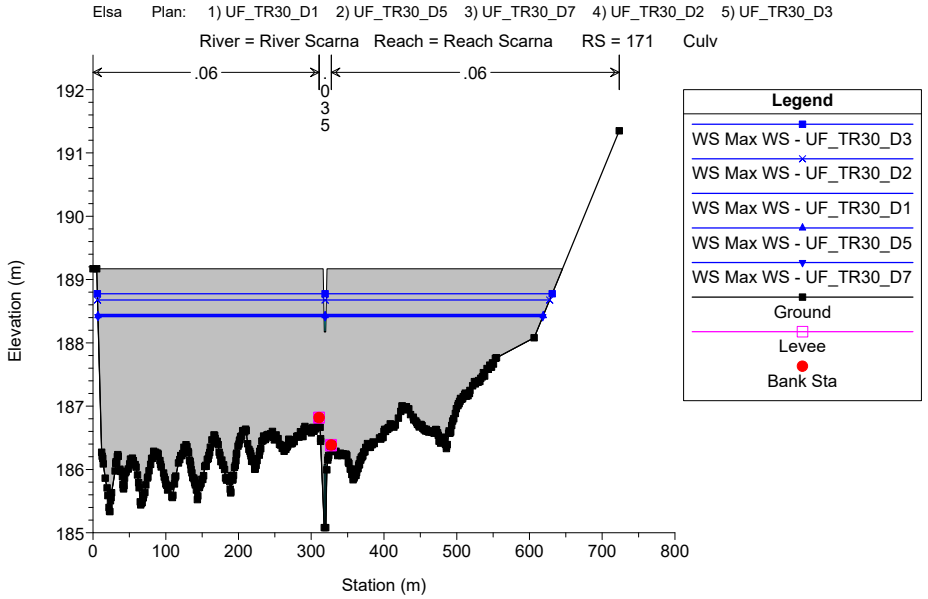

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 210 SCA_32
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

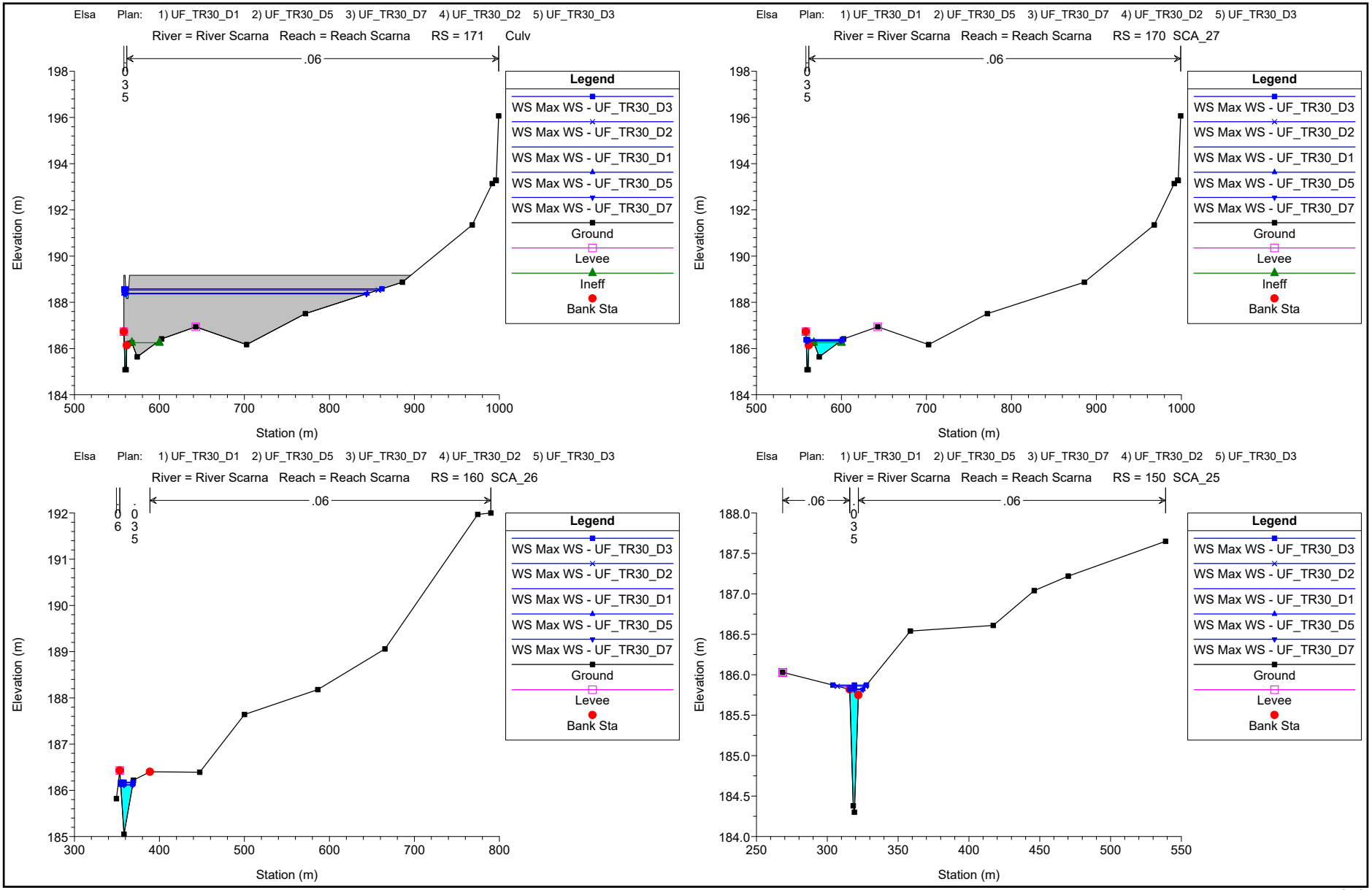

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 200 SCA_31
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

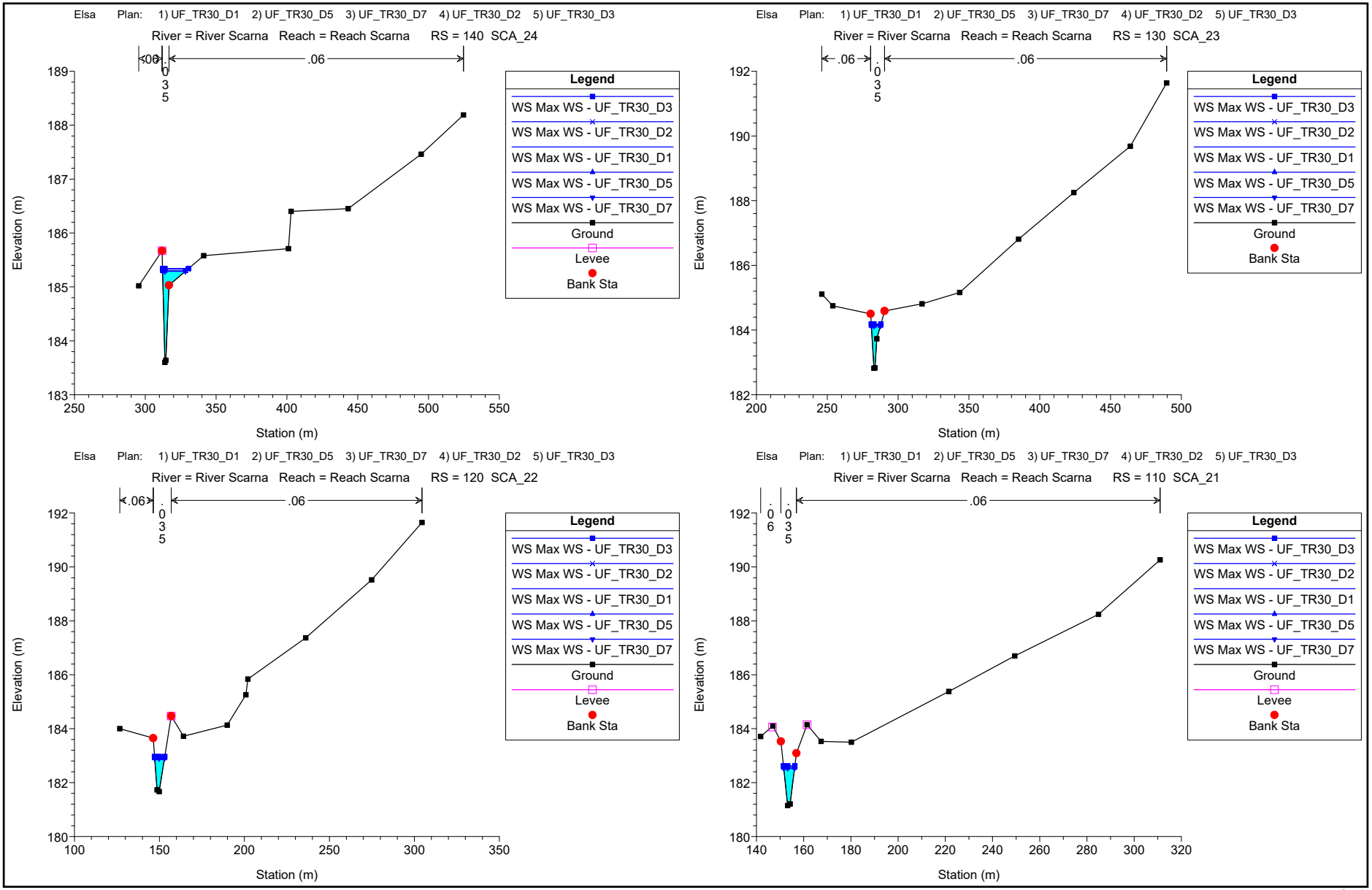

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 190 SCA_300
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

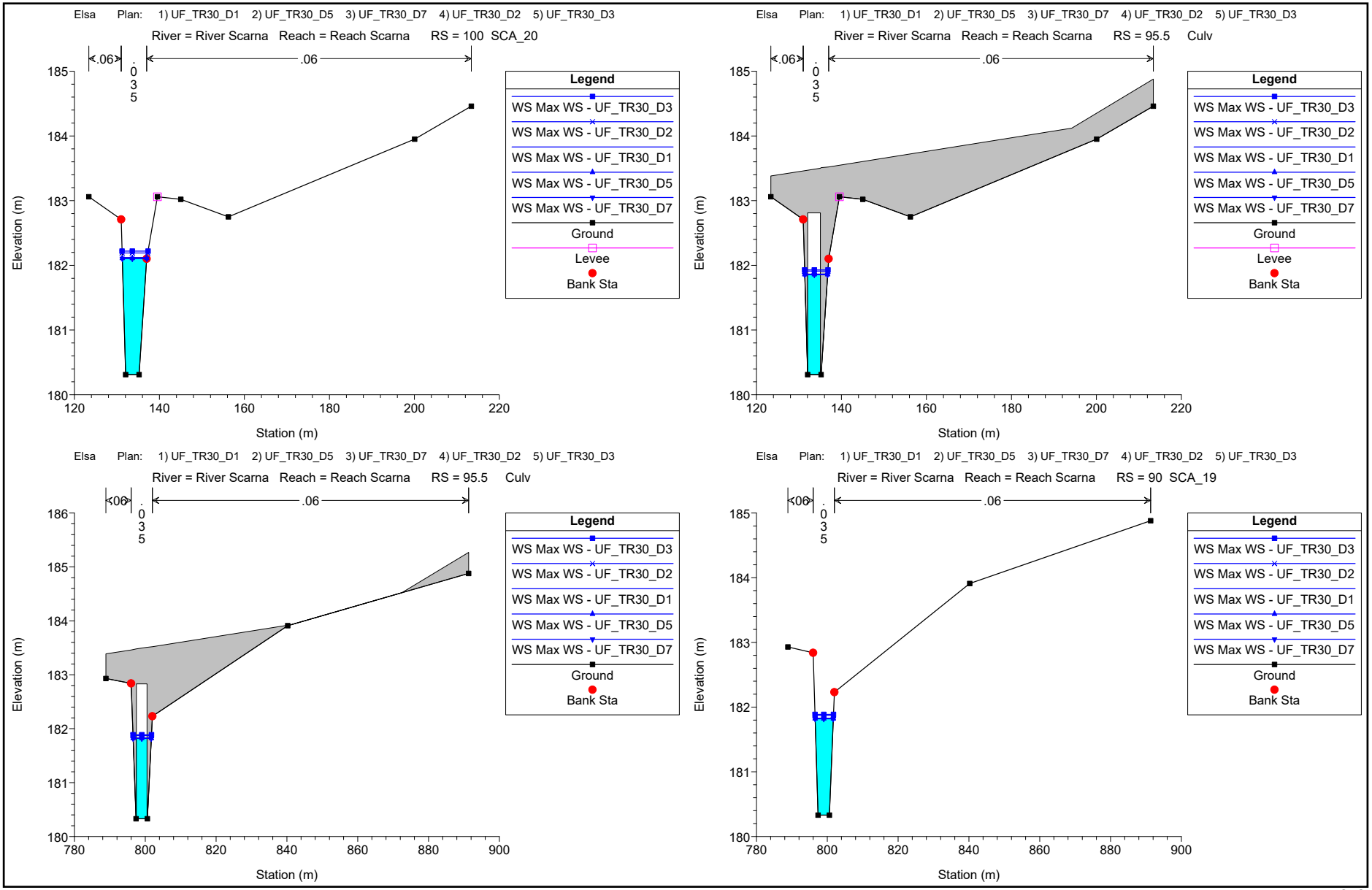

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 180 SCA_29
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

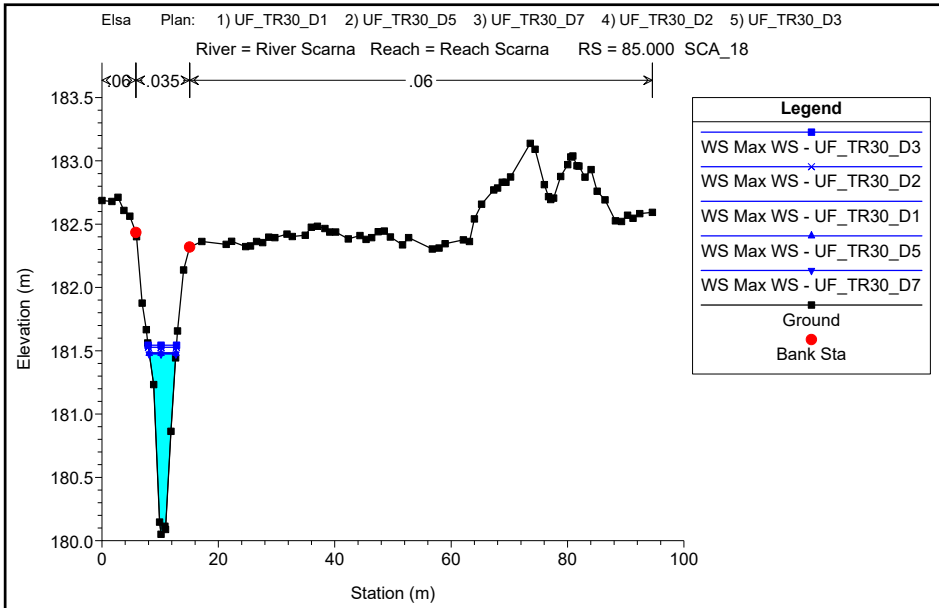

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 172 SCA_28
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

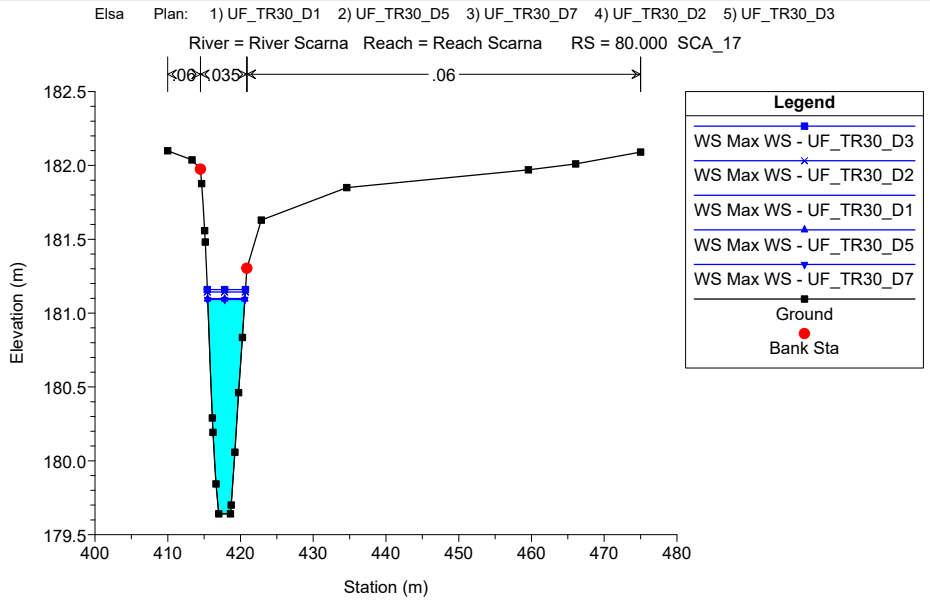

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 171 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

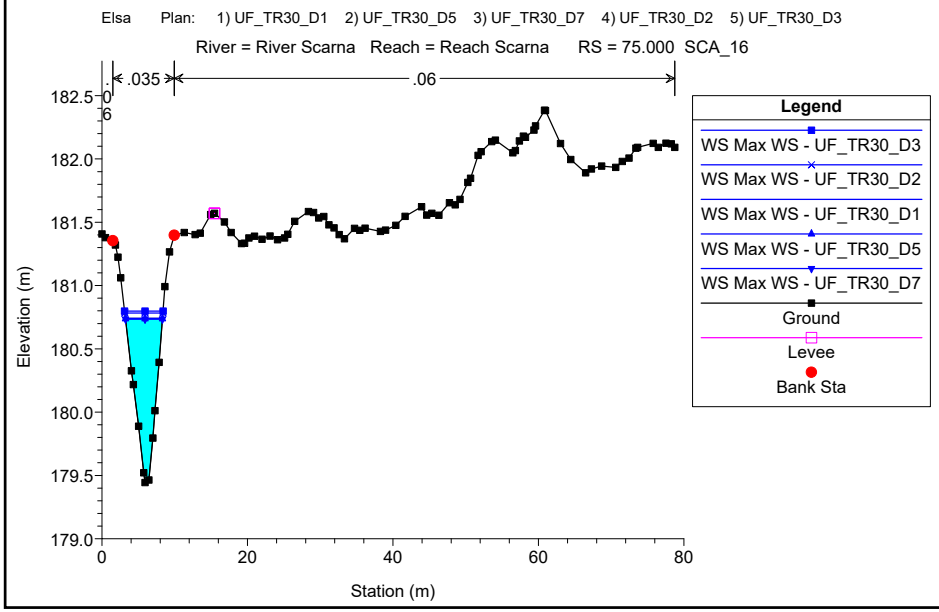

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 171 Culv
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 170 SCA_27
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 160 SCA_26
.06
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 150 SCA_25
.06
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

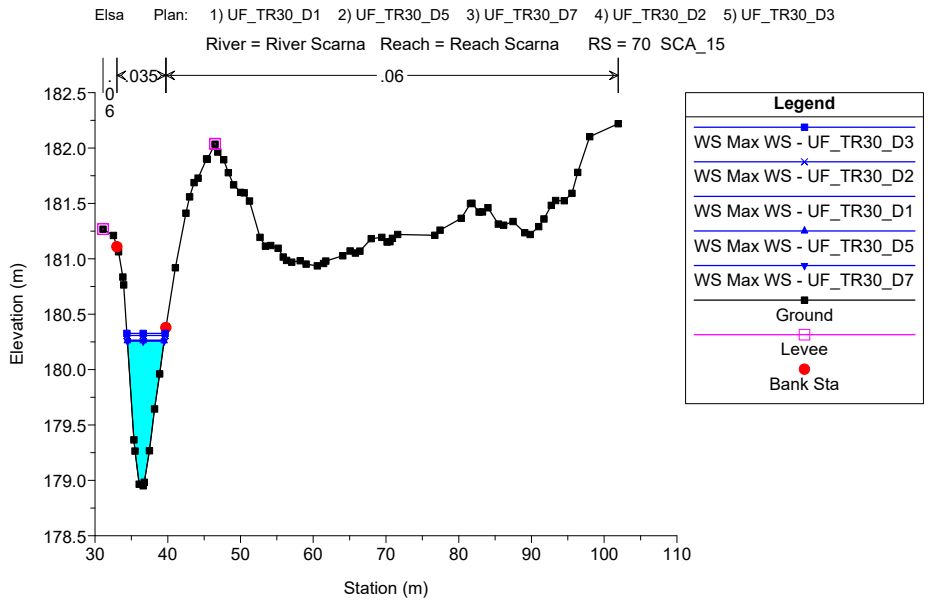

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 140 SCA_24
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 130 SCA_23
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 120 SCA_22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 110 SCA_21
.06
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

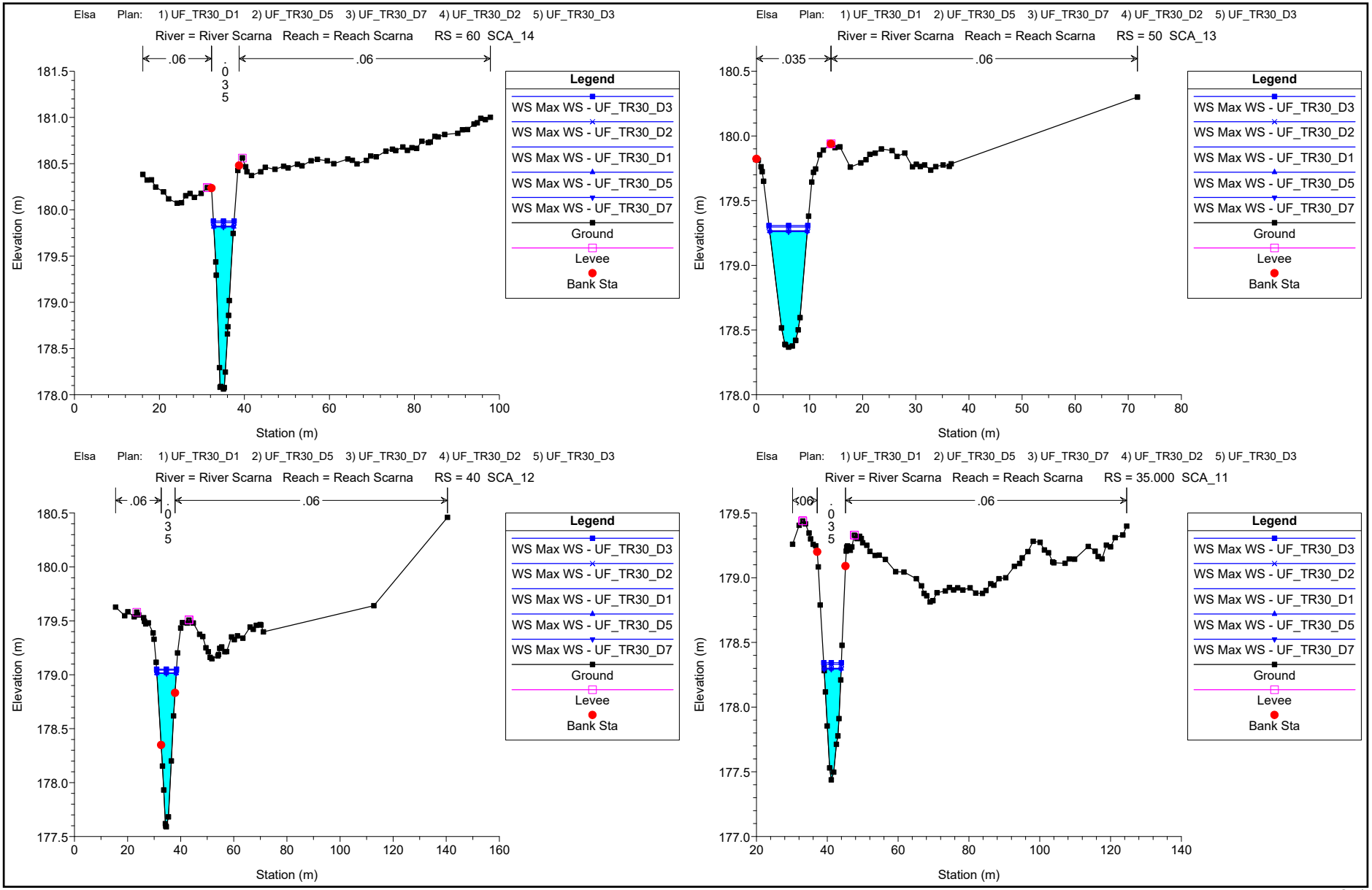

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 100 SCA_20
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 95.5 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 95.5 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 90 SCA_19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

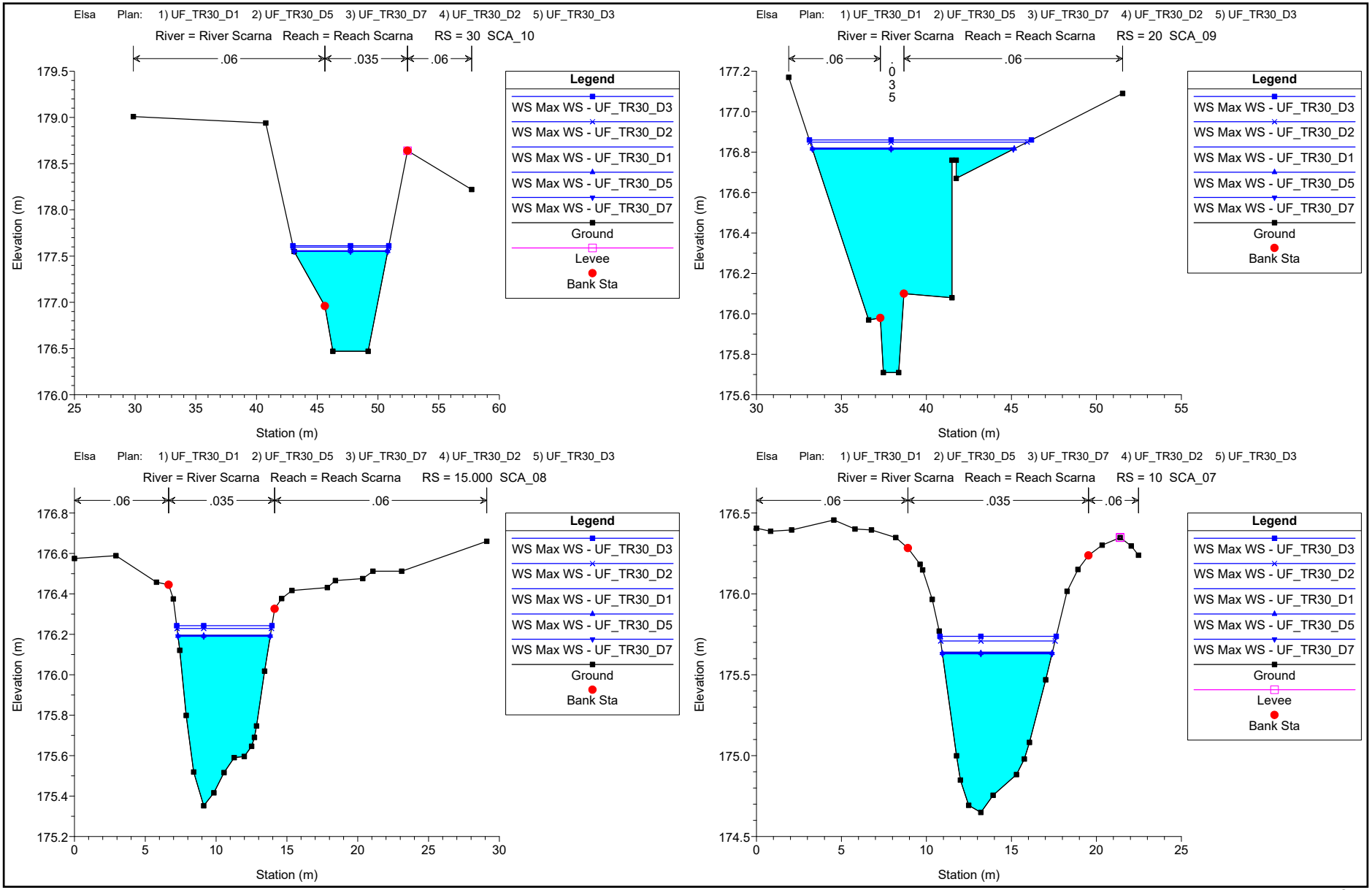

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 85.000 SCA_18
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

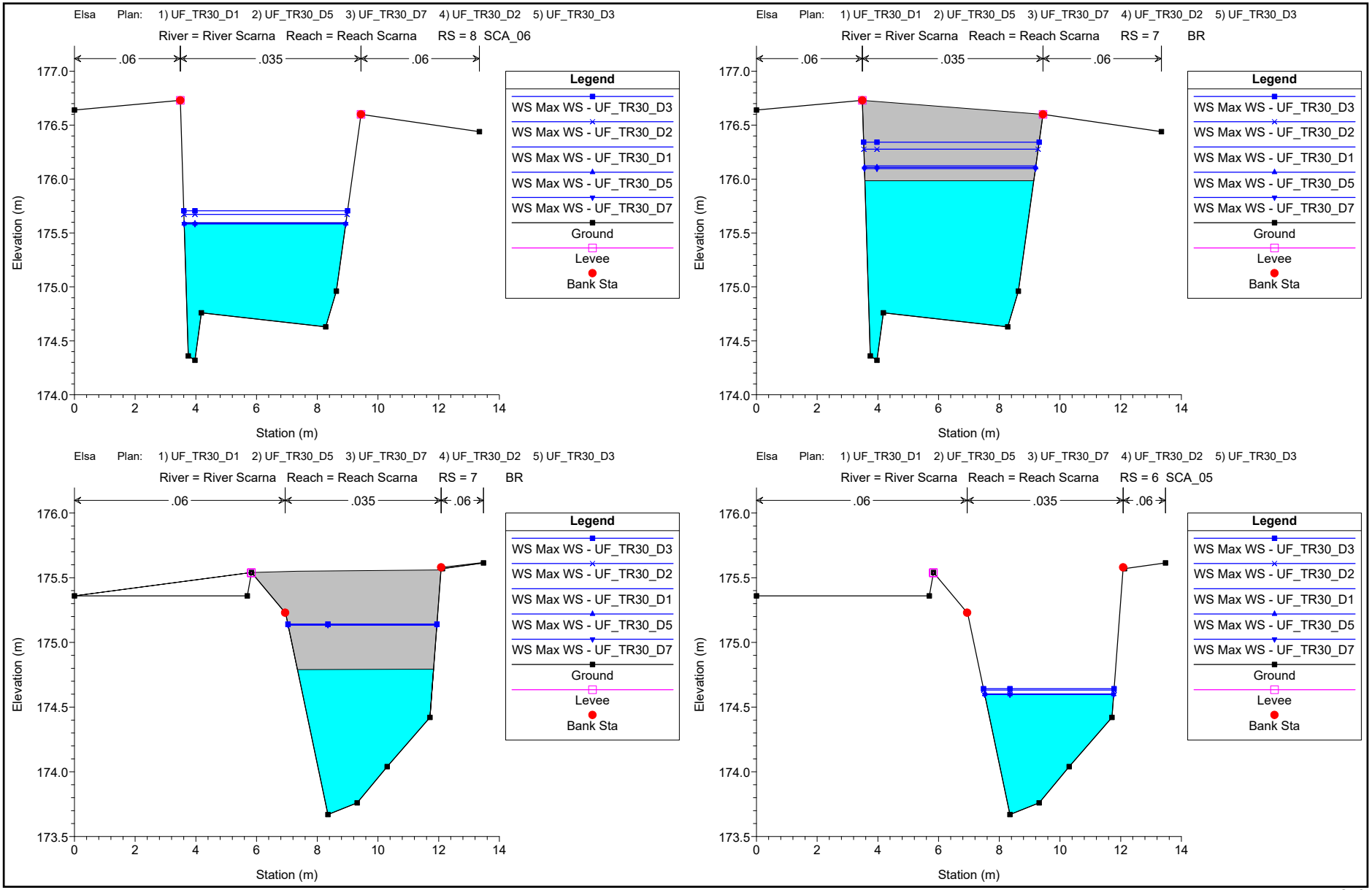

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 80.000 SCA_17
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

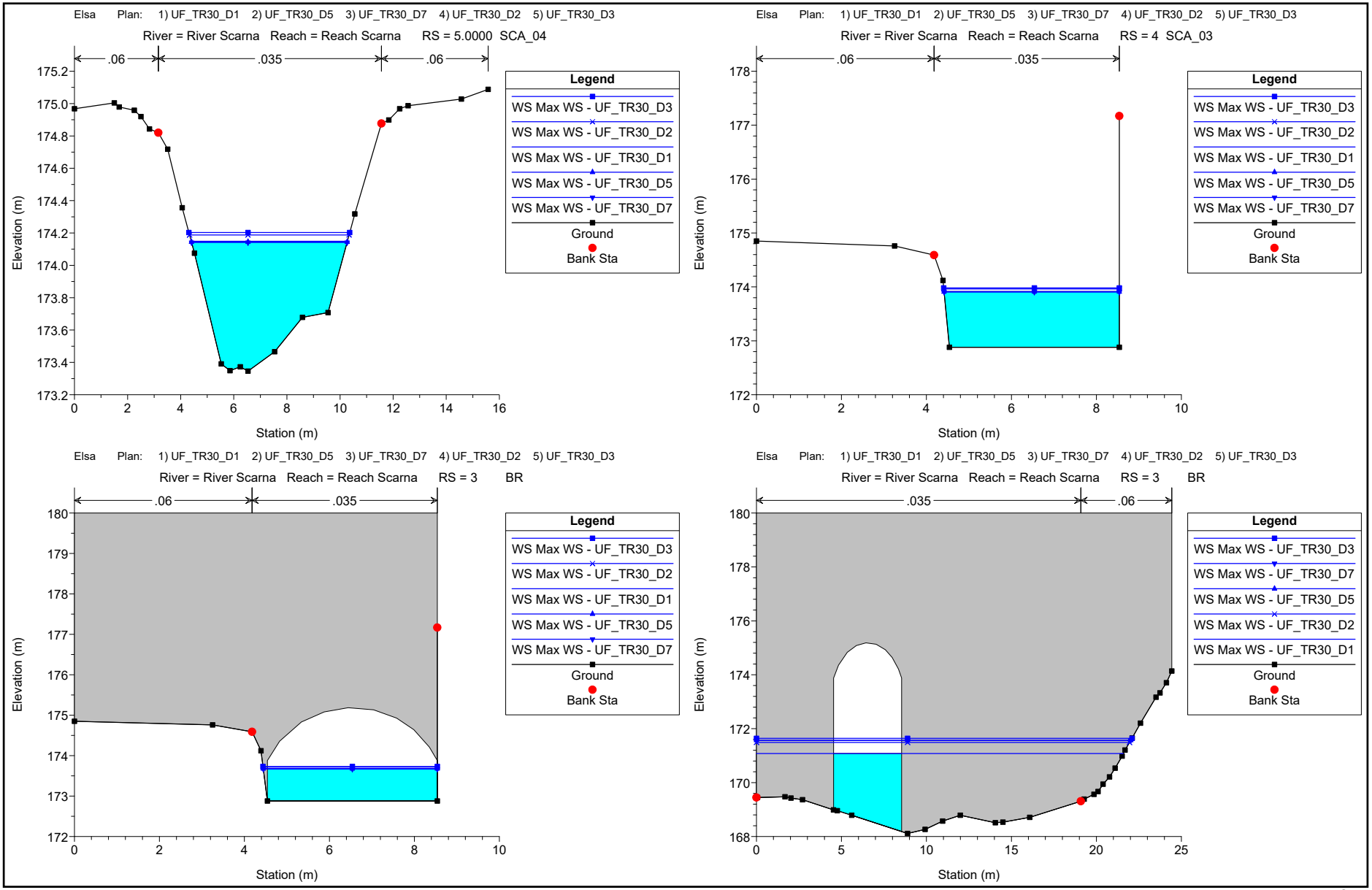

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 75.000 SCA_16
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

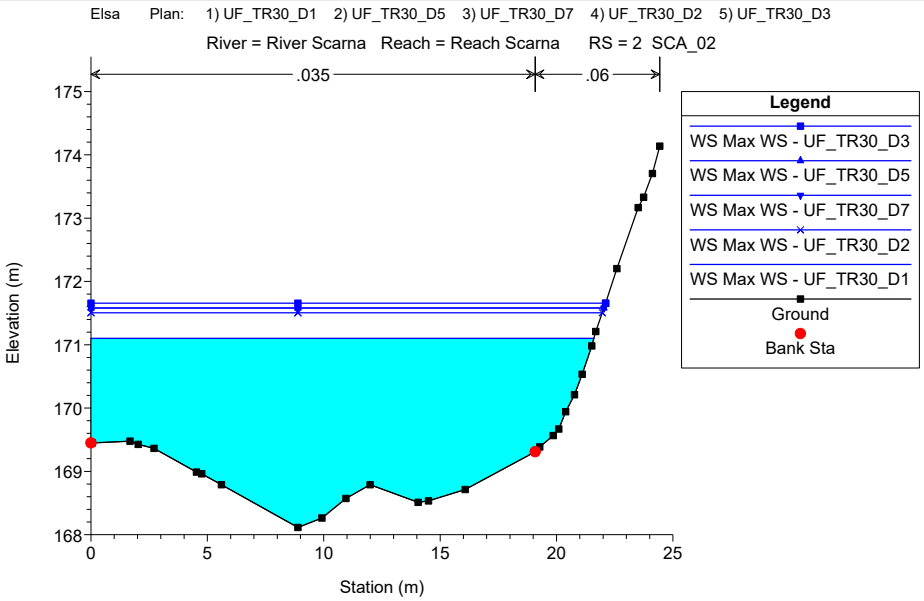

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 70 SCA_15
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

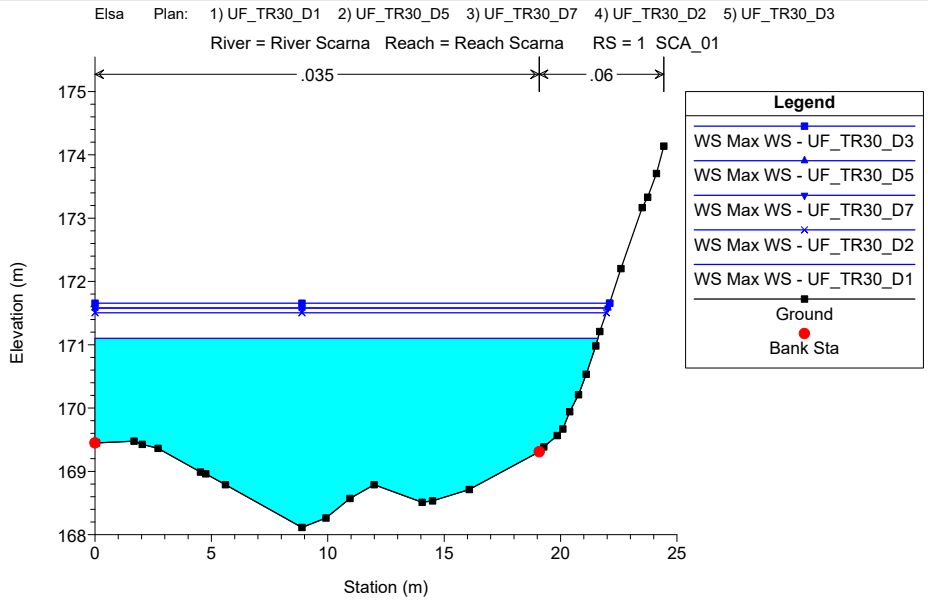

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 60 SCA_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 50 SCA_13
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 40 SCA_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 35.000 SCA_11
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 30 SCA_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 20 SCA_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 15.000 SCA_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 10 SCA_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 8 SCA_06
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 7 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 7 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 6 SCA_05
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 5.0000 SCA_04
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 4 SCA_03
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 3 BR
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 3 BR
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 2 SCA_02
.035
.06
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = River Scarna Reach = Reach Scarna RS = 1 SCA_01
.035
.06
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elevation (m)
Station (m)

ALLEGATI

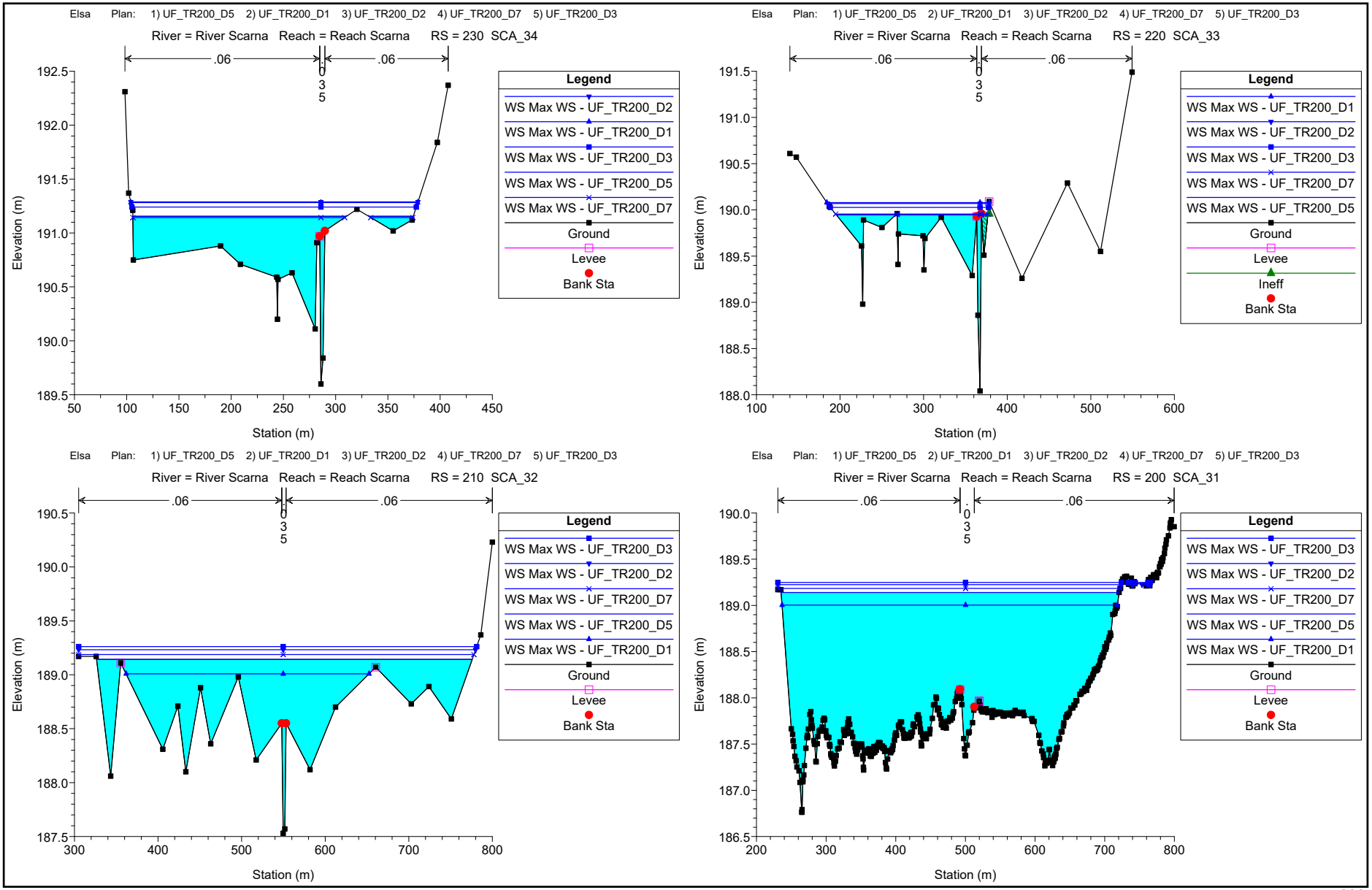
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

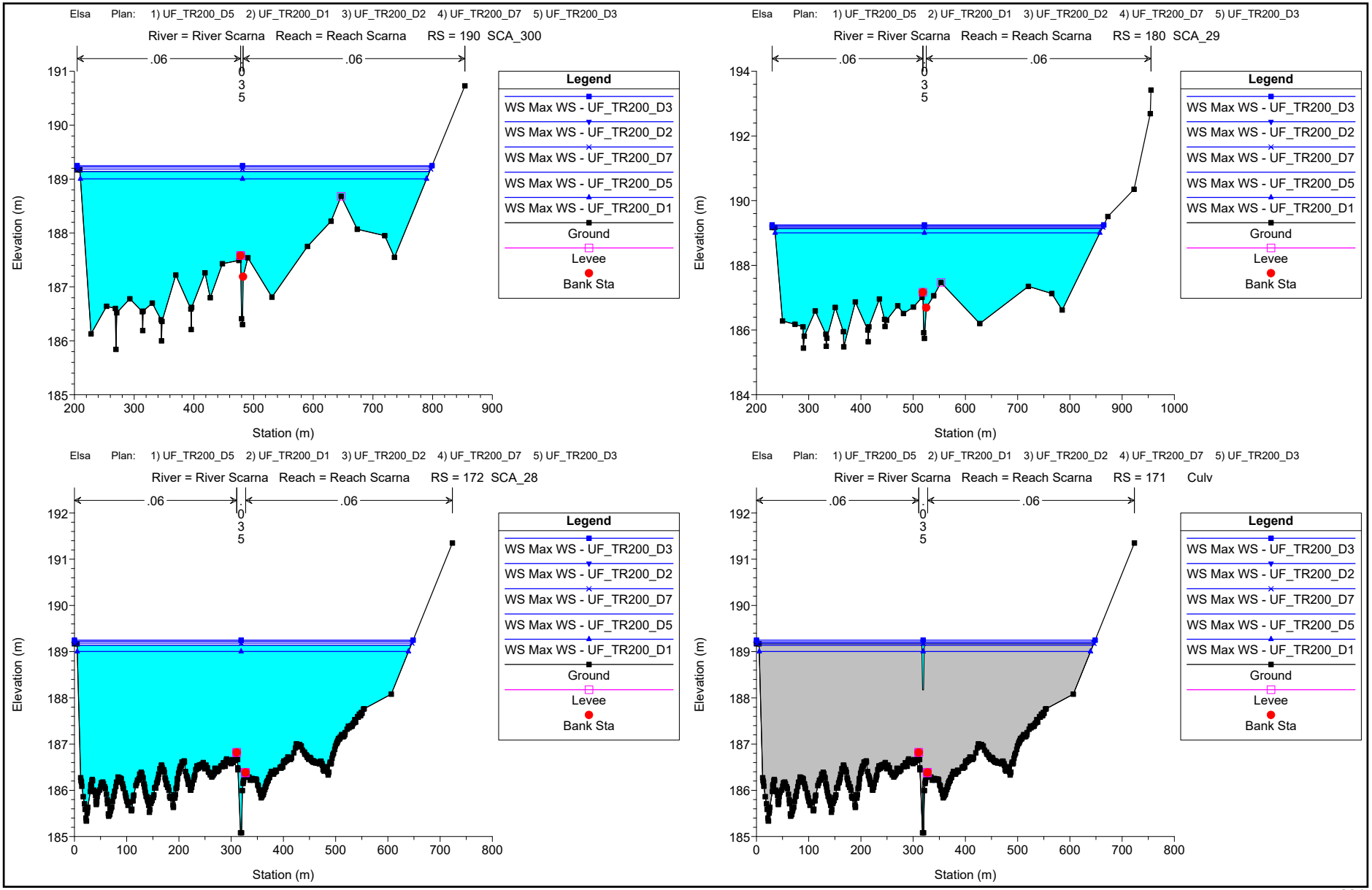
TORRENTE SCARNA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 230 SCA_34
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 220 SCA_33
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 210 SCA_32
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 200 SCA_31
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta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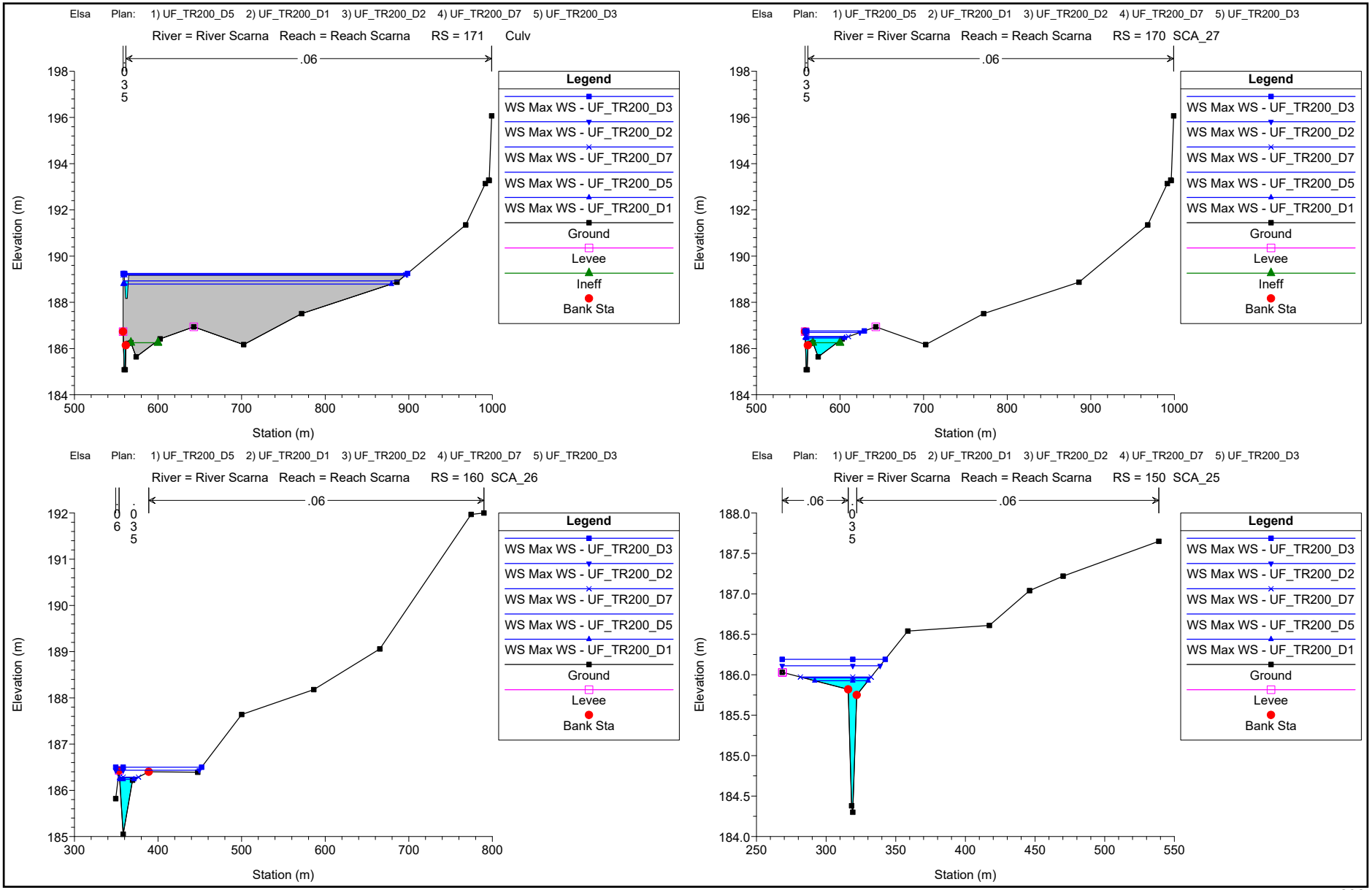
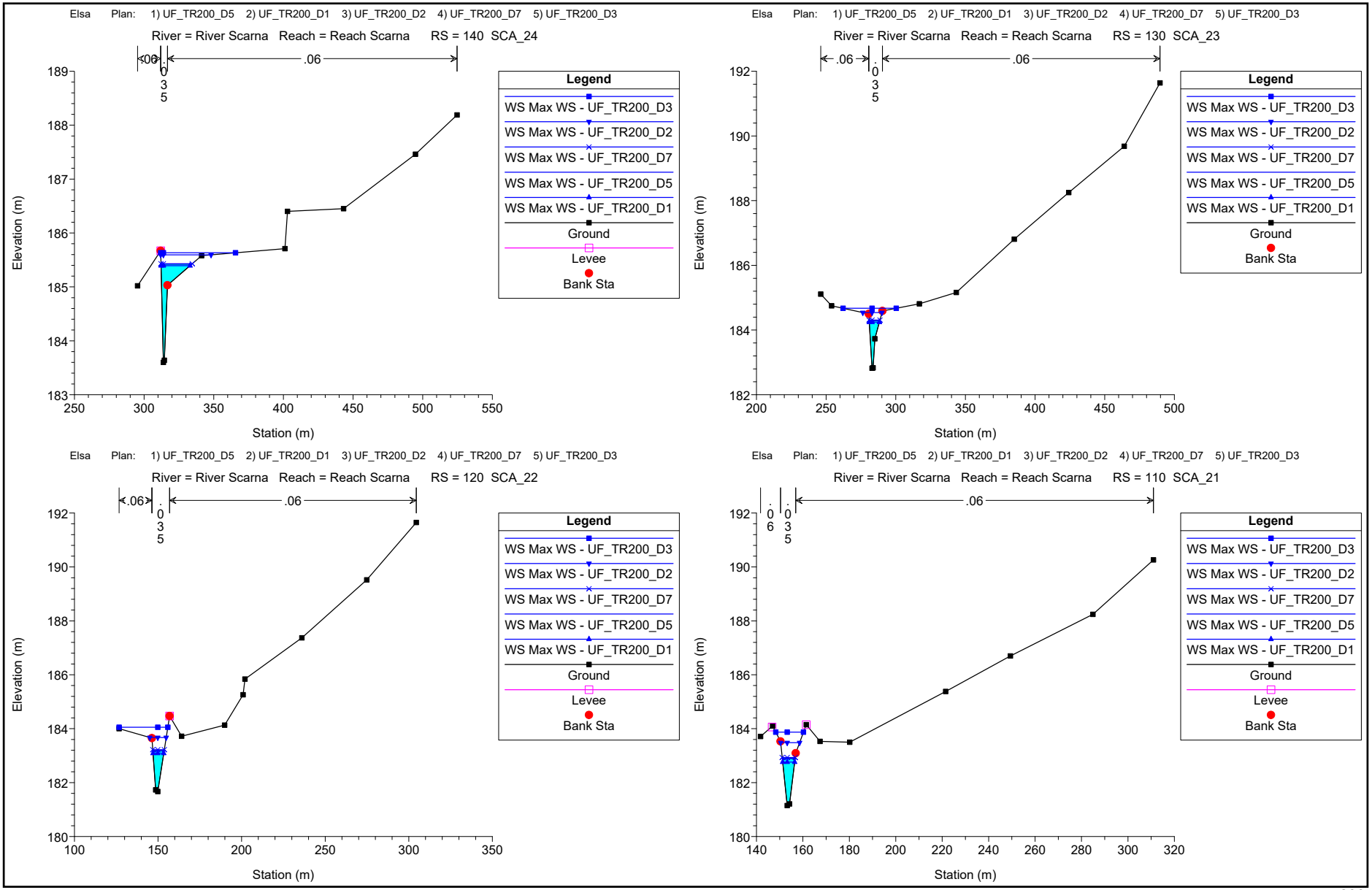
River = River Scarna Reach = Reach Scarna RS = 190 SCA_300
River = River Scarna Reach = Reach Scarna RS = 180 SCA_29
River = River Scarna Reach = Reach Scarna RS = 172 SCA_28
River = River Scarna Reach = Reach Scarna RS = 171 Culv
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 171 Culv
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 170 SCA_27
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 160 SCA_26
.06
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 150 SCA_25
.06
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta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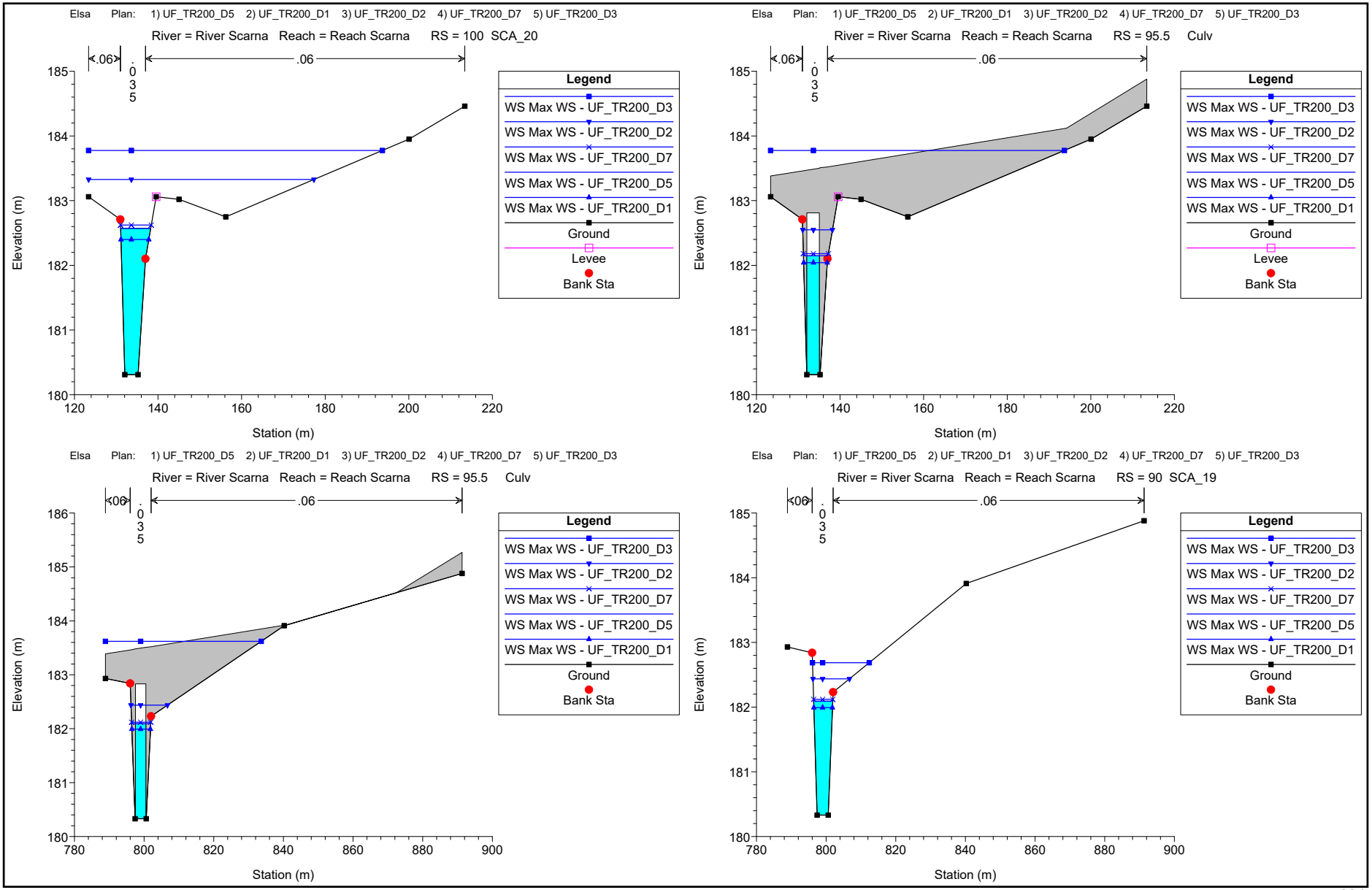
River = River Scarna Reach = Reach Scarna RS = 140 SCA_24
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 130 SCA_23
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 120 SCA_22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 110 SCA_21
.06
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta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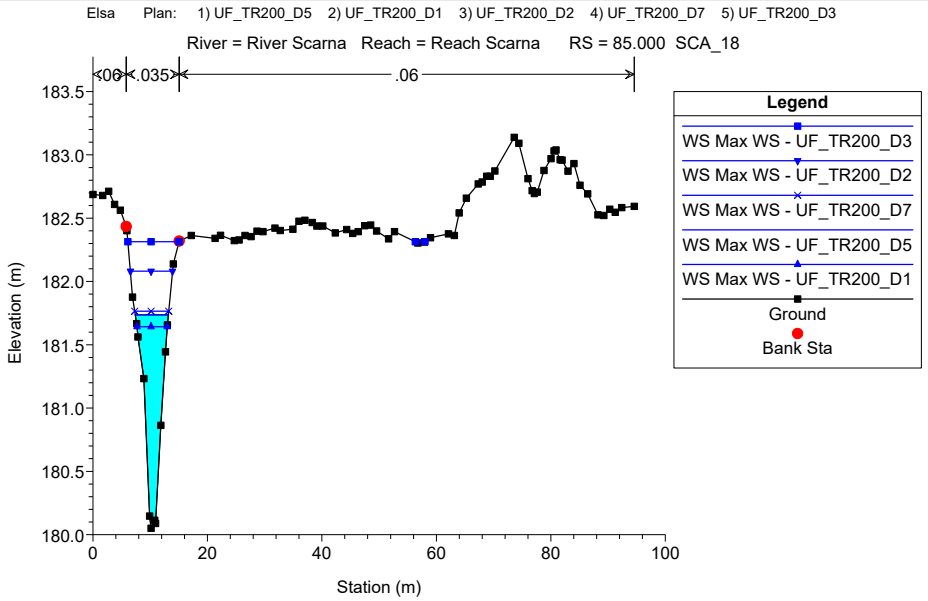
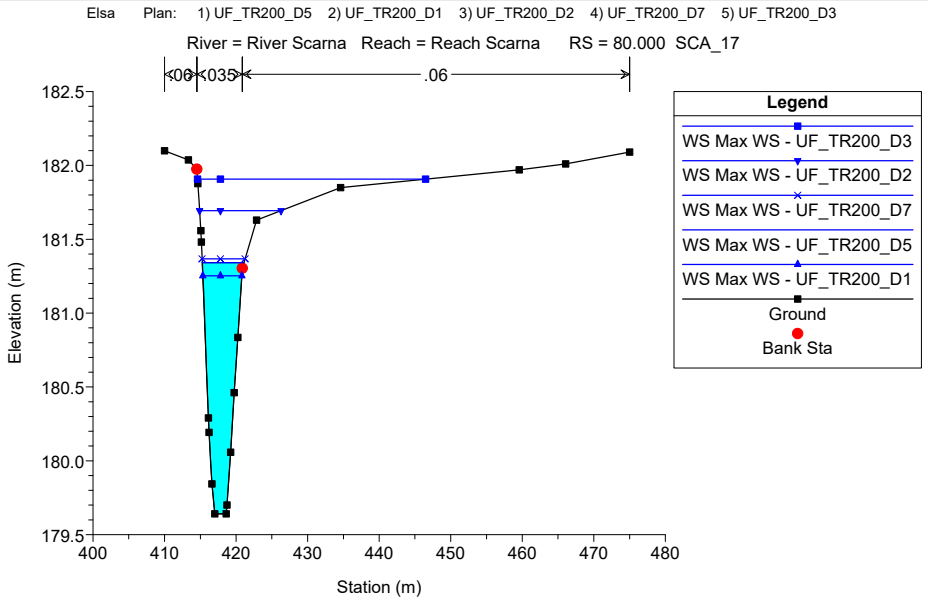
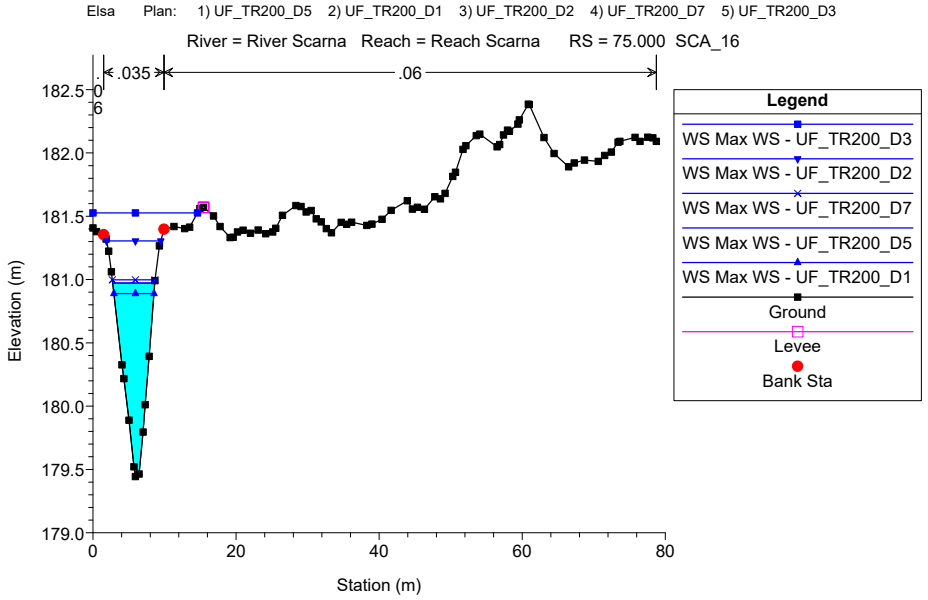
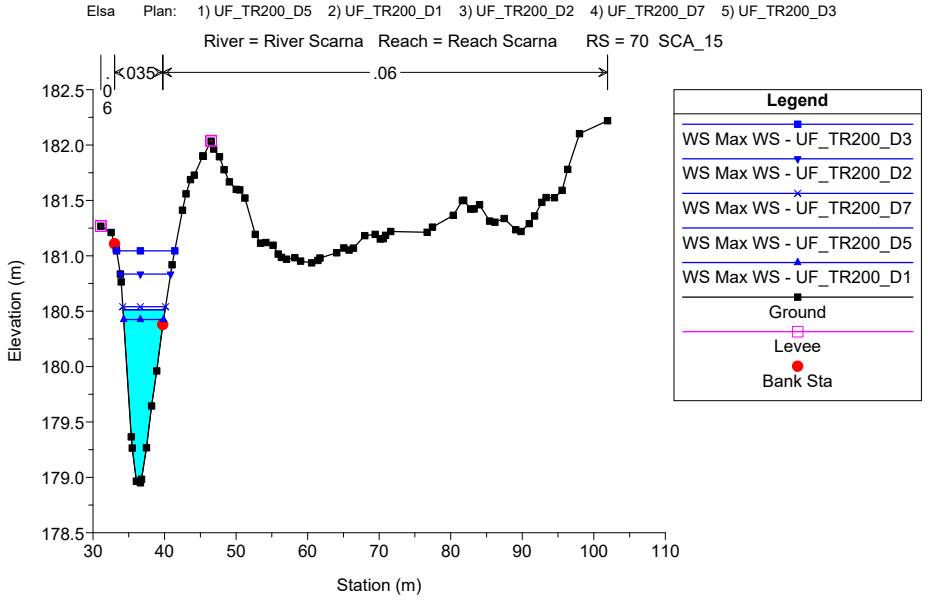
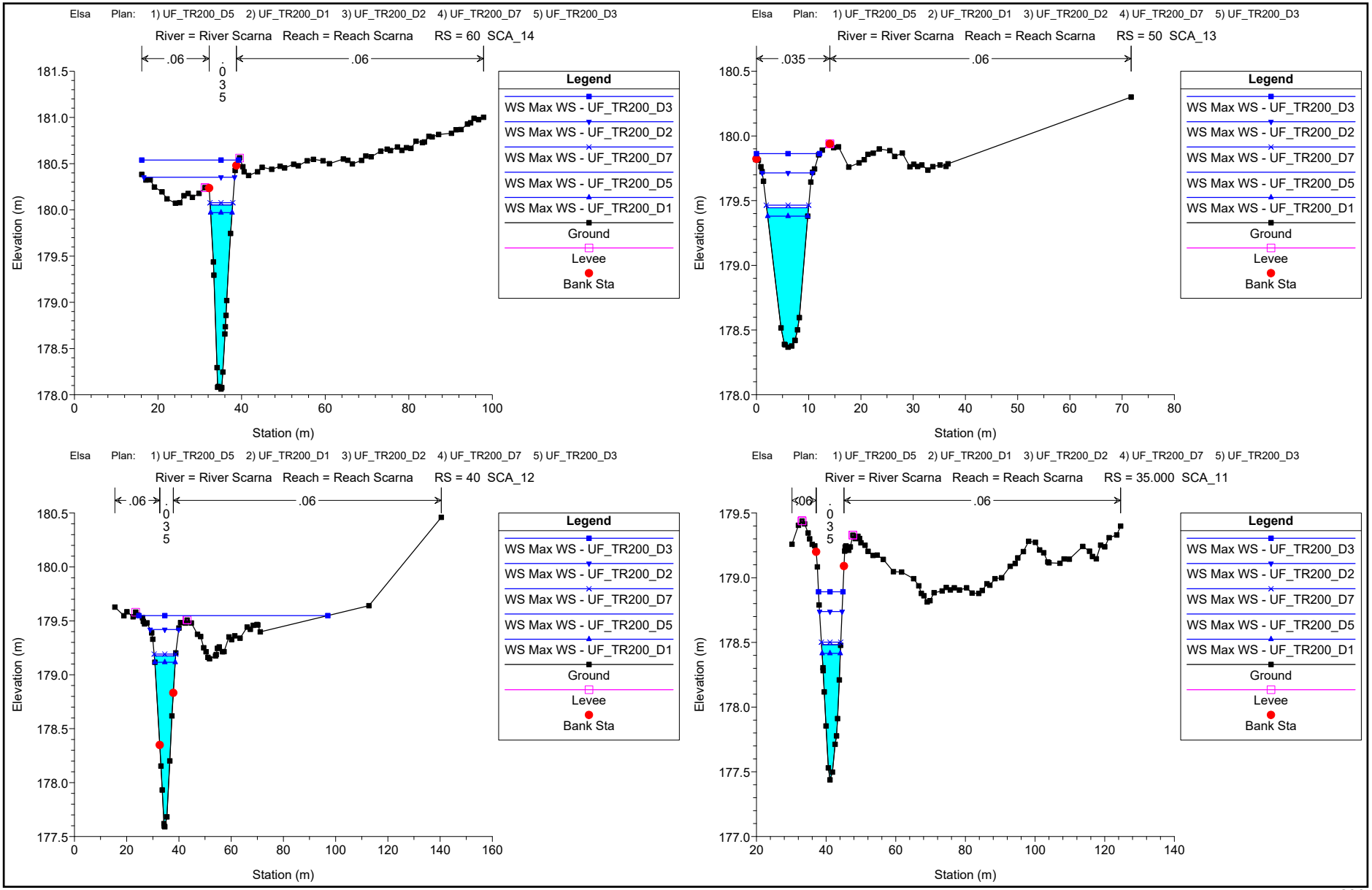
River = River Scarna Reach = Reach Scarna RS = 100 SCA_20
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 95.5 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 95.5 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 90 SCA_19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta

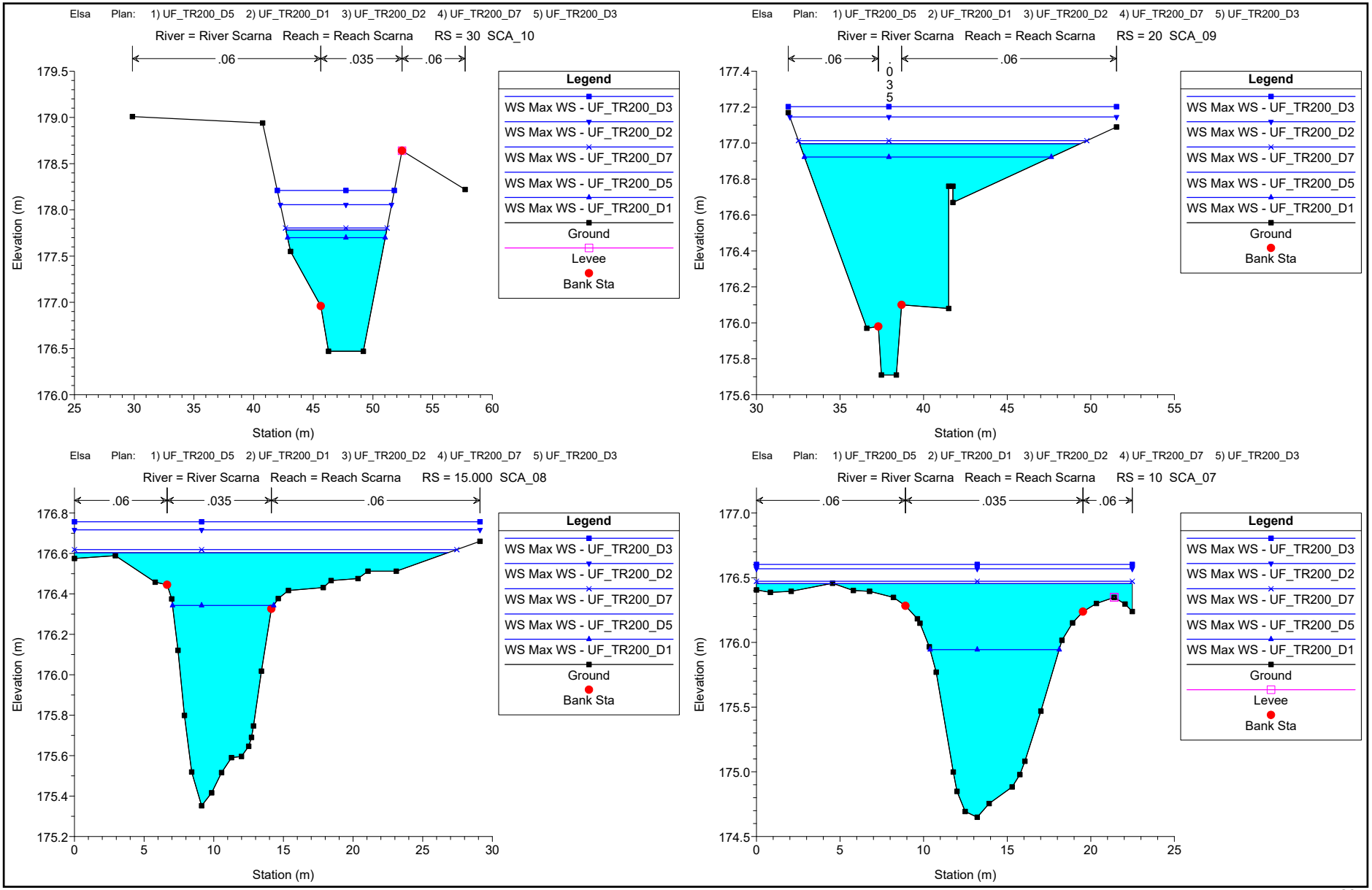

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 85.000 SCA_18
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta

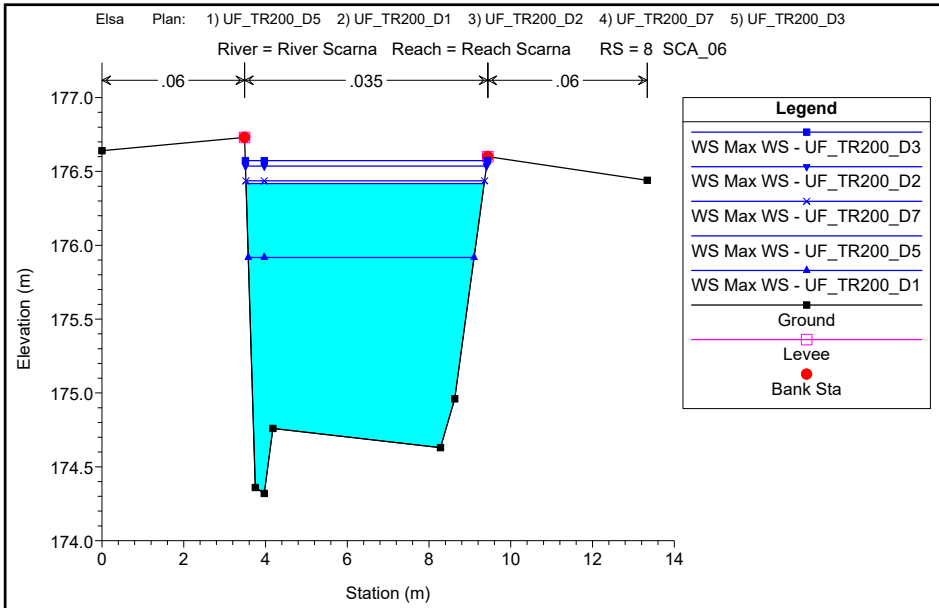

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 80.000 SCA_17
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 75.000 SCA_16
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 70 SCA_15
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 60 SCA_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 50 SCA_13
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 40 SCA_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 35.000 SCA_11
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 30 SCA_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 20 SCA_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 15.000 SCA_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 10 SCA_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta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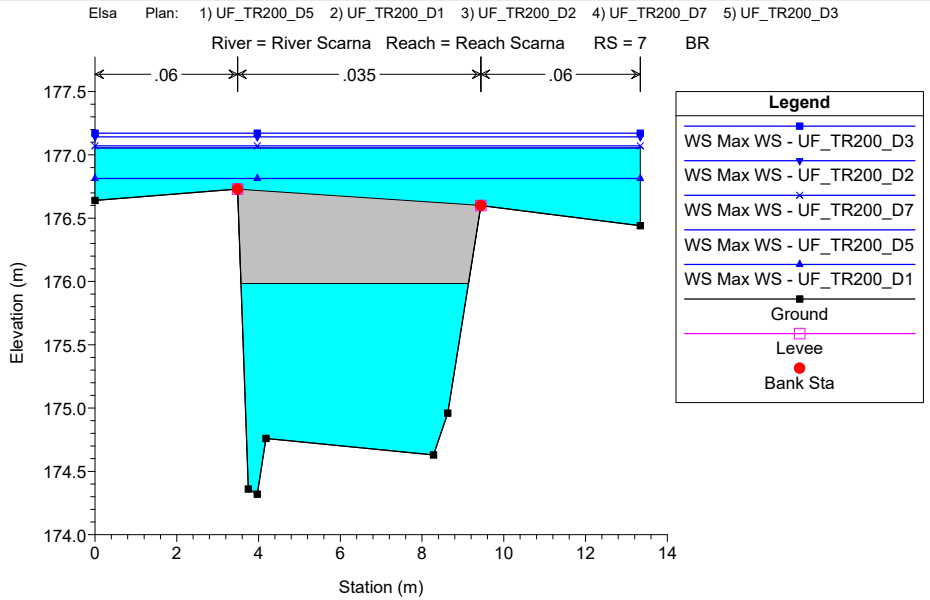
River = River Scarna Reach = Reach Scarna RS = 8 SCA_06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta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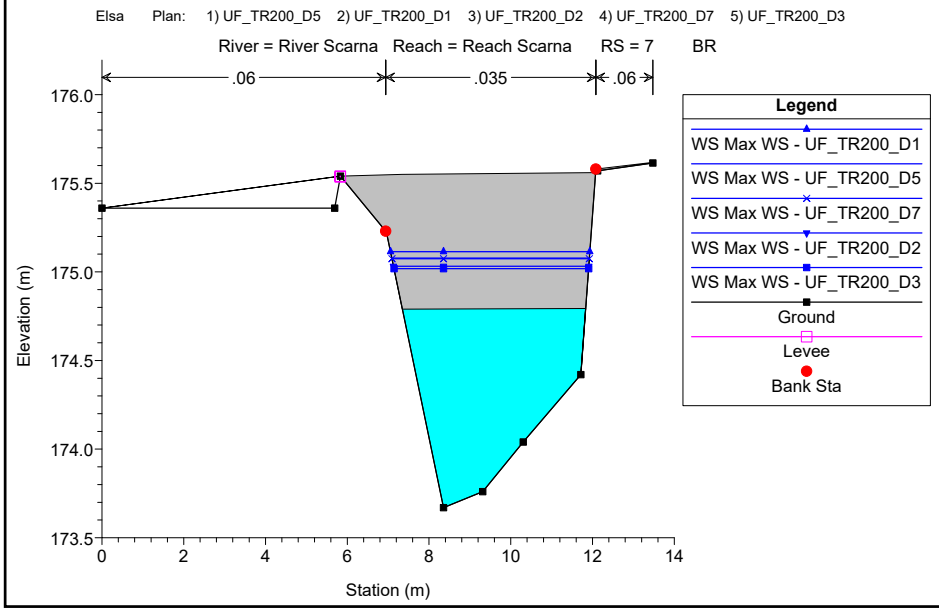
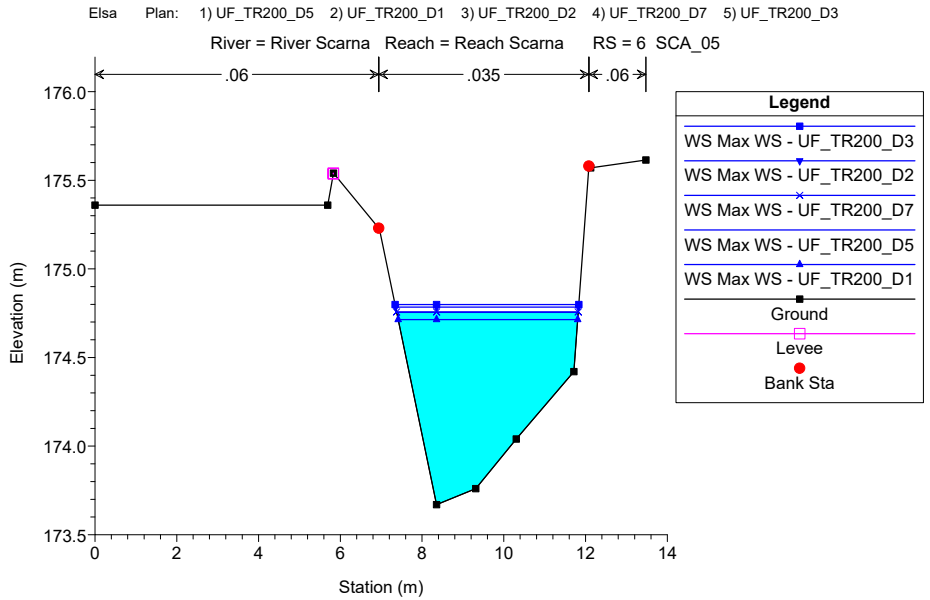
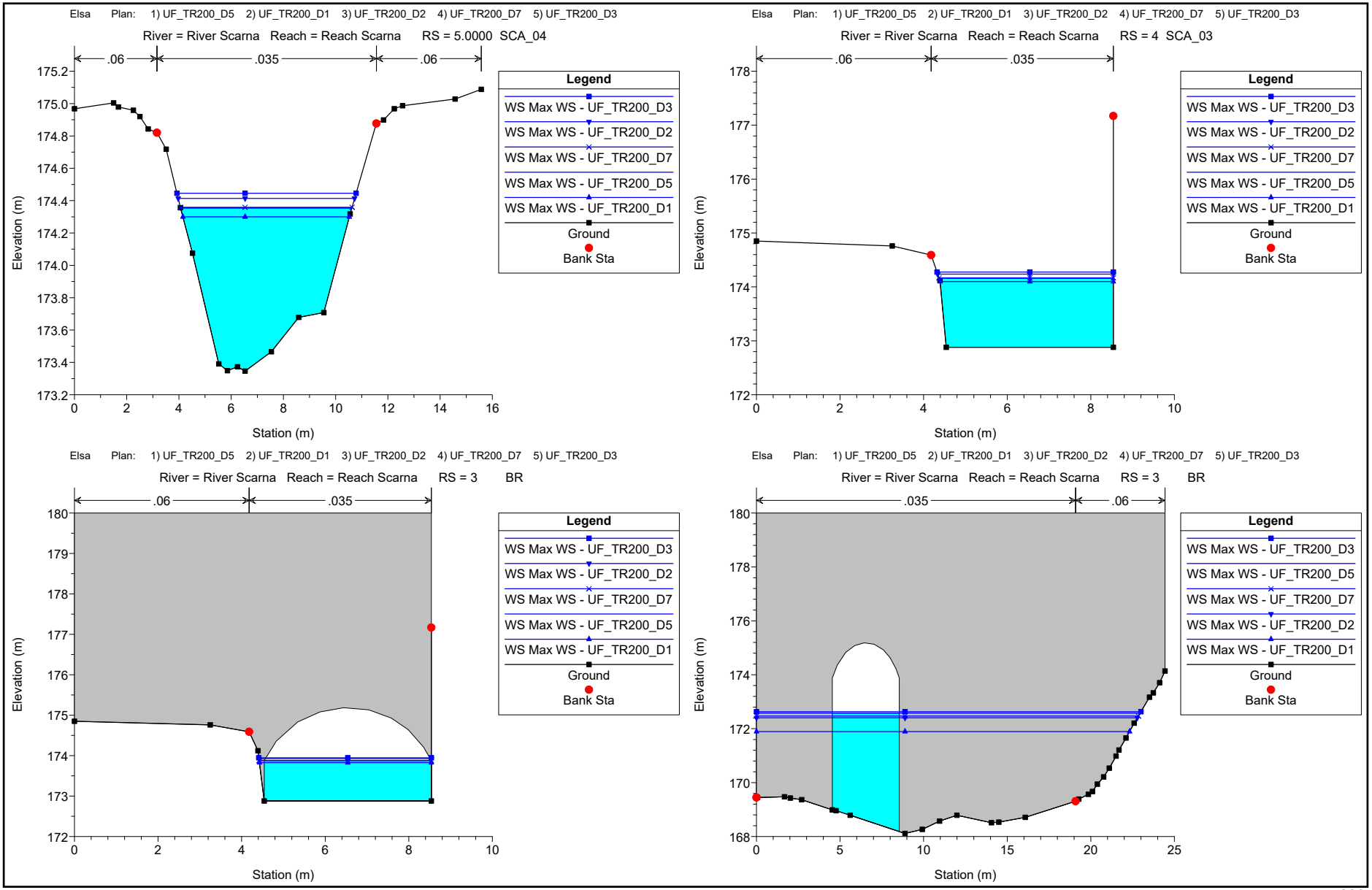
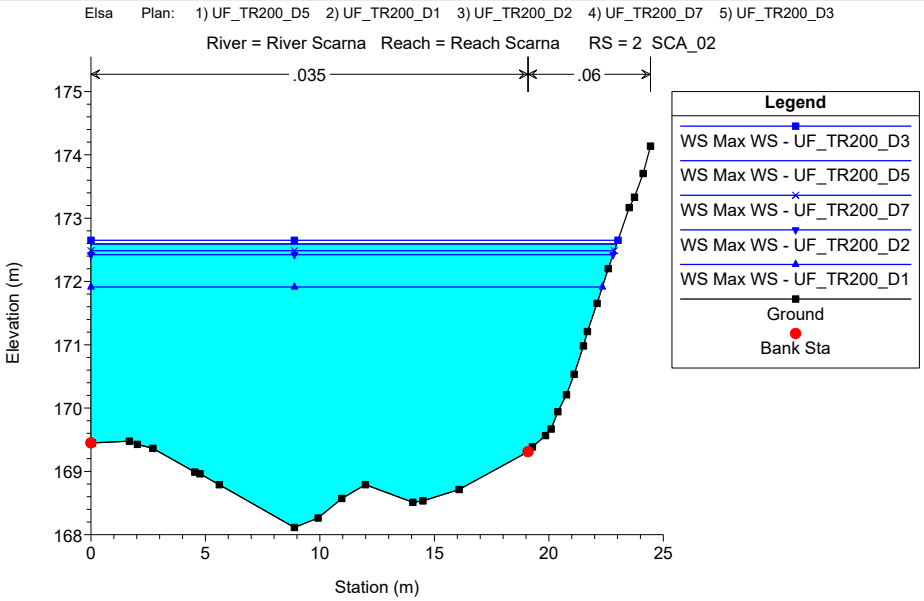
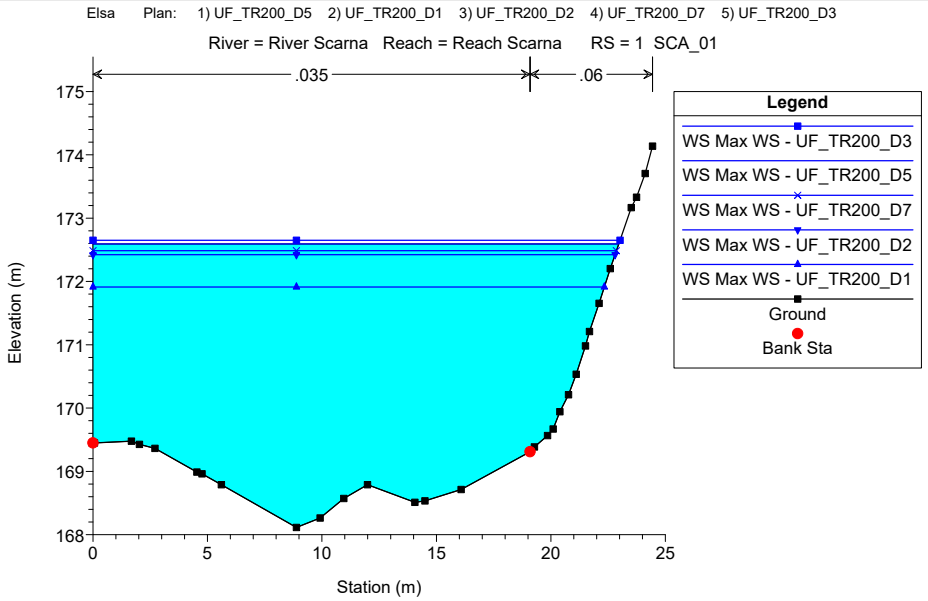
River = River Scarna Reach = Reach Scarna RS = 7 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 7 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 6 SCA_05
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 5.0000 SCA_04
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 4 SCA_03
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 3 BR
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 3 BR
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 2 SCA_02
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = River Scarna Reach = Reach Scarna RS = 1 SCA_01
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SCARNA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: River Scarna Reach: Reach Scarna Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Reach Scarna	230	Max WS	UF_TR30_D1	32.20	189.60	191.19		191.20	0.000932	0.31	0.81	0.10	98.97	259.98	0.25
Reach Scarna	230	Max WS	UF_TR30_D5	24.35	189.60	191.13		191.13	0.000844	0.27	0.74	0.07	83.14	236.96	0.23
Reach Scarna	230	Max WS	UF_TR30_D7	20.20	189.60	191.07		191.08	0.000877	0.25	0.73	0.04	71.37	211.26	0.24
Reach Scarna	230	Max WS	UF_TR30_D2	28.59	189.60	191.17		191.18	0.000828	0.29	0.76	0.09	94.58	253.81	0.23
Reach Scarna	230	Max WS	UF_TR30_D3	26.74	189.60	191.16		191.17	0.000775	0.27	0.73	0.08	92.20	250.39	0.23
Reach Scarna	220	Max WS	UF_TR30_D1	59.95	188.04	190.00	189.96	190.23	0.015417	0.83	3.36	0.82	52.75	186.94	1.00
Reach Scarna	220	Max WS	UF_TR30_D5	26.50	188.04	189.91	189.94	190.96	0.030640		4.53		5.85	12.44	1.39
Reach Scarna	220	Max WS	UF_TR30_D7	21.23	188.04	189.89	189.93	190.58	0.020468		3.68		5.76	12.13	1.14
Reach Scarna	220	Max WS	UF_TR30_D2	57.37	188.04	190.01	189.96	190.21	0.013520	0.79	3.16	0.78	53.67	187.43	0.94
Reach Scarna	220	Max WS	UF_TR30_D3	46.61	188.04	189.97	189.96	190.16	0.012136	0.69	2.94	0.69	47.44	184.05	0.88
Reach Scarna	215			Lat Struct											
Reach Scarna	210	Max WS	UF_TR30_D1	59.82	187.53	188.83		188.88	0.005702	0.61	1.97	0.65	85.52	242.48	0.64
Reach Scarna	210	Max WS	UF_TR30_D5	24.98	187.53	188.67		188.70	0.003579	0.38	1.38	0.45	51.06	191.56	0.49
Reach Scarna	210	Max WS	UF_TR30_D7	19.71	187.53	188.62		188.65	0.003751	0.36	1.36	0.43	41.43	175.66	0.50
Reach Scarna	210	Max WS	UF_TR30_D2	50.93	187.53	188.80		188.84	0.005395	0.56	1.87	0.62	77.00	230.98	0.62
Reach Scarna	210	Max WS	UF_TR30_D3	17.66	187.53	188.80		188.81	0.000623	0.19	0.64	0.21	78.21	232.64	0.21
Reach Scarna	200	Max WS	UF_TR30_D1	10.55	187.37	188.45		188.45	0.000004	0.03	0.05	0.03	346.78	454.32	0.02
Reach Scarna	200	Max WS	UF_TR30_D5	10.27	187.37	188.43		188.43	0.000005	0.03	0.05	0.03	337.65	452.20	0.02
Reach Scarna	200	Max WS	UF_TR30_D7	10.18	187.37	188.41		188.41	0.000005	0.03	0.05	0.03	330.36	451.40	0.02
Reach Scarna	200	Max WS	UF_TR30_D2	11.41	187.37	188.68		188.68	0.000002	0.03	0.04	0.02	451.93	467.57	0.01
Reach Scarna	200	Max WS	UF_TR30_D3	11.76	187.37	188.77		188.77	0.000002	0.02	0.04	0.02	497.61	471.00	0.01
Reach Scarna	190	Max WS	UF_TR30_D1	10.38	186.30	188.45		188.45	0.000001	0.02	0.03	0.01	581.43	424.83	0.01
Reach Scarna	190	Max WS	UF_TR30_D5	10.18	186.30	188.43		188.43	0.000001	0.02	0.03	0.01	572.76	423.96	0.01
Reach Scarna	190	Max WS	UF_TR30_D7	10.08	186.30	188.41		188.41	0.000001	0.02	0.03	0.01	565.92	423.27	0.01
Reach Scarna	190	Max WS	UF_TR30_D2	11.40	186.30	188.68		188.68	0.000001	0.02	0.03	0.01	679.39	434.54	0.01
Reach Scarna	190	Max WS	UF_TR30_D3	11.90	186.30	188.77		188.77	0.000000	0.02	0.03	0.01	812.14	569.92	0.01
Reach Scarna	180	Max WS	UF_TR30_D1	10.20	185.74	188.45		188.45	0.000000	0.01	0.02	0.01	1034.47	601.84	0.00
Reach Scarna	180	Max WS	UF_TR30_D5	10.09	185.74	188.43		188.43	0.000000	0.01	0.02	0.01	1022.19	601.12	0.00
Reach Scarna	180	Max WS	UF_TR30_D7	10.03	185.74	188.41		188.41	0.000000	0.01	0.02	0.01	1012.48	600.55	0.00
Reach Scarna	180	Max WS	UF_TR30_D2	11.39	185.74	188.68		188.68	0.000000	0.01	0.02	0.01	1172.61	609.93	0.00
Reach Scarna	180	Max WS	UF_TR30_D3	11.90	185.74	188.77		188.77	0.000000	0.01	0.02	0.01	1232.08	613.38	0.00
Reach Scarna	172	Max WS	UF_TR30_D1	10.18	185.08	188.45		188.45	0.000000	0.01	0.02	0.01	1153.86	612.98	0.00
Reach Scarna	172	Max WS	UF_TR30_D5	10.07	185.08	188.43		188.43	0.000000	0.01	0.02	0.01	1141.34	612.20	0.00
Reach Scarna	172	Max WS	UF_TR30_D7	9.99	185.08	188.41		188.41	0.000000	0.01	0.02	0.01	1131.46	611.58	0.00
Reach Scarna	172	Max WS	UF_TR30_D2	11.36	185.08	188.68		188.68	0.000000	0.01	0.02	0.01	1294.60	621.67	0.00
Reach Scarna	172	Max WS	UF_TR30_D3	11.87	185.08	188.77		188.77	0.000000	0.01	0.02	0.01	1355.23	625.38	0.00
Reach Scarna	171			Culvert											
Reach Scarna	170	Max WS	UF_TR30_D1	10.18	185.08	186.34		186.39	0.004398		1.43	0.52	14.90	40.97	0.48
Reach Scarna	170	Max WS	UF_TR30_D5	10.07	185.08	186.33		186.38	0.004399		1.43	0.52	14.77	40.85	0.48
Reach Scarna	170	Max WS	UF_TR30_D7	9.99	185.08	186.33		186.38	0.004409		1.43	0.51	14.66	40.75	0.48
Reach Scarna	170	Max WS	UF_TR30_D2	11.36	185.08	186.37		186.42	0.004297		1.44	0.54	16.41	42.33	0.48
Reach Scarna	170	Max WS	UF_TR30_D3	11.87	185.08	186.39		186.44	0.004256		1.44	0.55	17.04	42.89	0.48
Reach Scarna	169.99			Lat Struct											
Reach Scarna	160	Max WS	UF_TR30_D1	8.93	185.05	186.12		186.19	0.004020		1.18		7.54	14.08	0.52
Reach Scarna	160	Max WS	UF_TR30_D5	8.86	185.05	186.12		186.19	0.004038		1.18		7.49	14.03	0.52
Reach Scarna	160	Max WS	UF_TR30_D7	8.82	185.05	186.11		186.19	0.004055		1.18		7.45	13.99	0.52
Reach Scarna	160	Max WS	UF_TR30_D2	9.58	185.05	186.16		186.23	0.003824		1.18		8.10	14.59	0.51
Reach Scarna	160	Max WS	UF_TR30_D3	9.85	185.05	186.18		186.25	0.003748		1.18		8.33	14.80	0.50
Reach Scarna	159.99			Lat Struct											
Reach Scarna	150	Max WS	UF_TR30_D1	8.93	184.30	185.82		185.97	0.005008	0.02	1.70	0.13	5.39	10.60	0.58
Reach Scarna	150	Max WS	UF_TR30_D5	8.86	184.30	185.82		185.97	0.005007	0.01	1.69	0.13	5.35	9.69	0.58
Reach Scarna	150	Max WS	UF_TR30_D7	8.82	184.30	185.82		185.96	0.005004		1.69	0.12	5.33	9.28	0.58
Reach Scarna	150	Max WS	UF_TR30_D2	9.58	184.30	185.86	185.55	186.01	0.005027	0.09	1.74	0.17	5.91	19.89	0.59
Reach Scarna	150	Max WS	UF_TR30_D3	9.85	184.30	185.87	185.56	186.03	0.005004	0.10	1.76	0.18	6.21	23.70	0.59
Reach Scarna	140	Max WS	UF_TR30_D1	8.93	183.60	185.30		185.45	0.005160		1.81	0.31	6.24	16.36	0.57
Reach Scarna	140	Max WS	UF_TR30_D5	8.86	183.60	185.29		185.45	0.005156		1.80	0.31	6.19	16.21	0.57
Reach Scarna	140	Max WS	UF_TR30_D7	8.82	183.60	185.29		185.45	0.005159		1.80	0.31	6.14	16.07	0.57
Reach Scarna	140	Max WS	UF_TR30_D2	9.58	183.60	185.33		185.49	0.005194		1.84	0.34	6.84	17.95	0.57
Reach Scarna	140	Max WS	UF_TR30_D3	9.85	183.60	185.34		185.51	0.005279		1.87	0.35	7.02	18.40	0.58
Reach Scarna	130	Max WS	UF_TR30_D1	8.92	182.82	184.13	184.12	184.42	0.015801		2.35		3.79	6.40	0.98
Reach Scarna	130	Max WS	UF_TR30_D5	8.86	182.82	184.13	184.12	184.41	0.015861		2.36		3.76	6.37	0.98
Reach Scarna	130	Max WS	UF_TR30_D7	8.81	182.82	184.13	184.11	184.41	0.015887		2.35		3.74	6.34	0.98
Reach Scarna	130	Max WS	UF_TR30_D2	9.58	182.82	184.17	184.15	184.46	0.015373		2.36		4.06	6.72	0.97
Reach Scarna	130	Max WS	UF_TR30_D3	9.85	182.82	184.19	184.17	184.47	0.015463		2.38		4.14	6.81	0.97
Reach Scarna	120	Max WS	UF_TR30_D1	8.92	181.67	182.91		183.13	0.009202		2.09		4.28	5.77	0.77
Reach Scarna	120	Max WS	UF_TR30_D5	8.86	181.67	182.90		183.12	0.009228		2.08		4.25	5.75	0.77
Reach Scarna	120	Max WS	UF_TR30_D7	8.81	181.67	182.90		183.12	0.009239		2.08		4.23	5.74	0.77
Reach Scarna	120	Max WS	UF_TR30_D2	9.58	181.67	182.95		183.18	0.008988		2.11		4.55	5.94	0.77
Reach Scarna	120	Max WS	UF_TR30_D3	9.85	181.67	182.97		183.20	0.008875		2.11		4.67	6.01	0.77
Reach Scarna	110	Max WS	UF_TR30_D1	8.92	181.15	182.55		182.82	0.010508		2.30		3.87	4.62	0.80
Reach Scarna	110	Max WS	UF_TR30_D5	8.86	181.15	182.55		182.82	0.010528		2.30		3.85	4.61	0.80
Reach Scarna	110	Max WS	UF_TR30_D7	8.81	181.15	182.54		182.81	0.010546		2.30		3.83	4.60	0.80
Reach Scarna	110	Max WS	UF_TR30_D2	9.58	181.15	182.60		182.88	0.010263		2.32		4.12	4.76	0.80
Reach Scarna	110	Max WS	UF_TR30_D3	9.85	181.15	182.62		182.90	0.010150		2.33		4.22	4.81	0.79
Reach Scarna	109.99			Lat Struct											
Reach Scarna	100	Max WS	UF_TR30_D1	8.92	180.31	182.12		182.18	0.001403		1.11	0.03	8.06	5.80	0.30
Reach Scarna	100	Max WS	UF_TR30_D5	8.86	180.31	182.11		182.17	0.001407		1.11	0.02	8.02	5.77	0.30
Reach Scarna	100	Max WS	UF_TR30_D7	8.81	180.31	182.10		182.17	0.001410		1.10	0.01	7.99	5.76	0.30
Reach Scarna	100	Max WS	UF_TR30_D2	9.58	180.31	182.19		182.26	0.001385		1.13	0.08	8.49	6.02	0.30
Reach Scarna	100	Max WS	UF_TR30_D3	9.85	180.31	182.22		182.29	0.001379		1.14	0.09	8.66	6.11	0.30
Reach Scarna	95.5			Culvert											
Reach Scarna	90	Max WS	UF_TR30_D1	8.92	180.33	181.83		181.93	0.002789		1.43		6.24	5.14	0.41
Reach Scarna	90	Max WS	UF_TR30_D5	8.86	180.33	181.82		181.93	0.002783		1.43		6.22	5.13	0.41
Reach Scarna	90	Max WS	UF_TR30_D7	8.81	180.33	181.82		181.92	0.002780		1.42		6.20	5.13	0.41
Reach Scarna	90	Max WS	UF_TR30_D2	9.58	180.33	181.87		181.98	0.002918		1.48		6.47	5.20	0.42
Reach Scarna	90	Max WS	UF_TR30_D3	9.85	180.33	181.89		182.00	0.002969		1.50		6.56	5.22	0.43

HEC-RAS River: River Scarna Reach: Reach Scarna Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Reach Scarna	85.000	Max WS	UF_TR30_D1	8.92	180.05	181.48		181.81	0.014518		2.52		3.54	4.62	0.92
Reach Scarna	85.000	Max WS	UF_TR30_D5	8.86	180.05	181.48		181.80	0.014528		2.52		3.51	4.60	0.92
Reach Scarna	85.000	Max WS	UF_TR30_D7	8.81	180.05	181.47		181.80	0.014549		2.52		3.50	4.58	0.92
Reach Scarna	85.000	Max WS	UF_TR30_D2	9.58	180.05	181.53		181.86	0.014572		2.56		3.74	4.83	0.93
Reach Scarna	85.000	Max WS	UF_TR30_D3	9.85	180.05	181.54		181.88	0.014624		2.58		3.82	4.90	0.93
Reach Scarna	80.000	Max WS	UF_TR30_D1	8.92	179.64	181.10		181.25	0.004814		1.74		5.12	5.14	0.56
Reach Scarna	80.000	Max WS	UF_TR30_D5	8.86	179.64	181.10		181.25	0.004800		1.74		5.10	5.13	0.56
Reach Scarna	80.000	Max WS	UF_TR30_D7	8.81	179.64	181.09		181.24	0.004790		1.73		5.09	5.12	0.56
Reach Scarna	80.000	Max WS	UF_TR30_D2	9.58	179.64	181.14		181.31	0.004929		1.79		5.35	5.23	0.57
Reach Scarna	80.000	Max WS	UF_TR30_D3	9.85	179.64	181.16		181.33	0.004994		1.81		5.44	5.27	0.57
Reach Scarna	75.000	Max WS	UF_TR30_D1	8.92	179.44	180.74		181.04	0.013282		2.43		3.67	5.10	0.91
Reach Scarna	75.000	Max WS	UF_TR30_D5	8.86	179.44	180.74		181.04	0.013296		2.43		3.65	5.08	0.91
Reach Scarna	75.000	Max WS	UF_TR30_D7	8.81	179.44	180.73		181.03	0.013302		2.42		3.64	5.07	0.91
Reach Scarna	75.000	Max WS	UF_TR30_D2	9.58	179.44	180.78		181.09	0.013137		2.46		3.89	5.24	0.91
Reach Scarna	75.000	Max WS	UF_TR30_D3	9.85	179.44	180.80		181.11	0.013128		2.48		3.97	5.29	0.91
Reach Scarna	70	Max WS	UF_TR30_D1	8.92	178.95	180.26		180.53	0.010853		2.28		3.91	5.07	0.83
Reach Scarna	70	Max WS	UF_TR30_D5	8.86	178.95	180.26		180.52	0.010864		2.28		3.89	5.05	0.83
Reach Scarna	70	Max WS	UF_TR30_D7	8.81	178.95	180.26		180.52	0.010859		2.27		3.88	5.04	0.83
Reach Scarna	70	Max WS	UF_TR30_D2	9.58	178.95	180.31		180.58	0.010748		2.31		4.14	5.20	0.83
Reach Scarna	70	Max WS	UF_TR30_D3	9.85	178.95	180.33		180.60	0.010696		2.33		4.23	5.26	0.83
Reach Scarna	60	Max WS	UF_TR30_D1	8.92	178.06	179.82		180.00	0.005761		1.85		4.83	4.71	0.58
Reach Scarna	60	Max WS	UF_TR30_D5	8.86	178.06	179.82		179.99	0.005735		1.84		4.81	4.70	0.58
Reach Scarna	60	Max WS	UF_TR30_D7	8.81	178.06	179.82		179.99	0.005716		1.84		4.80	4.69	0.58
Reach Scarna	60	Max WS	UF_TR30_D2	9.58	178.06	179.86		180.05	0.006004		1.91		5.02	4.82	0.60
Reach Scarna	60	Max WS	UF_TR30_D3	9.85	178.06	179.88		180.07	0.006091		1.93		5.10	4.87	0.60
Reach Scarna	50	Max WS	UF_TR30_D1	8.92	178.37	179.27		179.49	0.011335		2.10		4.25	7.10	0.87
Reach Scarna	50	Max WS	UF_TR30_D5	8.86	178.37	179.26		179.49	0.011324		2.09		4.23	7.09	0.87
Reach Scarna	50	Max WS	UF_TR30_D7	8.81	178.37	179.26		179.48	0.011325		2.09		4.21	7.08	0.87
Reach Scarna	50	Max WS	UF_TR30_D2	9.58	178.37	179.30		179.53	0.011416		2.15		4.47	7.25	0.87
Reach Scarna	50	Max WS	UF_TR30_D3	9.85	178.37	179.31		179.55	0.011433		2.16		4.55	7.31	0.88
Reach Scarna	40	Max WS	UF_TR30_D1	8.92	177.59	179.02		179.16	0.004118	0.49	1.71	0.21	5.65	7.31	0.55
Reach Scarna	40	Max WS	UF_TR30_D5	8.86	177.59	179.01		179.16	0.004098	0.49	1.70	0.21	5.64	7.30	0.55
Reach Scarna	40	Max WS	UF_TR30_D7	8.81	177.59	179.01		179.15	0.004080	0.48	1.69	0.20	5.62	7.29	0.55
Reach Scarna	40	Max WS	UF_TR30_D2	9.58	177.59	179.04		179.20	0.004341	0.51	1.78	0.23	5.84	7.44	0.57
Reach Scarna	40	Max WS	UF_TR30_D3	9.85	177.59	179.05		179.21	0.004428	0.52	1.81	0.24	5.91	7.48	0.58
Reach Scarna	35.000	Max WS	UF_TR30_D1	8.92	177.44	178.30	178.49	178.91	0.036600		3.44		2.59	4.81	1.50
Reach Scarna	35.000	Max WS	UF_TR30_D5	8.86	177.44	178.30	178.48	178.90	0.036676		3.44		2.58	4.80	1.50
Reach Scarna	35.000	Max WS	UF_TR30_D7	8.81	177.44	178.29	178.48	178.90	0.036739		3.44		2.56	4.79	1.50
Reach Scarna	35.000	Max WS	UF_TR30_D2	9.58	177.44	178.33	178.52	178.95	0.036204		3.50		2.74	4.92	1.50
Reach Scarna	35.000	Max WS	UF_TR30_D3	9.85	177.44	178.34	178.53	178.97	0.036001		3.52		2.80	4.97	1.50
Reach Scarna	30	Max WS	UF_TR30_D1	8.92	176.47	177.56		177.73	0.005550	0.55	1.85		5.37	7.73	0.63
Reach Scarna	30	Max WS	UF_TR30_D5	8.86	176.47	177.55		177.72	0.005560	0.54	1.85		5.33	7.72	0.63
Reach Scarna	30	Max WS	UF_TR30_D7	8.81	176.47	177.55		177.72	0.005567	0.54	1.84		5.31	7.70	0.63
Reach Scarna	30	Max WS	UF_TR30_D2	9.58	176.47	177.60		177.77	0.005556	0.58	1.89		5.67	7.85	0.63
Reach Scarna	30	Max WS	UF_TR30_D3	9.85	176.47	177.61		177.79	0.005560	0.60	1.90		5.79	7.90	0.63
Reach Scarna	29.99			Lat Struct											
Reach Scarna	29.98			Lat Struct											
Reach Scarna	20	Max WS	UF_TR30_D1	8.92	175.71	176.82	176.73	177.08	0.013835	1.21	3.01	0.91	5.79	11.96	0.94
Reach Scarna	20	Max WS	UF_TR30_D5	8.86	175.71	176.82	176.72	177.07	0.013807	1.20	3.00	0.91	5.75	11.88	0.94
Reach Scarna	20	Max WS	UF_TR30_D7	8.81	175.71	176.81	176.72	177.07	0.013798	1.20	2.99	0.91	5.72	11.82	0.94
Reach Scarna	20	Max WS	UF_TR30_D2	9.58	175.71	176.85	176.71	177.12	0.014042	1.24	3.09	0.92	6.15	12.77	0.95
Reach Scarna	20	Max WS	UF_TR30_D3	9.84	175.71	176.86	176.72	177.13	0.014156	1.26	3.12	0.92	6.29	13.06	0.95
Reach Scarna	15.000	Max WS	UF_TR30_D1	8.92	175.35	176.20	176.22	176.51	0.017576		2.47		3.61	6.53	1.06
Reach Scarna	15.000	Max WS	UF_TR30_D5	8.86	175.35	176.19	176.21	176.50	0.017609		2.47		3.60	6.52	1.06
Reach Scarna	15.000	Max WS	UF_TR30_D7	8.81	175.35	176.19	176.21	176.50	0.017610		2.46		3.58	6.51	1.06
Reach Scarna	15.000	Max WS	UF_TR30_D2	9.58	175.35	176.23	176.25	176.55	0.017149		2.50		3.83	6.67	1.05
Reach Scarna	15.000	Max WS	UF_TR30_D3	9.85	175.35	176.24	176.26	176.56	0.016903		2.51		3.93	6.72	1.05
Reach Scarna	10	Max WS	UF_TR30_D1	8.92	174.65	175.64		175.86	0.010390		2.10		4.24	6.48	0.83
Reach Scarna	10	Max WS	UF_TR30_D5	8.86	174.65	175.63		175.86	0.010520		2.11		4.21	6.46	0.83
Reach Scarna	10	Max WS	UF_TR30_D7	8.81	174.65	175.63		175.86	0.010599		2.11		4.18	6.45	0.84
Reach Scarna	10	Max WS	UF_TR30_D2	9.58	174.65	175.71		175.92	0.008983		2.04		4.70	6.73	0.78
Reach Scarna	10	Max WS	UF_TR30_D3	9.85	174.65	175.74		175.94	0.008459		2.01		4.90	6.84	0.76
Reach Scarna	8	Max WS	UF_TR30_D1	8.92	174.32	175.59	175.37	175.78	0.008171		1.92		4.65	5.33	0.66
Reach Scarna	8	Max WS	UF_TR30_D5	8.86	174.32	175.59	175.37	175.78	0.008231		1.92		4.61	5.32	0.66
Reach Scarna	8	Max WS	UF_TR30_D7	8.81	174.32	175.58	175.37	175.77	0.008279		1.92		4.59	5.32	0.66
Reach Scarna	8	Max WS	UF_TR30_D2	9.58	174.32	175.67	175.41	175.86	0.007274		1.89		5.07	5.38	0.62
Reach Scarna	8	Max WS	UF_TR30_D3	9.85	174.32	175.71	175.42	175.89	0.006933		1.88		5.24	5.40	0.61
Reach Scarna	7			Bridge											
Reach Scarna	6	Max WS	UF_TR30_D1	8.92	173.67	174.60	174.80	175.27	0.039982		3.62		2.47	4.25	1.52
Reach Scarna	6	Max WS	UF_TR30_D5	8.86	173.67	174.60	174.80	175.26	0.039994		3.61		2.46	4.25	1.52
Reach Scarna	6	Max WS	UF_TR30_D7	8.81	173.67	174.60	174.79	175.26	0.040051		3.60		2.45	4.25	1.52
Reach Scarna	6	Max WS	UF_TR30_D2	9.58	173.67	174.63	174.84	175.33	0.039784		3.69		2.59	4.29	1.52
Reach Scarna	6	Max WS	UF_TR30_D3	9.85	173.67	174.64	174.85	175.35	0.039831		3.73		2.64	4.30	1.52
Reach Scarna	5.0000	Max WS	UF_TR30_D1	8.92	173.35	174.15	174.23	174.55	0.024287		2.82		3.16	5.88	1.23
Reach Scarna	5.0000	Max WS	UF_TR30_D5	8.86	173.35	174.14	174.23	174.55	0.024436		2.82		3.14	5.86	1.23
Reach Scarna	5.0000	Max WS	UF_TR30_D7	8.81	173.35	174.14	174.23	174.55	0.024611		2.82		3.12	5.85	1.24
Reach Scarna	5.0000	Max WS	UF_TR30_D2	9.58	173.35	174.19	174.27	174.59	0.022764		2.82		3.40	6.01	1.20
Reach Scarna	5.0000	Max WS	UF_TR30_D3	9.85	173.35	174.20	174.28	174.61	0.022320		2.82		3.49	6.06	1.19
Reach Scarna	4	Max WS	UF_TR30_D1	8.92	172.88	173.91	173.67	174.14	0.009046		2.12		4.20	4.12	0.67
Reach Scarna	4	Max WS	UF_TR30_D5	8.86	172.88	173.91	173.67	174.14	0.009048		2.12		4.18	4.12	0.67
Reach Scarna	4	Max WS	UF_TR30_D7	8.81	172.88	173.91	173.67	174.13	0.009050		2.12		4.16	4.12	0.67
Reach Scarna	4	Max WS	UF_TR30_D2	9.58	172.88	173.96	173.71	174.20	0.009131		2.18		4.40	4.13	0.67
Reach Scarna	4	Max WS	UF_TR30_D3	9.85	172.88	173.98	173.73	174.23	0.009187		2.20		4.47	4.13	0.68
Reach Scarna	3			Bridge											
Reach Scarna	2	Max WS	UF_TR30_D1	8.49	168.11	171.10		171.10	0.000017		0.19	0.06	46.51	21.60	0.04
Reach Scarna	2	Max WS	UF_TR30_D5	8.81	168.11	171.58		171.58	0.000010		0.16	0.05	57.02	22.04	0.03
Reach Scarna	2	Max WS	UF_TR30_D7	8.62	168.11	171.58		171.58	0.000009		0.16	0.05	57.02	22.04	0.03
Reach Scarna	2	Max WS	UF_TR30_D2	9.48	168.11	171.51		171.51	0.000012		0.18	0.06	55.36	21.97	0.03

HEC-RAS River: River Scarna Reach: Reach Scarna Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Reach Scarna	2	Max WS	UF_TR30_D3	9.78	168.11	171.66		171.66	0.000011		0.18	0.06	58.70	22.11	0.03
Reach Scarna	1	Max WS	UF_TR30_D1	8.49	168.11	171.10		171.10	0.000017		0.19	0.06	46.51	21.60	0.04
Reach Scarna	1	Max WS	UF_TR30_D5	8.81	168.11	171.58		171.58	0.000010		0.16	0.05	57.02	22.04	0.03
Reach Scarna	1	Max WS	UF_TR30_D7	8.62	168.11	171.58		171.58	0.000009		0.16	0.05	57.02	22.04	0.03
Reach Scarna	1	Max WS	UF_TR30_D2	9.48	168.11	171.51		171.51	0.000012		0.18	0.06	55.35	21.97	0.03
Reach Scarna	1	Max WS	UF_TR30_D3	9.78	168.11	171.66		171.66	0.000011		0.18	0.06	58.70	22.11	0.03

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SCARNA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: River Scarna Reach: Reach Scarna Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Reach Scarna	230	Max WS	UF_TR200_D5	25.21	189.60	191.16		191.16	0.000734	0.26	0.71	0.08	90.00	247.20	0.22
Reach Scarna	230	Max WS	UF_TR200_D1	83.37	189.60	191.28		191.32	0.003464	0.67	1.65	0.30	123.69	274.48	0.49
Reach Scarna	230	Max WS	UF_TR200_D2	79.73	189.60	191.29		191.32	0.003036	0.63	1.56	0.29	125.61	274.88	0.46
Reach Scarna	230	Max WS	UF_TR200_D7	31.20	189.60	191.14		191.15	0.001223	0.34	0.90	0.09	87.16	243.02	0.28
Reach Scarna	230	Max WS	UF_TR200_D3	69.71	189.60	191.24		191.27	0.003126	0.61	1.54	0.24	112.53	272.12	0.46
Reach Scarna	220	Max WS	UF_TR200_D5	38.26	188.04	189.95	189.96	190.12	0.010486	0.63	2.69		40.93	179.67	0.82
Reach Scarna	220	Max WS	UF_TR200_D1	86.92	188.04	190.08	190.09	190.32	0.017033	1.02	3.69	0.98	67.51	194.13	1.06
Reach Scarna	220	Max WS	UF_TR200_D2	79.75	188.04	190.07	190.09	190.29	0.015545	0.96	3.51	0.92	65.51	193.24	1.01
Reach Scarna	220	Max WS	UF_TR200_D7	21.32	188.04	189.95		190.00	0.003025	0.34	1.45		42.30	181.50	0.44
Reach Scarna	220	Max WS	UF_TR200_D3	68.99	188.04	190.03	190.09	190.26	0.016379	0.90	3.52	0.89	57.51	189.48	1.03
Reach Scarna	215			Lat Struct											
Reach Scarna	210	Max WS	UF_TR200_D5	17.10	187.53	189.14		189.14	0.000047	0.08	0.22	0.06	224.30	449.48	0.06
Reach Scarna	210	Max WS	UF_TR200_D1	16.55	187.53	189.01		189.01	0.000139	0.11	0.34	0.11	132.96	290.71	0.10
Reach Scarna	210	Max WS	UF_TR200_D2	35.14	187.53	189.23		189.23	0.000125	0.13	0.37	0.12	265.68	474.91	0.10
Reach Scarna	210	Max WS	UF_TR200_D7	18.01	187.53	189.19		189.19	0.000043	0.07	0.21	0.06	244.59	472.90	0.06
Reach Scarna	210	Max WS	UF_TR200_D3	49.65	187.53	189.26		189.26	0.000212	0.18	0.49	0.16	279.73	476.25	0.13
Reach Scarna	200	Max WS	UF_TR200_D5	16.18	187.37	189.14		189.14	0.000001	0.02	0.04	0.02	672.36	485.40	0.01
Reach Scarna	200	Max WS	UF_TR200_D1	14.48	187.37	189.00		189.00	0.000001	0.02	0.04	0.02	606.05	481.49	0.01
Reach Scarna	200	Max WS	UF_TR200_D2	33.07	187.37	189.22		189.22	0.000004	0.05	0.08	0.04	713.81	502.75	0.02
Reach Scarna	200	Max WS	UF_TR200_D7	17.50	187.37	189.18		189.18	0.000001	0.03	0.04	0.02	694.07	491.46	0.01
Reach Scarna	200	Max WS	UF_TR200_D3	45.49	187.37	189.25		189.25	0.000008	0.06	0.11	0.06	726.28	520.93	0.03
Reach Scarna	190	Max WS	UF_TR200_D5	16.15	186.30	189.14		189.14	0.000000	0.02	0.03	0.01	1023.30	585.73	0.01
Reach Scarna	190	Max WS	UF_TR200_D1	14.36	186.30	189.00		189.00	0.000000	0.02	0.03	0.01	943.37	579.80	0.01
Reach Scarna	190	Max WS	UF_TR200_D2	31.37	186.30	189.22		189.22	0.000001	0.03	0.05	0.02	1072.97	593.61	0.01
Reach Scarna	190	Max WS	UF_TR200_D7	17.17	186.30	189.18		189.18	0.000000	0.02	0.03	0.01	1049.48	592.14	0.01
Reach Scarna	190	Max WS	UF_TR200_D3	42.60	186.30	189.25		189.25	0.000002	0.04	0.07	0.03	1087.46	594.51	0.01
Reach Scarna	180	Max WS	UF_TR200_D5	16.16	185.74	189.14		189.14	0.000000	0.01	0.02	0.01	1458.61	626.34	0.00
Reach Scarna	180	Max WS	UF_TR200_D1	14.31	185.74	189.00		189.00	0.000000	0.01	0.02	0.01	1373.23	621.48	0.00
Reach Scarna	180	Max WS	UF_TR200_D2	29.50	185.74	189.22		189.22	0.000000	0.02	0.04	0.02	1511.69	634.04	0.01
Reach Scarna	180	Max WS	UF_TR200_D7	16.94	185.74	189.18		189.18	0.000000	0.01	0.02	0.01	1486.59	632.84	0.00
Reach Scarna	180	Max WS	UF_TR200_D3	39.37	185.74	189.25		189.25	0.000001	0.03	0.05	0.02	1527.16	634.77	0.01
Reach Scarna	172	Max WS	UF_TR200_D5	16.14	185.08	189.14		189.14	0.000000	0.01	0.02	0.01	1586.32	639.31	0.00
Reach Scarna	172	Max WS	UF_TR200_D1	14.30	185.08	189.00		189.00	0.000000	0.01	0.02	0.01	1499.19	634.09	0.00
Reach Scarna	172	Max WS	UF_TR200_D2	28.50	185.08	189.22		189.22	0.000000	0.02	0.03	0.01	1640.50	647.39	0.01
Reach Scarna	172	Max WS	UF_TR200_D7	16.77	185.08	189.18		189.18	0.000000	0.01	0.02	0.01	1614.88	645.97	0.00
Reach Scarna	172	Max WS	UF_TR200_D3	37.65	185.08	189.25		189.25	0.000000	0.02	0.04	0.02	1656.30	648.26	0.01
Reach Scarna	171			Culvert											
Reach Scarna	170	Max WS	UF_TR200_D5	16.14	185.08	186.50		186.55	0.004247		1.52	0.59	22.24	50.42	0.48
Reach Scarna	170	Max WS	UF_TR200_D1	14.30	185.08	186.46		186.50	0.004230		1.49	0.58	20.00	46.83	0.48
Reach Scarna	170	Max WS	UF_TR200_D2	28.48	185.08	186.69		186.76	0.005123		1.81	0.73	33.46	65.55	0.54
Reach Scarna	170	Max WS	UF_TR200_D7	16.78	185.08	186.52		186.56	0.004251		1.53	0.60	23.00	51.59	0.48
Reach Scarna	170	Max WS	UF_TR200_D3	37.65	185.08	186.76		186.84	0.006553		2.11	0.85	38.12	70.85	0.61
Reach Scarna	169.99			Lat Struct											
Reach Scarna	160	Max WS	UF_TR200_D5	12.09	185.05	186.27		186.35	0.005023		1.21		9.98	21.34	0.57
Reach Scarna	160	Max WS	UF_TR200_D1	11.16	185.05	186.24		186.31	0.004122		1.21		9.25	17.10	0.52
Reach Scarna	160	Max WS	UF_TR200_D2	18.90	185.05	186.43		186.51	0.005843	0.53	1.21	0.15	18.34	99.92	0.60
Reach Scarna	160	Max WS	UF_TR200_D7	12.39	185.05	186.29		186.36	0.005240		1.21		10.25	22.69	0.57
Reach Scarna	160	Max WS	UF_TR200_D3	25.25	185.05	186.50		186.58	0.005744	0.59	1.32	0.27	24.95	102.67	0.61
Reach Scarna	159.99			Lat Struct											
Reach Scarna	150	Max WS	UF_TR200_D5	12.09	184.30	185.96	185.68	186.13	0.004991	0.20	1.87	0.26	9.37	47.75	0.60
Reach Scarna	150	Max WS	UF_TR200_D1	11.16	184.30	185.93	185.63	186.09	0.005051	0.17	1.83	0.23	7.88	38.30	0.60
Reach Scarna	150	Max WS	UF_TR200_D2	18.07	184.30	186.11	186.11	186.26	0.004593	0.37	1.97	0.36	18.81	70.24	0.59
Reach Scarna	150	Max WS	UF_TR200_D7	12.39	184.30	185.97	185.69	186.14	0.004951	0.21	1.87	0.27	9.91	50.74	0.60
Reach Scarna	150	Max WS	UF_TR200_D3	22.44	184.30	186.19		186.33	0.004337	0.45	2.00	0.40	24.56	73.94	0.58
Reach Scarna	140	Max WS	UF_TR200_D5	12.06	183.60	185.42	185.27	185.61	0.005741		2.02	0.43	8.68	22.11	0.61
Reach Scarna	140	Max WS	UF_TR200_D1	11.16	183.60	185.39	185.19	185.57	0.005507		1.95	0.40	8.06	20.81	0.59
Reach Scarna	140	Max WS	UF_TR200_D2	17.75	183.60	185.59	185.53	185.82	0.006644		2.33	0.51	13.21	36.16	0.66
Reach Scarna	140	Max WS	UF_TR200_D7	12.39	183.60	185.43	185.30	185.62	0.005862		2.05	0.44	8.86	22.49	0.61
Reach Scarna	140	Max WS	UF_TR200_D3	20.68	183.60	185.63	185.58	185.92	0.008322		2.64	0.48	14.93	53.71	0.74
Reach Scarna	130	Max WS	UF_TR200_D5	12.09	182.82	184.29	184.28	184.60	0.015193		2.46		4.92	7.63	0.98
Reach Scarna	130	Max WS	UF_TR200_D1	11.14	182.82	184.25	184.23	184.55	0.015638		2.45		4.55	7.26	0.99
Reach Scarna	130	Max WS	UF_TR200_D2	18.07	182.82	184.54	184.50	184.88	0.013571	0.14	2.57		7.11	13.73	0.95
Reach Scarna	130	Max WS	UF_TR200_D7	12.38	182.82	184.31	184.29	184.62	0.014971		2.45		5.04	7.76	0.97
Reach Scarna	130	Max WS	UF_TR200_D3	20.75	182.82	184.67	184.74	184.96	0.010042	0.33	2.42	0.20	10.32	38.17	0.84
Reach Scarna	120	Max WS	UF_TR200_D5	13.05	181.67	183.19		183.43	0.007712		2.15		6.07	6.82	0.73
Reach Scarna	120	Max WS	UF_TR200_D1	11.50	181.67	183.09		183.32	0.008237		2.13		5.39	6.44	0.75
Reach Scarna	120	Max WS	UF_TR200_D2	20.93	181.67	183.67		183.91	0.005495	0.06	2.14		9.81	9.89	0.64
Reach Scarna	120	Max WS	UF_TR200_D7	13.54	181.67	183.22		183.46	0.007537		2.15		6.29	6.94	0.72
Reach Scarna	120	Max WS	UF_TR200_D3	28.38	181.67	184.05		184.25	0.003756	0.38	2.02		17.70	29.17	0.55
Reach Scarna	110	Max WS	UF_TR200_D5	13.05	181.15	182.89		183.17	0.008341		2.32		5.62	5.52	0.74
Reach Scarna	110	Max WS	UF_TR200_D1	11.50	181.15	182.76		183.04	0.009312		2.35		4.90	5.17	0.77
Reach Scarna	110	Max WS	UF_TR200_D2	20.75	181.15	183.48		183.74	0.005043		2.24	0.39	9.54	8.17	0.60
Reach Scarna	110	Max WS	UF_TR200_D7	13.54	181.15	182.93		183.21	0.008190		2.33		5.81	5.61	0.73
Reach Scarna	110	Max WS	UF_TR200_D3	28.39	181.15	183.87		184.14	0.004038	0.32	2.34	0.56	13.41	11.93	0.56
Reach Scarna	109.99			Lat Struct											
Reach Scarna	100	Max WS	UF_TR200_D5	13.12	180.31	182.57		182.65	0.001269		1.22	0.22	11.00	7.19	0.29
Reach Scarna	100	Max WS	UF_TR200_D1	11.50	180.31	182.40		182.47	0.001326		1.18	0.16	9.81	6.66	0.29
Reach Scarna	100	Max WS	UF_TR200_D2	20.79	180.31	183.33		183.38	0.000664	0.24	1.10	0.22	33.11	53.91	0.22
Reach Scarna	100	Max WS	UF_TR200_D7	13.64	180.31	182.62		182.70	0.001256		1.23	0.23	11.38	7.35	0.29
Reach Scarna	100	Max WS	UF_TR200_D3	28.06	180.31	183.78		183.81	0.000400	0.29	0.95	0.25	60.97	70.31	0.18
Reach Scarna	95.5			Culvert											
Reach Scarna	90	Max WS	UF_TR200_D5	13.12	180.33	182.09		182.24	0.003464		1.72		7.64	5.48	0.46
Reach Scarna	90	Max WS	UF_TR200_D1	11.50	180.33	181.99		182.13	0.003247		1.62		7.10	5.35	0.45
Reach Scarna	90	Max WS	UF_TR200_D2	20.79	180.33	182.44		182.67	0.004431		2.15	0.24	10.09	10.49	0.53
Reach Scarna	90	Max WS	UF_TR200_D7	13.64	180.33	182.12		182.28	0.003532		1.75		7.81	5.52	0.47
Reach Scarna	90	Max WS	UF_TR200_D3	28.06	180.33	182.69		182.98	0.004952		2.44	0.44	13.43	16.31	0.57

HEC-RAS River: River Scarna Reach: Reach Scarna Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Reach Scarna	85.000	Max WS	UF_TR200_D5	13.12	180.05	181.74	181.69	182.11	0.014386		2.71		4.85	5.77	0.94
Reach Scarna	85.000	Max WS	UF_TR200_D1	11.50	180.05	181.64		182.00	0.014529		2.66		4.32	5.28	0.94
Reach Scarna	85.000	Max WS	UF_TR200_D2	20.78	180.05	182.08	182.03	182.51	0.013434		2.91		7.14	7.38	0.95
Reach Scarna	85.000	Max WS	UF_TR200_D7	13.64	180.05	181.76	181.72	182.14	0.014361		2.72		5.01	5.93	0.95
Reach Scarna	85.000	Max WS	UF_TR200_D3	28.19	180.05	182.31	182.55	182.81	0.014318		3.13	0.06	9.03	10.65	0.99
Reach Scarna	80.000	Max WS	UF_TR200_D5	13.12	179.64	181.34		181.55	0.005577		2.04	0.09	6.43	5.84	0.61
Reach Scarna	80.000	Max WS	UF_TR200_D1	11.50	179.64	181.25		181.44	0.005376		1.94		5.93	5.47	0.59
Reach Scarna	80.000	Max WS	UF_TR200_D2	20.78	179.64	181.69		181.99	0.006059		2.44	0.29	9.03	11.38	0.65
Reach Scarna	80.000	Max WS	UF_TR200_D7	13.64	179.64	181.37		181.59	0.005628		2.07	0.12	6.59	6.02	0.61
Reach Scarna	80.000	Max WS	UF_TR200_D3	28.18	179.64	181.91	181.60	182.28	0.006903		2.77	0.34	12.94	31.87	0.71
Reach Scarna	75.000	Max WS	UF_TR200_D5	13.12	179.44	180.97		181.33	0.012972		2.66		4.94	5.87	0.92
Reach Scarna	75.000	Max WS	UF_TR200_D1	11.50	179.44	180.89		181.23	0.013082		2.58		4.46	5.59	0.92
Reach Scarna	75.000	Max WS	UF_TR200_D2	20.78	179.44	181.31	181.26	181.74	0.013154		2.91		7.14	7.58	0.96
Reach Scarna	75.000	Max WS	UF_TR200_D7	13.64	179.44	181.00		181.36	0.012967		2.68		5.09	5.96	0.93
Reach Scarna	75.000	Max WS	UF_TR200_D3	28.15	179.44	181.53	181.69	182.01	0.012593	0.50	3.10	0.41	9.67	14.60	0.96
Reach Scarna	70	Max WS	UF_TR200_D5	13.12	178.95	180.51		180.83	0.010055		2.50	0.26	5.27	5.87	0.82
Reach Scarna	70	Max WS	UF_TR200_D1	11.50	178.95	180.42		180.72	0.010394		2.41	0.13	4.77	5.57	0.82
Reach Scarna	70	Max WS	UF_TR200_D2	20.78	178.95	180.83		181.26	0.010074		2.91	0.59	7.34	7.02	0.85
Reach Scarna	70	Max WS	UF_TR200_D7	13.64	178.95	180.54		180.86	0.009968		2.52	0.29	5.43	5.97	0.82
Reach Scarna	70	Max WS	UF_TR200_D3	28.24	178.95	181.04	181.00	181.60	0.011621		3.31	0.80	8.93	8.14	0.93
Reach Scarna	60	Max WS	UF_TR200_D5	13.12	178.06	180.05		180.30	0.007146		2.19		5.99	5.37	0.66
Reach Scarna	60	Max WS	UF_TR200_D1	11.50	178.06	179.97		180.19	0.006668		2.07		5.56	5.13	0.63
Reach Scarna	60	Max WS	UF_TR200_D2	20.77	178.06	180.35	180.10	180.66	0.007982	0.45	2.54		10.36	21.72	0.72
Reach Scarna	60	Max WS	UF_TR200_D7	13.64	178.06	180.08		180.33	0.007299		2.23		6.12	5.43	0.67
Reach Scarna	60	Max WS	UF_TR200_D3	27.62	178.06	180.54	180.51	180.85	0.007775	0.72	2.65	0.14	14.54	23.20	0.72
Reach Scarna	50	Max WS	UF_TR200_D5	13.12	178.37	179.45		179.73	0.011524		2.34		5.60	8.01	0.89
Reach Scarna	50	Max WS	UF_TR200_D1	11.50	178.37	179.38		179.64	0.011472		2.26		5.09	7.67	0.89
Reach Scarna	50	Max WS	UF_TR200_D2	20.77	178.37	179.71		180.06	0.011469		2.61		7.95	9.62	0.92
Reach Scarna	50	Max WS	UF_TR200_D7	13.64	178.37	179.47		179.75	0.011537		2.37		5.76	8.11	0.90
Reach Scarna	50	Max WS	UF_TR200_D3	26.30	178.37	179.86	179.85	180.25	0.013343		2.75		9.58	12.08	0.99
Reach Scarna	40	Max WS	UF_TR200_D5	13.12	177.59	179.17		179.40	0.005260	0.62	2.13	0.35	6.87	8.17	0.64
Reach Scarna	40	Max WS	UF_TR200_D1	11.50	177.59	179.12		179.31	0.004861	0.58	1.98	0.30	6.40	7.80	0.61
Reach Scarna	40	Max WS	UF_TR200_D2	20.76	177.59	179.42		179.77	0.006550	0.71	2.71	0.51	9.14	10.94	0.74
Reach Scarna	40	Max WS	UF_TR200_D7	13.64	177.59	179.19		179.42	0.005374	0.64	2.18	0.37	7.01	8.28	0.65
Reach Scarna	40	Max WS	UF_TR200_D3	26.29	177.59	179.55	179.39	179.88	0.006130	0.54	2.79	0.37	18.89	72.38	0.73
Reach Scarna	35.000	Max WS	UF_TR200_D5	13.12	177.44	178.48	178.70	179.19	0.034020		3.72		3.53	5.48	1.48
Reach Scarna	35.000	Max WS	UF_TR200_D1	11.50	177.44	178.42	178.62	179.09	0.034998		3.63		3.17	5.23	1.49
Reach Scarna	35.000	Max WS	UF_TR200_D2	20.76	177.44	178.74	179.00	179.60	0.032133		4.10		5.06	6.47	1.48
Reach Scarna	35.000	Max WS	UF_TR200_D7	13.64	177.44	178.50	178.72	179.22	0.033848		3.75		3.64	5.55	1.48
Reach Scarna	35.000	Max WS	UF_TR200_D3	26.32	177.44	178.89	179.18	179.84	0.031232		4.32		6.09	7.01	1.48
Reach Scarna	30	Max WS	UF_TR200_D5	13.12	176.47	177.78		177.99	0.005690	0.74	2.09		7.18	8.44	0.65
Reach Scarna	30	Max WS	UF_TR200_D1	11.50	176.47	177.70		177.89	0.005656	0.68	2.01		6.49	8.18	0.64
Reach Scarna	30	Max WS	UF_TR200_D2	20.76	176.47	178.06		178.35	0.006669	0.99	2.52		9.60	9.31	0.72
Reach Scarna	30	Max WS	UF_TR200_D7	13.64	176.47	177.80		178.02	0.005748	0.76	2.12		7.37	8.51	0.66
Reach Scarna	30	Max WS	UF_TR200_D3	26.50	176.47	178.21		178.57	0.007473	1.15	2.81		11.08	9.80	0.77
Reach Scarna	29.99			Lat Struct											
Reach Scarna	29.98			Lat Struct											
Reach Scarna	20	Max WS	UF_TR200_D5	13.11	175.71	177.00	176.72	177.28	0.013865	1.35	3.34	0.95	8.34	16.80	0.96
Reach Scarna	20	Max WS	UF_TR200_D1	11.50	175.71	176.92	176.95	177.22	0.014707	1.33	3.30	0.95	7.17	14.77	0.98
Reach Scarna	20	Max WS	UF_TR200_D2	18.49	175.71	177.15	176.75	177.46	0.014272	1.49	3.66	1.11	11.10	19.54	1.00
Reach Scarna	20	Max WS	UF_TR200_D7	13.59	175.71	177.01	176.73	177.30	0.013865	1.37	3.37	0.96	8.63	17.25	0.97
Reach Scarna	20	Max WS	UF_TR200_D3	21.24	175.71	177.20	176.76	177.52	0.014491	1.56	3.79	1.21	12.23	19.64	1.01
Reach Scarna	15.000	Max WS	UF_TR200_D5	13.11	175.35	176.60	176.40	176.78	0.005800	0.20	1.92	0.31	8.47	26.80	0.66
Reach Scarna	15.000	Max WS	UF_TR200_D1	11.50	175.35	176.34	176.33	176.66	0.014455		2.49	0.08	4.62	7.26	0.98
Reach Scarna	15.000	Max WS	UF_TR200_D2	17.82	175.35	176.72	176.68	176.93	0.006179	0.41	2.15	0.46	11.71	29.11	0.69
Reach Scarna	15.000	Max WS	UF_TR200_D7	13.57	175.35	176.62	176.43	176.80	0.005765	0.23	1.94	0.32	8.90	27.45	0.66
Reach Scarna	15.000	Max WS	UF_TR200_D3	19.80	175.35	176.76	176.73	176.98	0.006319	0.47	2.23	0.52	12.87	29.11	0.70
Reach Scarna	10	Max WS	UF_TR200_D5	12.46	174.65	176.45		176.52	0.001472	0.10	1.09	0.17	12.22	22.33	0.34
Reach Scarna	10	Max WS	UF_TR200_D1	11.50	174.65	175.94		176.11	0.005595		1.80		6.40	7.72	0.63
Reach Scarna	10	Max WS	UF_TR200_D2	13.11	174.65	176.57		176.62	0.001106	0.17	1.02	0.21	14.80	22.48	0.30
Reach Scarna	10	Max WS	UF_TR200_D7	12.55	174.65	176.47		176.53	0.001402	0.11	1.08	0.18	12.63	22.48	0.33
Reach Scarna	10	Max WS	UF_TR200_D3	13.38	174.65	176.60		176.65	0.001031	0.18	1.00	0.22	15.56	22.48	0.29
Reach Scarna	8	Max WS	UF_TR200_D5	12.43	174.32	176.42	175.54	176.51	0.002137		1.35		9.24	5.83	0.34
Reach Scarna	8	Max WS	UF_TR200_D1	11.50	174.32	175.92	175.50	176.08	0.005255		1.80		6.40	5.52	0.53
Reach Scarna	8	Max WS	UF_TR200_D2	12.84	174.32	176.54	175.56	176.62	0.001861		1.29		9.93	5.90	0.32
Reach Scarna	8	Max WS	UF_TR200_D7	12.49	174.32	176.44	175.55	176.53	0.002091		1.34		9.35	5.84	0.34
Reach Scarna	8	Max WS	UF_TR200_D3	12.97	174.32	176.57	175.57	176.66	0.001785		1.28		10.15	5.92	0.31
Reach Scarna	7			Bridge											
Reach Scarna	6	Max WS	UF_TR200_D5	12.43	173.67	174.75	174.99	175.56	0.038684		3.97		3.13	4.44	1.51
Reach Scarna	6	Max WS	UF_TR200_D1	11.50	173.67	174.71	174.94	175.49	0.039236		3.90		2.95	4.39	1.52
Reach Scarna	6	Max WS	UF_TR200_D2	12.84	173.67	174.78	175.01	175.58	0.036637		3.94		3.26	4.48	1.47
Reach Scarna	6	Max WS	UF_TR200_D7	12.49	173.67	174.76	175.00	175.56	0.038595		3.98		3.14	4.44	1.51
Reach Scarna	6	Max WS	UF_TR200_D3	12.97	173.67	174.80	175.02	175.57	0.035248		3.90		3.33	4.49	1.45
Reach Scarna	5.0000	Max WS	UF_TR200_D5	12.43	173.35	174.35	174.40	174.75	0.017775		2.80		4.44	6.56	1.09
Reach Scarna	5.0000	Max WS	UF_TR200_D1	11.50	173.35	174.30	174.35	174.70	0.019279		2.81		4.09	6.37	1.12
Reach Scarna	5.0000	Max WS	UF_TR200_D2	13.17	173.35	174.41	174.43	174.79	0.015696		2.72		4.84	6.76	1.03
Reach Scarna	5.0000	Max WS	UF_TR200_D7	12.51	173.35	174.36	174.40	174.76	0.017650		2.79		4.47	6.58	1.08
Reach Scarna	5.0000	Max WS	UF_TR200_D3	13.52	173.35	174.45	174.44	174.81	0.014620		2.68		5.05	6.86	1.00
Reach Scarna	4	Max WS	UF_TR200_D5	12.43	172.88	174.16	173.87	174.45	0.009389		2.38		5.23	4.17	0.68
Reach Scarna	4	Max WS	UF_TR200_D1	11.50	172.88	174.10	173.82	174.37	0.009343		2.32		4.96	4.15	0.68
Reach Scarna	4	Max WS	UF_TR200_D2	13.39	172.88	174.24	173.92	174.54	0.009269		2.42		5.54	4.20	0.67
Reach Scarna	4	Max WS	UF_TR200_D7	12.51	172.88	174.17	173.87	174.46	0.009393		2.38		5.25	4.17	0.68
Reach Scarna	4	Max WS	UF_TR200_D3	13.90	172.88	174.28	173.94	174.58	0.009197		2.43		5.71	4.22	0.67
Reach Scarna	3			Bridge											
Reach Scarna	2	Max WS	UF_TR200_D5	12.42	168.11	172.59		172.59	0.000007		0.17	0.06	79.76	22.96	0.03
Reach Scarna	2	Max WS	UF_TR200_D1	10.95	168.11	171.91		171.91	0.000010		0.18	0.06	64.34	22.34	0.03
Reach Scarna	2	Max WS	UF_TR200_D2	13.18	168.11	172.42		172.42	0.000009		0.18	0.06	75.89	22.80	0.03
Reach Scarna	2	Max WS	UF_TR200_D7	12.50	168.11	172.49		172.49	0.000008		0.17	0.06	77.32	22.86	0.03

HEC-RAS River: River Scarna Reach: Reach Scarna Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Reach Scarna	2	Max WS	UF_TR200_D3	13.11	168.11	172.65		172.65	0.000008		0.17	0.06	81.09	23.02	0.03
Reach Scarna	1	Max WS	UF_TR200_D5	12.42	168.11	172.59		172.59	0.000007		0.17	0.06	79.76	22.96	0.03
Reach Scarna	1	Max WS	UF_TR200_D1	10.95	168.11	171.91		171.91	0.000010		0.18	0.06	64.34	22.34	0.03
Reach Scarna	1	Max WS	UF_TR200_D2	13.18	168.11	172.42		172.42	0.000009		0.18	0.06	75.89	22.80	0.03
Reach Scarna	1	Max WS	UF_TR200_D7	12.50	168.11	172.49		172.49	0.000008		0.17	0.06	77.32	22.86	0.03
Reach Scarna	1	Max WS	UF_TR200_D3	13.11	168.11	172.65		172.65	0.000008		0.17	0.06	81.09	23.02	0.03

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SENNA

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

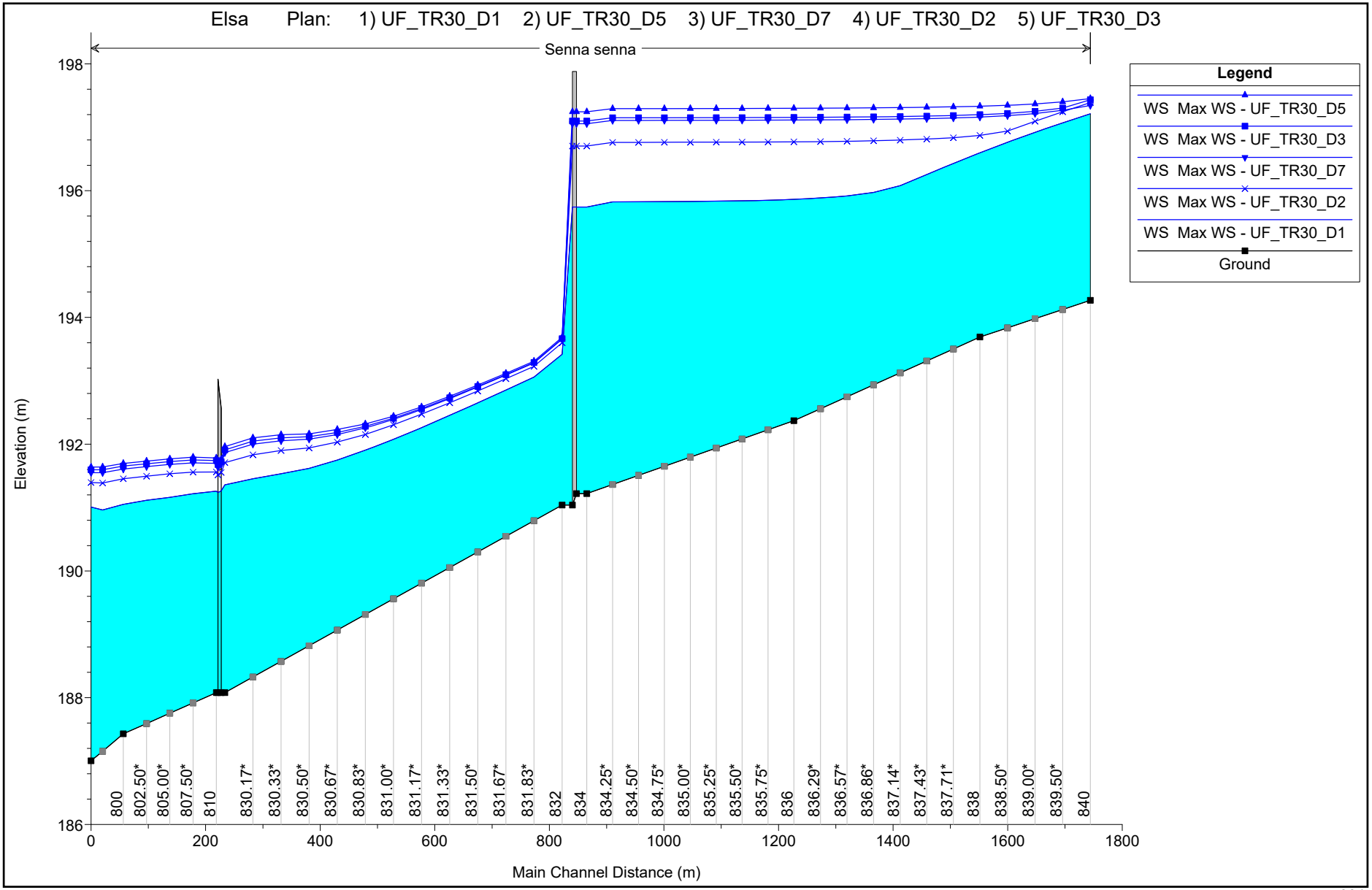
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SENNA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
Senna senna
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
198
196
194
192
190
188
186
0
200
400
600
800
1000
1200
1400
1600
1800
800
802.50*
805.00*
807.50*
810
830.17*
830.33*
830.50*
830.67*
830.83*
831.00*
831.17*
831.33*
831.50*
831.67*
831.83*
832
834
834.25*
834.50*
834.75*
835.00*
835.25*
835.50*
835.75*
836
836.29*
836.57*
836.86*
837.14*
837.43*
837.71*
838
838.50*
839.00*
839.50*
840

ALLEGATI

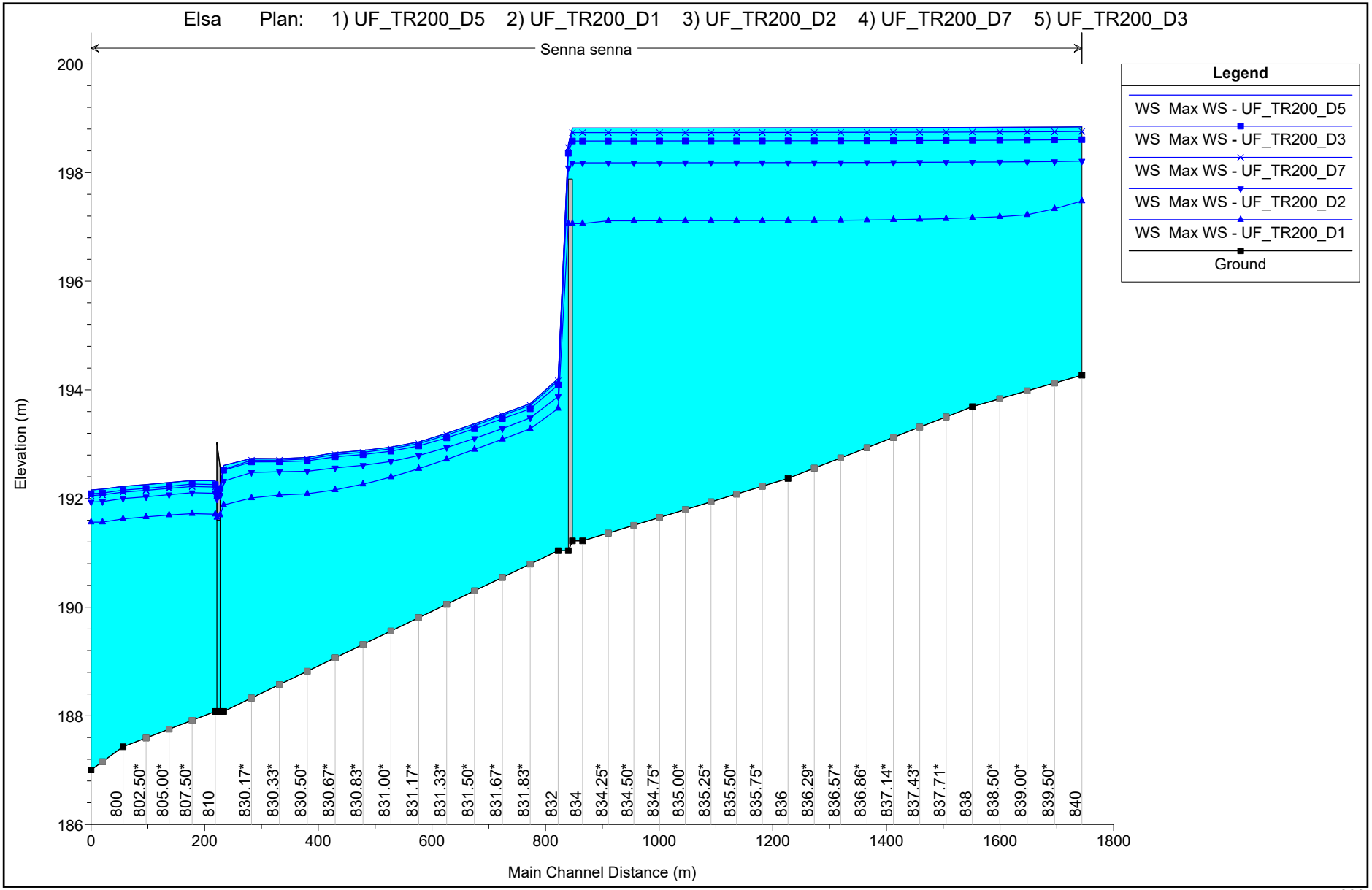
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SENNA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
Senna senna
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
Main Channel Distance (m)
200
198
196
194
192
190
188
186
0
200
400
600
800
1000
1200
1400
1600
1800
800
802.50*
805.00*
807.50*
810
830.17*
830.33*
830.50*
830.67*
830.83*
831.00*
831.17*
831.33*
831.50*
831.67*
831.83*
832
834
834.25*
834.50*
834.75*
835.00*
835.25*
835.50*
835.75*
836
836.29*
836.57*
836.86*
837.14*
837.43*
837.71*
838
838.50*
839.00*
839.50*
840

ALLEGATI

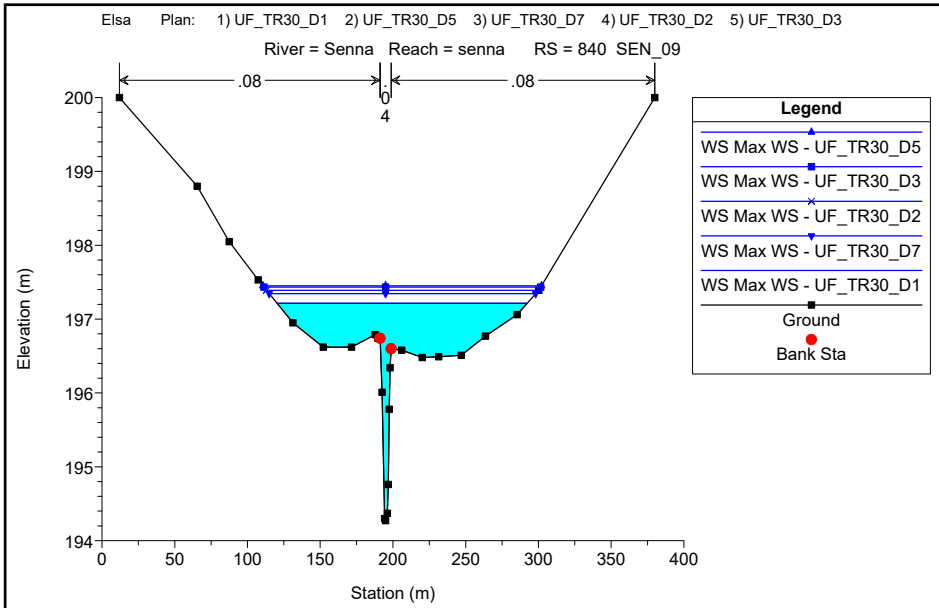
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

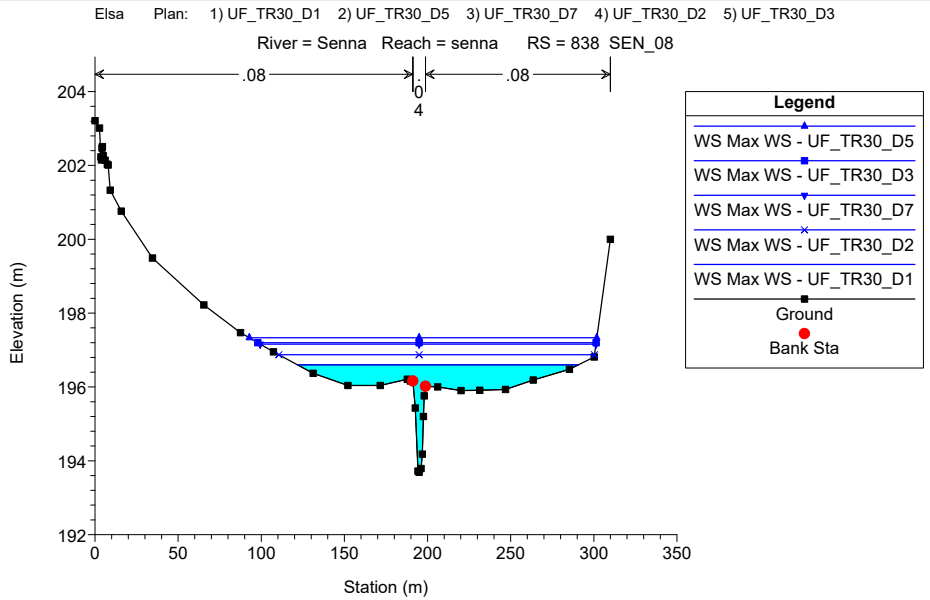
TORRENTE SENNA

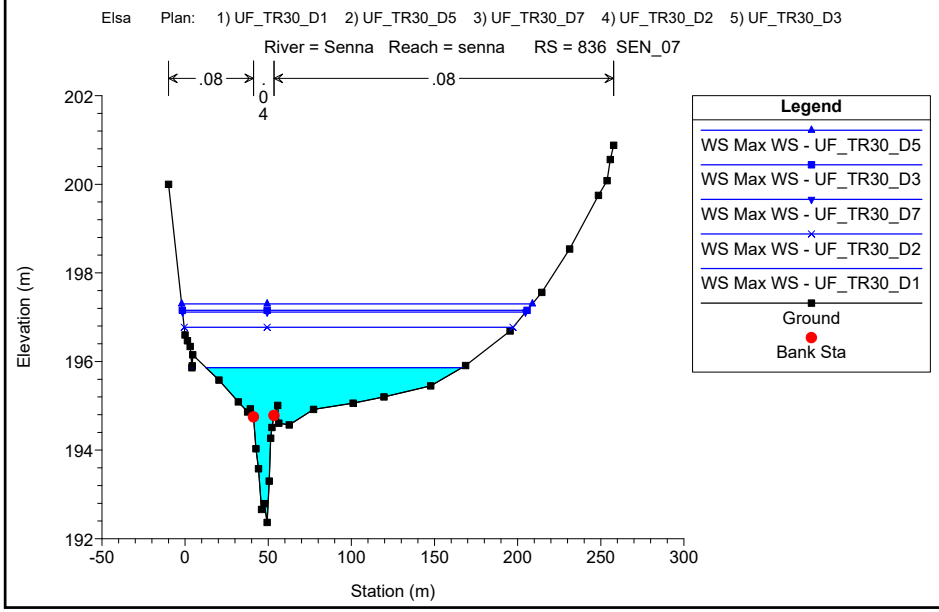
MODELLAZIONE PER TR=30 anni

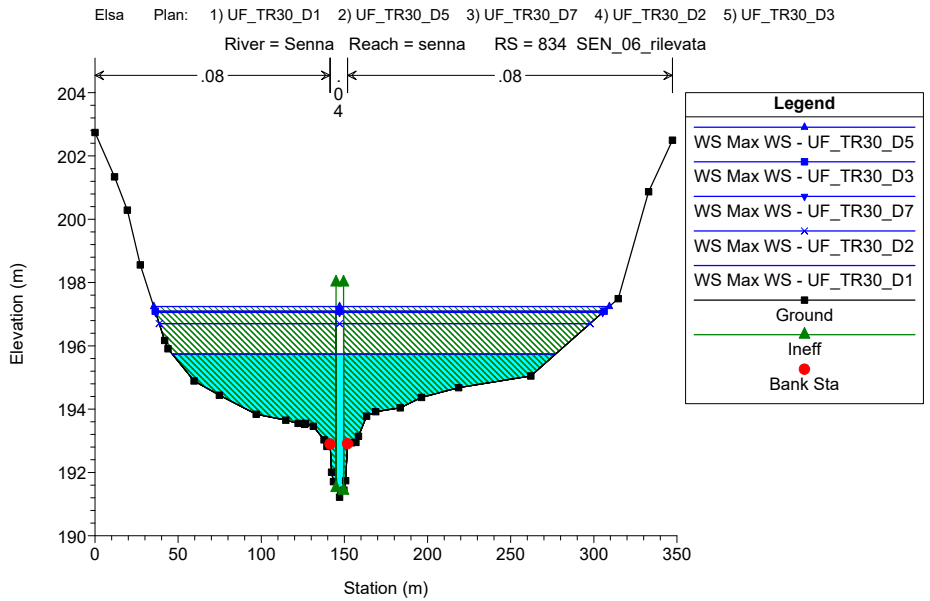
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

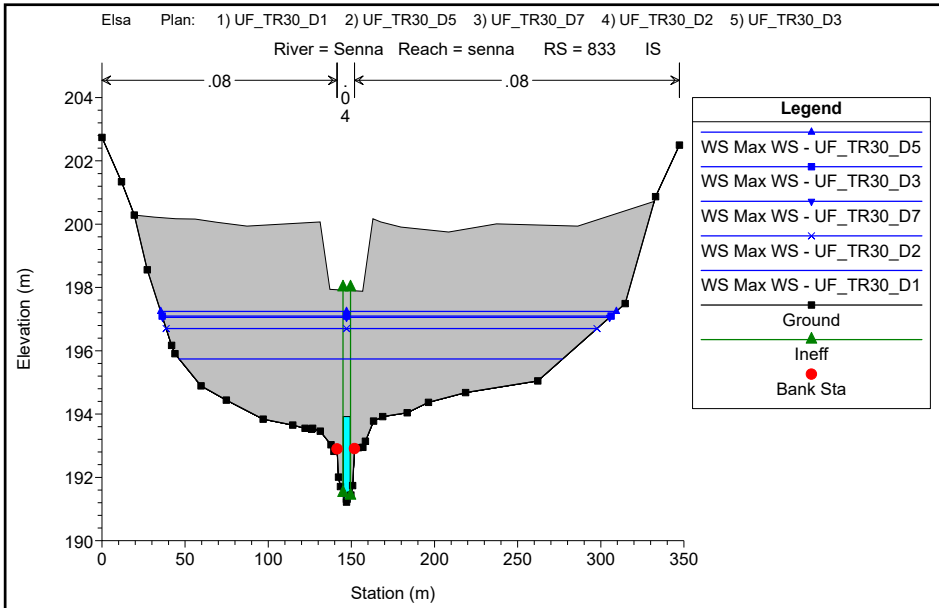
Sezioni Trasversali (da monte verso valle)

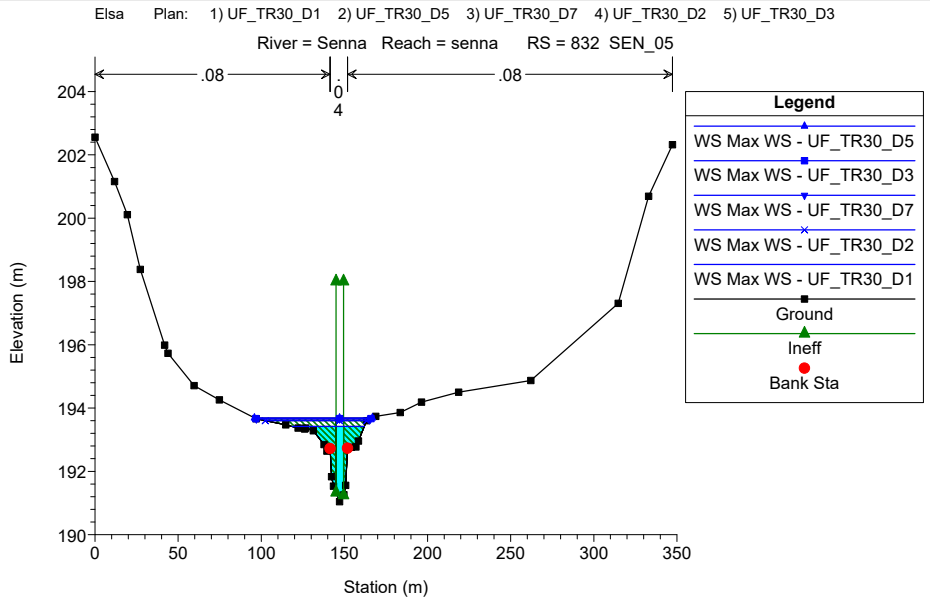

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 840 SEN_09
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D1
Ground
Bank Sta

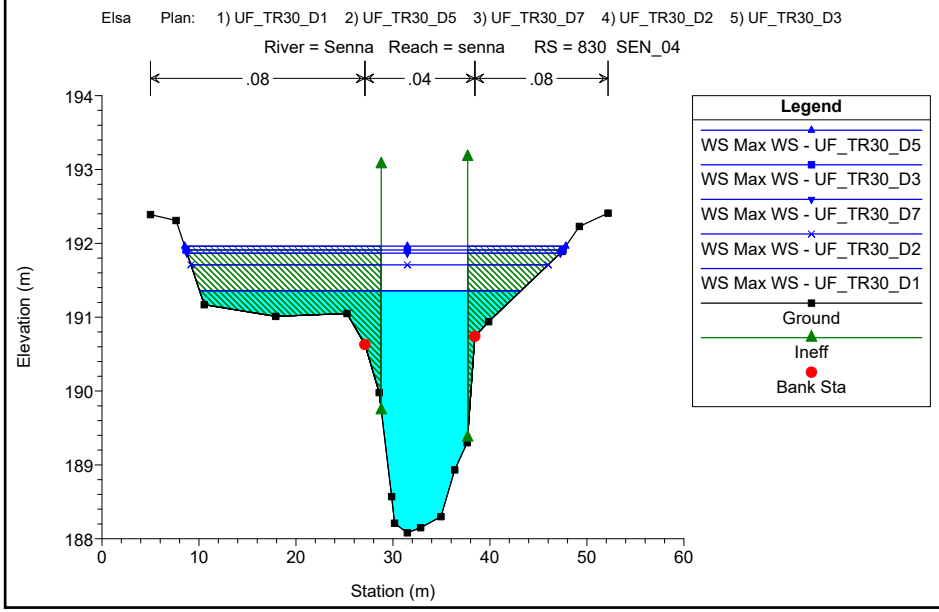

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 838 SEN_08
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

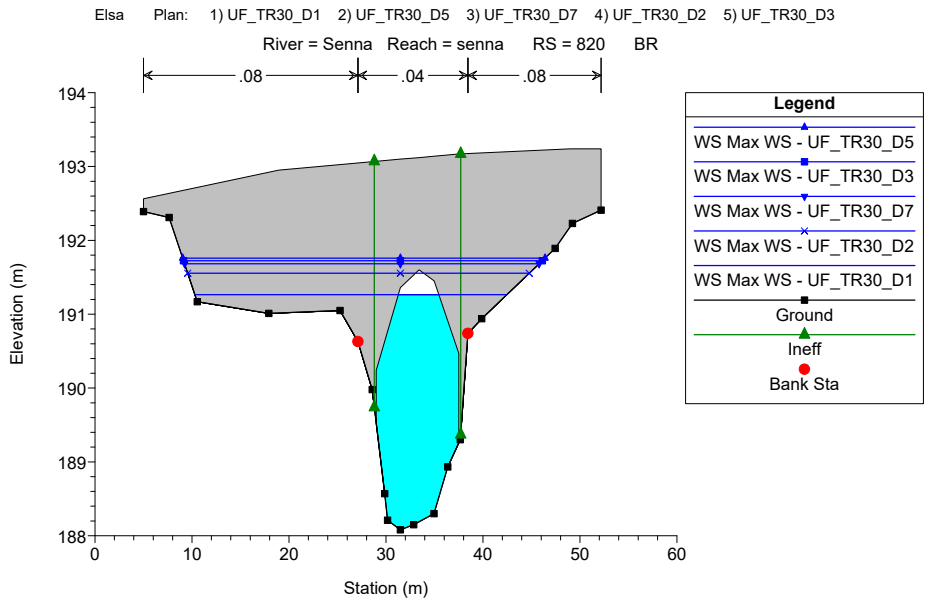

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 836 SEN_07
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

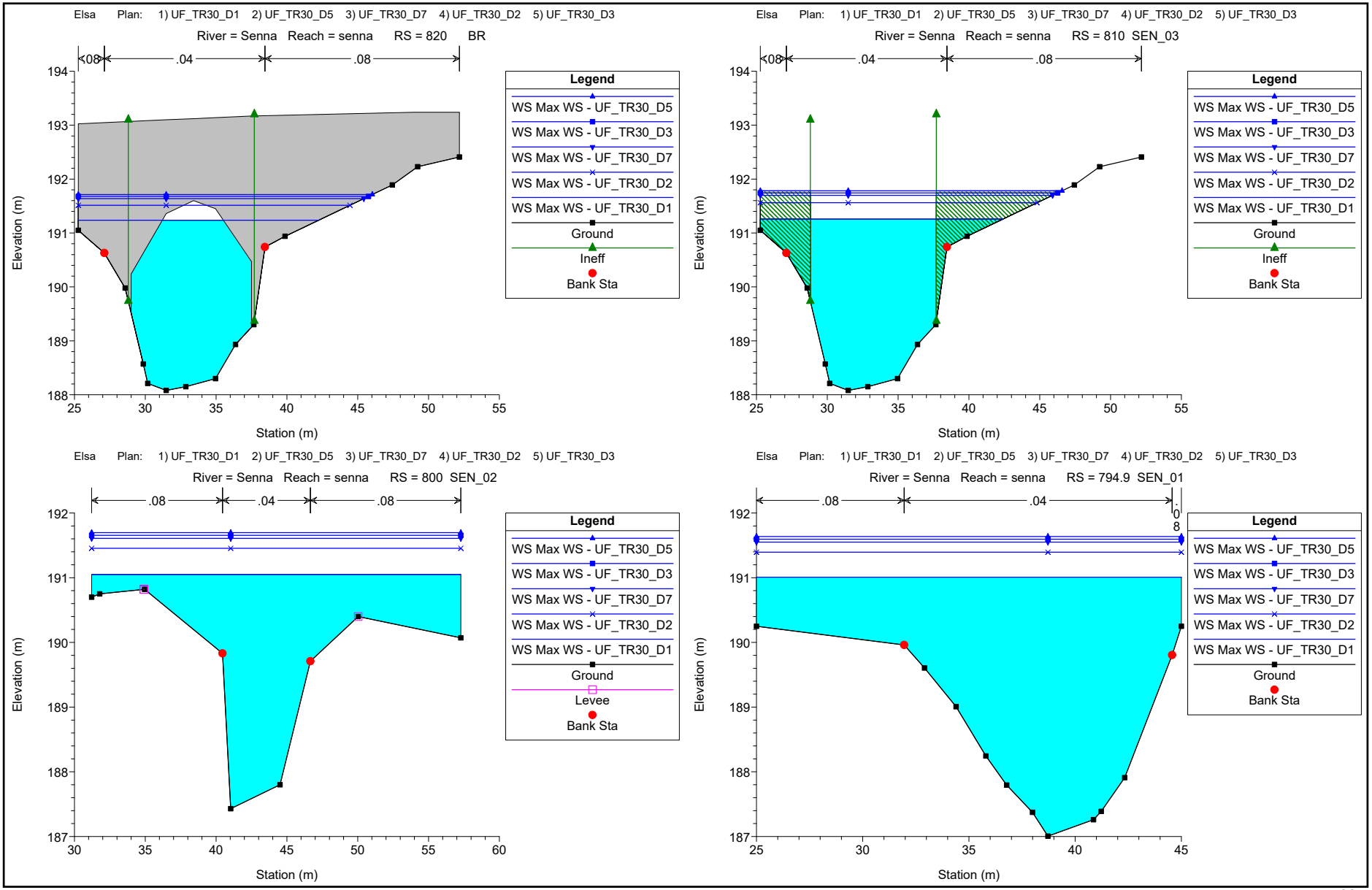

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 834 SEN_06_rilevata
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 833 IS
.08
.08
0
4
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 832 SEN_05
.08
.08
0
4
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 830 SEN_04
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 820 BR
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 820 BR
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 810 SEN_03
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 800 SEN_02
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Senna Reach = senna RS = 794.9 SEN_01
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

ALLEGATI

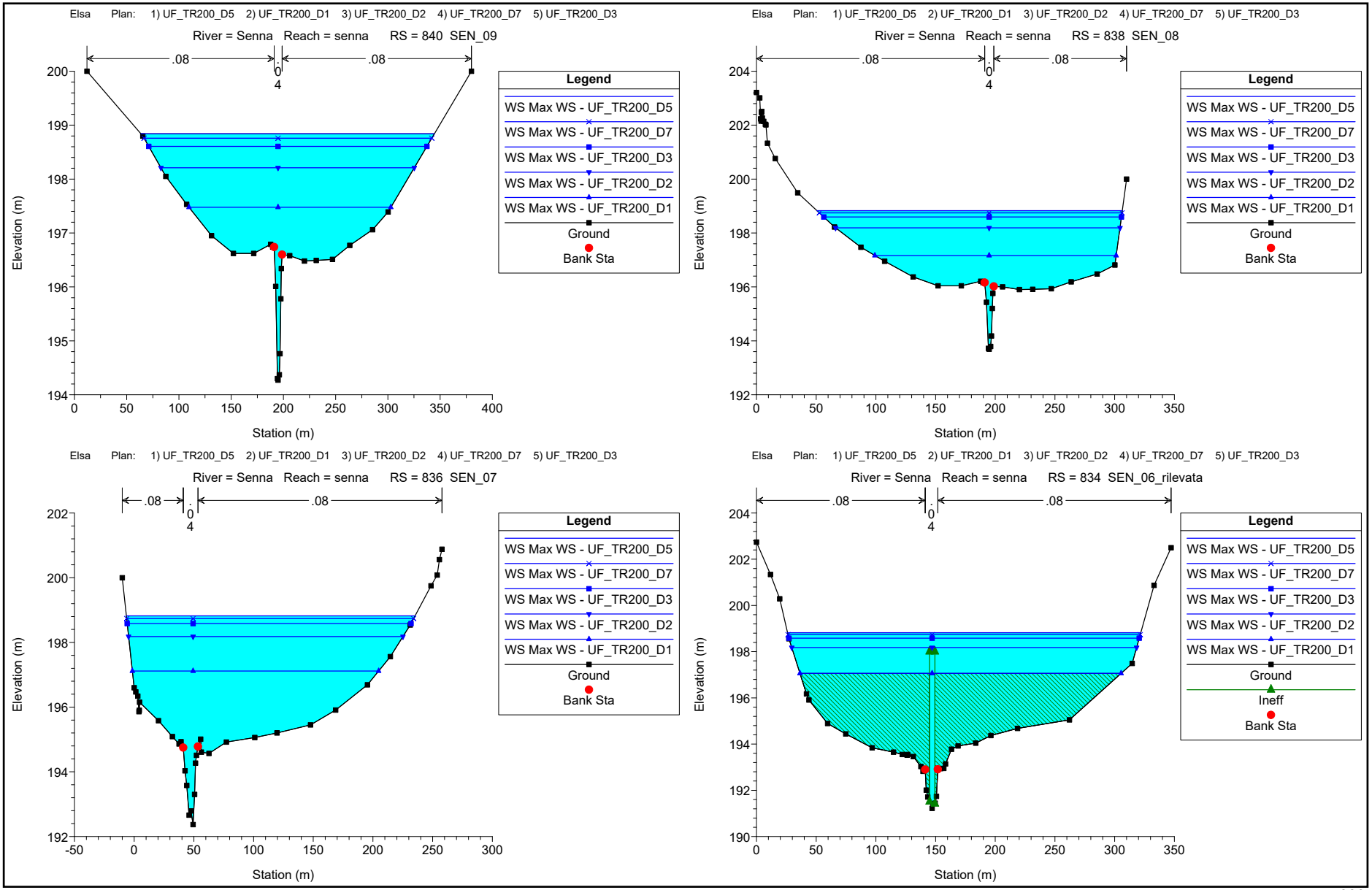
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

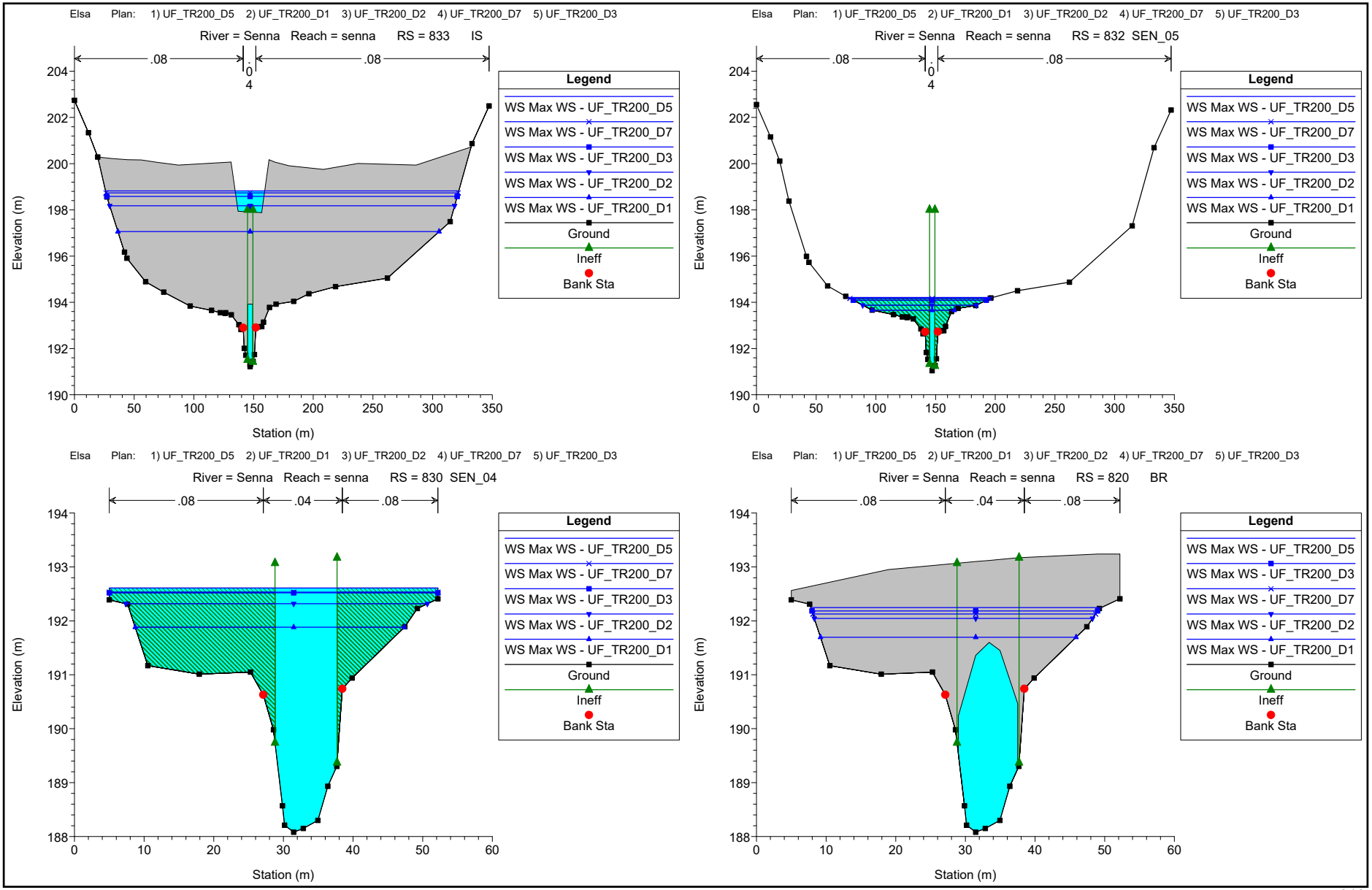
TORRENTE SENNA

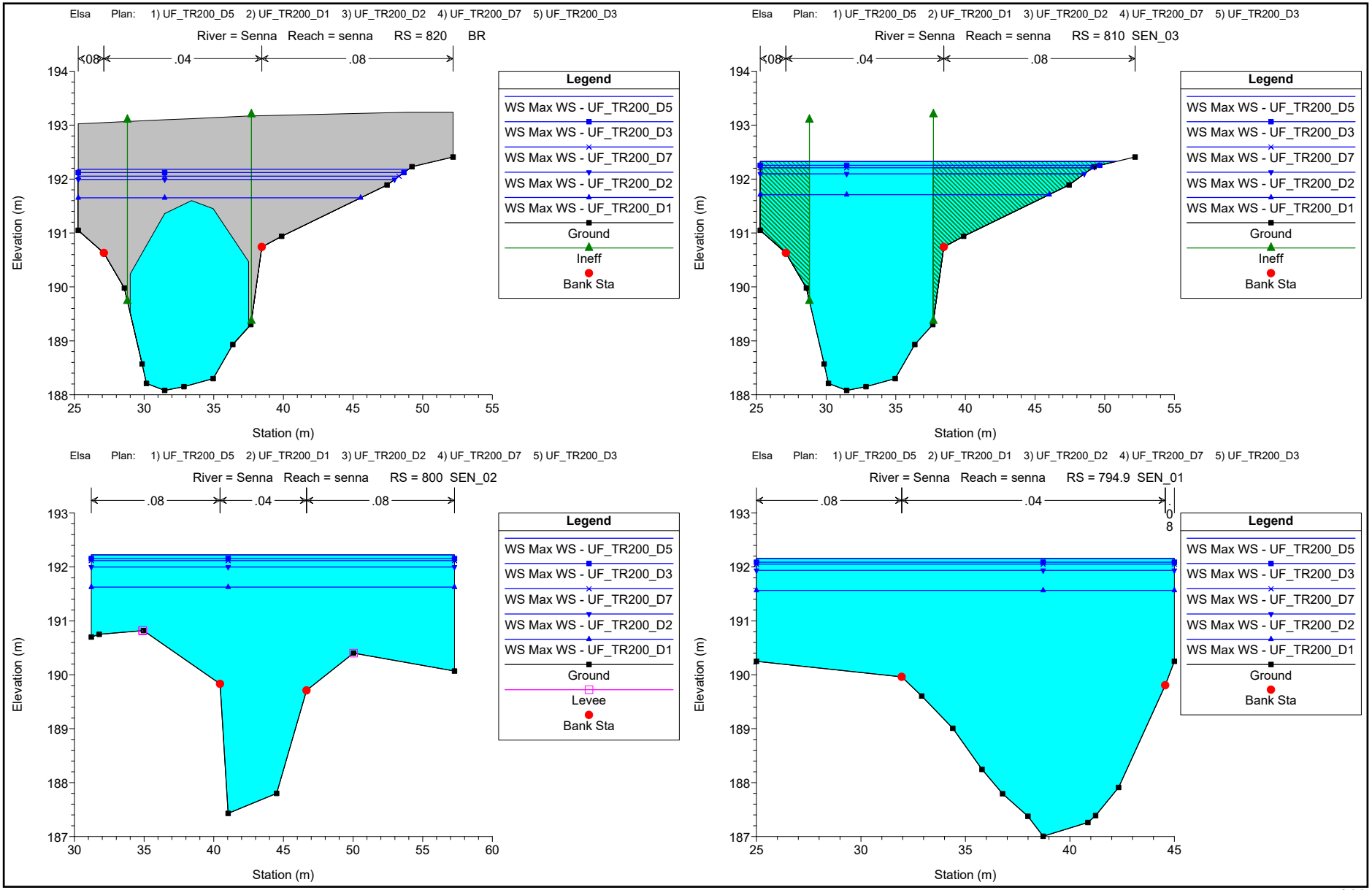
MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 840 SEN_09
River = Senna Reach = senna RS = 838 SEN_08
River = Senna Reach = senna RS = 836 SEN_07
River = Senna Reach = senna RS = 834 SEN_06_rilevata
.08
.04
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 833 IS
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 832 SEN_05
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 830 SEN_04
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 820 BR
.08
.04
.08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 820 BR
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 810 SEN_03
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 800 SEN_02
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Senna Reach = senna RS = 794.9 SEN_01
.08 .04 .08
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SENNA

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Senna Reach: senna Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
senna	840	Max WS	UF_TR30_D1	62.79	194.27	197.21		197.29	0.003137	0.41	1.85	0.46	96.13	171.85	0.43
senna	840	Max WS	UF_TR30_D5	67.93	194.27	197.45		197.49	0.001482	0.35	1.38	0.38	139.45	191.49	0.30
senna	840	Max WS	UF_TR30_D7	63.99	194.27	197.34		197.39	0.001942	0.37	1.52	0.40	119.34	183.13	0.34
senna	840	Max WS	UF_TR30_D2	86.93	194.27	197.39		197.47	0.003025	0.48	1.93	0.52	127.86	187.09	0.43
senna	840	Max WS	UF_TR30_D3	93.42	194.27	197.43		197.51	0.002978	0.49	1.94	0.54	136.19	190.26	0.43
senna	838	Max WS	UF_TR30_D1	62.60	193.69	196.60		196.69	0.003605	0.42	1.96	0.48	90.31	168.90	0.46
senna	838	Max WS	UF_TR30_D5	57.67	193.69	197.33		197.34	0.000263	0.19	0.66	0.22	231.22	209.03	0.13
senna	838	Max WS	UF_TR30_D7	56.41	193.69	197.16		197.17	0.000399	0.22	0.78	0.25	196.14	201.98	0.16
senna	838	Max WS	UF_TR30_D2	57.78	193.69	196.87		196.90	0.001064	0.30	1.17	0.33	139.40	189.79	0.26
senna	838	Max WS	UF_TR30_D3	57.36	193.69	197.20		197.21	0.000371	0.21	0.76	0.25	203.81	203.54	0.15
senna	836	Max WS	UF_TR30_D1	45.08	192.37	195.86		195.89	0.000437	0.18	0.87	0.21	125.63	154.05	0.18
senna	836	Max WS	UF_TR30_D5	56.45	192.37	197.30		197.30	0.000039	0.11	0.36	0.11	396.10	210.85	0.06
senna	836	Max WS	UF_TR30_D7	55.14	192.37	197.11		197.12	0.000049	0.11	0.39	0.12	357.64	206.25	0.07
senna	836	Max WS	UF_TR30_D2	52.61	192.37	196.77		196.78	0.000081	0.13	0.46	0.14	288.26	197.70	0.08
senna	836	Max WS	UF_TR30_D3	55.45	192.37	197.16		197.16	0.000047	0.11	0.38	0.12	366.15	207.28	0.06
senna	834	Max WS	UF_TR30_D1	44.63	191.22	195.74	193.50	196.00	0.001138		2.25		19.79	230.41	0.34
senna	834	Max WS	UF_TR30_D5	56.33	191.22	197.24	193.86	197.47	0.000680		2.12		26.56	274.04	0.28
senna	834	Max WS	UF_TR30_D7	55.00	191.22	197.06	193.83	197.29	0.000722		2.14		25.71	268.82	0.29
senna	834	Max WS	UF_TR30_D2	52.42	191.22	196.70	193.75	196.94	0.000812		2.17		24.13	259.05	0.30
senna	834	Max WS	UF_TR30_D3	55.30	191.22	197.10	193.83	197.33	0.000713		2.13		25.90	269.99	0.28
senna	833			Inl Struct											
senna	832	Max WS	UF_TR30_D1	44.62	191.04	193.42		194.40	0.010534		4.40		10.15	43.31	0.93
senna	832	Max WS	UF_TR30_D5	56.33	191.04	193.69	193.68	194.94	0.011514		4.96		11.37	70.92	1.00
senna	832	Max WS	UF_TR30_D7	55.00	191.04	193.66	193.64	194.88	0.011417		4.90		11.23	68.58	0.99
senna	832	Max WS	UF_TR30_D2	52.42	191.04	193.60	193.57	194.76	0.011205		4.78		10.98	60.95	0.98
senna	832	Max WS	UF_TR30_D3	55.30	191.04	193.67	193.65	194.89	0.011430		4.91		11.27	69.22	0.99
senna	831.16			Lat Struct											
senna	830.49			Lat Struct											
senna	830	Max WS	UF_TR30_D1	44.07	188.08	191.36	189.87	191.51	0.001363		1.74		25.37	33.14	0.33
senna	830	Max WS	UF_TR30_D5	55.13	188.08	191.96	190.09	192.13	0.001125		1.79		30.73	39.29	0.31
senna	830	Max WS	UF_TR30_D7	54.18	188.08	191.87	190.07	192.04	0.001191		1.81		29.90	38.50	0.32
senna	830	Max WS	UF_TR30_D2	51.78	188.08	191.71	190.02	191.88	0.001278		1.82		28.49	36.83	0.32
senna	830	Max WS	UF_TR30_D3	54.28	188.08	191.91	190.07	192.07	0.001146		1.79		30.28	38.89	0.31
senna	820			Bridge											
senna	810	Max WS	UF_TR30_D1	44.01	188.08	191.26		191.42	0.001531		1.80		24.48	17.14	0.35
senna	810	Max WS	UF_TR30_D5	54.45	188.08	191.78		191.96	0.001311		1.87		29.14	21.31	0.33
senna	810	Max WS	UF_TR30_D7	53.60	188.08	191.70		191.88	0.001386		1.89		28.38	20.64	0.34
senna	810	Max WS	UF_TR30_D2	51.57	188.08	191.56		191.74	0.001486		1.90		27.16	19.54	0.35
senna	810	Max WS	UF_TR30_D3	52.95	188.08	191.74		191.92	0.001291		1.84		28.79	21.00	0.33
senna	800	Max WS	UF_TR30_D1	38.34	187.43	191.05		191.19	0.001890	0.35	1.76	0.47	32.56	26.07	0.33
senna	800	Max WS	UF_TR30_D5	46.42	187.43	191.70		191.78	0.001073	0.43	1.52	0.49	49.42	26.07	0.26
senna	800	Max WS	UF_TR30_D7	44.77	187.43	191.61		191.70	0.001122	0.42	1.53	0.48	47.10	26.07	0.26
senna	800	Max WS	UF_TR30_D2	42.92	187.43	191.45		191.55	0.001276	0.41	1.58	0.48	43.09	26.07	0.28
senna	800	Max WS	UF_TR30_D3	45.30	187.43	191.66		191.74	0.001077	0.42	1.51	0.48	48.36	26.07	0.26
senna	794.9	Max WS	UF_TR30_D1	40.62	187.01	191.01		191.07	0.000584	0.26	1.11	0.14	41.77	20.00	0.21
senna	794.9	Max WS	UF_TR30_D5	53.10	187.01	191.64		191.70	0.000480	0.32	1.15	0.14	54.37	20.00	0.20
senna	794.9	Max WS	UF_TR30_D7	51.21	187.01	191.55		191.61	0.000489	0.32	1.14	0.14	52.63	20.00	0.20
senna	794.9	Max WS	UF_TR30_D2	48.79	187.01	191.40		191.46	0.000527	0.31	1.15	0.14	49.52	20.00	0.21
senna	794.9	Max WS	UF_TR30_D3	52.03	187.01	191.60		191.66	0.000482	0.32	1.14	0.14	53.53	20.00	0.20

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

TORRENTE SENNA

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Senna Reach: senna Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
senna	840	Max WS	UF_TR200_D5	89.02	194.27	198.84		198.84	0.000098	0.16	0.50	0.18	469.45	280.97	0.08
senna	840	Max WS	UF_TR200_D1	101.50	194.27	197.48		197.55	0.003035	0.51	1.99	0.56	144.26	193.28	0.43
senna	840	Max WS	UF_TR200_D2	67.54	194.27	198.21		198.21	0.000185	0.18	0.60	0.20	304.35	242.44	0.11
senna	840	Max WS	UF_TR200_D7	85.84	194.27	198.76		198.76	0.000105	0.17	0.50	0.18	446.32	275.36	0.09
senna	840	Max WS	UF_TR200_D3	81.59	194.27	198.61		198.61	0.000123	0.17	0.53	0.18	405.13	266.23	0.09
senna	838	Max WS	UF_TR200_D5	88.38	193.69	198.83		198.83	0.000043	0.13	0.36	0.15	581.46	255.78	0.06
senna	838	Max WS	UF_TR200_D1	57.32	193.69	197.16		197.17	0.000408	0.22	0.79	0.25	196.82	202.12	0.16
senna	838	Max WS	UF_TR200_D2	65.64	193.69	198.19		198.19	0.000059	0.13	0.38	0.15	423.64	238.16	0.07
senna	838	Max WS	UF_TR200_D7	85.36	193.69	198.75		198.75	0.000044	0.13	0.36	0.15	560.12	253.49	0.06
senna	838	Max WS	UF_TR200_D3	80.36	193.69	198.59		198.59	0.000048	0.13	0.37	0.15	521.58	249.30	0.06
senna	836	Max WS	UF_TR200_D5	88.08	192.37	198.82		198.82	0.000016	0.10	0.29	0.10	742.03	241.81	0.04
senna	836	Max WS	UF_TR200_D1	55.10	192.37	197.12		197.12	0.000049	0.11	0.39	0.12	358.27	206.33	0.06
senna	836	Max WS	UF_TR200_D2	65.25	192.37	198.18		198.18	0.000017	0.09	0.27	0.09	590.90	229.76	0.04
senna	836	Max WS	UF_TR200_D7	85.07	192.37	198.74		198.74	0.000016	0.10	0.28	0.10	721.75	240.35	0.04
senna	836	Max WS	UF_TR200_D3	79.85	192.37	198.58		198.58	0.000017	0.10	0.28	0.10	685.03	237.69	0.04
senna	834	Max WS	UF_TR200_D5	88.02	191.22	198.82	194.73	198.82	0.000005	0.07	0.19	0.06	1185.84	295.77	0.02
senna	834	Max WS	UF_TR200_D1	55.02	191.22	197.06	193.82	197.29	0.000722		2.14		25.73	268.91	0.29
senna	834	Max WS	UF_TR200_D2	65.09	191.22	198.18	194.12	198.18	0.000004	0.06	0.17	0.05	998.50	288.78	0.02
senna	834	Max WS	UF_TR200_D7	84.94	191.22	198.73	194.66	198.73	0.000005	0.07	0.19	0.06	1160.99	294.93	0.02
senna	834	Max WS	UF_TR200_D3	79.72	191.22	198.58	194.52	198.58	0.000005	0.07	0.18	0.06	1115.81	293.41	0.02
senna	833			Inl Struct											
senna	832	Max WS	UF_TR200_D5	88.01	191.04	194.21	194.56	196.31	0.015077		6.42		13.70	120.83	1.18
senna	832	Max WS	UF_TR200_D1	55.02	191.04	193.66	193.64	194.88	0.011413		4.90		11.24	68.70	0.99
senna	832	Max WS	UF_TR200_D2	66.36	191.04	193.87	193.97	195.38	0.012596		5.44		12.21	95.16	1.05
senna	832	Max WS	UF_TR200_D7	84.94	191.04	194.17	194.48	196.18	0.014704		6.28		13.52	117.10	1.16
senna	832	Max WS	UF_TR200_D3	79.69	191.04	194.09	194.34	195.95	0.014077		6.05		13.18	111.46	1.13
senna	831.16			Lat Struct											
senna	830.49			Lat Struct											
senna	830	Max WS	UF_TR200_D5	65.11	188.08	192.61	190.27	192.77	0.000886		1.78		36.49	47.18	0.28
senna	830	Max WS	UF_TR200_D1	53.33	188.08	191.88	190.05	192.04	0.001139		1.78		30.02	38.64	0.31
senna	830	Max WS	UF_TR200_D2	59.10	188.08	192.32	190.16	192.47	0.000932		1.74		33.91	43.31	0.29
senna	830	Max WS	UF_TR200_D7	69.89	188.08	192.53	190.35	192.73	0.001086		1.95		35.82	47.18	0.31
senna	830	Max WS	UF_TR200_D3	64.06	188.08	192.52	190.25	192.68	0.000921		1.79		35.71	47.18	0.29
senna	820			Bridge											
senna	810	Max WS	UF_TR200_D5	65.11	188.08	192.33		192.51	0.001123		1.92		33.98	25.54	0.31
senna	810	Max WS	UF_TR200_D1	53.10	188.08	191.71		191.89	0.001340		1.86		28.51	20.75	0.33
senna	810	Max WS	UF_TR200_D2	59.10	188.08	192.10		192.27	0.001137		1.85		31.94	23.26	0.31
senna	810	Max WS	UF_TR200_D7	68.99	188.08	192.21		192.43	0.001398		2.09		32.95	23.85	0.35
senna	810	Max WS	UF_TR200_D3	62.05	188.08	192.25		192.43	0.001086		1.86		33.34	24.37	0.31
senna	800	Max WS	UF_TR200_D5	59.98	187.43	192.22		192.31	0.000957	0.50	1.57	0.55	63.17	26.07	0.25
senna	800	Max WS	UF_TR200_D1	44.83	187.43	191.63		191.71	0.001099	0.42	1.52	0.48	47.56	26.07	0.26
senna	800	Max WS	UF_TR200_D2	53.90	187.43	192.00		192.09	0.000995	0.47	1.54	0.52	57.31	26.07	0.25
senna	800	Max WS	UF_TR200_D7	59.54	187.43	192.12		192.21	0.001059	0.51	1.62	0.56	60.42	26.07	0.26
senna	800	Max WS	UF_TR200_D3	58.43	187.43	192.15		192.24	0.000980	0.49	1.57	0.54	61.36	26.07	0.25
senna	794.9	Max WS	UF_TR200_D5	67.78	187.01	192.16		192.23	0.000473	0.37	1.26	0.14	64.75	20.00	0.20
senna	794.9	Max WS	UF_TR200_D1	51.53	187.01	191.56		191.63	0.000488	0.32	1.15	0.14	52.91	20.00	0.20
senna	794.9	Max WS	UF_TR200_D2	60.92	187.01	191.94		192.00	0.000469	0.35	1.20	0.14	60.32	20.00	0.20
senna	794.9	Max WS	UF_TR200_D7	66.24	187.01	192.05		192.13	0.000496	0.37	1.27	0.14	62.68	20.00	0.21
senna	794.9	Max WS	UF_TR200_D3	65.95	187.01	192.09		192.16	0.000477	0.37	1.25	0.14	63.36	20.00	0.20

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DEGLI STRULLI

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

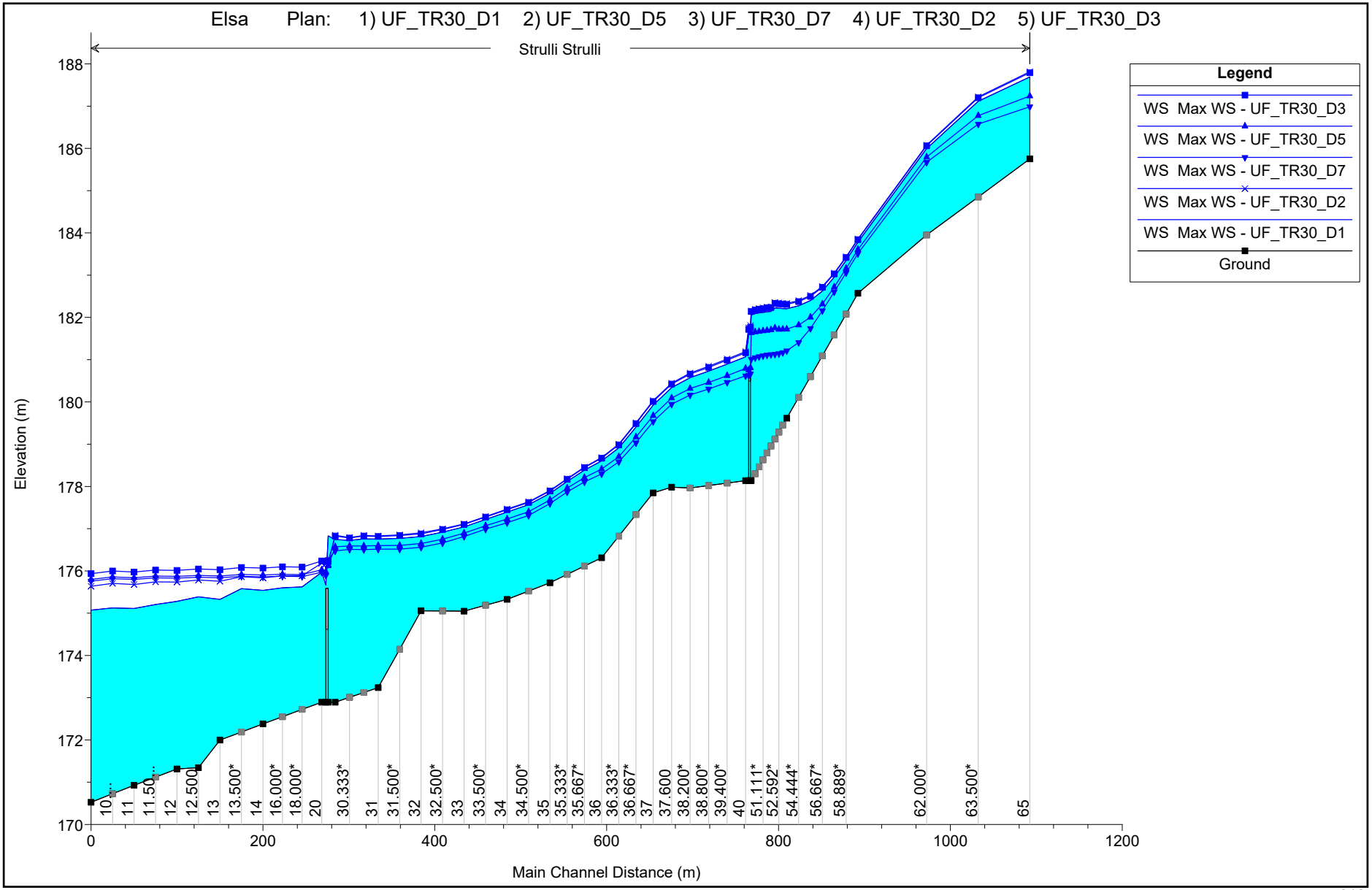
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DEGLI STRULLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
Strulli Strulli
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
188
186
184
182
180
178
176
174
172
170
0
200
400
600
800
1000
1200
10...
11
11.50...
12
12.500
13
13.500*
14
16.000*
18.000*
20
30.333*
31
31.500*
32
32.500*
33
33.500*
34
34.500*
35
35.333*
35.667*
36
36.333*
36.667*
37
37.600
38.200*
38.800*
39.400*
40
51.111*
52.592*
54.444*
56.667*
58.889*
62.000*
63.500*
65

ALLEGATI

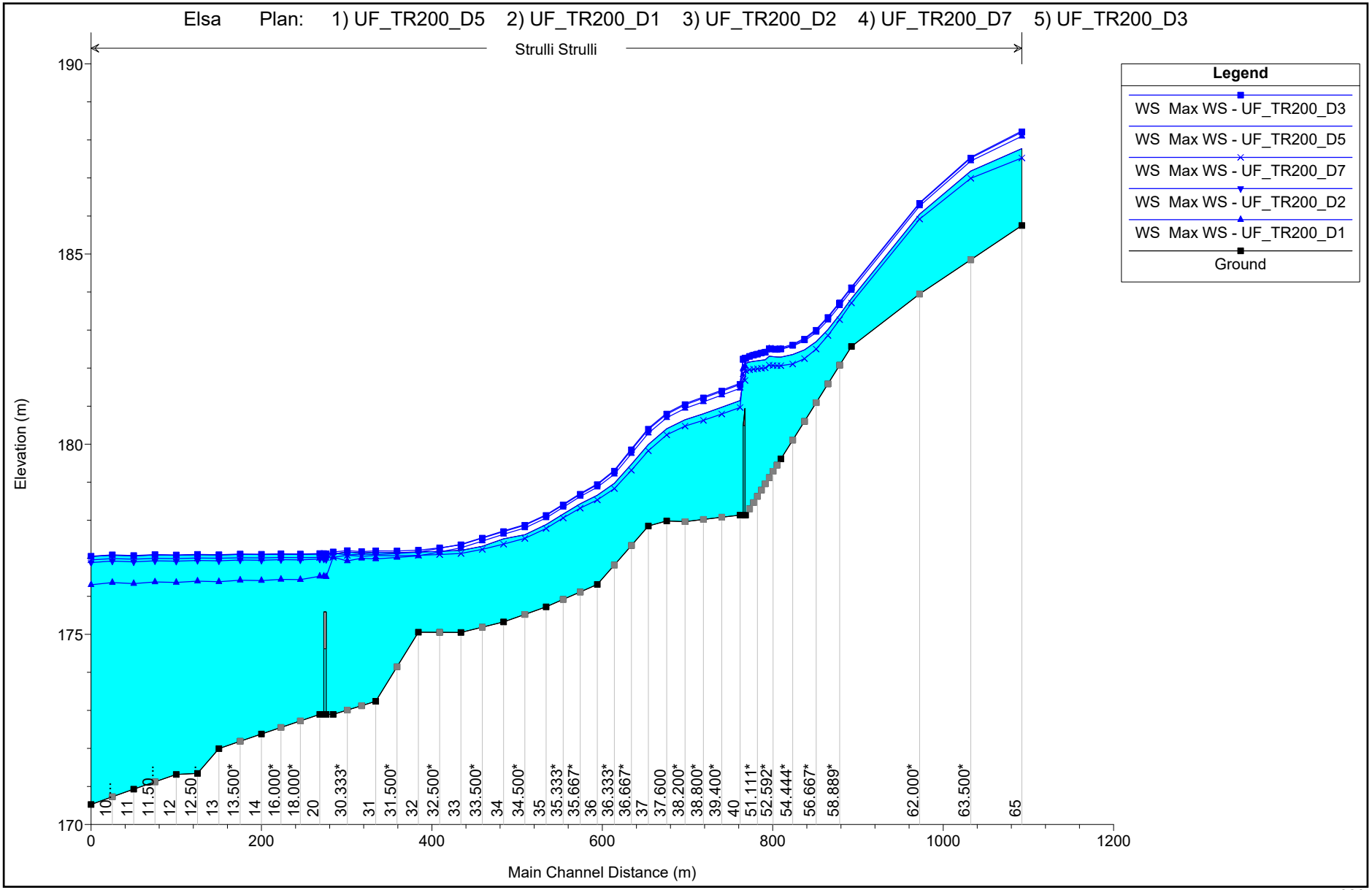
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DEGLI STRULLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
Strulli Strulli
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
190
185
180
175
170
0
200
400
600
800
1000
1200
Main Channel Distance (m)
10...
11
11.50...
12
12.50...
13
13.500*
14
16.000*
18.000*
20
30.333*
31
31.500*
32
32.500*
33
33.500*
34
34.500*
35
35.333*
35.667*
36
36.333*
36.667*
37
37.600
38.200*
38.800*
39.400*
40
51.111*
52.592*
54.444*
56.667*
58.889*
62.000*
63.500*
65

ALLEGATI

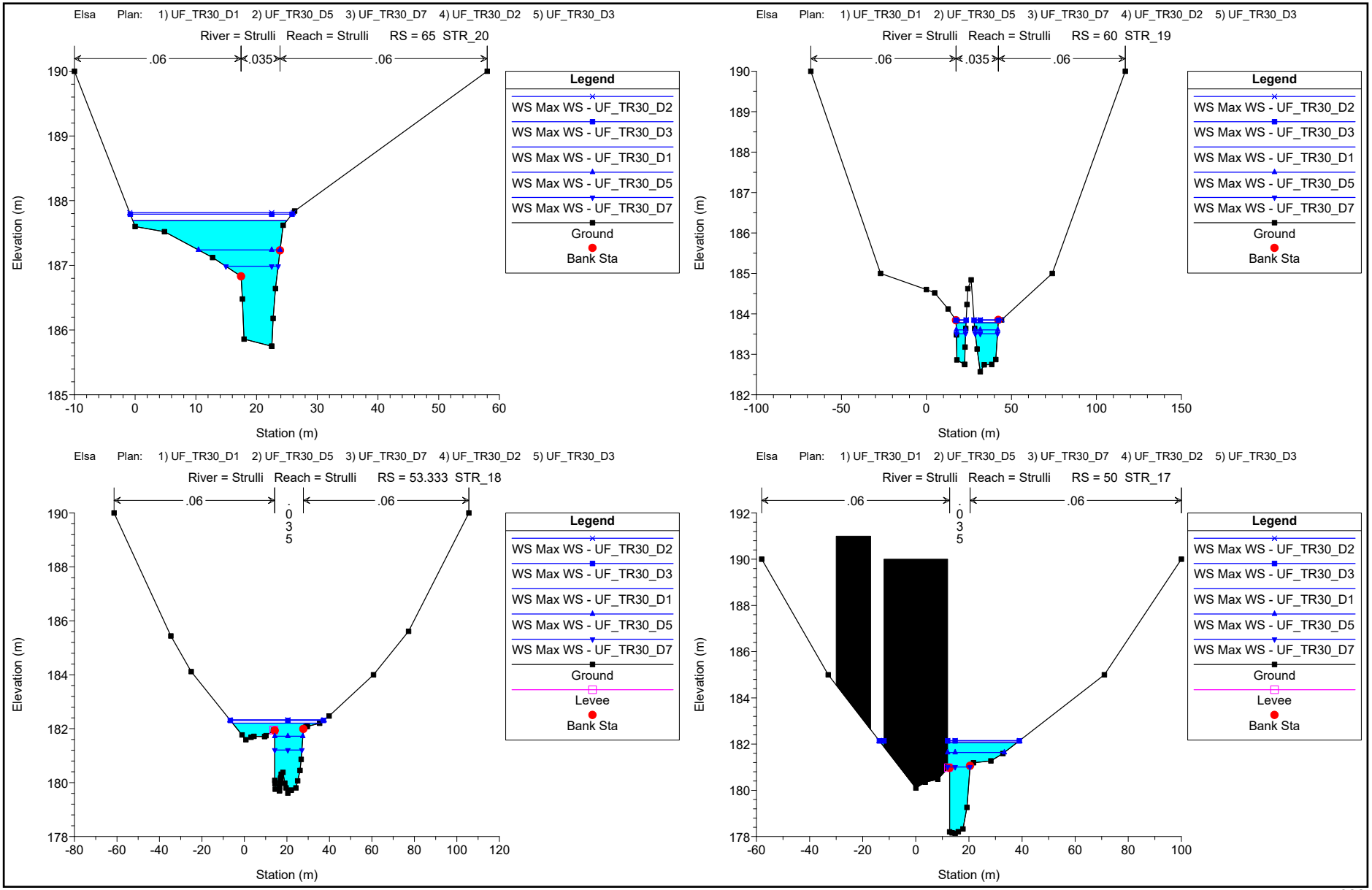
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

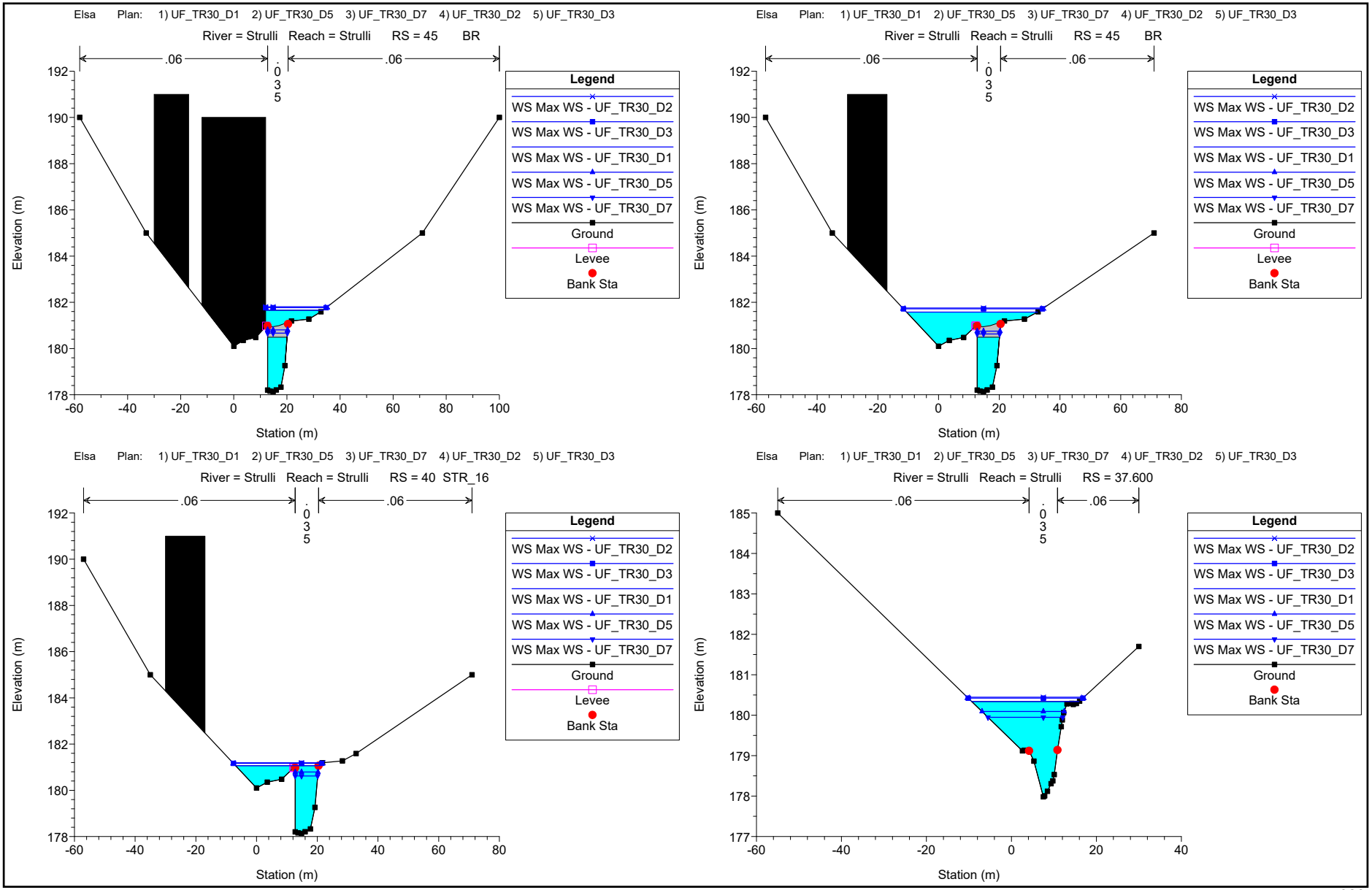
BOTRO DEGLI STRULLI

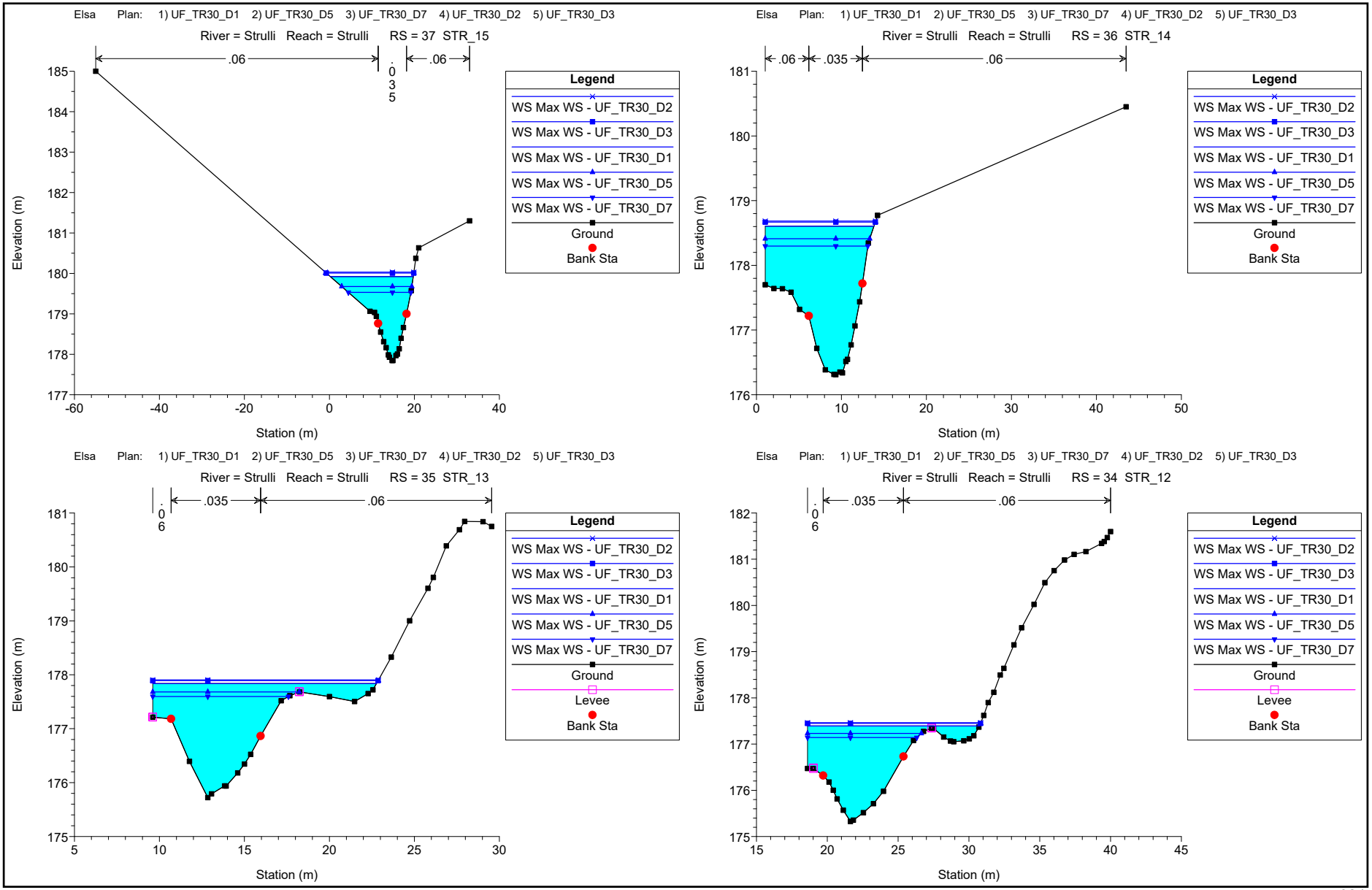
MODELLAZIONE PER TR=30 anni

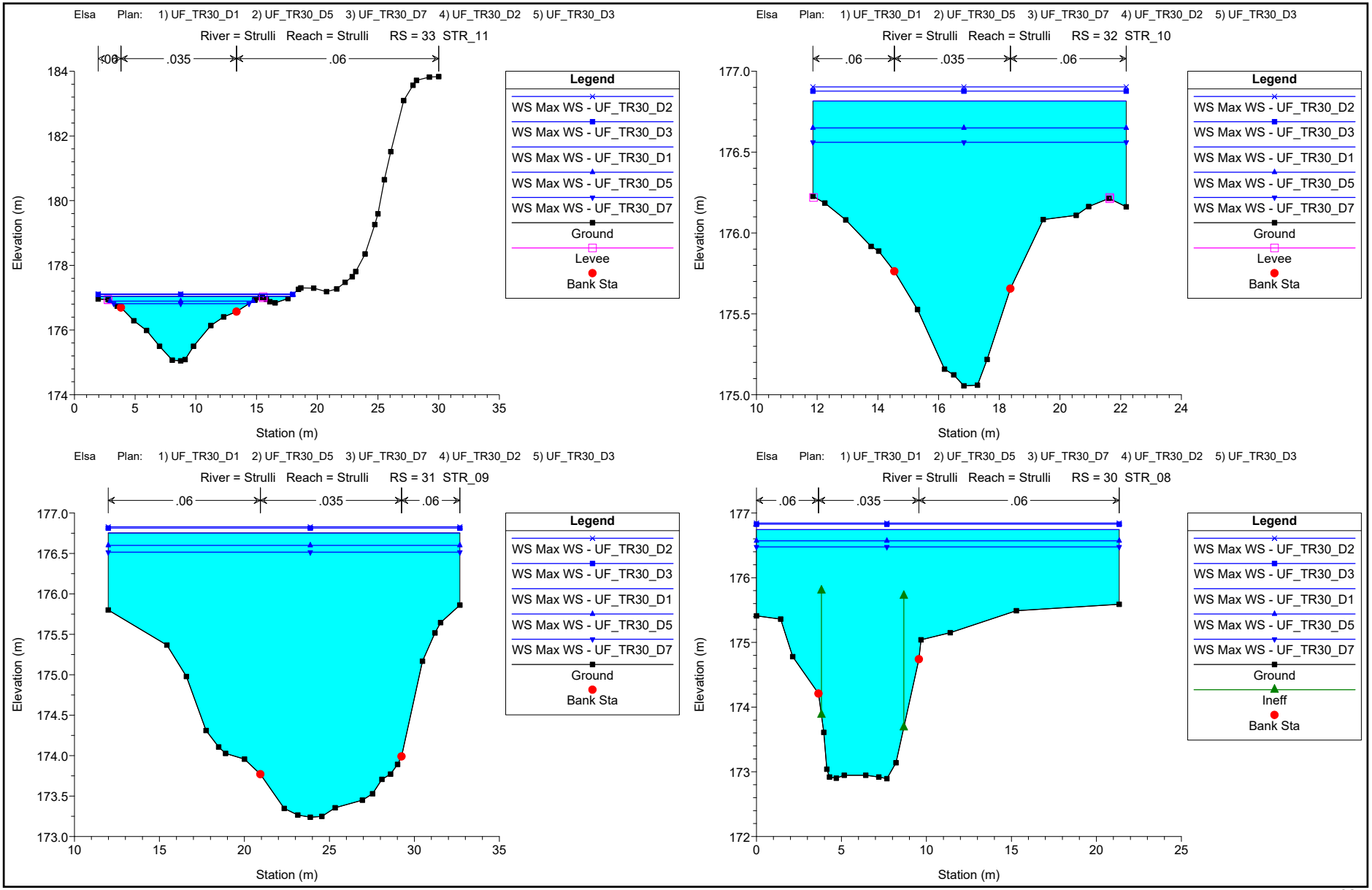
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

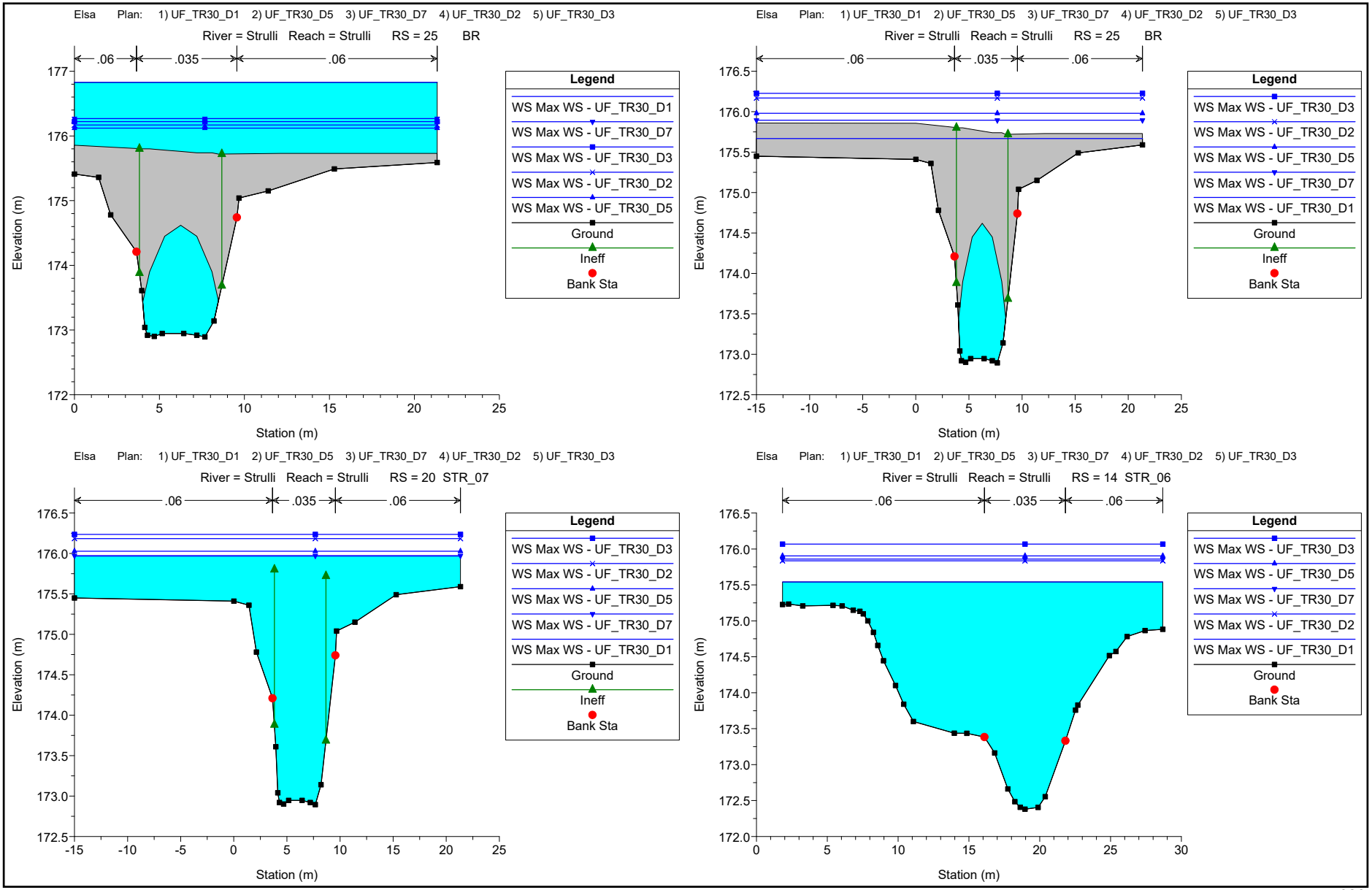
Sezioni Trasversali (da monte verso valle)

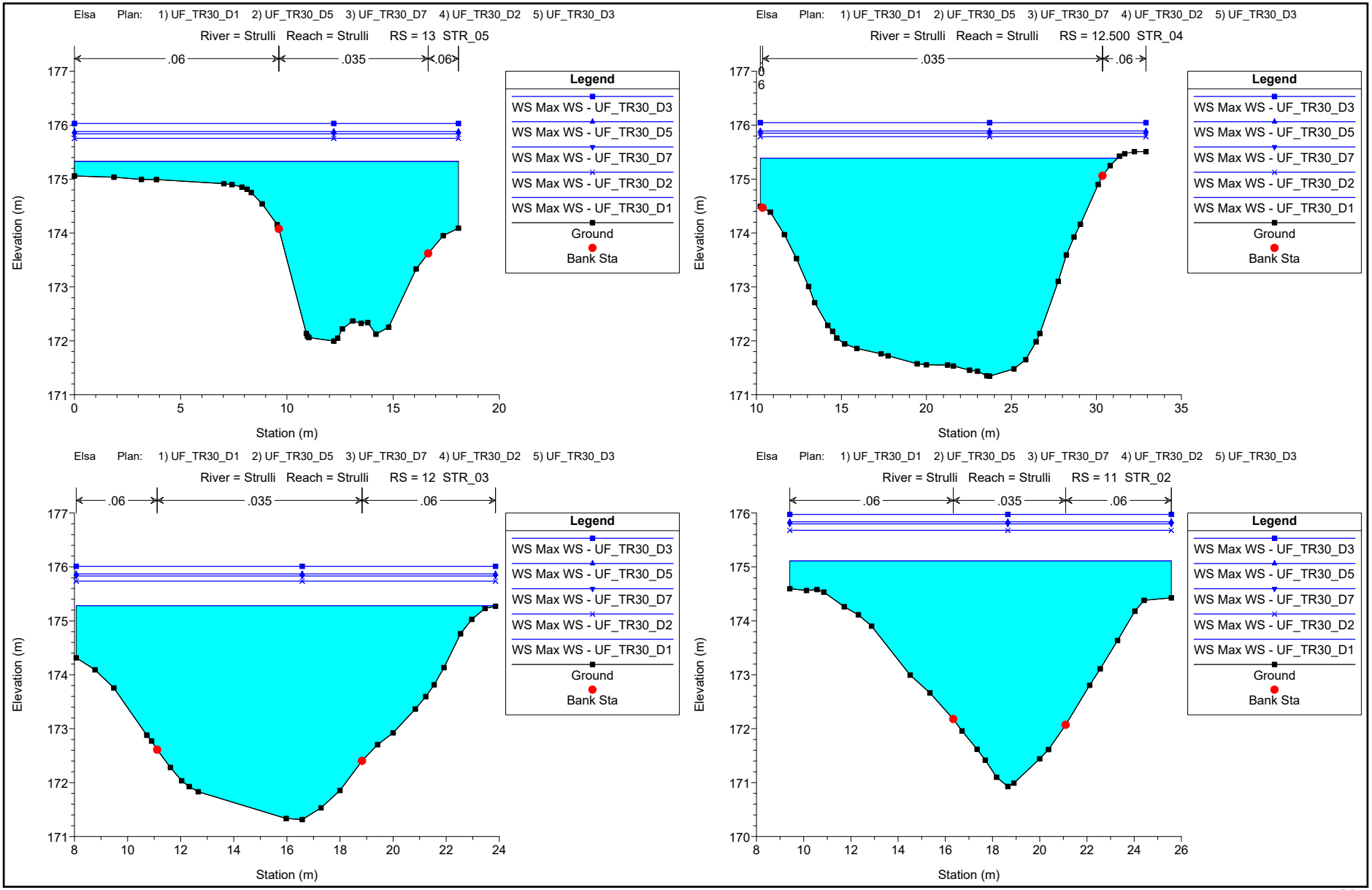

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 65 STR_20
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 60 STR_19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 53.333 STR_18
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 50 STR_17
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

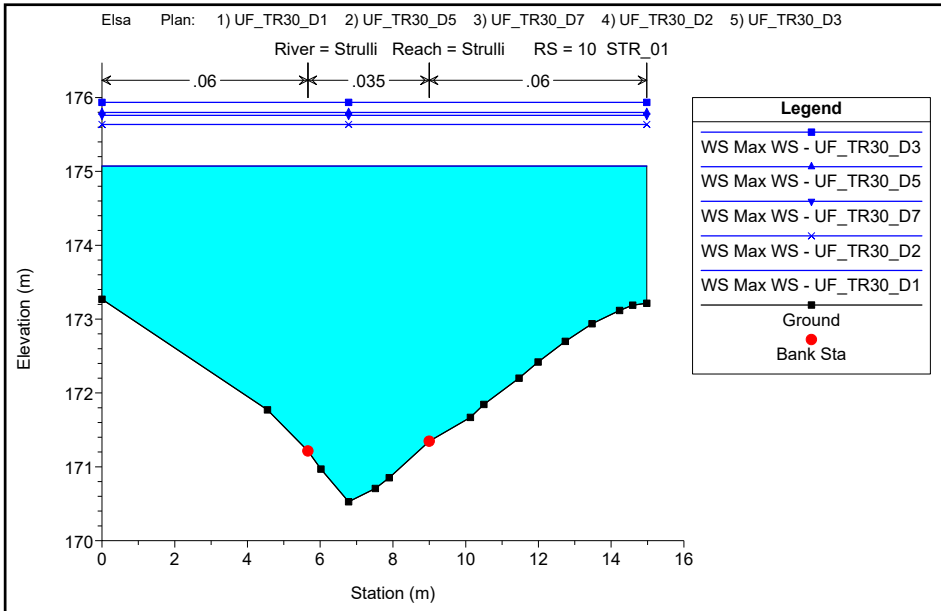

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 45 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 45 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 40 STR_16
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 37.600
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 37 STR_15
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 36 STR_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 35 STR_13
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 34 STR_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 33 STR_11
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 32 STR_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 31 STR_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 30 STR_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 25 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 25 BR
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 20 STR_07
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 14 STR_06
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 13 STR_05
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 12.500 STR_04
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 12 STR_03
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 11 STR_02
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Strulli Reach = Strulli RS = 10 STR_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

ALLEGATI

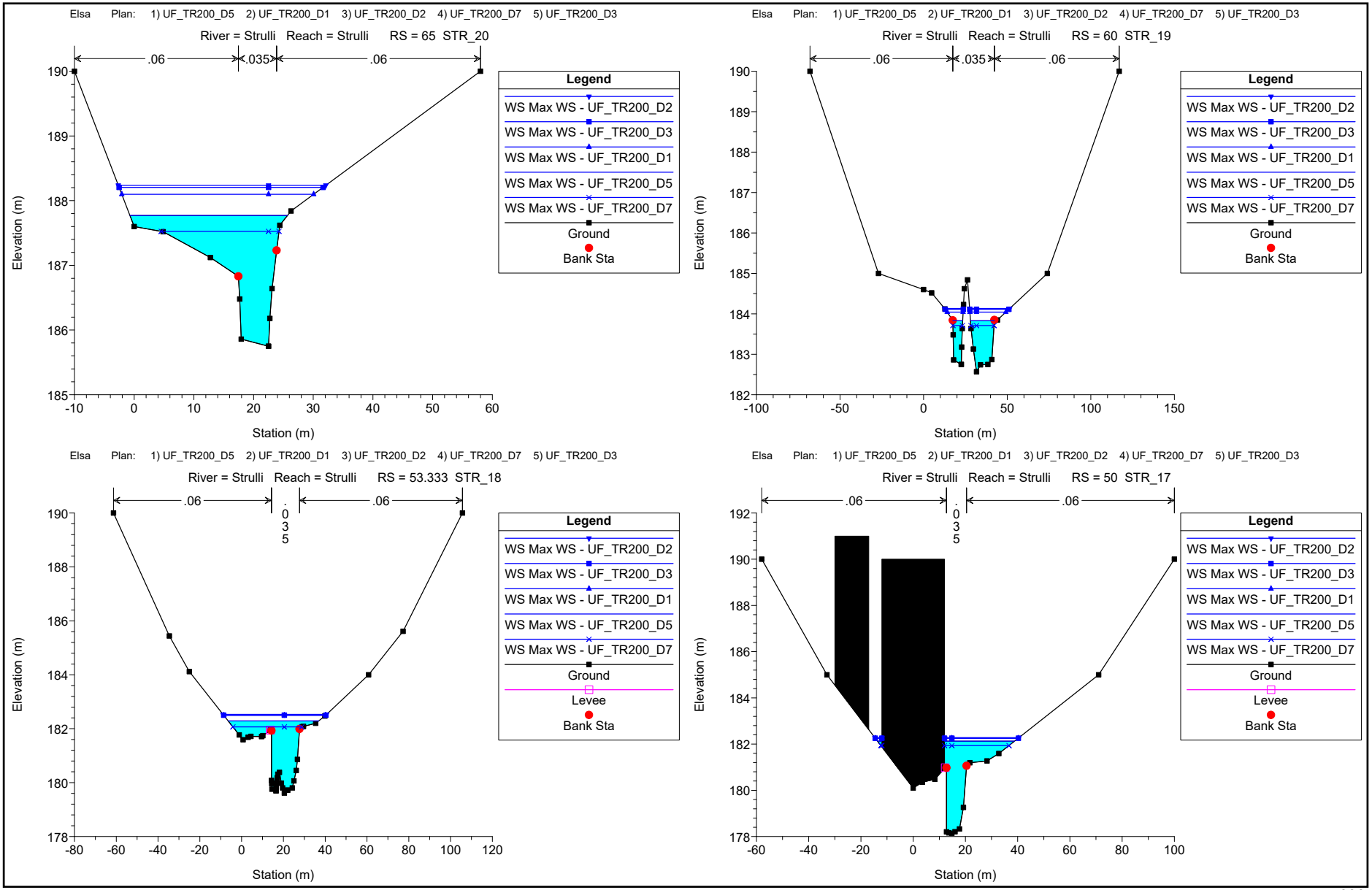
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

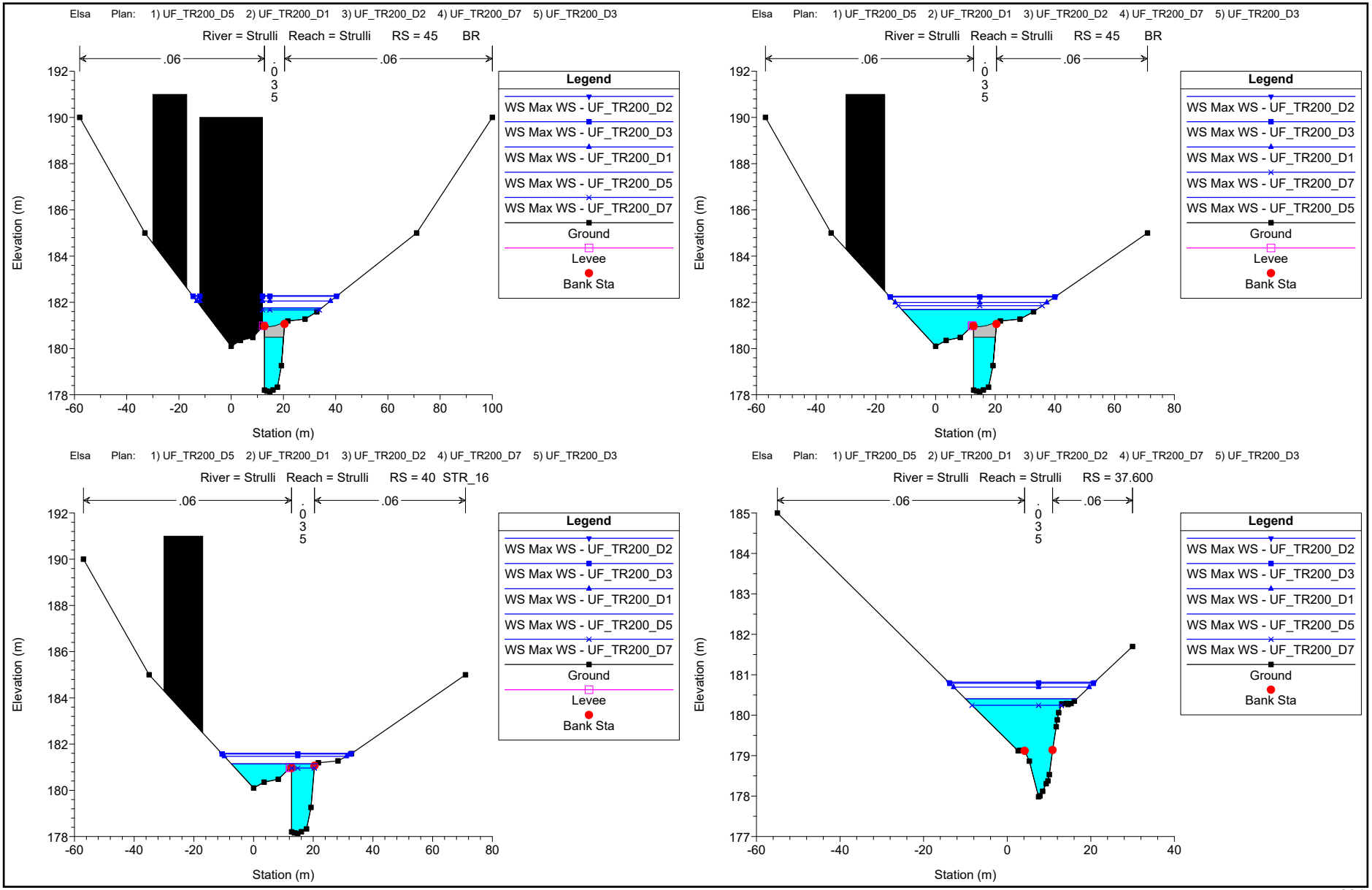
BOTRO DEGLI STRULLI

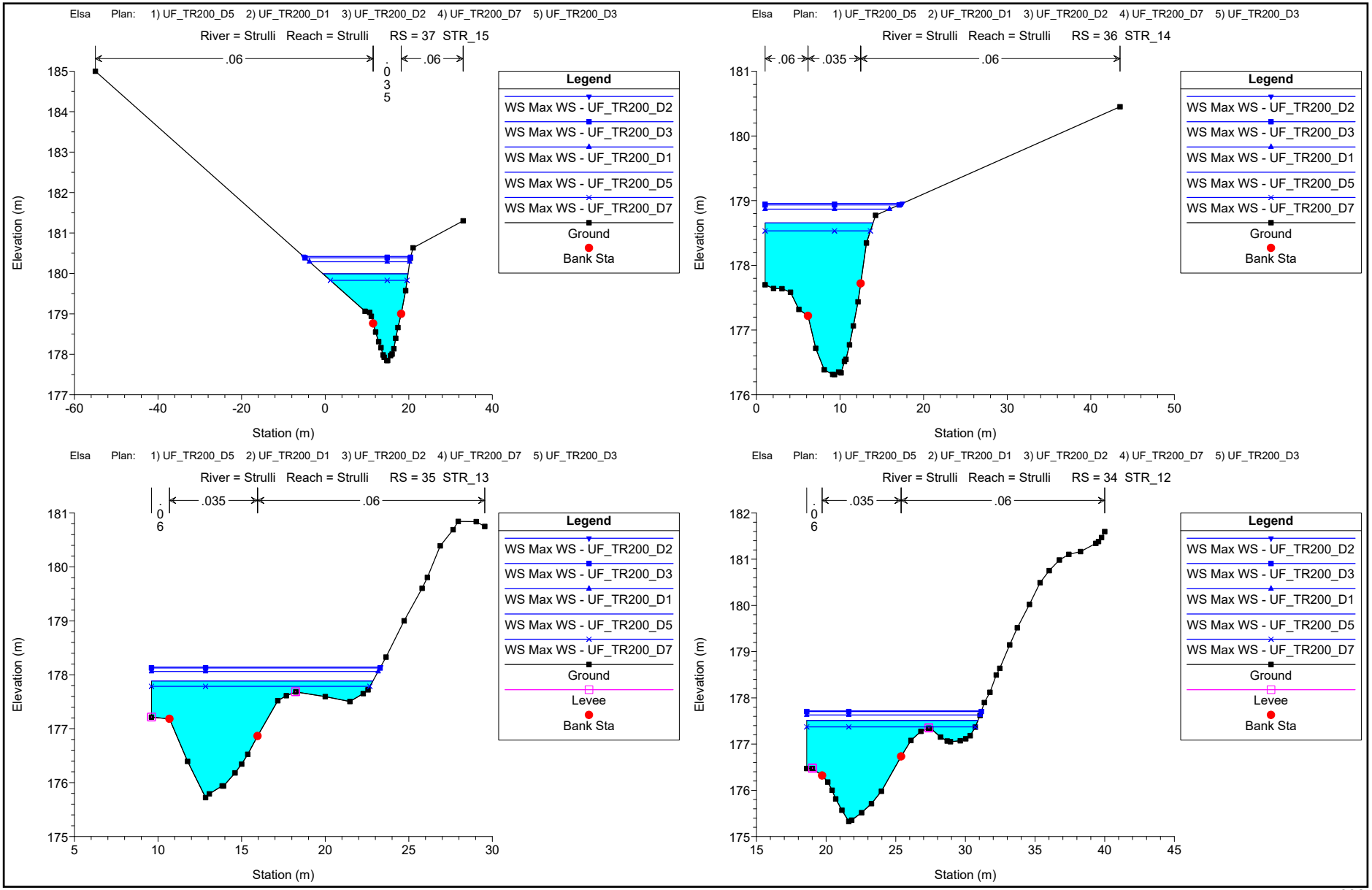
MODELLAZIONE PER TR=200 anni

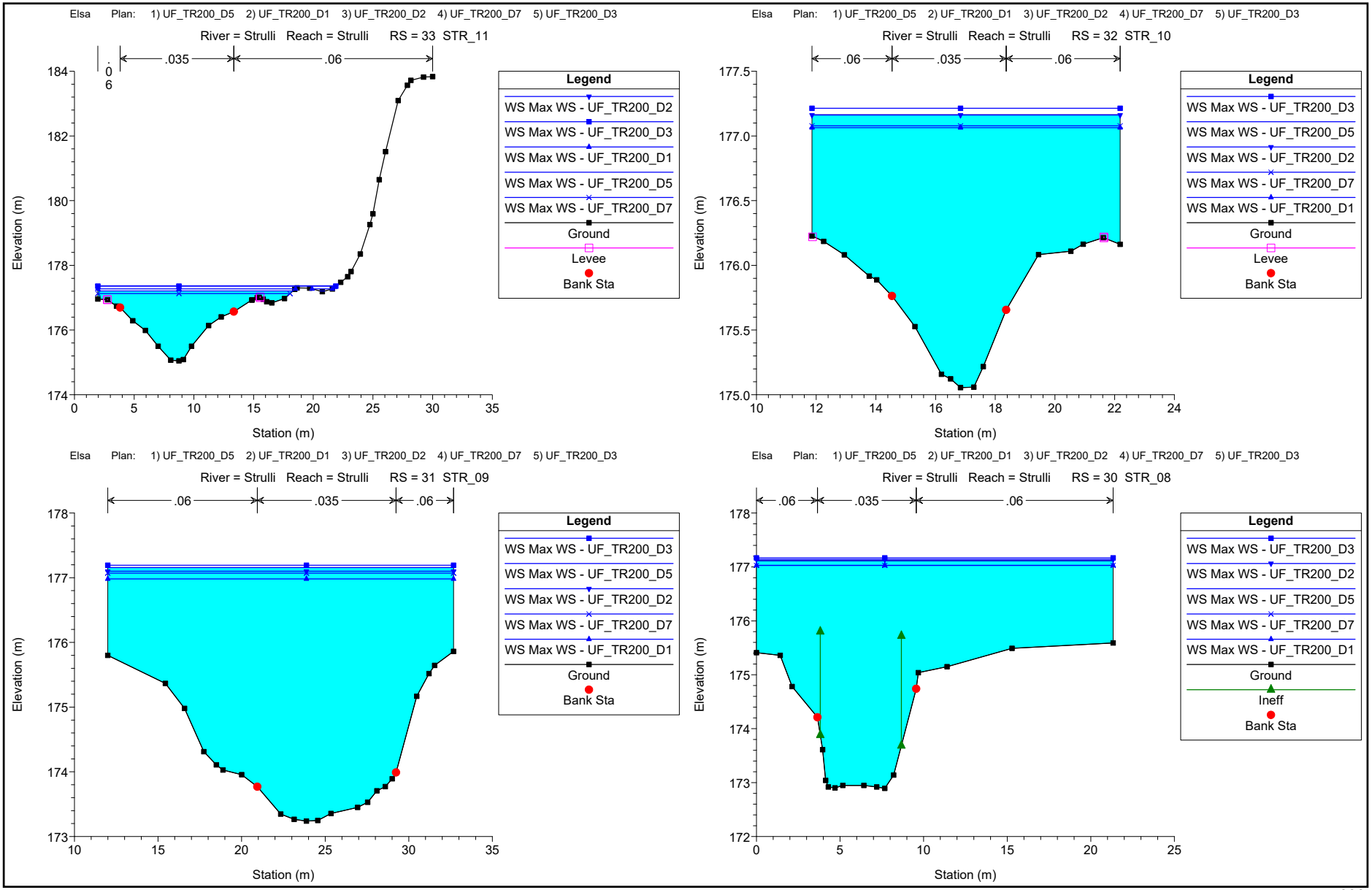
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Sezioni Trasversali (da monte verso valle)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 65 STR_20
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 60 STR_19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 53.333 STR_18
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 50 STR_17
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 45 BR
.06
.035
.06
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 45 BR
.06
.035
.06
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 40 STR_16
.06
.035
.06
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 37.600
.06
.035
.06
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 37 STR_15
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 36 STR_14
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 35 STR_13
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 34 STR_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta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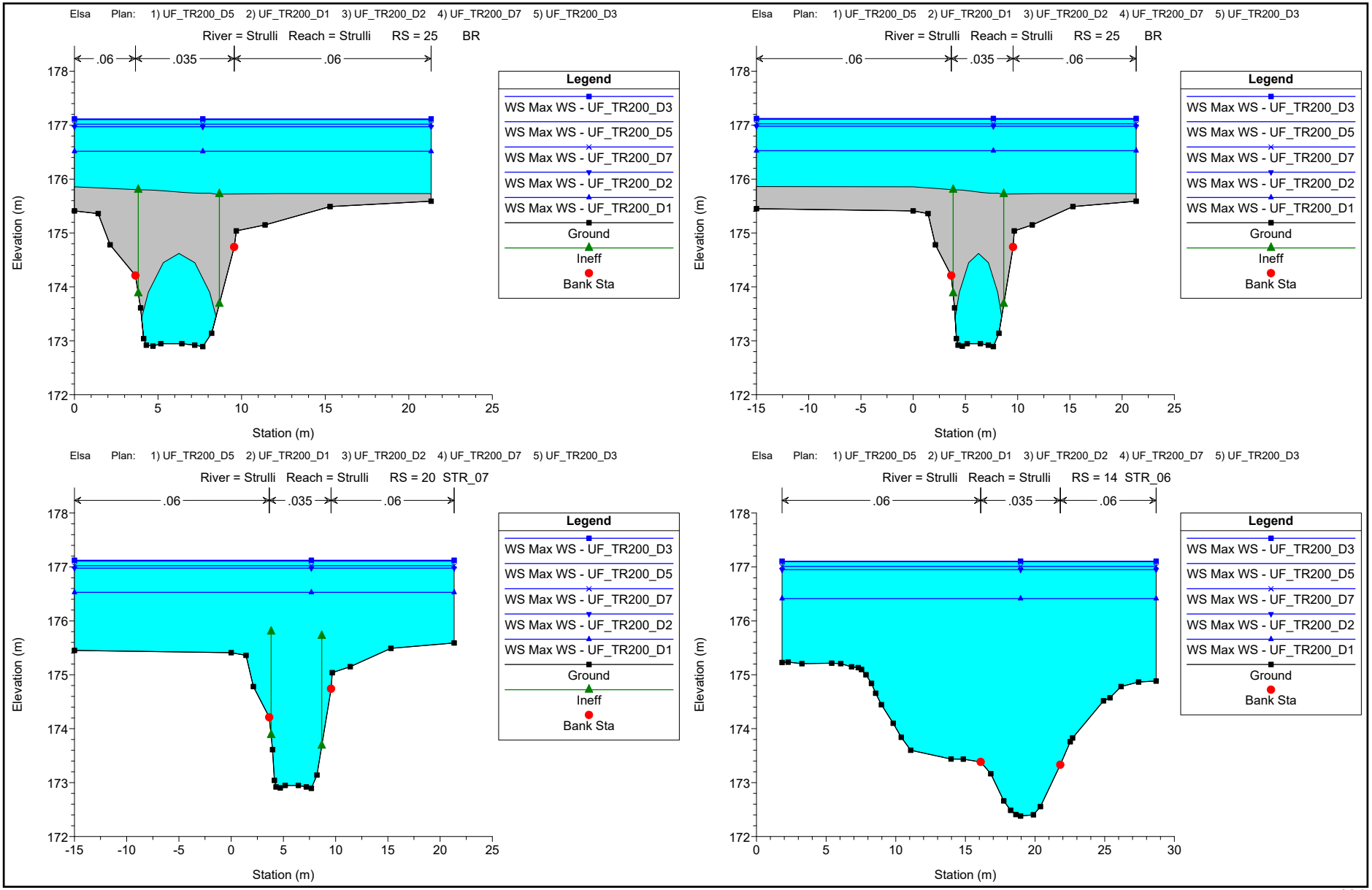
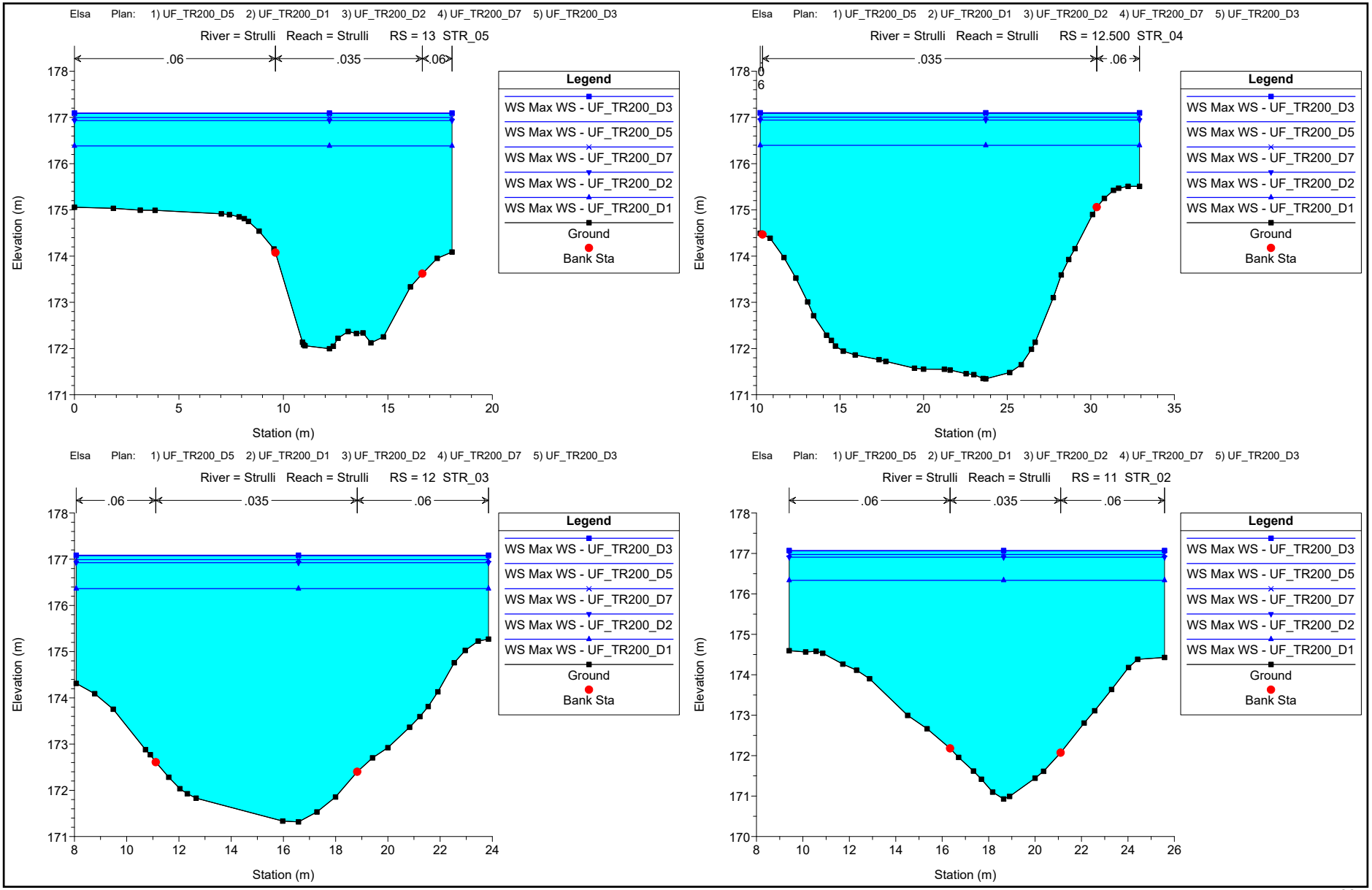
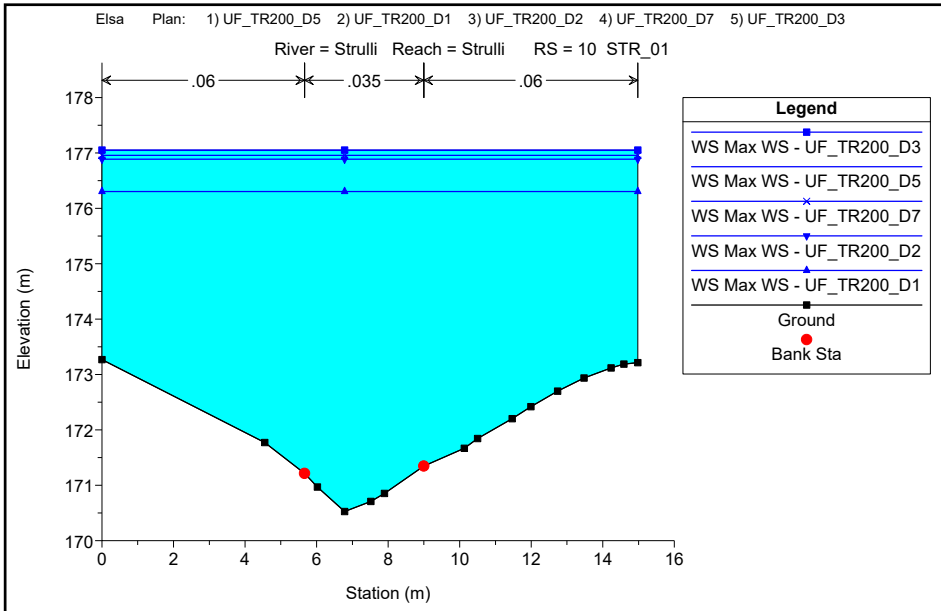
River = Strulli Reach = Strulli RS = 33 STR_11
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 32 STR_10
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 31 STR_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 30 STR_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 25 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 25 BR
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 20 STR_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 14 STR_06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 13 STR_05
.06
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 12.500 STR_04
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 12 STR_03
.06
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 11 STR_02
.06
.035
.06
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elevation (m)
Station (m)


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Strulli Reach = Strulli RS = 10 STR_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DEGLI STRULLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Strulli Reach: Strulli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Strulli	65	Max WS	UF_TR30_D1	77.68	185.75	187.69	188.23	189.41	0.030780	1.56	6.24	0.74	17.82	25.39	1.54
Strulli	65	Max WS	UF_TR30_D5	56.90	185.75	187.24	187.99	189.70	0.060198	1.37	7.06	0.09	9.16	13.45	2.04
Strulli	65	Max WS	UF_TR30_D7	46.70	185.75	186.98	187.84	189.84	0.085659	0.88	7.50		6.40	8.59	2.37
Strulli	65	Max WS	UF_TR30_D2	87.70	185.75	187.81	188.35	189.44	0.027768	1.75	6.21	0.81	21.04	26.96	1.48
Strulli	65	Max WS	UF_TR30_D3	85.59	185.75	187.79	188.32	189.43	0.028298	1.71	6.21	0.79	20.38	26.64	1.49
Strulli	60	Max WS	UF_TR30_D1	77.67	182.57	183.78	184.11	184.79	0.031912		4.44		17.47	19.90	1.51
Strulli	60	Max WS	UF_TR30_D5	56.90	182.57	183.60	183.85	184.44	0.032627		4.04		14.08	18.97	1.50
Strulli	60	Max WS	UF_TR30_D7	46.70	182.57	183.51	183.72	184.24	0.032922		3.80		12.30	18.43	1.48
Strulli	60	Max WS	UF_TR30_D2	87.70	182.57	183.86	184.23	184.94	0.031533	0.12	4.61	0.11	19.05	22.57	1.52
Strulli	60	Max WS	UF_TR30_D3	85.57	182.57	183.84	184.20	184.91	0.031662		4.58		18.70	20.23	1.52
Strulli	53.333	Max WS	UF_TR30_D1	77.65	179.61	182.21		182.51	0.003672	0.56	2.51	0.20	37.92	41.08	0.55
Strulli	53.333	Max WS	UF_TR30_D5	56.87	179.61	181.72		182.05	0.004947		2.52		22.53	13.19	0.62
Strulli	53.333	Max WS	UF_TR30_D7	46.69	179.61	181.21		181.65	0.009603		2.94		15.89	12.71	0.84
Strulli	53.333	Max WS	UF_TR30_D2	87.70	179.61	182.33		182.65	0.003689	0.65	2.62	0.32	43.21	44.39	0.55
Strulli	53.333	Max WS	UF_TR30_D3	85.56	179.61	182.31		182.62	0.003663	0.63	2.59	0.30	42.23	43.79	0.55
Strulli	50	Max WS	UF_TR30_D1	77.64	178.14	182.06	180.78	182.39	0.002910	0.47	2.66	0.64	38.11	27.26	0.46
Strulli	50	Max WS	UF_TR30_D5	56.93	178.14	181.64	180.34	181.91	0.002755	0.43	2.37	0.42	27.96	21.32	0.44
Strulli	50	Max WS	UF_TR30_D7	46.69	178.14	181.01	180.09	181.34	0.004283	0.12	2.54		18.43	8.40	0.52
Strulli	50	Max WS	UF_TR30_D2	87.70	178.14	182.15	180.99	182.53	0.003281	0.48	2.87	0.73	40.77	28.96	0.49
Strulli	50	Max WS	UF_TR30_D3	85.55	178.14	182.14	180.98	182.50	0.003187	0.48	2.82	0.71	40.31	28.68	0.48
Strulli	45			Bridge											
Strulli	40	Max WS	UF_TR30_D1	77.64	178.14	181.07	181.03	181.63	0.008167	1.01	3.55	0.04	29.63	27.41	0.72
Strulli	40	Max WS	UF_TR30_D5	56.93	178.14	180.79		181.38	0.008295		3.40		16.74	7.52	0.73
Strulli	40	Max WS	UF_TR30_D7	46.69	178.14	180.62		181.08	0.006977		3.02		15.44	7.41	0.67
Strulli	40	Max WS	UF_TR30_D2	87.70	178.14	181.19	181.16	181.77	0.008213	1.13	3.67	0.23	33.16	29.63	0.73
Strulli	40	Max WS	UF_TR30_D3	85.55	178.14	181.16	181.13	181.74	0.008237	1.10	3.65	0.21	32.35	29.05	0.73
Strulli	37.600	Max WS	UF_TR30_D1	77.64	177.98	180.34	180.66	181.39	0.014799	1.56	5.02	0.79	22.90	25.25	1.18
Strulli	37.600	Max WS	UF_TR30_D5	56.89	177.98	180.09	180.28	180.96	0.014116	1.33	4.46	1.03	17.61	19.34	1.12
Strulli	37.600	Max WS	UF_TR30_D7	46.68	177.98	179.95	180.13	180.72	0.013859	1.20	4.15	0.94	14.93	17.60	1.09
Strulli	37.600	Max WS	UF_TR30_D2	87.70	177.98	180.44	180.79	181.55	0.014852	1.65	5.21	0.90	25.69	27.41	1.19
Strulli	37.600	Max WS	UF_TR30_D3	85.54	177.98	180.42	180.76	181.52	0.014861	1.63	5.18	0.88	25.08	26.96	1.19
Strulli	37	Max WS	UF_TR30_D1	77.64	177.85	179.92	180.46	181.53	0.024109	1.65	6.00	1.46	17.71	19.52	1.49
Strulli	37	Max WS	UF_TR30_D5	56.89	177.85	179.68	180.14	181.06	0.024686	1.39	5.45	1.19	13.25	16.49	1.47
Strulli	37	Max WS	UF_TR30_D7	46.68	177.85	179.53	179.95	180.79	0.025090	1.22	5.12	1.01	11.03	14.72	1.45
Strulli	37	Max WS	UF_TR30_D2	87.70	177.85	180.03	180.58	181.71	0.023787	1.76	6.22	1.56	19.88	20.83	1.49
Strulli	37	Max WS	UF_TR30_D3	85.54	177.85	180.01	180.56	181.67	0.023842	1.74	6.17	1.54	19.42	20.56	1.49
Strulli	36.61			Lat Struct											
Strulli	36	Max WS	UF_TR30_D1	58.09	176.31	178.60	178.58	179.34	0.009559	1.53	4.07	0.71	18.13	12.78	0.94
Strulli	36	Max WS	UF_TR30_D5	46.00	176.31	178.41	178.36	179.01	0.008888	1.32	3.65	0.60	15.71	12.29	0.89
Strulli	36	Max WS	UF_TR30_D7	39.70	176.31	178.30	178.23	178.83	0.008537	1.20	3.42	0.55	14.33	12.07	0.86
Strulli	36	Max WS	UF_TR30_D2	63.91	176.31	178.68	178.68	179.48	0.009933	1.62	4.26	0.77	19.16	12.99	0.96
Strulli	36	Max WS	UF_TR30_D3	62.55	176.31	178.67	178.66	179.45	0.009819	1.60	4.21	0.76	18.95	12.95	0.96
Strulli	35	Max WS	UF_TR30_D1	36.69	175.72	177.84	178.03	178.66	0.013782	1.07	4.16	0.86	10.97	13.16	1.06
Strulli	35	Max WS	UF_TR30_D5	30.57	175.72	177.68	177.88	178.46	0.014567	0.97	3.99	0.85	8.59	8.62	1.07
Strulli	35	Max WS	UF_TR30_D7	27.33	175.72	177.60	177.79	178.32	0.014500	0.88	3.82	0.86	7.89	7.99	1.06
Strulli	35	Max WS	UF_TR30_D2	39.68	175.72	177.91	178.11	178.75	0.013538	1.10	4.24	0.97	11.88	13.28	1.06
Strulli	35	Max WS	UF_TR30_D3	39.09	175.72	177.89	178.09	178.73	0.013629	1.10	4.23	0.95	11.68	13.26	1.06
Strulli	34	Max WS	UF_TR30_D1	25.40	175.33	177.39		177.76	0.006033	0.83	2.76	0.50	11.04	12.13	0.72
Strulli	34	Max WS	UF_TR30_D5	19.86	175.33	177.23		177.53	0.005615	0.75	2.47	0.43	8.87	8.03	0.68
Strulli	34	Max WS	UF_TR30_D7	17.28	175.33	177.14		177.41	0.005368	0.70	2.31	0.38	8.17	7.71	0.66
Strulli	34	Max WS	UF_TR30_D2	27.38	175.33	177.46		177.84	0.005892	0.84	2.82	0.58	11.90	12.23	0.71
Strulli	34	Max WS	UF_TR30_D3	26.88	175.33	177.45		177.82	0.005894	0.84	2.80	0.56	11.71	12.21	0.71
Strulli	33	Max WS	UF_TR30_D1	27.17	175.05	177.04		177.33	0.006052	0.39	2.38	0.39	12.33	15.84	0.70
Strulli	33	Max WS	UF_TR30_D5	22.50	175.05	176.89		177.16	0.006642	0.31	2.28	0.40	10.14	11.77	0.72
Strulli	33	Max WS	UF_TR30_D7	20.19	175.05	176.82		177.07	0.006988	0.23	2.22	0.34	9.24	11.15	0.73
Strulli	33	Max WS	UF_TR30_D2	29.48	175.05	177.12		177.40	0.005731	0.47	2.41	0.47	13.49	16.06	0.69
Strulli	33	Max WS	UF_TR30_D3	28.93	175.05	177.10		177.39	0.005774	0.45	2.40	0.46	13.24	16.02	0.69
Strulli	32.88			Lat Struct											
Strulli	32	Max WS	UF_TR30_D1	17.85	175.05	176.82		177.05	0.004630	0.84	2.41	0.83	10.66	10.32	0.63
Strulli	32	Max WS	UF_TR30_D5	15.23	175.05	176.65		176.89	0.005410	0.81	2.41	0.78	8.95	10.32	0.67
Strulli	32	Max WS	UF_TR30_D7	13.84	175.05	176.56		176.81	0.005941	0.78	2.41	0.74	8.03	10.32	0.70
Strulli	32	Max WS	UF_TR30_D2	19.12	175.05	176.90		177.13	0.004245	0.85	2.40	0.84	11.56	10.32	0.61
Strulli	32	Max WS	UF_TR30_D3	19.22	175.05	176.88		177.12	0.004577	0.87	2.47	0.86	11.29	10.32	0.63
Strulli	31	Max WS	UF_TR30_D1	35.39	173.24	176.75		176.79	0.000259	0.38	1.01	0.28	49.61	20.69	0.18
Strulli	31	Max WS	UF_TR30_D5	27.54	173.24	176.60		176.63	0.000189	0.31	0.83	0.23	46.45	20.69	0.15
Strulli	31	Max WS	UF_TR30_D7	23.55	173.24	176.52		176.54	0.000153	0.27	0.74	0.20	44.71	20.69	0.13
Strulli	31	Max WS	UF_TR30_D2	39.15	173.24	176.83		176.88	0.000291	0.41	1.08	0.30	51.19	20.69	0.19
Strulli	31	Max WS	UF_TR30_D3	38.72	173.24	176.81		176.86	0.000290	0.41	1.08	0.30	50.87	20.69	0.19
Strulli	30	Max WS	UF_TR30_D1	23.45	172.89	176.74	174.36	176.77	0.000218	0.28	0.83	0.28	43.15	21.34	0.14
Strulli	30	Max WS	UF_TR30_D5	20.60	172.89	176.57	174.25	176.60	0.000211	0.27	0.79	0.25	39.46	21.34	0.14
Strulli	30	Max WS	UF_TR30_D7	19.33	172.89	176.48	174.20	176.50	0.000211	0.26	0.77	0.24	37.43	21.34	0.14
Strulli	30	Max WS	UF_TR30_D2	23.27	172.89	176.84	174.36	176.87	0.000189	0.27	0.79	0.27	45.31	21.34	0.13
Strulli	30	Max WS	UF_TR30_D3	23.14	172.89	176.83	174.35	176.85	0.000191	0.27	0.79	0.27	44.92	21.34	0.13
Strulli	25			Bridge											
Strulli	20	Max WS	UF_TR30_D1	23.31	172.89	175.97		176.02	0.000562	0.28	1.13	0.26	34.69	36.34	0.22
Strulli	20	Max WS	UF_TR30_D5	19.42	172.89	176.03		176.06	0.000344	0.23	0.89	0.22	36.85	36.34	0.17
Strulli	20	Max WS	UF_TR30_D7	18.96	172.89	175.97		176.01	0.000369	0.23	0.91	0.21	34.82	36.34	0.18
Strulli	20	Max WS	UF_TR30_D2	23.14	172.89	176.18		176.22	0.000357	0.27	0.94	0.26	42.52	36.34	0.18
Strulli	20	Max WS	UF_TR30_D3	22.21	172.89	176.24		176.26	0.000297	0.26	0.87	0.24	44.40	36.34	0.16
Strulli	19.99			Lat Struct											
Strulli	19.9			Lat Struct											
Strulli	14	Max WS	UF_TR30_D1	52.04	172.38	175.54		175.71	0.001646	0.73	2.19	0.67	40.17	26.85	0.42
Strulli	14	Max WS	UF_TR30_D5	34.26	172.38	175.90		175.95	0.000402	0.42	1.17	0.39	49.92	26.85	0.21
Strulli	14	Max WS	UF_TR30_D7	32.95	172.38	175.86		175.91	0.000396	0.41	1.16	0.38	48.72	26.85	0.21

HEC-RAS River: Strulli Reach: Strulli Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Strulli	14	Max WS	UF_TR30_D2	49.95	172.38	175.83		175.94	0.000946	0.63	1.78	0.58	48.05	26.85	0.32
Strulli	14	Max WS	UF_TR30_D3	41.31	172.38	176.07		176.12	0.000463	0.48	1.30	0.44	54.33	26.85	0.23
Strulli	13	Max WS	UF_TR30_D1	57.30	172.00	175.33		175.69	0.003201	0.52	2.76	0.77	25.55	18.07	0.53
Strulli	13	Max WS	UF_TR30_D5	32.25	172.00	175.88		175.95	0.000480	0.34	1.21	0.33	35.57	18.07	0.21
Strulli	13	Max WS	UF_TR30_D7	30.71	172.00	175.84		175.90	0.000459	0.32	1.17	0.32	34.80	18.07	0.21
Strulli	13	Max WS	UF_TR30_D2	47.52	172.00	175.76		175.92	0.001218	0.49	1.87	0.51	33.33	18.07	0.33
Strulli	13	Max WS	UF_TR30_D3	40.74	172.00	176.03		176.12	0.000639	0.42	1.43	0.39	38.27	18.07	0.25
Strulli	12.500	Max WS	UF_TR30_D1	71.11	171.34	175.39		175.46	0.000447	0.09	1.18	0.10	60.32	21.02	0.22
Strulli	12.500	Max WS	UF_TR30_D5	41.90	171.34	175.89		175.91	0.000092	0.04	0.60	0.09	71.64	22.69	0.10
Strulli	12.500	Max WS	UF_TR30_D7	39.50	171.34	175.85		175.87	0.000085	0.04	0.57	0.08	70.67	22.69	0.10
Strulli	12.500	Max WS	UF_TR30_D2	62.62	171.34	175.79		175.83	0.000228	0.06	0.92	0.12	69.20	22.69	0.16
Strulli	12.500	Max WS	UF_TR30_D3	53.13	171.34	176.05		176.07	0.000128	0.05	0.72	0.12	75.12	22.69	0.12
Strulli	12	Max WS	UF_TR30_D1	65.47	171.32	175.28		175.48	0.001094	0.60	2.11	0.64	39.82	15.79	0.36
Strulli	12	Max WS	UF_TR30_D5	37.94	171.32	175.87		175.92	0.000208	0.30	1.02	0.33	49.14	15.79	0.16
Strulli	12	Max WS	UF_TR30_D7	35.94	171.32	175.83		175.87	0.000193	0.28	0.98	0.31	48.52	15.79	0.15
Strulli	12	Max WS	UF_TR30_D2	55.57	171.32	175.74		175.84	0.000504	0.45	1.55	0.49	47.01	15.79	0.25
Strulli	12	Max WS	UF_TR30_D3	48.56	171.32	176.01		176.08	0.000302	0.36	1.25	0.41	51.37	15.79	0.19
Strulli	11	Max WS	UF_TR30_D1	64.85	170.93	175.11		175.45	0.002133	0.89	2.89	0.86	34.18	16.17	0.48
Strulli	11	Max WS	UF_TR30_D5	39.61	170.93	175.84		175.91	0.000373	0.46	1.36	0.43	45.91	16.17	0.21
Strulli	11	Max WS	UF_TR30_D7	37.78	170.93	175.80		175.86	0.000352	0.44	1.32	0.41	45.28	16.17	0.20
Strulli	11	Max WS	UF_TR30_D2	54.31	170.93	175.68		175.83	0.000815	0.66	1.97	0.62	43.35	16.17	0.31
Strulli	11	Max WS	UF_TR30_D3	49.02	170.93	175.97		176.07	0.000505	0.55	1.62	0.51	48.10	16.17	0.24
Strulli	10	Max WS	UF_TR30_D1	63.65	170.53	175.07		175.26	0.001237	0.93	2.45	0.93	45.75	14.98	0.38
Strulli	10	Max WS	UF_TR30_D5	44.29	170.53	175.80		175.86	0.000330	0.53	1.40	0.53	56.64	14.98	0.20
Strulli	10	Max WS	UF_TR30_D7	42.81	170.53	175.76		175.82	0.000317	0.52	1.37	0.52	56.05	14.98	0.20
Strulli	10	Max WS	UF_TR30_D2	56.21	170.53	175.64		175.74	0.000601	0.70	1.85	0.70	54.20	14.98	0.27
Strulli	10	Max WS	UF_TR30_D3	51.60	170.53	175.94		176.01	0.000405	0.59	1.58	0.60	58.70	14.98	0.22

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

BOTRO DEGLI STRULLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Strulli Reach: Strulli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Strulli	65	Max WS	UF_TR200_D5	84.00	185.75	187.77	188.31	189.43	0.028773	1.69	6.22	0.77	19.87	26.39	1.50
Strulli	65	Max WS	UF_TR200_D1	114.59	185.75	188.10	188.60	189.59	0.023031	2.07	6.24	0.98	29.38	32.13	1.38
Strulli	65	Max WS	UF_TR200_D2	129.69	185.75	188.24	188.71	189.68	0.021306	2.20	6.27	1.10	34.05	34.77	1.34
Strulli	65	Max WS	UF_TR200_D7	69.40	185.75	187.52	188.14	189.50	0.038773	1.55	6.53	0.79	13.89	19.72	1.70
Strulli	65	Max WS	UF_TR200_D3	126.00	185.75	188.20	188.68	189.66	0.021678	2.17	6.26	1.07	32.92	34.15	1.35
Strulli	60	Max WS	UF_TR200_D5	84.00	182.57	183.83	184.19	184.88	0.031703		4.55		18.46	20.16	1.52
Strulli	60	Max WS	UF_TR200_D1	114.54	182.57	184.04	184.48	185.30	0.030049	0.63	4.98	0.71	24.01	31.04	1.52
Strulli	60	Max WS	UF_TR200_D2	129.66	182.57	184.13	184.61	185.47	0.029548	0.79	5.16	0.88	27.03	35.24	1.52
Strulli	60	Max WS	UF_TR200_D7	69.40	182.57	183.71	184.01	184.65	0.032241		4.30		16.15	19.55	1.51
Strulli	60	Max WS	UF_TR200_D3	125.96	182.57	184.11	184.56	185.43	0.029585	0.76	5.11	0.84	26.31	34.25	1.52
Strulli	53.333	Max WS	UF_TR200_D5	84.00	179.61	182.29		182.60	0.003651	0.62	2.57	0.28	41.47	43.33	0.55
Strulli	53.333	Max WS	UF_TR200_D1	114.48	179.61	182.49		182.92	0.004605	0.83	3.06	0.49	50.93	48.74	0.63
Strulli	53.333	Max WS	UF_TR200_D2	129.65	179.61	182.53	182.37	183.05	0.005520	0.94	3.39	0.57	52.75	49.62	0.69
Strulli	53.333	Max WS	UF_TR200_D7	69.40	179.61	182.06		182.36	0.003864	0.47	2.47	0.12	32.70	32.96	0.55
Strulli	53.333	Max WS	UF_TR200_D3	125.95	179.61	182.50	182.34	183.01	0.005499	0.91	3.35	0.55	51.29	48.92	0.68
Strulli	50	Max WS	UF_TR200_D5	84.00	178.14	182.12	180.91	182.48	0.003128	0.48	2.79	0.70	39.92	28.43	0.48
Strulli	50	Max WS	UF_TR200_D1	107.21	178.14	182.25	181.65	182.76	0.004327	0.54	3.36	0.88	43.65	30.70	0.56
Strulli	50	Max WS	UF_TR200_D2	129.65	178.14	182.28	182.04	183.00	0.006115	0.64	4.01	1.06	44.47	31.17	0.67
Strulli	50	Max WS	UF_TR200_D7	69.40	178.14	181.94	180.61	182.23	0.002734	0.47	2.51	0.57	34.88	25.06	0.44
Strulli	50	Max WS	UF_TR200_D3	125.94	178.14	182.26	181.99	182.95	0.005932	0.64	3.93	1.04	43.81	30.79	0.66
Strulli	45			Bridge											
Strulli	40	Max WS	UF_TR200_D5	84.00	178.14	181.15	181.11	181.72	0.008222	1.08	3.63	0.18	31.82	28.74	0.73
Strulli	40	Max WS	UF_TR200_D1	114.54	178.14	181.47	181.49	182.10	0.008349	1.37	3.97	0.55	43.47	40.87	0.75
Strulli	40	Max WS	UF_TR200_D2	129.65	178.14	181.60	181.63	182.25	0.008405	1.47	4.10	0.69	49.09	43.67	0.76
Strulli	40	Max WS	UF_TR200_D7	69.40	178.14	180.96		181.72	0.010032		3.85		18.05	7.64	0.80
Strulli	40	Max WS	UF_TR200_D3	125.94	178.14	181.57	181.60	182.22	0.008396	1.45	4.07	0.66	47.71	43.03	0.76
Strulli	37.600	Max WS	UF_TR200_D5	84.00	177.98	180.41	180.74	181.50	0.014859	1.62	5.15	0.86	24.65	26.63	1.18
Strulli	37.600	Max WS	UF_TR200_D1	114.52	177.98	180.69	181.09	181.92	0.014843	1.83	5.65	1.13	33.17	32.44	1.21
Strulli	37.600	Max WS	UF_TR200_D2	129.63	177.98	180.82	181.23	182.10	0.014798	1.91	5.85	1.24	37.36	34.94	1.22
Strulli	37.600	Max WS	UF_TR200_D7	69.40	177.98	180.25	180.55	181.22	0.014500	1.47	4.80	1.10	20.73	21.38	1.15
Strulli	37.600	Max WS	UF_TR200_D3	125.93	177.98	180.79	181.19	182.06	0.014828	1.90	5.80	1.21	36.32	34.33	1.22
Strulli	37	Max WS	UF_TR200_D5	84.00	177.85	179.99	180.54	181.65	0.023902	1.72	6.14	1.53	19.09	20.36	1.49
Strulli	37	Max WS	UF_TR200_D1	114.53	177.85	180.29	180.94	182.14	0.022980	1.98	6.69	1.77	25.65	23.98	1.50
Strulli	37	Max WS	UF_TR200_D2	129.63	177.85	180.42	181.12	182.35	0.022571	2.08	6.91	1.84	28.88	25.63	1.50
Strulli	37	Max WS	UF_TR200_D7	69.40	177.85	179.83	180.33	181.36	0.024370	1.56	5.81	1.37	15.94	18.37	1.48
Strulli	37	Max WS	UF_TR200_D3	125.93	177.85	180.39	181.08	182.30	0.022685	2.06	6.86	1.84	28.08	25.20	1.50
Strulli	36.61			Lat Struct											
Strulli	36	Max WS	UF_TR200_D5	61.68	176.31	178.66	178.65	179.43	0.009762	1.59	4.18	0.75	18.79	12.92	0.95
Strulli	36	Max WS	UF_TR200_D1	78.80	176.31	178.87	178.96	179.85	0.010960	1.84	4.74	0.71	21.66	14.89	1.03
Strulli	36	Max WS	UF_TR200_D2	86.97	176.31	178.96	179.13	180.04	0.011523	1.95	4.99	0.72	23.04	16.43	1.06
Strulli	36	Max WS	UF_TR200_D7	53.35	176.31	178.53	178.50	179.21	0.009274	1.45	3.91	0.67	17.23	12.60	0.92
Strulli	36	Max WS	UF_TR200_D3	84.90	176.31	178.93	179.09	179.99	0.011392	1.93	4.93	0.71	22.68	16.04	1.05
Strulli	35	Max WS	UF_TR200_D5	38.61	175.72	177.88	178.08	178.72	0.013512	1.09	4.20	0.93	11.60	13.25	1.06
Strulli	35	Max WS	UF_TR200_D1	47.54	175.72	178.06	178.27	178.98	0.013374	1.18	4.48	1.19	13.97	13.56	1.07
Strulli	35	Max WS	UF_TR200_D2	51.56	175.72	178.14	178.35	179.08	0.013058	1.21	4.56	1.28	15.10	13.71	1.07
Strulli	35	Max WS	UF_TR200_D7	34.28	175.72	177.79	177.98	178.58	0.013782	1.03	4.07	0.77	10.29	13.07	1.06
Strulli	35	Max WS	UF_TR200_D3	50.43	175.72	178.12	178.33	179.05	0.013037	1.20	4.53	1.25	14.84	13.67	1.06
Strulli	34	Max WS	UF_TR200_D5	14.16	175.33	177.51		177.60	0.001408	0.42	1.40	0.31	12.48	12.29	0.35
Strulli	34	Max WS	UF_TR200_D1	32.23	175.33	177.63		178.03	0.005578	0.86	2.93	0.72	13.95	12.45	0.71
Strulli	34	Max WS	UF_TR200_D2	35.19	175.33	177.72		178.13	0.005490	0.87	3.00	0.79	15.07	12.55	0.71
Strulli	34	Max WS	UF_TR200_D7	20.86	175.33	177.37		177.63	0.004280	0.70	2.31	0.40	10.79	12.10	0.60
Strulli	34	Max WS	UF_TR200_D3	34.87	175.33	177.70		178.12	0.005578	0.88	3.01	0.79	14.86	12.54	0.71
Strulli	33	Max WS	UF_TR200_D5	24.82	175.05	177.21		177.38	0.003123	0.41	1.87	0.42	15.00	16.74	0.51
Strulli	33	Max WS	UF_TR200_D1	35.87	175.05	177.27		177.59	0.005456	0.60	2.55	0.60	16.16	18.28	0.68
Strulli	33	Max WS	UF_TR200_D2	39.83	175.05	177.37		177.70	0.005348	0.67	2.63	0.56	17.97	19.97	0.69
Strulli	33	Max WS	UF_TR200_D7	23.69	175.05	177.13		177.31	0.003574	0.38	1.92	0.38	13.68	16.10	0.54
Strulli	33	Max WS	UF_TR200_D3	40.02	175.05	177.35		177.70	0.005572	0.67	2.67	0.55	17.72	19.93	0.70
Strulli	32.88			Lat Struct											
Strulli	32	Max WS	UF_TR200_D5	17.73	175.05	177.16		177.29	0.002030	0.67	1.84	0.67	14.25	10.32	0.43
Strulli	32	Max WS	UF_TR200_D1	22.99	175.05	177.06		177.32	0.004218	0.92	2.55	0.92	13.22	10.32	0.62
Strulli	32	Max WS	UF_TR200_D2	26.47	175.05	177.16		177.46	0.004536	1.00	2.75	1.01	14.23	10.32	0.65
Strulli	32	Max WS	UF_TR200_D7	16.83	175.05	177.08		177.21	0.002189	0.67	1.85	0.67	13.37	10.32	0.45
Strulli	32	Max WS	UF_TR200_D3	24.42	175.05	177.21		177.45	0.003477	0.89	2.45	0.90	14.77	10.32	0.57
Strulli	31	Max WS	UF_TR200_D5	26.85	173.24	177.16		177.17	0.000096	0.25	0.66	0.19	57.96	20.69	0.11
Strulli	31	Max WS	UF_TR200_D1	47.76	173.24	176.98		177.05	0.000366	0.48	1.25	0.35	54.34	20.69	0.21
Strulli	31	Max WS	UF_TR200_D2	41.16	173.24	177.10		177.14	0.000240	0.40	1.04	0.30	56.79	20.69	0.17
Strulli	31	Max WS	UF_TR200_D7	25.64	173.24	177.07		177.09	0.000096	0.25	0.65	0.19	56.19	20.69	0.11
Strulli	31	Max WS	UF_TR200_D3	34.07	173.24	177.19		177.22	0.000150	0.32	0.83	0.24	58.72	20.69	0.14
Strulli	30	Max WS	UF_TR200_D5	22.16	172.89	177.12	174.31	177.13	0.000125	0.23	0.67	0.24	51.11	21.34	0.11
Strulli	30	Max WS	UF_TR200_D1	25.94	172.89	177.03	174.45	177.05	0.000189	0.28	0.81	0.29	49.21	21.34	0.13
Strulli	30	Max WS	UF_TR200_D2	27.47	172.89	177.14	174.51	177.16	0.000187	0.29	0.82	0.30	51.60	21.34	0.13
Strulli	30	Max WS	UF_TR200_D7	21.39	172.89	177.03	174.28	177.05	0.000128	0.23	0.67	0.24	49.26	21.34	0.11
Strulli	30	Max WS	UF_TR200_D3	27.87	172.89	177.17	174.53	177.19	0.000187	0.29	0.83	0.30	52.20	21.34	0.13
Strulli	25			Bridge											
Strulli	20	Max WS	UF_TR200_D5	22.04	172.89	177.11		177.12	0.000074	0.20	0.51	0.19	76.17	36.34	0.08
Strulli	20	Max WS	UF_TR200_D1	24.49	172.89	176.53		176.55	0.000215	0.26	0.79	0.25	55.00	36.34	0.14
Strulli	20	Max WS	UF_TR200_D2	26.45	172.89	176.98		176.99	0.000127	0.25	0.66	0.23	71.37	36.34	0.11
Strulli	20	Max WS	UF_TR200_D7	21.34	172.89	177.02		177.03	0.000078	0.19	0.52	0.19	73.01	36.34	0.09
Strulli	20	Max WS	UF_TR200_D3	25.92	172.89	177.12		177.13	0.000100	0.23	0.60	0.22	76.66	36.34	0.10
Strulli	19.99			Lat Struct											
Strulli	19.9			Lat Struct											
Strulli	14	Max WS	UF_TR200_D5	30.72	172.38	177.10		177.11	0.000080	0.26	0.65	0.23	81.97	26.85	0.10
Strulli	14	Max WS	UF_TR200_D1	43.05	172.38	176.41		176.46	0.000325	0.45	1.17	0.41	63.61	26.85	0.19
Strulli	14	Max WS	UF_TR200_D2	38.95	172.38	176.95		176.97	0.000149	0.35	0.87	0.31	77.97	26.85	0.14
Strulli	14	Max WS	UF_TR200_D7	30.52	172.38	177.01		177.02	0.000086	0.27	0.67	0.24	79.63	26.85	0.10
Strulli	14	Max WS	UF_TR200_D3	36.10	172.38	177.11		177.12	0.000110	0.31	0.76	0.27	82.20	26.85	0.12
Strulli	13	Max WS	UF_TR200_D5	32.46	172.00	177.09		177.11	0.000140	0.29	0.80	0.20	57.36	18.07	0.12
Strulli	13	Max WS	UF_TR200_D1	43.21	172.00	176.38		176.46	0.000485	0.43	1.33	0.35	44.66	18.07	0.22
Strulli	13	Max WS	UF_TR200_D2	39.62	172.00	176.93		176.98	0.000239	0.36	1.02	0.26	54.59	18.07	0.16

HEC-RAS River: Strulli Reach: Strulli Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Strulli	13	Max WS	UF_TR200_D7	32.04	172.00	177.00		177.03	0.000147	0.29	0.81	0.20	55.78	18.07	0.12
Strulli	13	Max WS	UF_TR200_D3	37.10	172.00	177.09		177.13	0.000182	0.33	0.91	0.23	57.50	18.07	0.14
Strulli	12.500	Max WS	UF_TR200_D5	39.65	171.34	177.09		177.10	0.000030	0.02	0.42	0.09	98.86	22.69	0.06
Strulli	12.500	Max WS	UF_TR200_D1	55.19	171.34	176.40		176.42	0.000101	0.04	0.68	0.14	83.08	22.69	0.11
Strulli	12.500	Max WS	UF_TR200_D2	48.29	171.34	176.94		176.96	0.000050	0.03	0.52	0.12	95.47	22.69	0.08
Strulli	12.500	Max WS	UF_TR200_D7	39.05	171.34	177.01		177.01	0.000031	0.02	0.42	0.09	96.87	22.69	0.06
Strulli	12.500	Max WS	UF_TR200_D3	44.91	171.34	177.10		177.11	0.000039	0.03	0.47	0.11	99.08	22.69	0.07
Strulli	12	Max WS	UF_TR200_D5	37.92	171.32	177.08		177.10	0.000083	0.22	0.76	0.25	68.21	15.79	0.11
Strulli	12	Max WS	UF_TR200_D1	51.12	171.32	176.36		176.43	0.000251	0.35	1.21	0.39	56.94	15.79	0.18
Strulli	12	Max WS	UF_TR200_D2	44.73	171.32	176.92		176.96	0.000128	0.26	0.93	0.31	65.77	15.79	0.13
Strulli	12	Max WS	UF_TR200_D7	37.57	171.32	176.99		177.02	0.000087	0.22	0.77	0.25	66.82	15.79	0.11
Strulli	12	Max WS	UF_TR200_D3	41.98	171.32	177.09		177.12	0.000101	0.24	0.84	0.28	68.33	15.79	0.12
Strulli	11	Max WS	UF_TR200_D5	40.18	170.93	177.06		177.10	0.000146	0.36	1.01	0.32	65.73	16.17	0.14
Strulli	11	Max WS	UF_TR200_D1	51.43	170.93	176.33		176.42	0.000409	0.53	1.53	0.49	53.93	16.17	0.22
Strulli	11	Max WS	UF_TR200_D2	45.50	170.93	176.91		176.96	0.000209	0.42	1.18	0.38	63.19	16.17	0.16
Strulli	11	Max WS	UF_TR200_D7	39.63	170.93	176.98		177.01	0.000151	0.36	1.01	0.32	64.31	16.17	0.14
Strulli	11	Max WS	UF_TR200_D3	43.28	170.93	177.07		177.11	0.000169	0.38	1.08	0.34	65.85	16.17	0.15
Strulli	10	Max WS	UF_TR200_D5	42.59	170.53	177.05		177.08	0.000137	0.38	1.05	0.38	75.31	14.98	0.14
Strulli	10	Max WS	UF_TR200_D1	52.90	170.53	176.30		176.37	0.000331	0.56	1.50	0.56	64.20	14.98	0.21
Strulli	10	Max WS	UF_TR200_D2	46.80	170.53	176.89		176.93	0.000181	0.43	1.19	0.44	72.94	14.98	0.15
Strulli	10	Max WS	UF_TR200_D7	42.16	170.53	176.96		176.99	0.000141	0.38	1.06	0.39	73.99	14.98	0.14
Strulli	10	Max WS	UF_TR200_D3	44.91	170.53	177.05		177.09	0.000152	0.40	1.11	0.40	75.42	14.98	0.14

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO PODERE VALLI

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

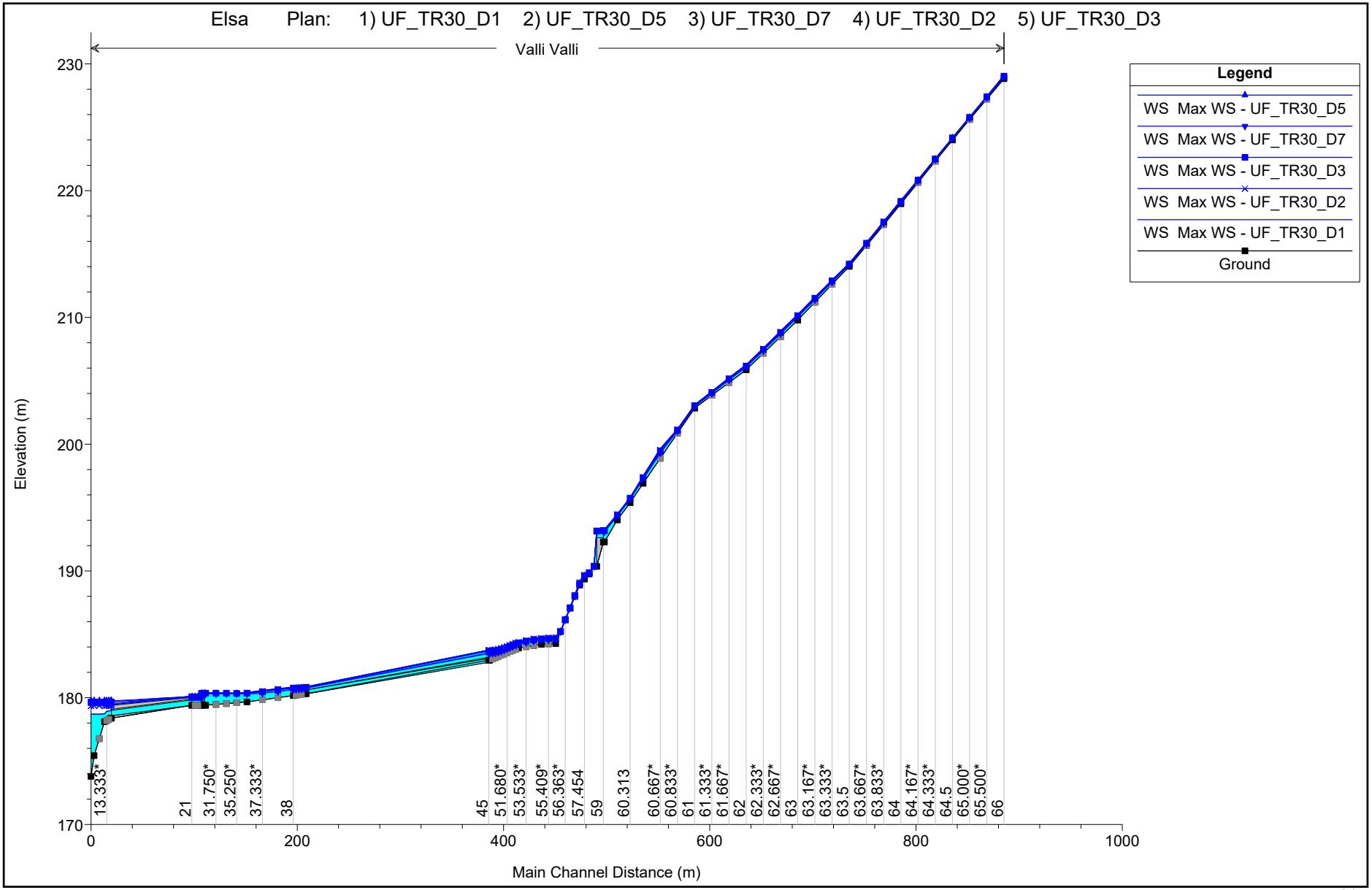
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO PODERE VALLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
Valli Valli
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Elevation (m)
Main Channel Distance (m)
230
220
210
200
190
180
170
0
200
400
600
800
1000
13.333*
21
31.750*
35.250*
37.333*
38
45
51.680*
53.533*
55.409*
56.363*
57.454
59
60.313
60.667*
60.833*
61
61.333*
61.667*
62
62.333*
62.667*
63
63.167*
63.333*
63.5
63.667*
63.833*
64
64.167*
64.333*
64.5
65.000*
65.500*
66

ALLEGATI

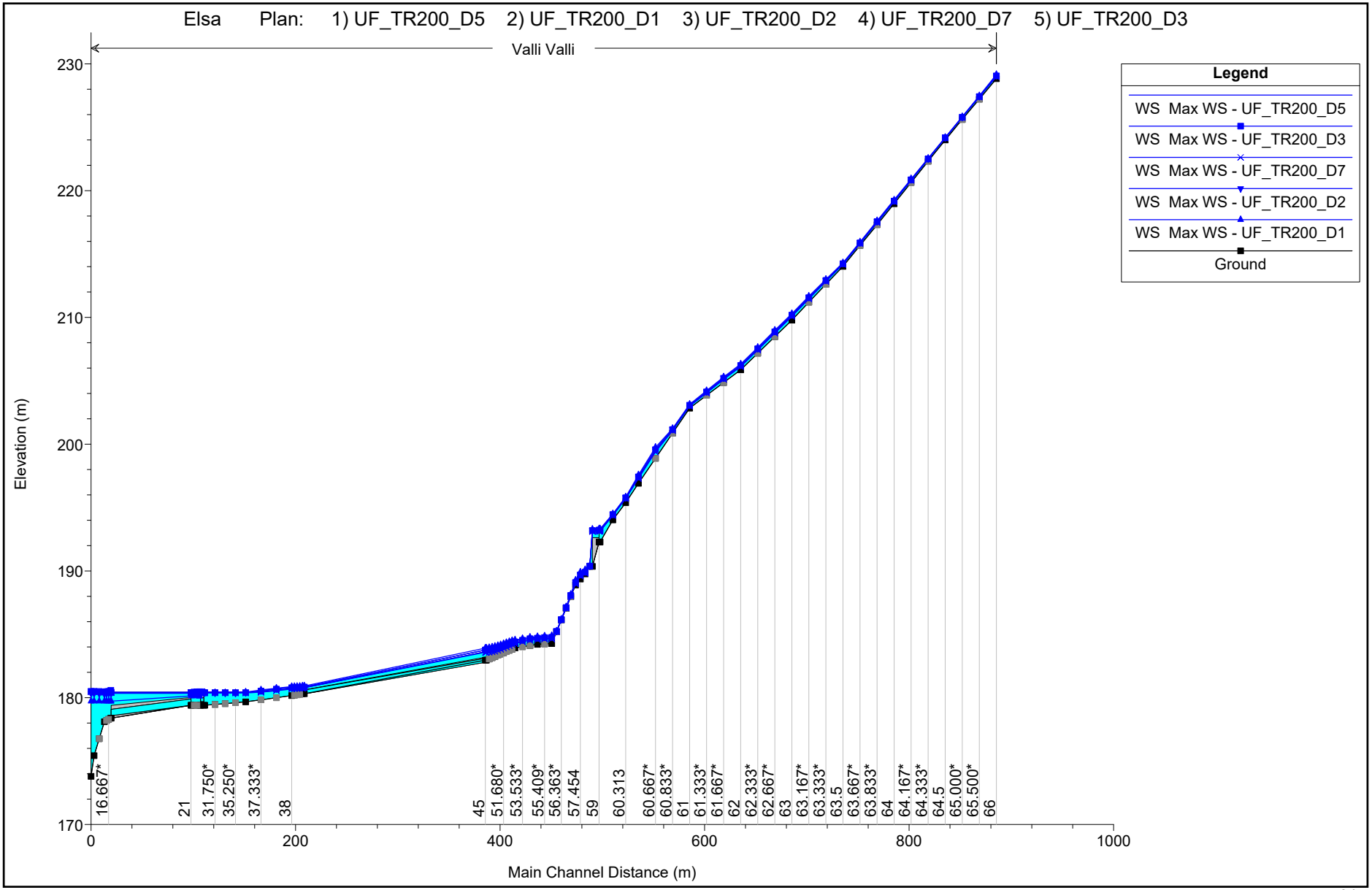
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO PODERE VALLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Profilo longitudinale


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
Valli Valli
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Elevation (m)
Main Channel Distance (m)
230
220
210
200
190
180
170
0
200
400
600
800
1000
16.667*
21
31.750*
35.250*
37.333*
38
45
51.680*
53.533*
55.409*
56.363*
57.454
59
60.313
60.667*
60.833*
61
61.333*
61.667*
62
62.333*
62.667*
63
63.167*
63.333*
63.5
63.667*
63.833*
64
64.167*
64.333*
64.5
65.000*
65.500*
66

ALLEGATI

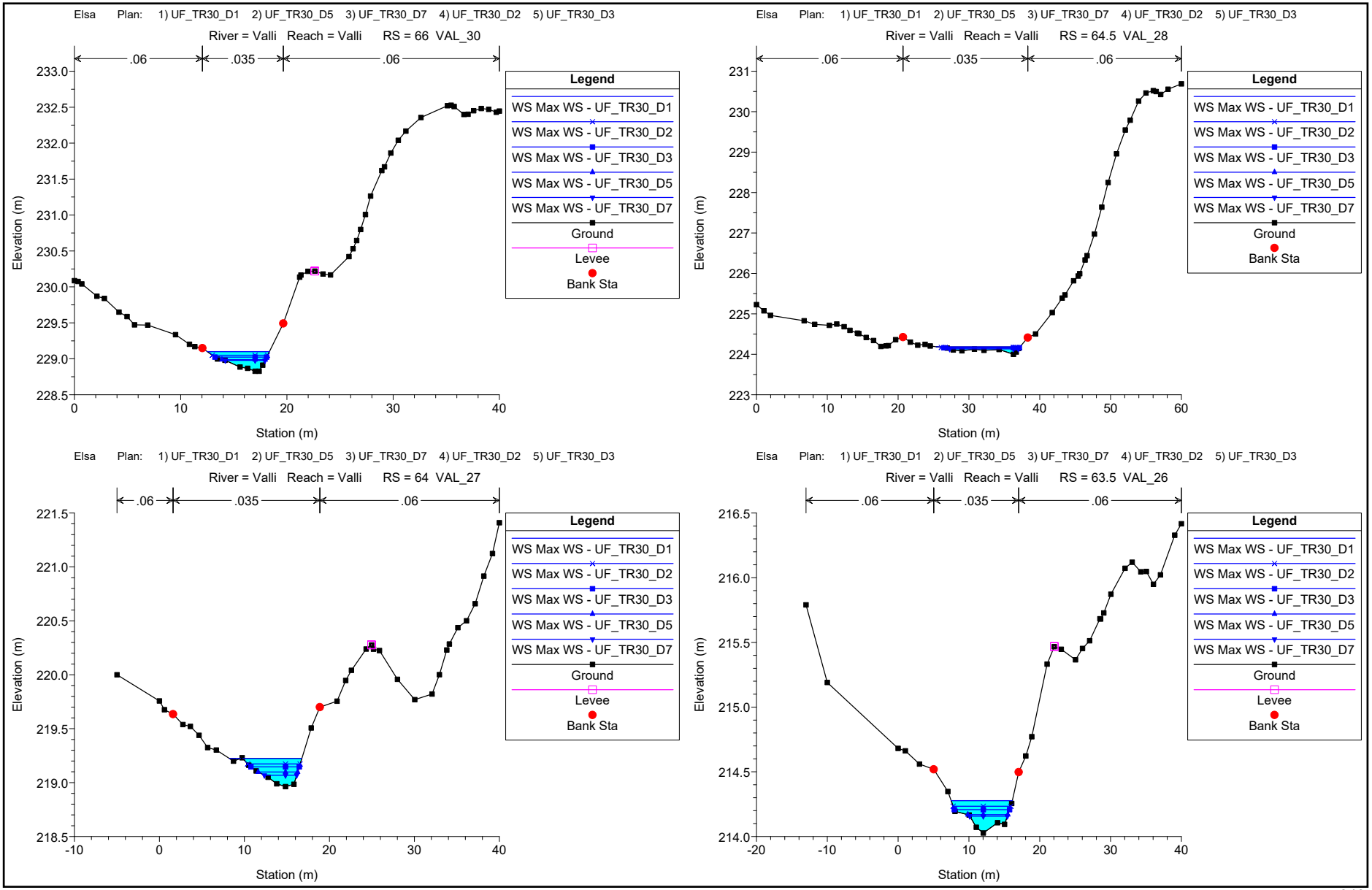
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

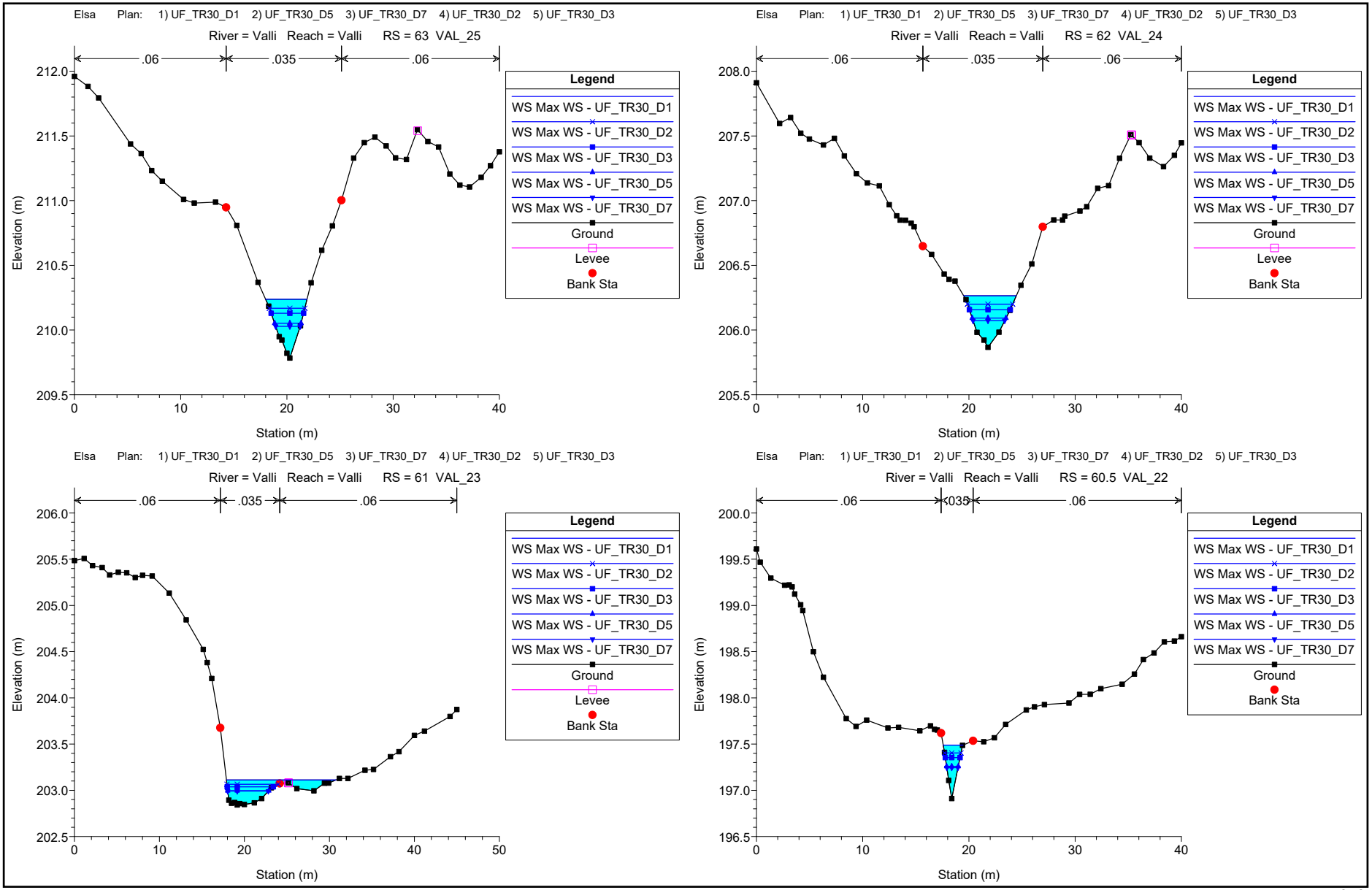
FOSSO PODERE VALLI

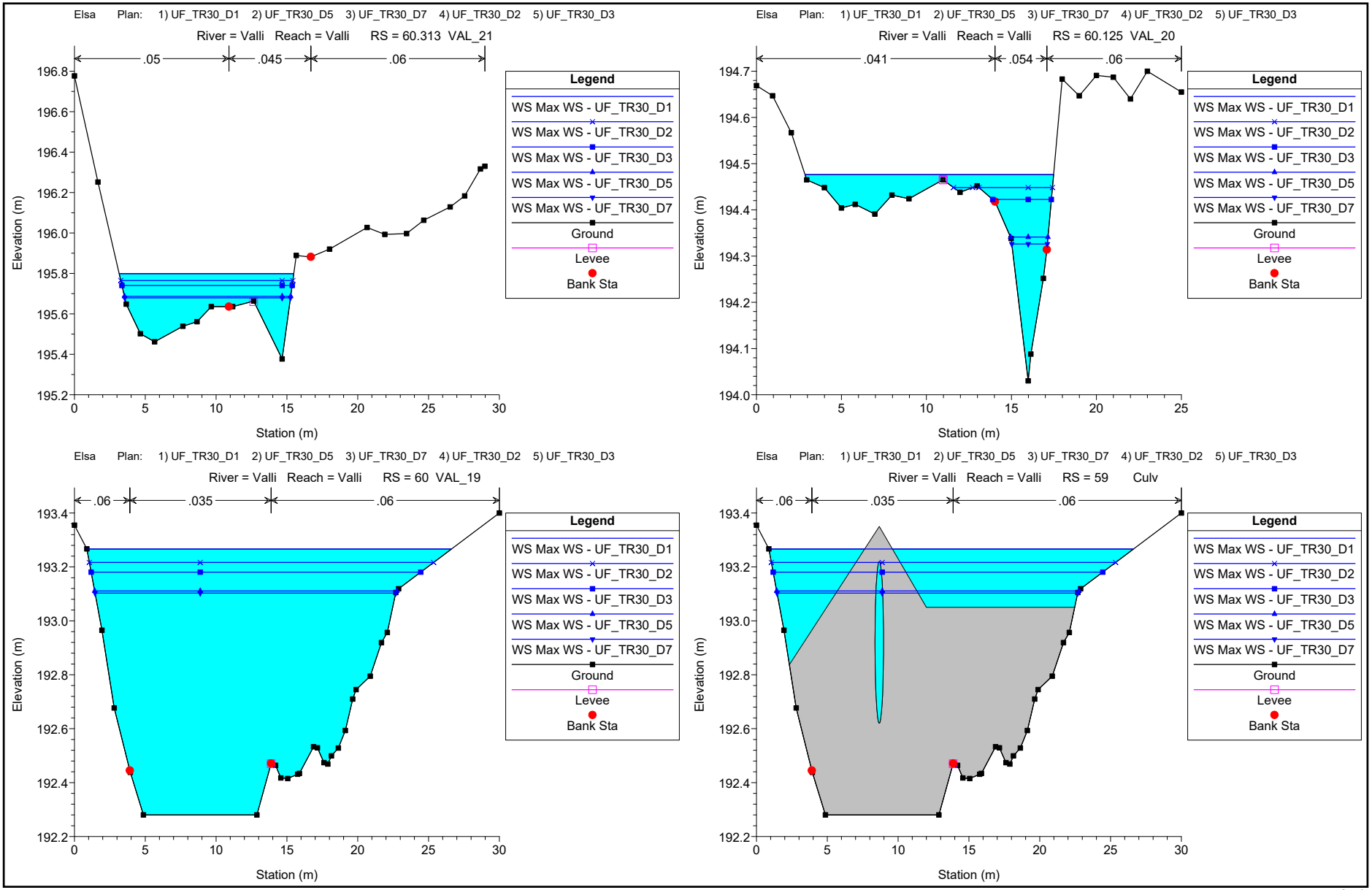
MODELLAZIONE PER TR=30 anni

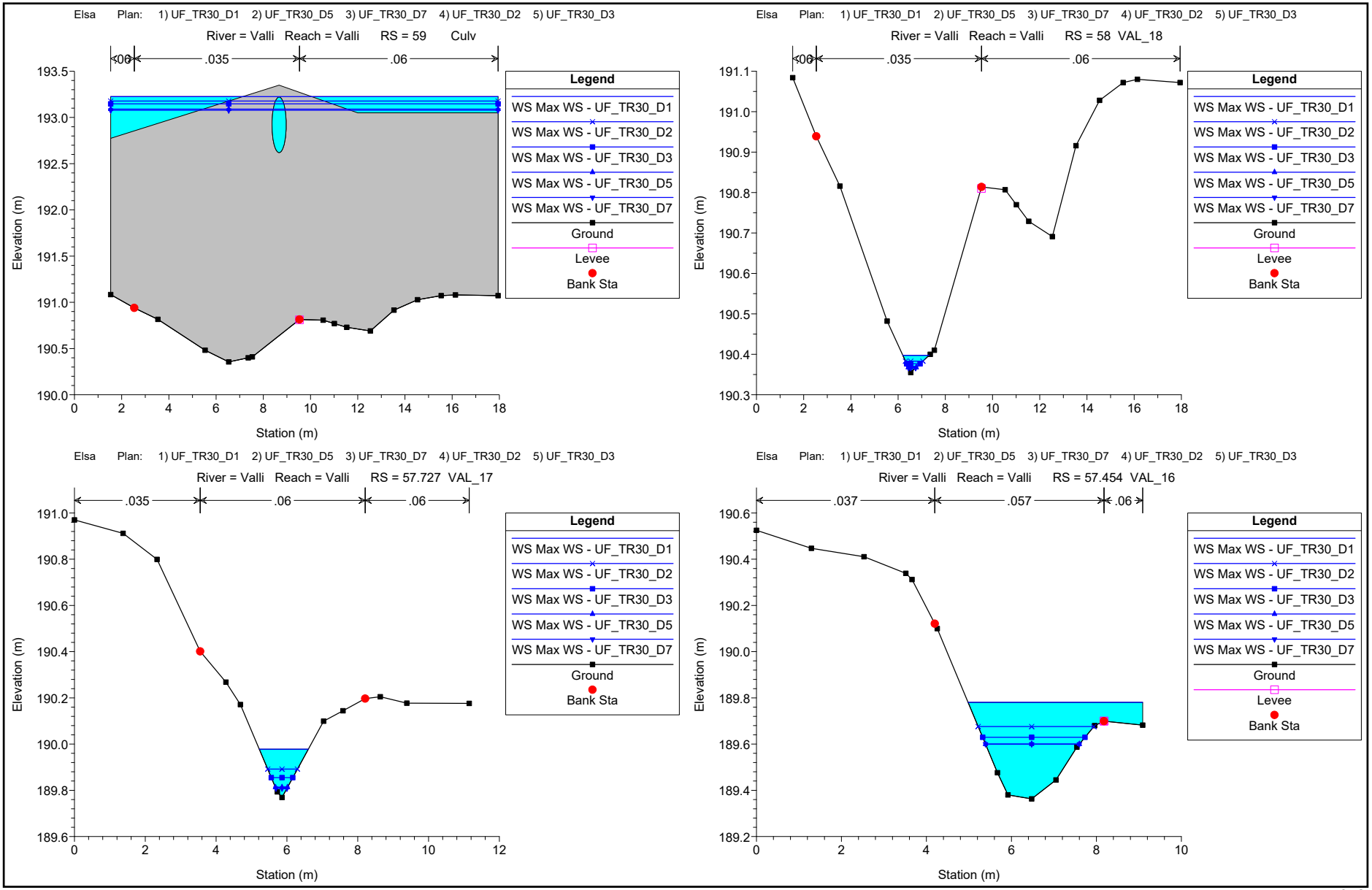
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

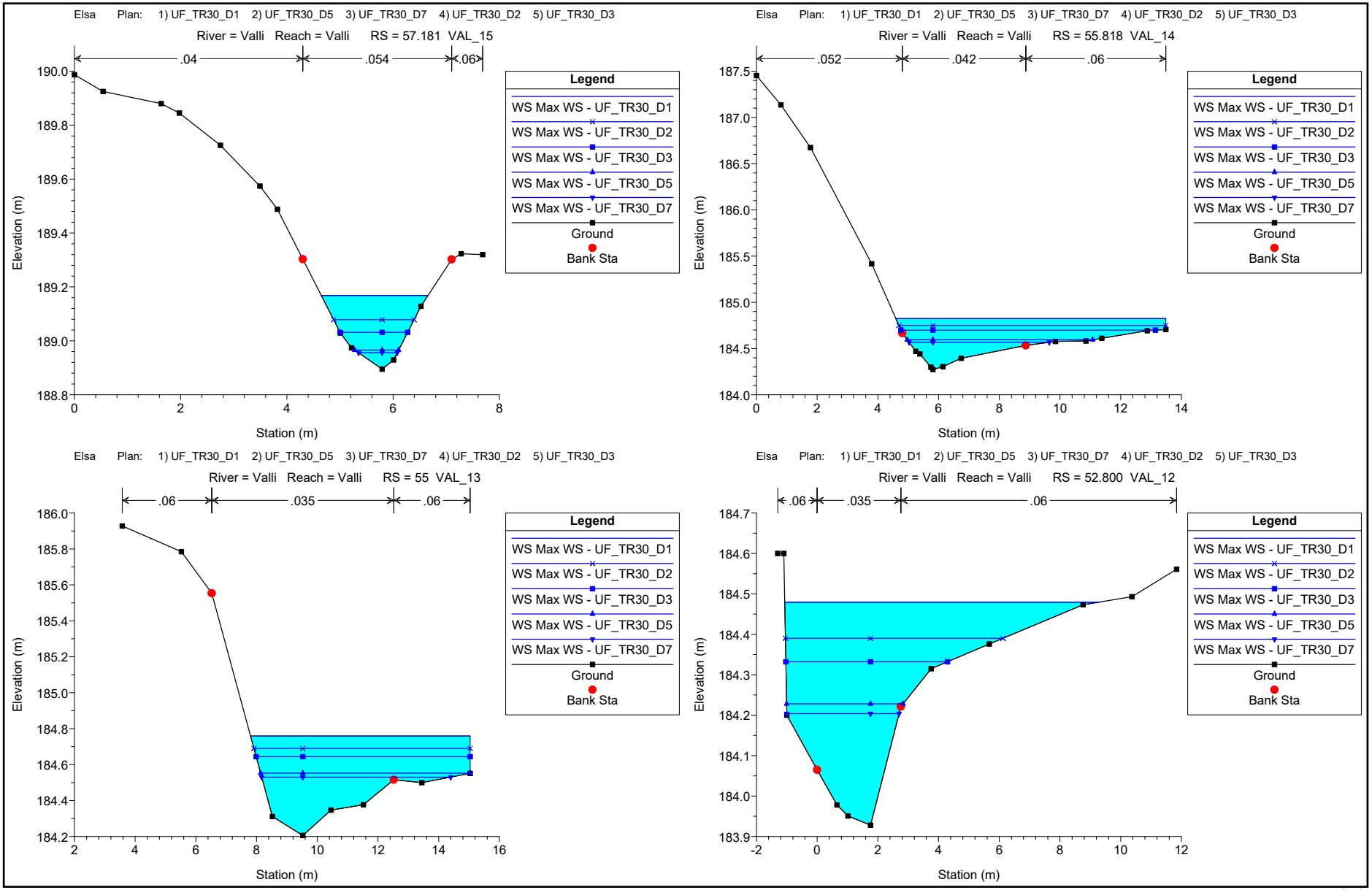
Sezioni Trasversali (da monte verso valle)

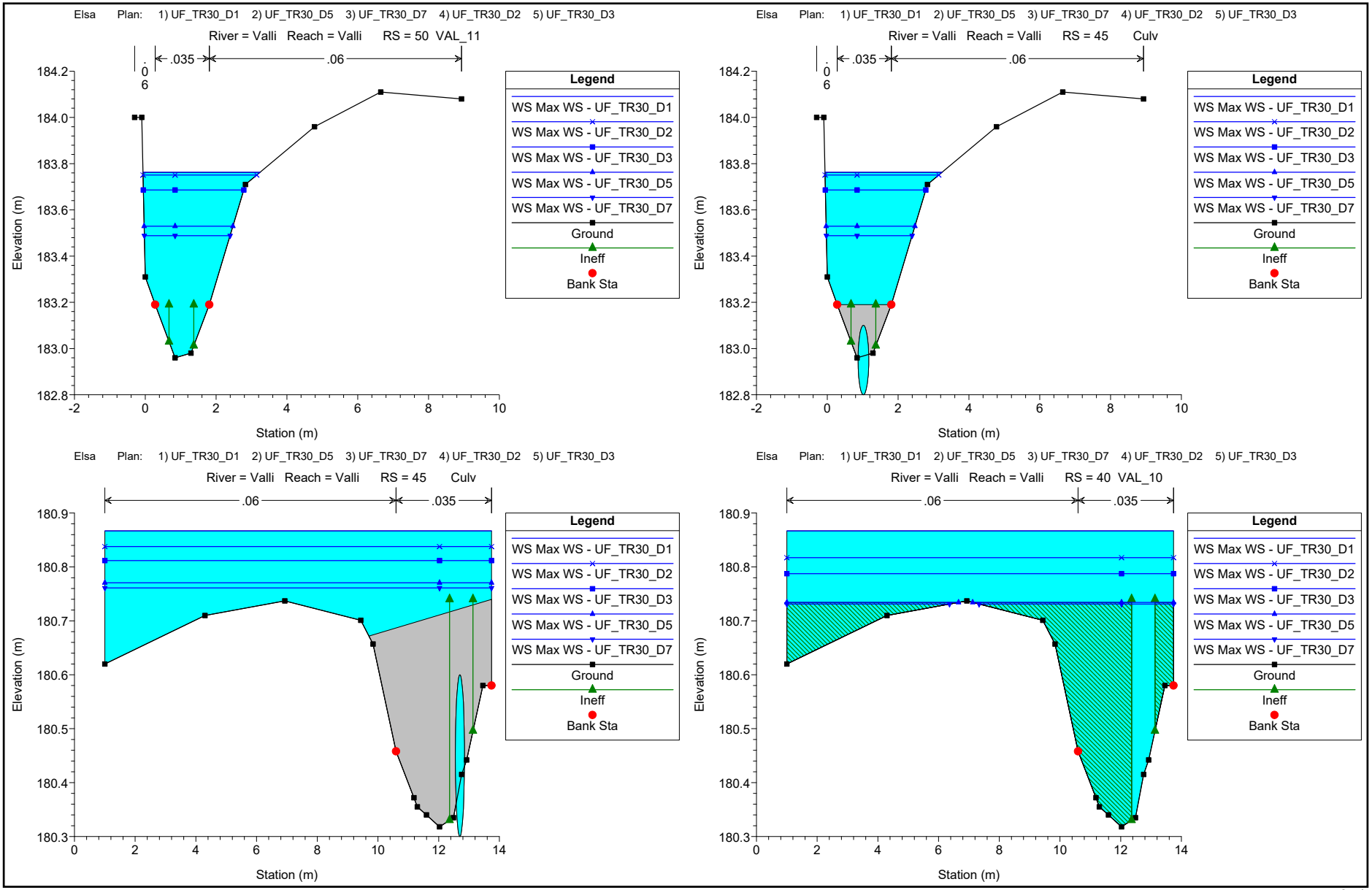

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 66 VAL_30
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 64.5 VAL_28
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 64 VAL_27
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 63.5 VAL_26
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

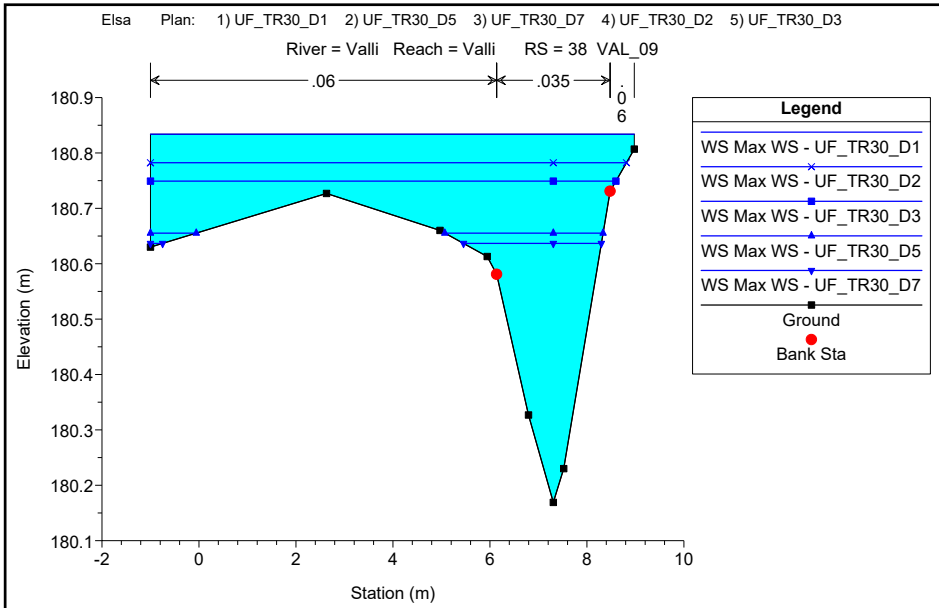

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 63 VAL_25
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 62 VAL_24
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 61 VAL_23
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 60.5 VAL_22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

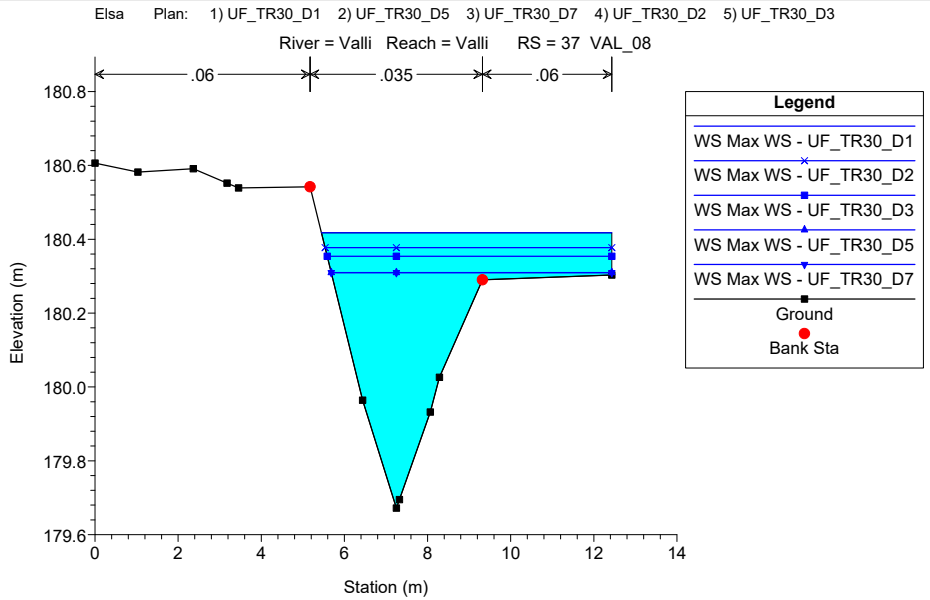

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 60.313 VAL_21
.05
.045
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 60.125 VAL_20
.041
.054
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 60 VAL_19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 59 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

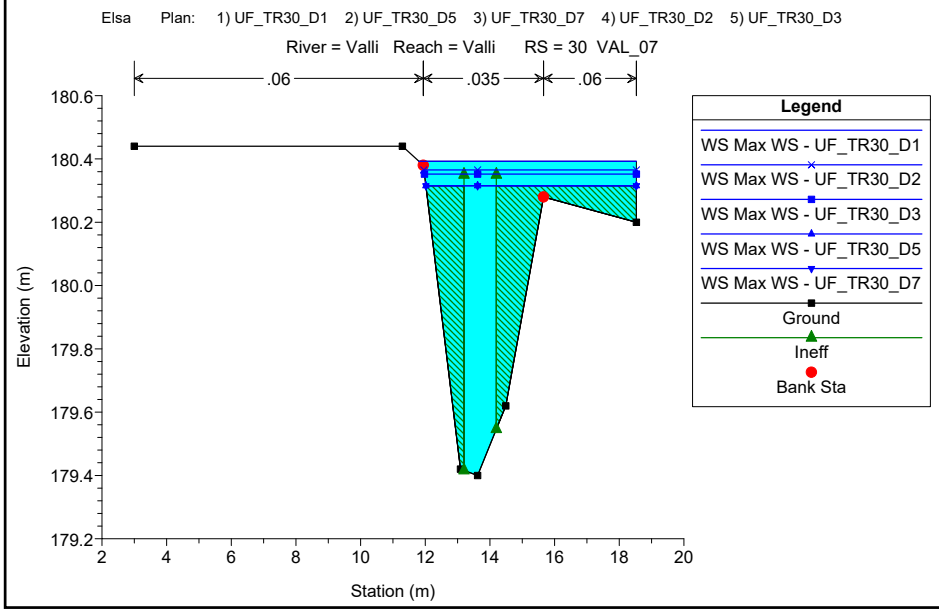

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 59 Culv
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 58 VAL_18
.06 .035 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 57.727 VAL_17
.035 .06 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 57.454 VAL_16
.037 .057 .06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Bank Sta

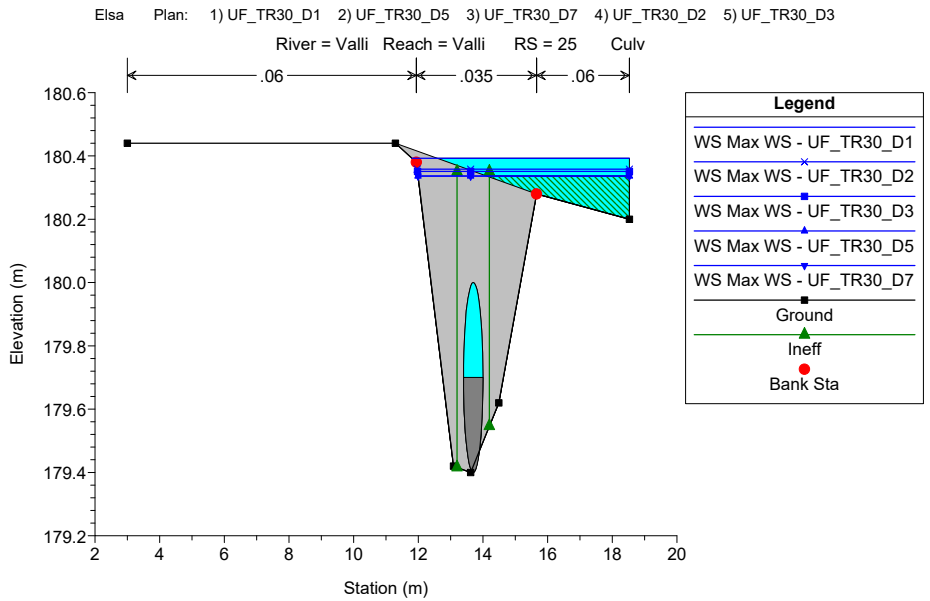

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 57.181 VAL_15
.04
.054
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 55.818 VAL_14
.052
.042
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 55 VAL_13
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 52.800 VAL_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

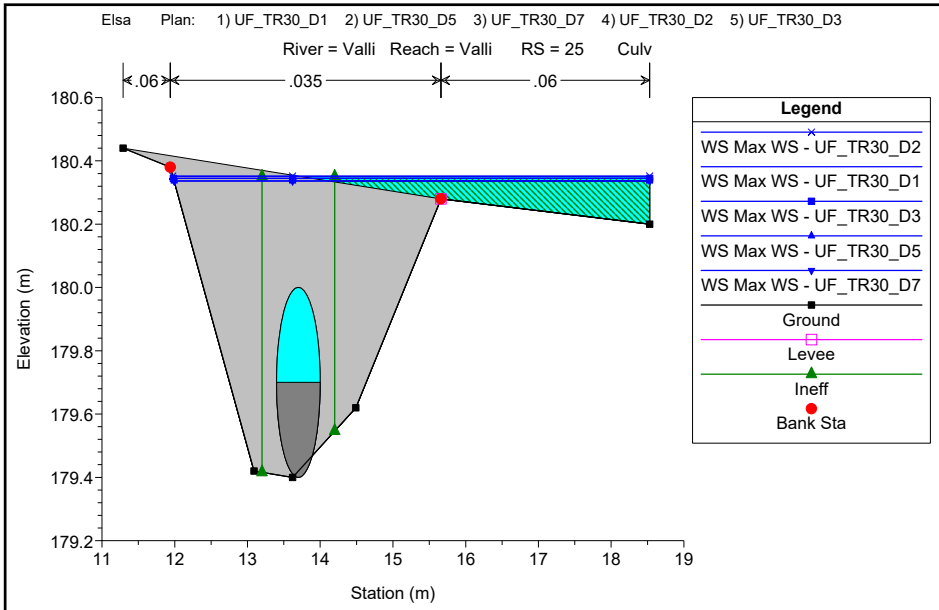

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 50 VAL_11
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 45 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 45 Culv
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 40 VAL_10
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta

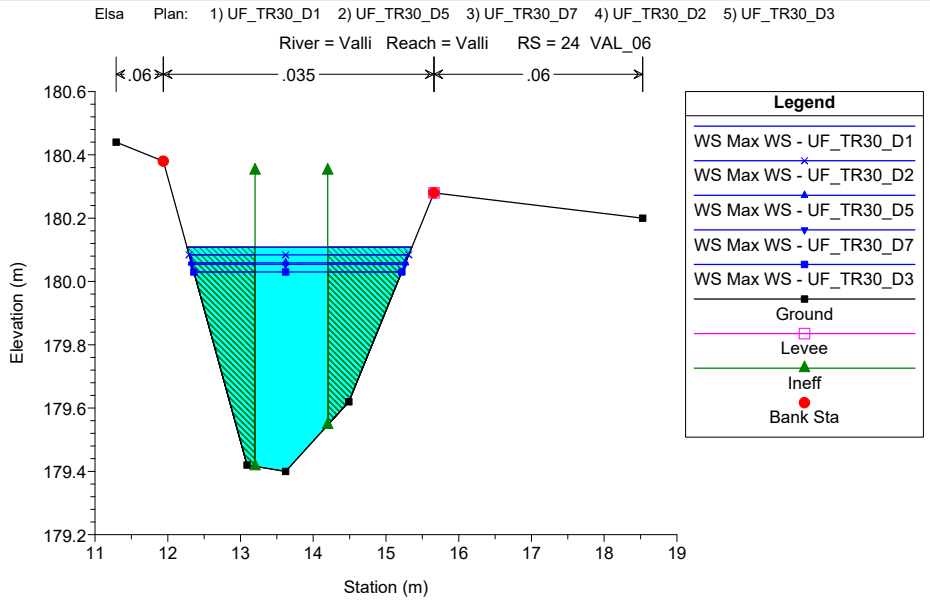

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 38 VAL_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

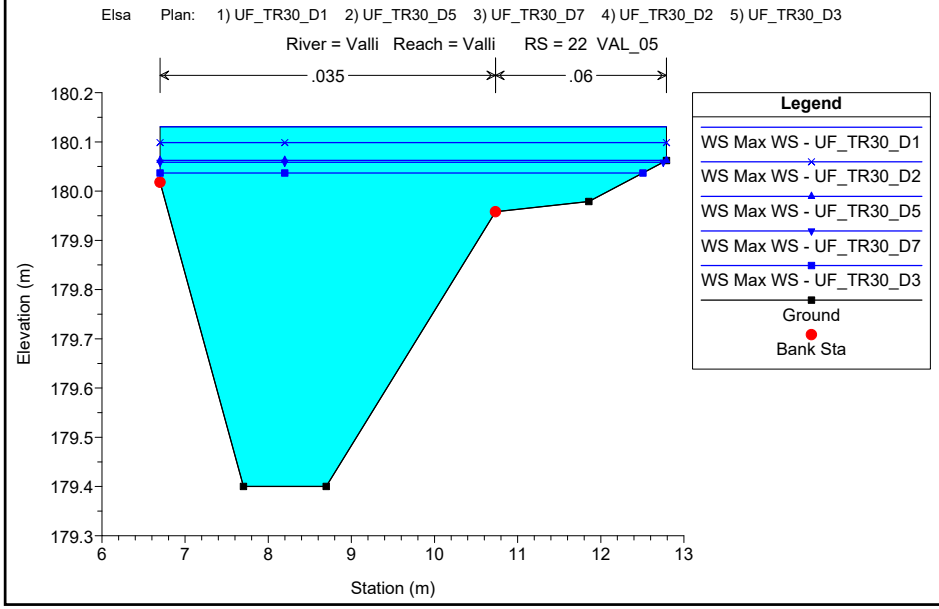

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 37 VAL_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Bank Sta

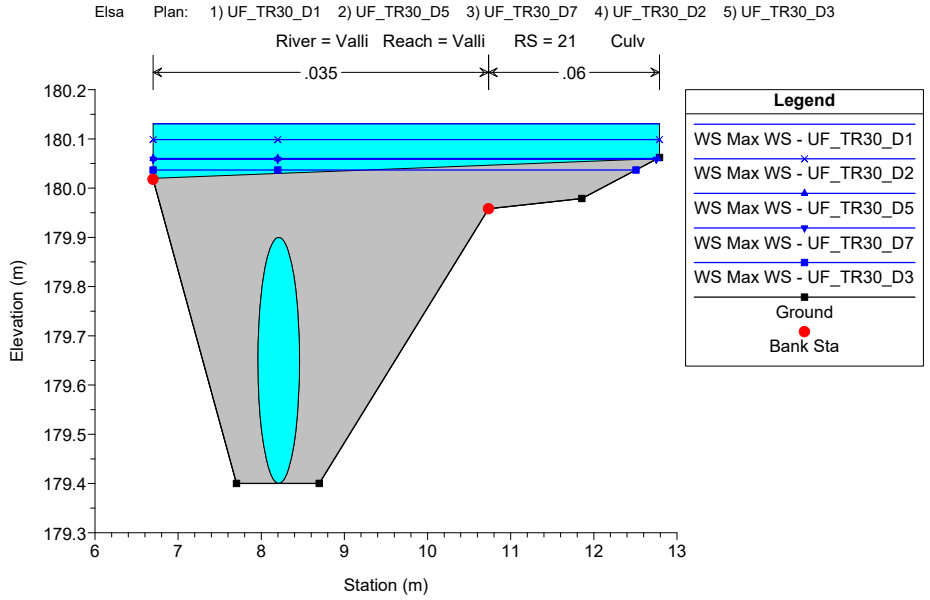

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 30 VAL_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta

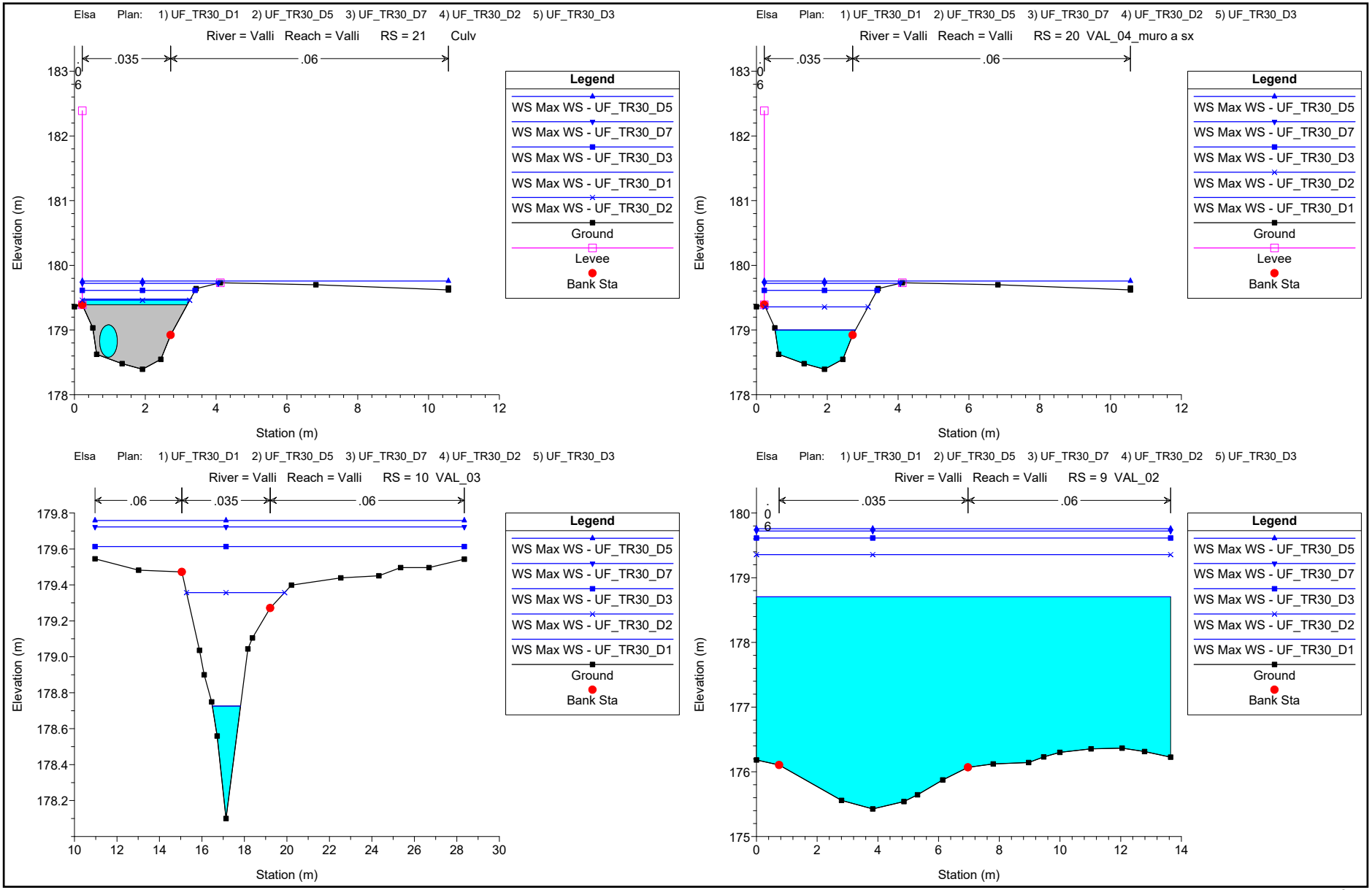

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Ineff
Bank Sta

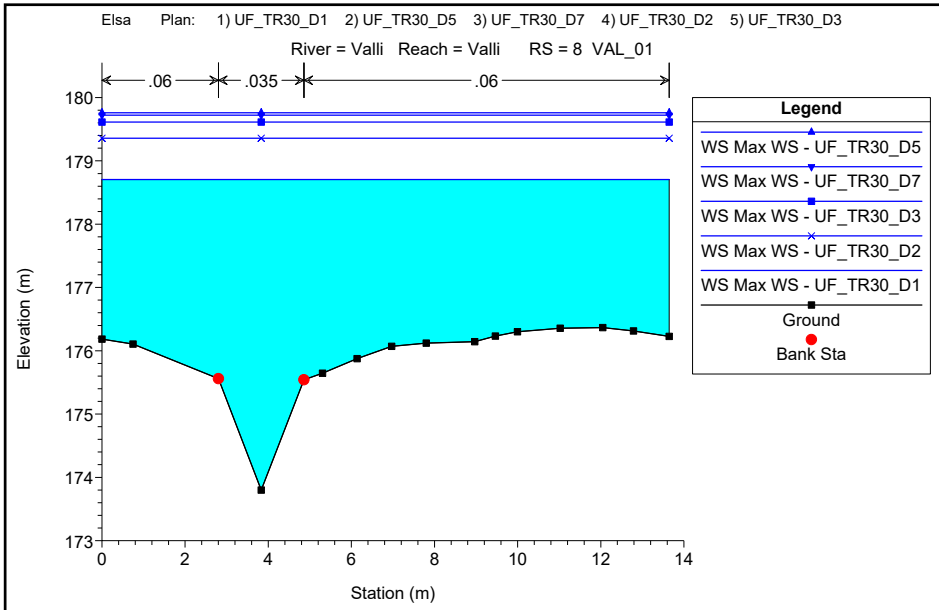

Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 24 VAL_06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
Ground
Levee
Ineff
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 22 VAL_05
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 21 Culv
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 21 Culv
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D1
WS Max WS - UF_TR30_D2
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 20 VAL_04_muro a sx
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 10 VAL_03
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 9 VAL_02
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR30_D1 2) UF_TR30_D5 3) UF_TR30_D7 4) UF_TR30_D2 5) UF_TR30_D3
River = Valli Reach = Valli RS = 8 VAL_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR30_D5
WS Max WS - UF_TR30_D7
WS Max WS - UF_TR30_D3
WS Max WS - UF_TR30_D2
WS Max WS - UF_TR30_D1
Ground
Bank Sta

ALLEGATI

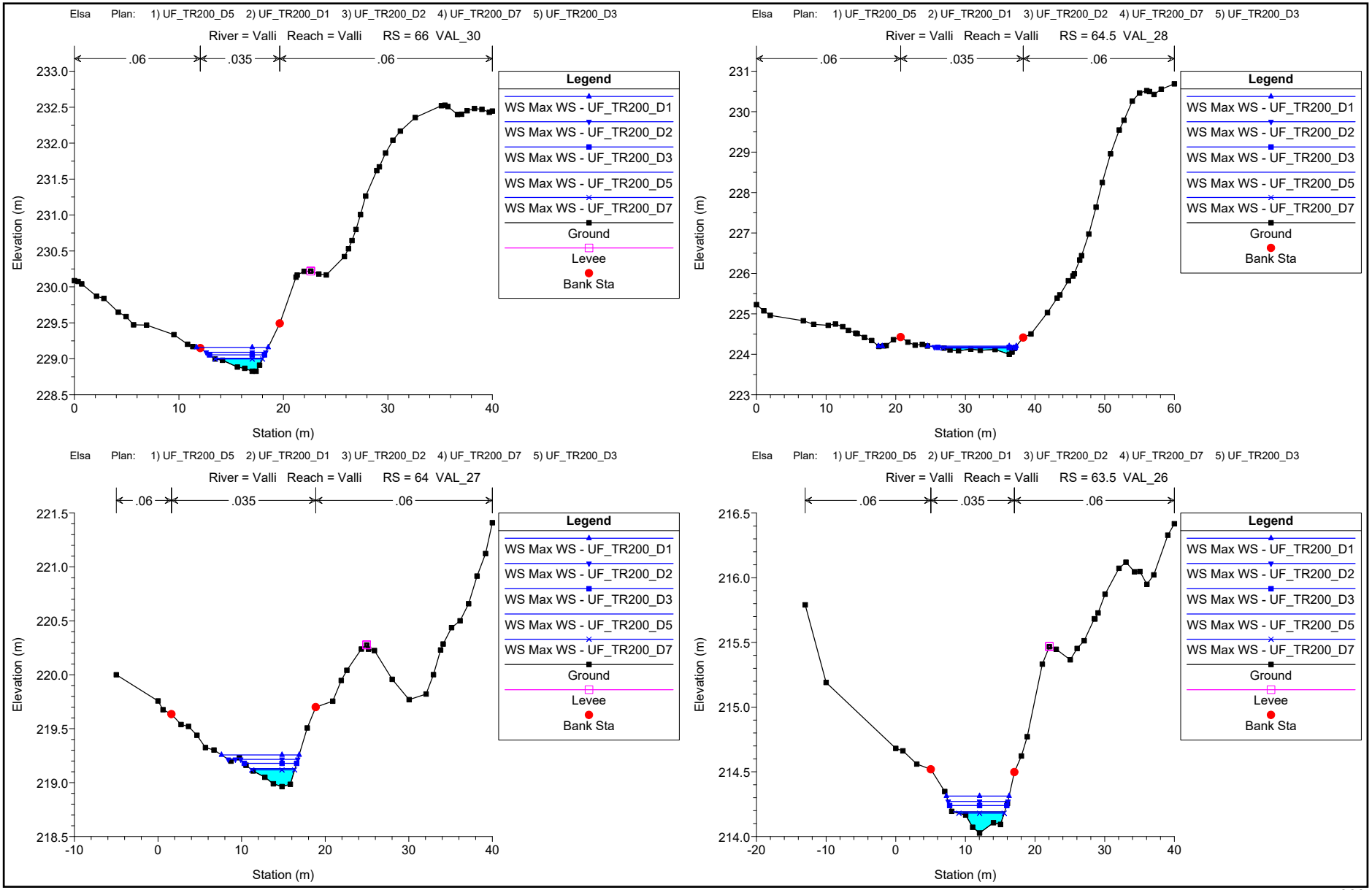
MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

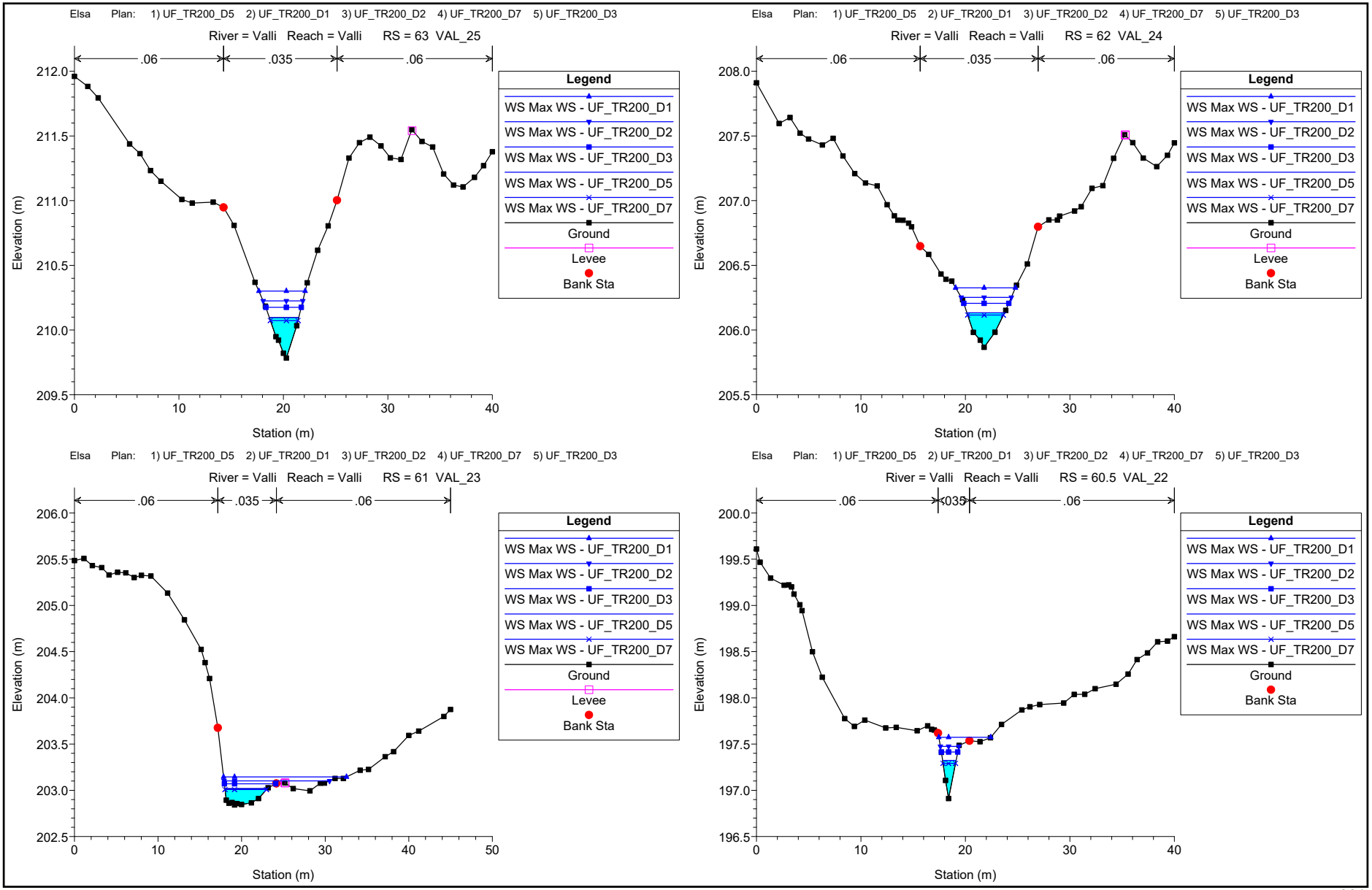
FOSSO PODERE VALLI

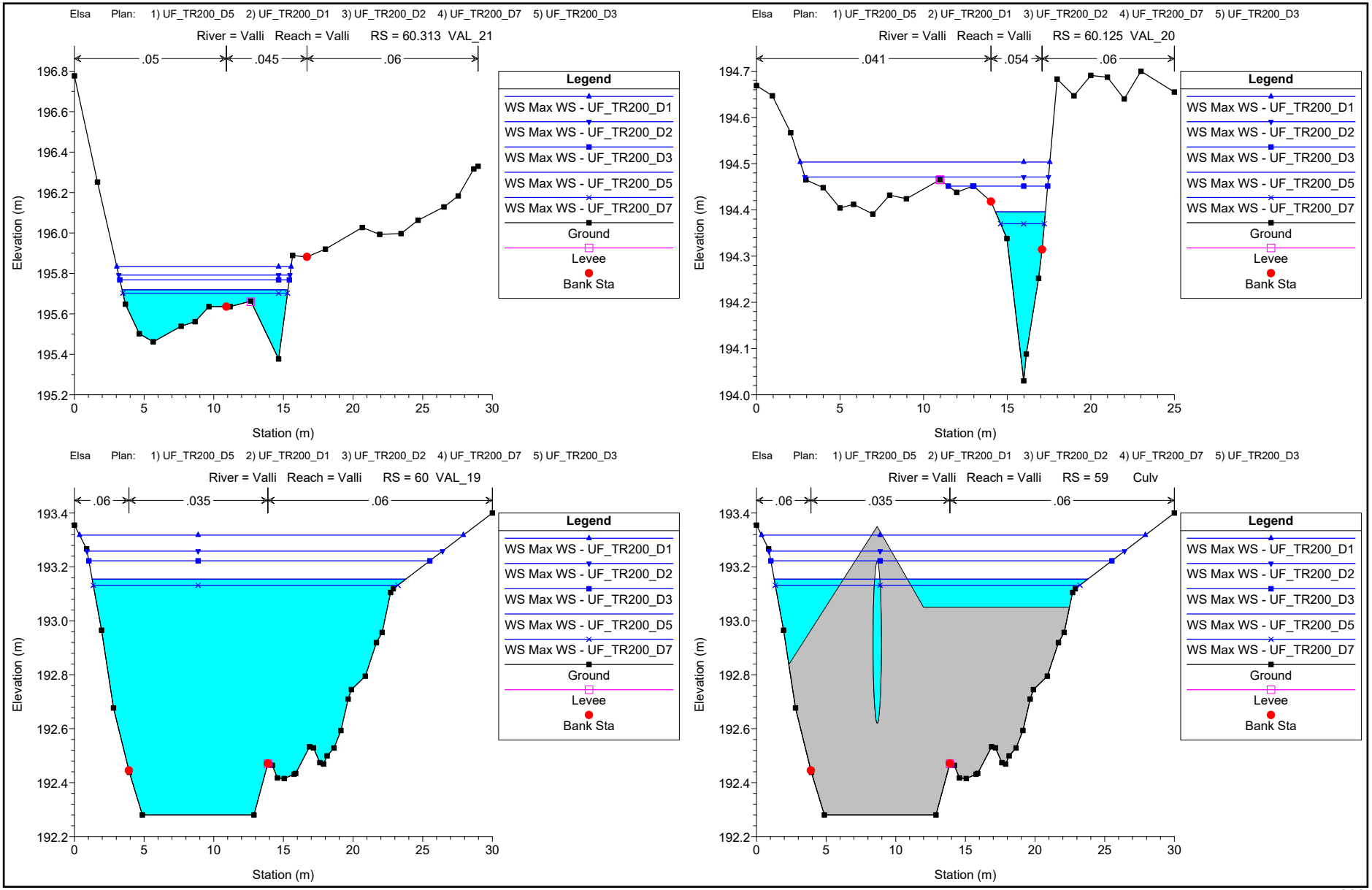
MODELLAZIONE PER TR=200 anni

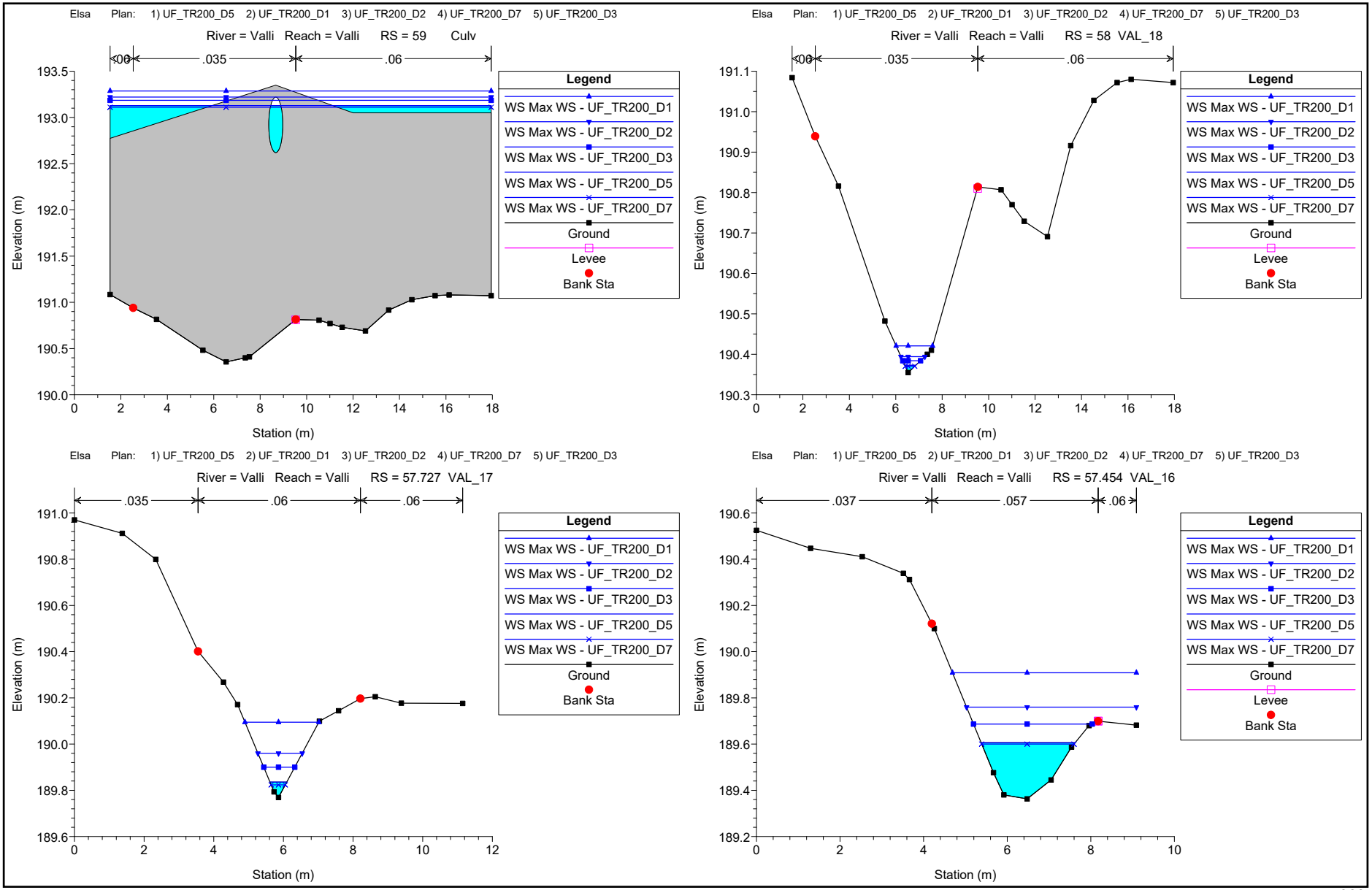
DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

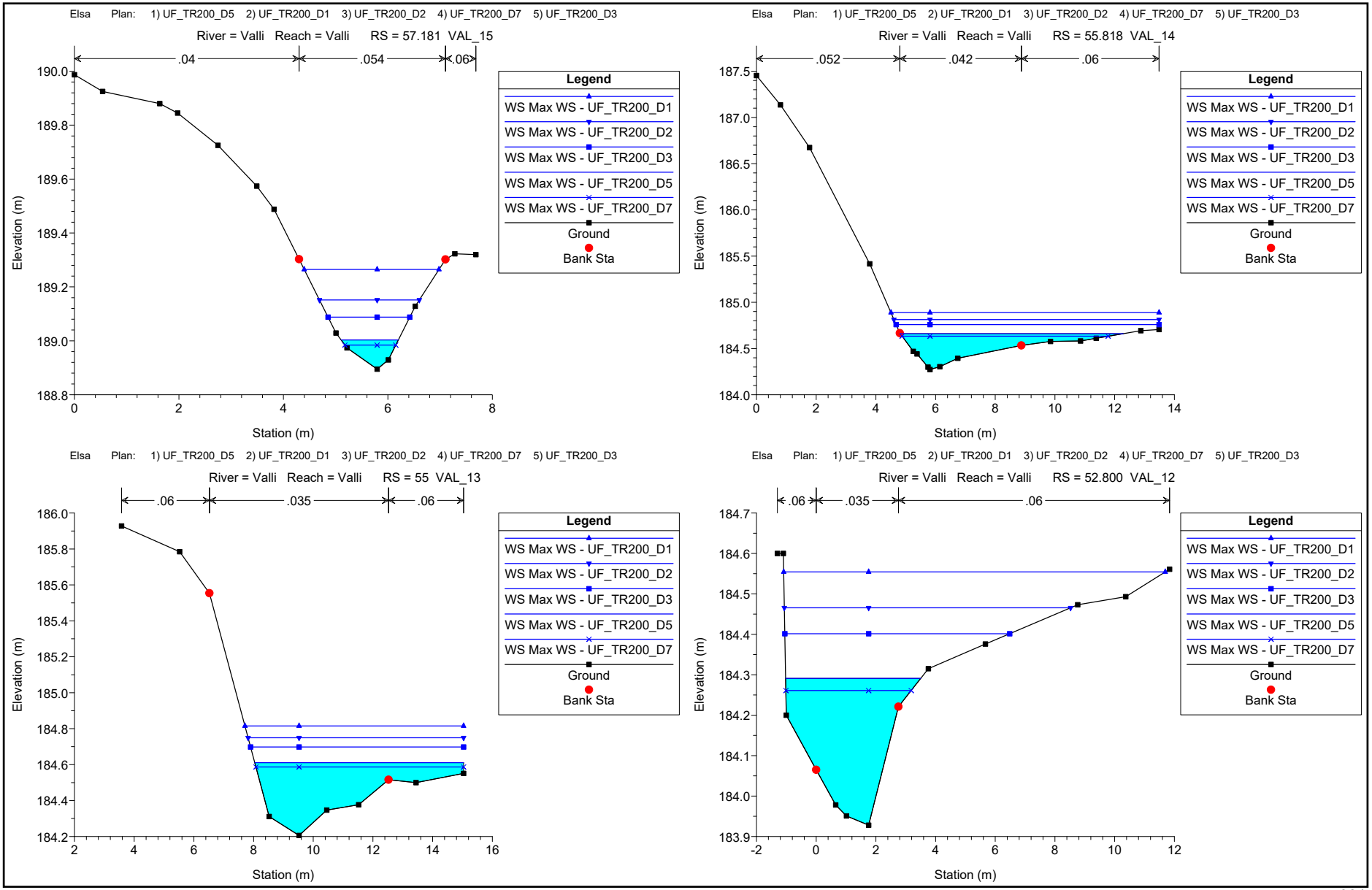
Sezioni Trasversali (da monte verso valle)

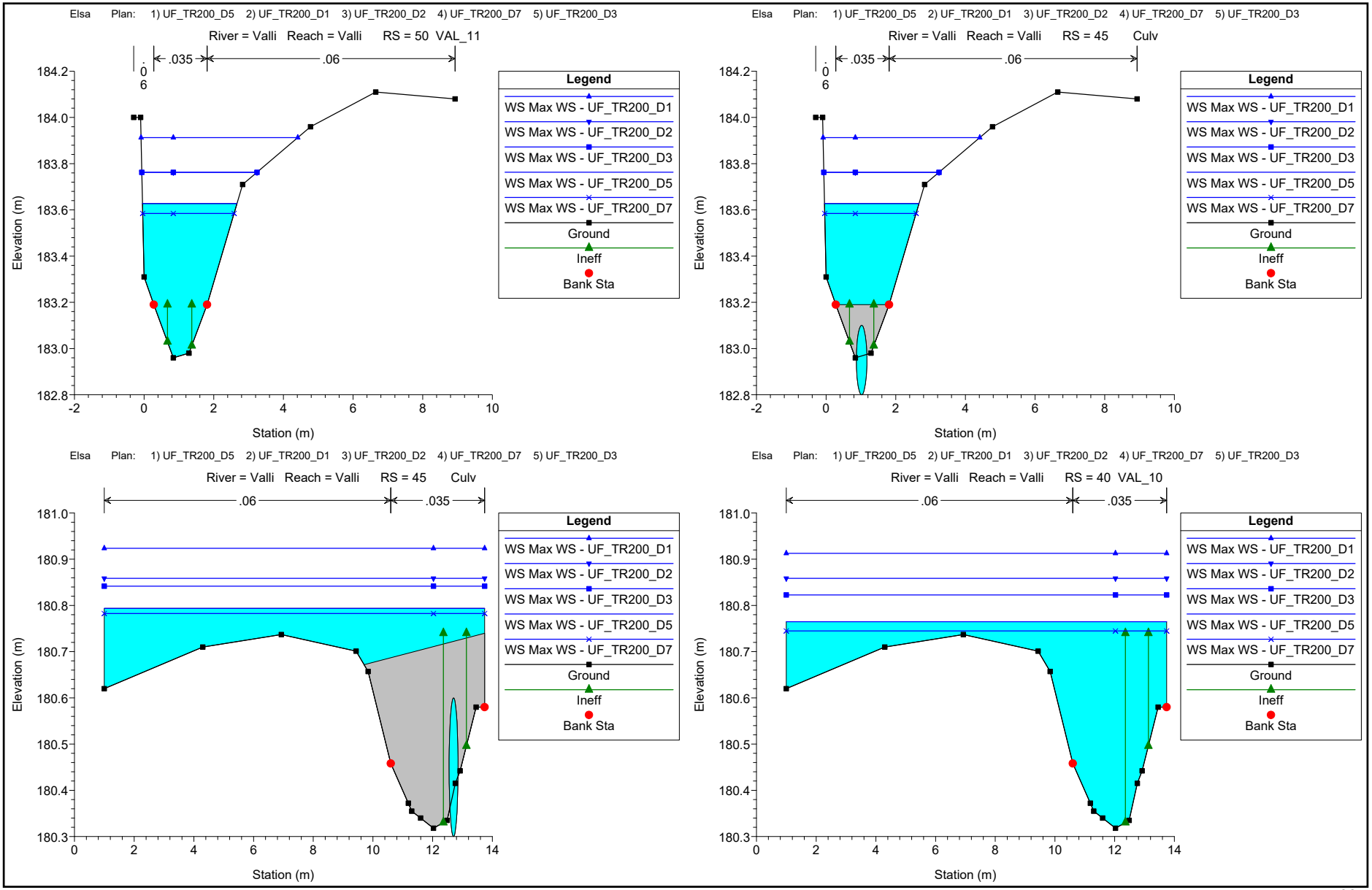

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 66 VAL_30
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 64.5 VAL_28
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 64 VAL_27
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 63.5 VAL_26
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta

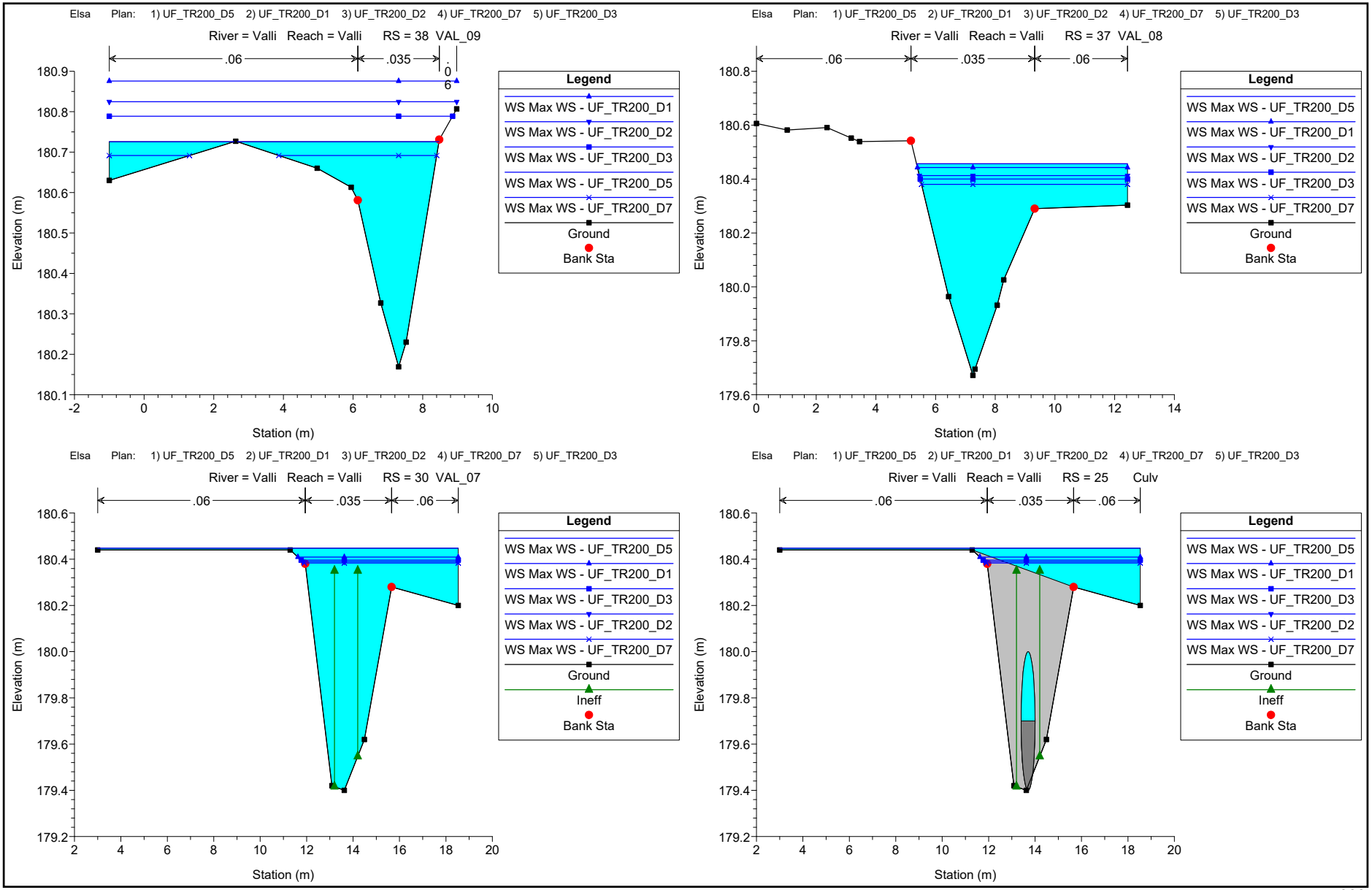

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 63 VAL_25
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 62 VAL_24
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 61 VAL_23
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 60.5 VAL_22
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta

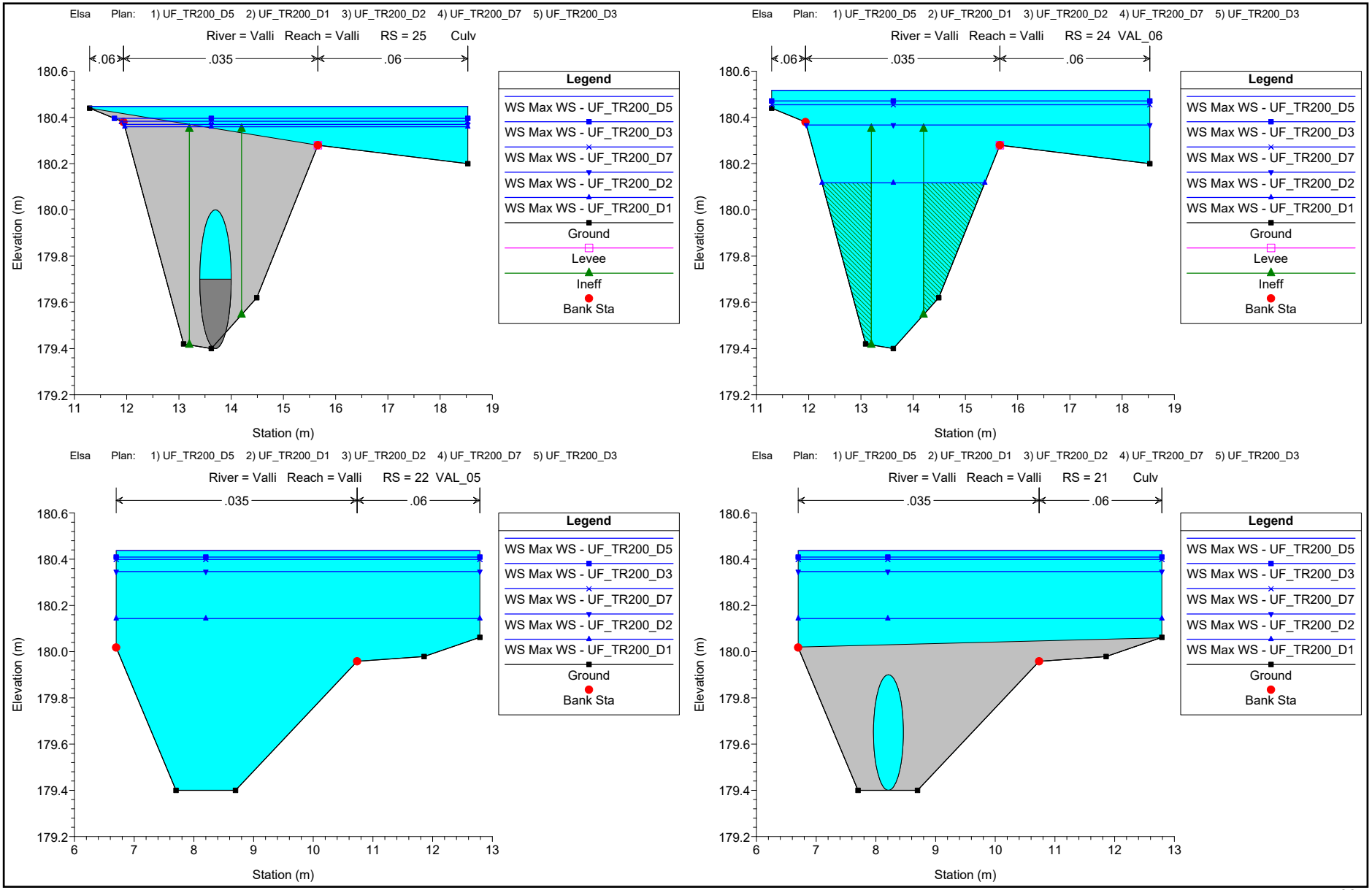

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 60.313 VAL_21
.05
.045
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 60.125 VAL_20
.041
.054
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 60 VAL_19
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 59 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta

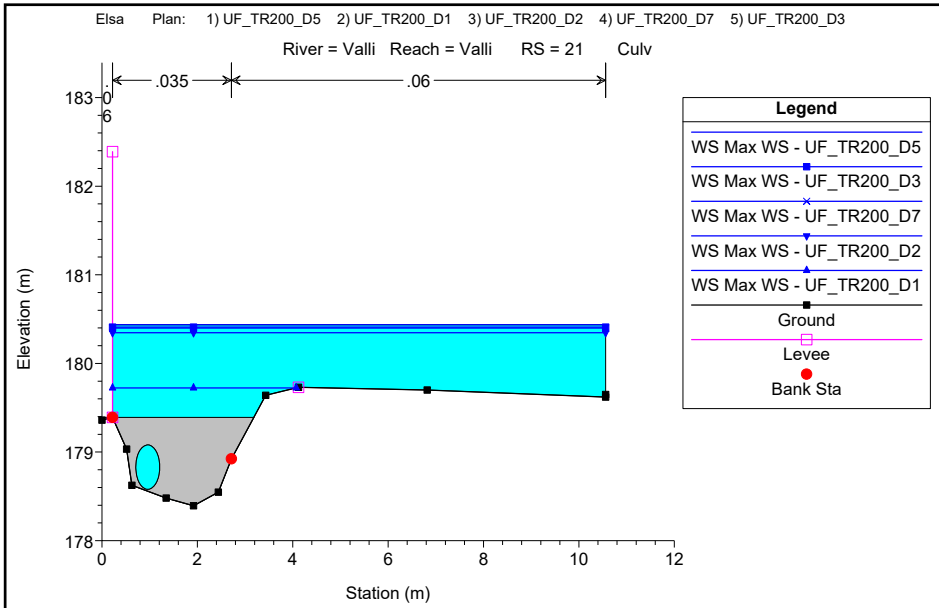

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 59 Culv
.00
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 58 VAL_18
.00
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 57.727 VAL_17
.035
.06
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 57.454 VAL_16
.037
.057
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Levee
Bank Sta

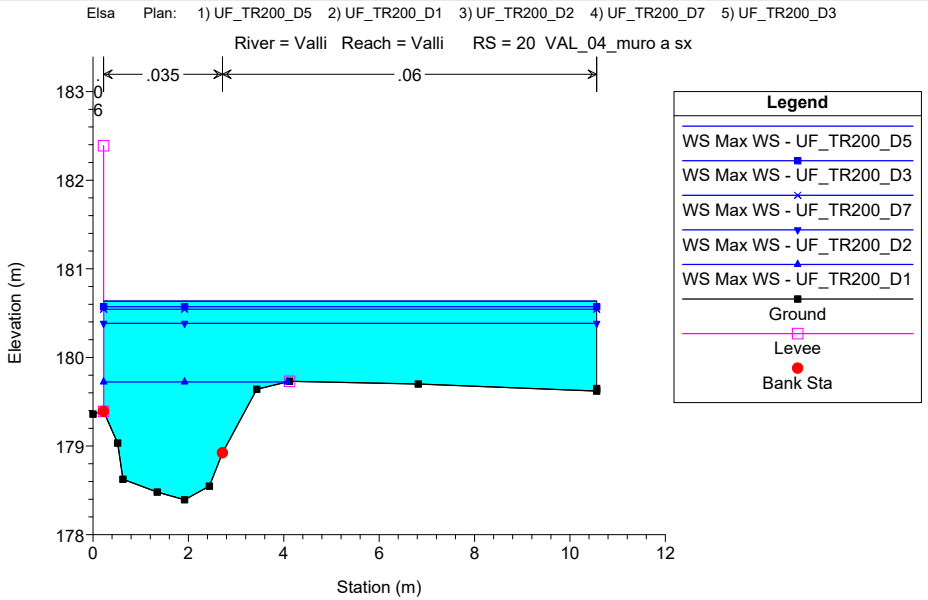

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 57.181 VAL_15
.04
.054
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 55.818 VAL_14
.052
.042
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 55 VAL_13
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 52.800 VAL_12
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta

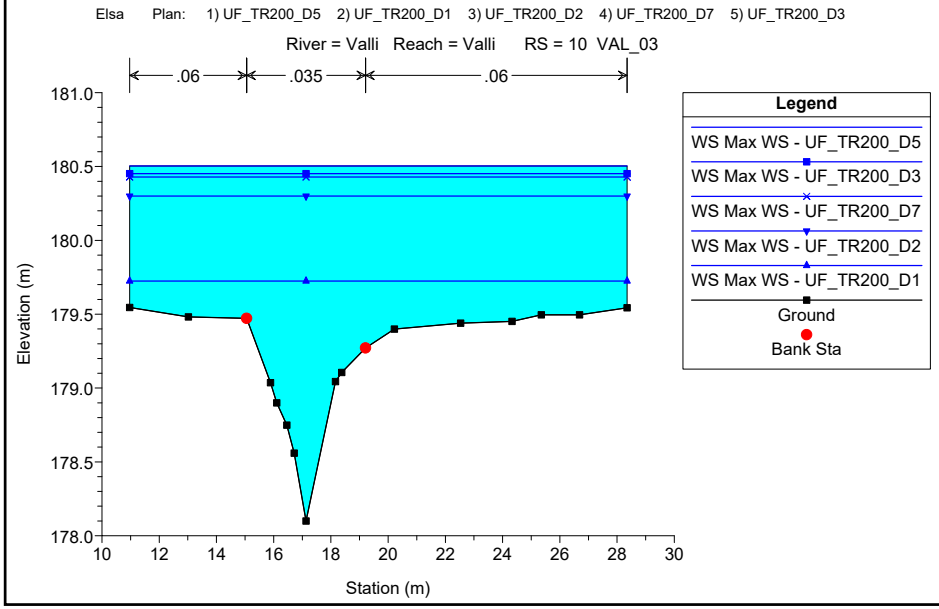

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 50 VAL_11
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 45 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 45 Culv
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 40 VAL_10
.06
.035
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta

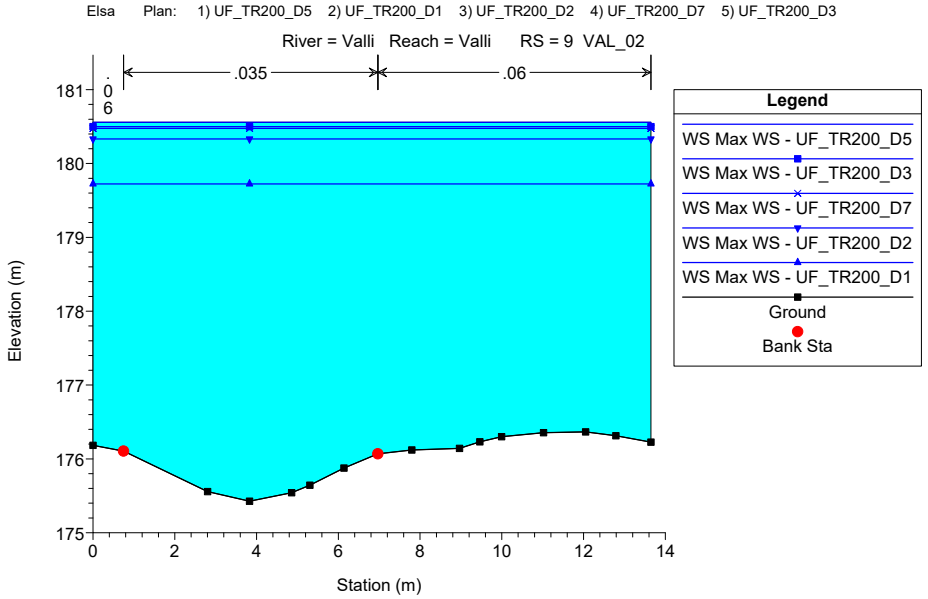

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 38 VAL_09
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 37 VAL_08
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 30 VAL_07
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D1
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D7
Ground
Ineff
Bank Sta

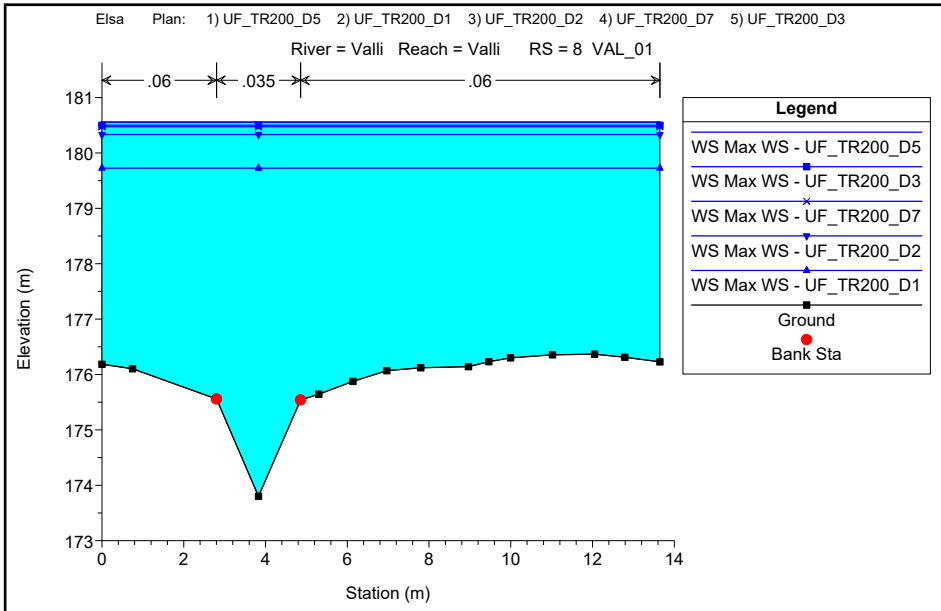

Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 25 Culv
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 24 VAL_06
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Ineff
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 22 VAL_05
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta
Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 21 Culv
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 21 Culv
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 20 VAL_04_muro a sx
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Levee
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 10 VAL_03
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 9 VAL_02
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta


Elsa Plan: 1) UF_TR200_D5 2) UF_TR200_D1 3) UF_TR200_D2 4) UF_TR200_D7 5) UF_TR200_D3
River = Valli Reach = Valli RS = 8 VAL_01
.06
.035
.06
Elevation (m)
Station (m)
Legend
WS Max WS - UF_TR200_D5
WS Max WS - UF_TR200_D3
WS Max WS - UF_TR200_D7
WS Max WS - UF_TR200_D2
WS Max WS - UF_TR200_D1
Ground
Bank Sta

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO PODERE VALLI

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Valli Reach: Valli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Valli	66	Max WS	UF_TR30_D1	3.00	228.83	229.10	229.24	229.62	0.145545		3.20		0.94	5.83	2.55
Valli	66	Max WS	UF_TR30_D5	0.80	228.83	228.99	229.06	229.23	0.147867		2.19		0.37	4.09	2.34
Valli	66	Max WS	UF_TR30_D7	0.60	228.83	228.98	229.03	229.15	0.106018		1.83		0.33	3.73	1.97
Valli	66	Max WS	UF_TR30_D2	2.00	228.83	229.05	229.17	229.52	0.176998		3.03		0.66	5.20	2.71
Valli	66	Max WS	UF_TR30_D3	1.50	228.83	229.02	229.13	229.43	0.191126		2.83		0.53	4.86	2.74
Valli	64.5	Max WS	UF_TR30_D1	3.00	224.00	224.19	224.29	224.70	0.362478		3.18		0.94	11.84	3.60
Valli	64.5	Max WS	UF_TR30_D5	0.80	224.00	224.15	224.18	224.25	0.115023		1.42		0.57	10.11	1.91
Valli	64.5	Max WS	UF_TR30_D7	0.60	224.00	224.13	224.17	224.25	0.205715		1.53		0.39	9.71	2.42
Valli	64.5	Max WS	UF_TR30_D2	2.00	224.00	224.17	224.25	224.52	0.299209		2.63		0.76	11.04	3.19
Valli	64.5	Max WS	UF_TR30_D3	1.50	224.00	224.16	224.23	224.41	0.235510		2.21		0.68	10.65	2.79
Valli	64	Max WS	UF_TR30_D1	3.00	218.96	219.22	219.33	219.57	0.117710		2.61		1.15	8.28	2.24
Valli	64	Max WS	UF_TR30_D5	0.80	218.96	219.10	219.16	219.32	0.148928		2.08		0.38	4.66	2.32
Valli	64	Max WS	UF_TR30_D7	0.60	218.96	219.07	219.14	219.35	0.249722		2.35		0.26	3.80	2.90
Valli	64	Max WS	UF_TR30_D2	2.00	218.96	219.17	219.27	219.50	0.121105		2.52		0.79	6.18	2.25
Valli	64	Max WS	UF_TR30_D3	1.50	218.96	219.15	219.24	219.43	0.131386		2.38		0.63	5.69	2.29
Valli	63.5	Max WS	UF_TR30_D1	3.00	214.03	214.28	214.36	214.55	0.080584		2.30		1.30	8.63	1.89
Valli	63.5	Max WS	UF_TR30_D5	0.80	214.03	214.17	214.22	214.32	0.106256		1.74		0.46	5.66	1.95
Valli	63.5	Max WS	UF_TR30_D7	0.60	214.03	214.16	214.20	214.27	0.088223		1.51		0.40	5.31	1.76
Valli	63.5	Max WS	UF_TR30_D2	2.00	214.03	214.23	214.30	214.46	0.098242		2.12		0.94	8.13	1.99
Valli	63.5	Max WS	UF_TR30_D3	1.50	214.03	214.21	214.27	214.42	0.119238		2.04		0.74	7.80	2.12
Valli	63	Max WS	UF_TR30_D1	3.00	209.78	210.24	210.40	210.76	0.086041		3.18		0.94	3.91	2.07
Valli	63	Max WS	UF_TR30_D5	0.80	209.78	210.05	210.14	210.32	0.089986		2.28		0.35	2.49	1.94
Valli	63	Max WS	UF_TR30_D7	0.60	209.78	210.03	210.10	210.24	0.084069		2.05		0.29	2.31	1.85
Valli	63	Max WS	UF_TR30_D2	2.00	209.78	210.17	210.31	210.60	0.087945		2.91		0.69	3.34	2.04
Valli	63	Max WS	UF_TR30_D3	1.50	209.78	210.13	210.24	210.49	0.085009		2.66		0.56	3.05	1.97
Valli	62	Max WS	UF_TR30_D1	2.99	205.87	206.27	206.40	206.64	0.068777		2.72		1.10	4.96	1.84
Valli	62	Max WS	UF_TR30_D5	0.80	205.87	206.09	206.16	206.30	0.079039		2.00		0.40	3.18	1.80
Valli	62	Max WS	UF_TR30_D7	0.66	205.87	206.07	206.13	206.26	0.084544		1.94		0.34	2.98	1.83
Valli	62	Max WS	UF_TR30_D2	2.00	205.87	206.20	206.30	206.52	0.071986		2.50		0.80	4.24	1.84
Valli	62	Max WS	UF_TR30_D3	1.50	205.87	206.16	206.25	206.45	0.078287		2.38		0.63	3.85	1.87
Valli	61	Max WS	UF_TR30_D1	2.99	202.84	203.11	203.19	203.35	0.056402		2.24	0.64	1.64	12.88	1.63
Valli	61	Max WS	UF_TR30_D5	0.80	202.84	203.00	203.03	203.10	0.046400		1.44		0.55	4.83	1.36
Valli	61	Max WS	UF_TR30_D7	0.73	202.84	202.99	203.02	203.09	0.044518		1.38		0.53	4.78	1.33
Valli	61	Max WS	UF_TR30_D2	2.00	202.84	203.07	203.12	203.30	0.071707		2.17		0.92	6.04	1.77
Valli	61	Max WS	UF_TR30_D3	1.50	202.84	203.04	203.10	203.23	0.065419		1.97		0.76	5.41	1.67
Valli	60.5	Max WS	UF_TR30_D1	2.99	196.91	197.49	197.79	199.14	0.267147		5.68		0.53	1.86	3.42
Valli	60.5	Max WS	UF_TR30_D5	0.80	196.91	197.26	197.46	198.14	0.268537		4.15		0.19	1.09	3.16
Valli	60.5	Max WS	UF_TR30_D7	0.71	196.91	197.24	197.44	198.07	0.266121		4.02		0.18	1.05	3.12
Valli	60.5	Max WS	UF_TR30_D2	2.00	196.91	197.40	197.71	198.78	0.264931		5.20		0.38	1.54	3.32
Valli	60.5	Max WS	UF_TR30_D3	1.50	196.91	197.35	197.63	198.54	0.263267		4.83		0.31	1.38	3.25
Valli	60.313	Max WS	UF_TR30_D1	2.99	195.38	195.80		195.86	0.018871	1.04	1.09		2.82	12.33	0.74
Valli	60.313	Max WS	UF_TR30_D5	0.80	195.38	195.69		195.70	0.011018	0.54	0.54		1.47	11.74	0.51
Valli	60.313	Max WS	UF_TR30_D7	0.70	195.38	195.68		195.69	0.010238	0.51	0.50		1.39	11.70	0.49
Valli	60.313	Max WS	UF_TR30_D2	2.00	195.38	195.76		195.80	0.014032	0.82	0.85		2.41	12.15	0.63
Valli	60.313	Max WS	UF_TR30_D3	1.50	195.38	195.74		195.77	0.012021	0.70	0.72		2.11	12.02	0.57
Valli	60.125	Max WS	UF_TR30_D1	2.99	194.03	194.48	194.56	194.89	0.207880	1.38	3.16	1.35	1.24	14.63	2.08
Valli	60.125	Max WS	UF_TR30_D5	0.80	194.03	194.34	194.44	194.62	0.197628		2.35	0.40	0.34	2.20	1.89
Valli	60.125	Max WS	UF_TR30_D7	0.70	194.03	194.33	194.42	194.59	0.201188		2.28	0.24	0.31	2.09	1.88
Valli	60.125	Max WS	UF_TR30_D2	2.00	194.03	194.45	194.53	194.93	0.237491	0.62	3.10	1.28	0.67	5.44	2.18
Valli	60.125	Max WS	UF_TR30_D3	1.50	194.03	194.42	194.51	194.79	0.212948	0.20	2.69	1.05	0.57	3.46	2.01
Valli	60.12			Lat Struct											
Valli	60.11			Lat Struct											
Valli	60	Max WS	UF_TR30_D1	2.99	192.28	193.27		193.27	0.000076	0.08	0.24	0.09	16.98	25.75	0.08
Valli	60	Max WS	UF_TR30_D5	0.80	192.28	193.11		193.11	0.000010	0.03	0.08	0.03	13.32	21.35	0.03
Valli	60	Max WS	UF_TR30_D7	0.70	192.28	193.10		193.10	0.000008	0.02	0.07	0.03	13.15	21.23	0.02
Valli	60	Max WS	UF_TR30_D2	2.00	192.28	193.22		193.22	0.000041	0.06	0.17	0.06	15.73	24.31	0.06
Valli	60	Max WS	UF_TR30_D3	1.50	192.28	193.18		193.18	0.000027	0.05	0.14	0.05	14.88	23.27	0.05
Valli	59			Culvert											
Valli	58	Max WS	UF_TR30_D1	2.99	190.35	190.40	190.86	1013.93	3390.029000		127.09		0.02	1.11	278.80
Valli	58	Max WS	UF_TR30_D5	0.80	190.35	190.37	190.63	7278.25	143988.700000		372.85		0.00	0.34	1488.32
Valli	58	Max WS	UF_TR30_D7	0.70	190.35	190.37	190.61	8176.00	185177.700000		395.76		0.00	0.30	1660.13
Valli	58	Max WS	UF_TR30_D2	2.00	190.35	190.38	190.77	2108.52	13685.900000		193.96		0.01	0.73	522.96
Valli	58	Max WS	UF_TR30_D3	1.50	190.35	190.38	190.72	3240.86	30774.580000		244.60		0.01	0.57	750.98
Valli	57.727	Max WS	UF_TR30_D1	2.99	189.77	189.98	190.38	210.23	29.332800		19.93		0.15	1.38	19.32
Valli	57.727	Max WS	UF_TR30_D5	0.80	189.77	189.81	190.20	684.33	5331.264000		98.48		0.01	0.34	203.79
Valli	57.727	Max WS	UF_TR30_D7	0.70	189.77	189.81	190.16	751.89	7043.406000		105.00		0.01	0.31	230.03
Valli	57.727	Max WS	UF_TR30_D2	2.00	189.77	189.89	190.32	257.85	193.650400		36.51		0.05	0.84	45.67
Valli	57.727	Max WS	UF_TR30_D3	1.50	189.77	189.86	190.28	335.43	653.674600		53.43		0.03	0.61	79.36
Valli	57.454	Max WS	UF_TR30_D1	2.99	189.36	189.78	189.95	190.34	0.228820		3.38	1.50	0.93	4.11	2.10
Valli	57.454	Max WS	UF_TR30_D5	0.69	189.36	189.60	189.67	189.81	0.167189		2.02		0.34	2.21	1.64
Valli	57.454	Max WS	UF_TR30_D7	0.69	189.36	189.60	189.67	189.81	0.167189		2.02		0.34	2.21	1.64
Valli	57.454	Max WS	UF_TR30_D2	2.00	189.36	189.68	189.85	190.41	0.432488		3.78		0.53	2.72	2.74
Valli	57.454	Max WS	UF_TR30_D3	1.50	189.36	189.63	189.80	190.32	0.486066		3.67		0.41	2.41	2.84
Valli	57.181	Max WS	UF_TR30_D1	2.99	188.89	189.17	189.55	193.50	2.978303		9.22		0.32	2.01	7.33
Valli	57.181	Max WS	UF_TR30_D5	0.80	188.89	188.97	189.27	221.84	149.864900		25.39		0.03	0.83	41.52
Valli	57.181	Max WS	UF_TR30_D7	0.70	188.89	188.96	189.25	232.63	243.140000		29.27		0.02	0.73	51.61
Valli	57.181	Max WS	UF_TR30_D2	2.00	188.89	189.08	189.45	196.40	8.292789		11.98		0.17	1.52	11.53
Valli	57.181	Max WS	UF_TR30_D3	1.50	188.89	189.03	189.39	200.17	19.221840		14.78		0.10	1.27	16.71
Valli	55.818	Max WS	UF_TR30_D1	2.98	184.27	184.82		184.91	0.013438	0.36	1.46	0.67	2.58	8.90	0.74
Valli	55.818	Max WS	UF_TR30_D5	0.80	184.27	184.59	184.59	184.66	0.027059		1.19	0.23	0.72	6.11	0.92
Valli	55.818	Max WS	UF_TR30_D7	0.67	184.27	184.57	184.57	184.64	0.033355		1.19	0.21	0.58	4.62	1.00
Valli	55.818	Max WS	UF_TR30_D2	2.00	184.27	184.75		184.82	0.014248	0.24	1.30	0.52	1.91	8.80	0.74
Valli	55.818	Max WS	UF_TR30_D3	1.50	184.27	184.70		184.77	0.016085	0.14	1.23	0.42	1.47	8.39	0.76
Valli	55	Max WS	UF_TR30_D1	2.68	184.21	184.76		184.83	0.007298		1.28	0.52	2.45	7.23	0.65
Valli	55	Max WS	UF_TR30_D5	0.80	184.21	184.55		184.59	0.007721		0.87	0.15	0.99	6.90	0.61
Valli	55	Max WS	UF_TR30_D7	0.67	184.21	184.53		184.56	0.007925		0.82	0.11	0.85	6.23	0.61
Valli	55	Max WS	UF_TR30_D2	1.91	184.21	184.69		184.75	0.007135		1.13	0.42	1.96	7.12	0.63
Valli	55	Max WS	UF_TR30_D3	1.49	184.21	184.64		184.70	0.007238		1.05	0.35	1.63	7.05	0.62
Valli	52.800	Max WS	UF_TR30_D1	2.96	183.93	184.48	184.47	184.63	0.012202	0.78	1.88	0.39	2.29	10.37	0.88
Valli	52.800	Max WS	UF_TR30_D5	0.80	183.93	184.23		184.31	0.015505	0.42	1.27	0.05	0.69	3.84	0.87
Valli	52.800	Max WS	UF_TR30_D7	0.67	183.93	184.20		184.28	0.015919	0.36	1.21		0.60	3.70	0.87
Valli	52.800	Max WS	UF_TR30_D2	2.00	183.93	184.39	184.38	184.52	0.012925	0.69	1.68	0.30	1.52	7.17	0.87
Valli	52.800	Max WS	UF_TR30_D3	1.50	183.93	184.33	184.31	184.44	0.013519	0.61	1.54	0.24	1.16	5.33	0.87

HEC-RAS River: Valli Reach: Valli Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Valli	50	Max WS	UF_TR30_D1	2.09	182.96	183.76		183.90	0.006018	0.45	1.71	0.46	1.58	3.31	0.65
Valli	50	Max WS	UF_TR30_D5	0.80	182.96	183.53		183.58	0.003558	0.29	1.01	0.28	0.93	2.51	0.46
Valli	50	Max WS	UF_TR30_D7	0.66	182.96	183.49		183.53	0.003340	0.26	0.92	0.25	0.83	2.42	0.44
Valli	50	Max WS	UF_TR30_D2	2.00	182.96	183.75		183.88	0.005840	0.44	1.66	0.46	1.54	3.21	0.63
Valli	50	Max WS	UF_TR30_D3	1.50	182.96	183.69		183.77	0.004589	0.38	1.38	0.41	1.35	2.84	0.55
Valli	45			Culvert											
Valli	40	Max WS	UF_TR30_D1	2.98	180.32	180.87		180.95	0.008801	0.49	1.49		3.16	12.74	0.70
Valli	40	Max WS	UF_TR30_D5	0.80	180.32	180.73	180.74	181.24	0.055607		3.16		0.25	12.28	1.76
Valli	40	Max WS	UF_TR30_D7	0.63	180.32	180.73	180.74	181.06	0.036127		2.53		0.25	11.77	1.41
Valli	40	Max WS	UF_TR30_D2	2.00	180.32	180.82		180.88	0.006845	0.35	1.23		2.53	12.74	0.61
Valli	40	Max WS	UF_TR30_D3	1.50	180.32	180.79		180.84	0.005509	0.26	1.05		2.15	12.74	0.55
Valli	39.91			Lat Struct											
Valli	39.81			Lat Struct											
Valli	38	Max WS	UF_TR30_D1	1.73	180.17	180.83		180.90	0.006538	0.39	1.26	0.21	2.19	9.98	0.61
Valli	38	Max WS	UF_TR30_D5	0.68	180.17	180.66		180.72	0.009244	0.13	1.11		0.65	4.21	0.67
Valli	38	Max WS	UF_TR30_D7	0.61	180.17	180.64		180.69	0.009101	0.11	1.06		0.58	3.09	0.66
Valli	38	Max WS	UF_TR30_D2	1.24	180.17	180.78		180.84	0.006143	0.29	1.12	0.11	1.67	9.82	0.58
Valli	38	Max WS	UF_TR30_D3	0.99	180.17	180.75		180.80	0.006078	0.23	1.05	0.06	1.35	9.60	0.57
Valli	37	Max WS	UF_TR30_D1	2.45	179.67	180.42		180.52	0.009360		1.46	0.39	1.96	6.98	0.73
Valli	37	Max WS	UF_TR30_D5	0.79	179.67	180.31		180.33	0.002663		0.67	0.05	1.22	6.75	0.38
Valli	37	Max WS	UF_TR30_D7	0.79	179.67	180.31		180.33	0.002663		0.67	0.05	1.22	6.75	0.38
Valli	37	Max WS	UF_TR30_D2	1.84	179.67	180.38		180.45	0.007574		1.25	0.27	1.68	6.90	0.65
Valli	37	Max WS	UF_TR30_D3	1.47	179.67	180.35		180.41	0.006038		1.08	0.19	1.52	6.85	0.57
Valli	31.7			Lat Struct											
Valli	30	Max WS	UF_TR30_D1	0.59	179.40	180.39		180.40	0.000150	0.01	0.24	0.06	2.81	6.73	0.09
Valli	30	Max WS	UF_TR30_D5	0.25	179.40	180.32		180.32	0.000128		0.29		0.87	6.51	0.10
Valli	30	Max WS	UF_TR30_D7	0.25	179.40	180.32		180.32	0.000128		0.29		0.87	6.51	0.10
Valli	30	Max WS	UF_TR30_D2	0.45	179.40	180.37		180.37	0.000105		0.19	0.04	2.63	6.57	0.08
Valli	30	Max WS	UF_TR30_D3	0.26	179.40	180.35		180.35	0.000038		0.12	0.02	2.55	6.56	0.05
Valli	25			Culvert											
Valli	24	Max WS	UF_TR30_D1	0.59	179.40	180.11		180.15	0.001701		0.88		0.66	3.09	0.35
Valli	24	Max WS	UF_TR30_D5	0.22	179.40	180.06		180.07	0.000311		0.36		0.61	2.94	0.15
Valli	24	Max WS	UF_TR30_D7	0.22	179.40	180.05		180.06	0.000324		0.36		0.61	2.93	0.15
Valli	24	Max WS	UF_TR30_D2	0.45	179.40	180.08		180.11	0.001153		0.71		0.64	3.02	0.28
Valli	24	Max WS	UF_TR30_D3	0.29	179.40	180.03		180.04	0.000652		0.50		0.58	2.86	0.21
Valli	22	Max WS	UF_TR30_D1	0.58	179.40	180.13		180.13	0.000244		0.27	0.07	2.36	6.09	0.12
Valli	22	Max WS	UF_TR30_D5	0.22	179.40	180.06		180.06	0.000056		0.12	0.02	1.94	6.09	0.06
Valli	22	Max WS	UF_TR30_D7	0.22	179.40	180.06		180.06	0.000060		0.12	0.02	1.92	6.05	0.06
Valli	22	Max WS	UF_TR30_D2	0.45	179.40	180.10		180.10	0.000187		0.23	0.05	2.16	6.09	0.10
Valli	22	Max WS	UF_TR30_D3	0.30	179.40	180.04		180.04	0.000133		0.18	0.03	1.79	5.81	0.09
Valli	21			Culvert											
Valli	20	Max WS	UF_TR30_D1	0.53	178.39	179.00		179.02	0.001244		0.52	0.05	1.02	2.27	0.25
Valli	20	Max WS	UF_TR30_D5	0.22	178.39	179.76		179.76	0.000009		0.07	0.01	3.72	10.34	0.02
Valli	20	Max WS	UF_TR30_D7	0.22	178.39	179.72		179.72	0.000010		0.08	0.02	3.09	3.84	0.02
Valli	20	Max WS	UF_TR30_D2	0.24	178.39	179.36		179.36	0.000042		0.13	0.03	1.94	2.91	0.05
Valli	20	Max WS	UF_TR30_D3	0.24	178.39	179.61		179.61	0.000017		0.09	0.03	2.72	3.19	0.03
Valli	19			Lat Struct											
Valli	18			Lat Struct											
Valli	10	Max WS	UF_TR30_D1	0.61	178.10	178.73		178.85	0.022039		1.53		0.40	1.32	0.89
Valli	10	Max WS	UF_TR30_D5	-0.22	178.10	179.76		179.76	0.000004	-0.01	-0.05	-0.01	7.54	17.38	0.02
Valli	10	Max WS	UF_TR30_D7	0.01	178.10	179.72		179.72	0.000000	0.00	0.00	0.00	6.91	17.38	0.00
Valli	10	Max WS	UF_TR30_D2	0.34	178.10	179.36		179.36	0.000113		0.17	0.02	2.02	4.61	0.08
Valli	10	Max WS	UF_TR30_D3	0.34	178.10	179.61		179.61	0.000023	0.02	0.10	0.02	5.01	17.38	0.04
Valli	9	Max WS	UF_TR30_D1	0.34	175.43	178.70		178.70	0.000000	0.00	0.01	0.01	36.95	13.65	0.00
Valli	9	Max WS	UF_TR30_D5	-0.22	175.43	179.76		179.76	0.000000	0.00	-0.01	0.00	51.33	13.65	0.00
Valli	9	Max WS	UF_TR30_D7	0.01	175.43	179.72		179.72	0.000000	0.00	0.00	0.00	50.84	13.65	0.00
Valli	9	Max WS	UF_TR30_D2	0.34	175.43	179.36		179.36	0.000000	0.00	0.01	0.00	45.85	13.65	0.00
Valli	9	Max WS	UF_TR30_D3	0.34	175.43	179.61		179.61	0.000000	0.00	0.01	0.00	49.35	13.65	0.00
Valli	8	Max WS	UF_TR30_D1	0.34	173.80	178.70		178.70	0.000000	0.01	0.01	0.01	38.62	13.65	0.00
Valli	8	Max WS	UF_TR30_D5	-0.22	173.80	179.76		179.76	0.000000	0.00	-0.01	0.00	53.00	13.65	0.00
Valli	8	Max WS	UF_TR30_D7	0.01	173.80	179.72		179.72	0.000000	0.00	0.00	0.00	52.51	13.65	0.00
Valli	8	Max WS	UF_TR30_D2	0.34	173.80	179.36		179.36	0.000000	0.00	0.01	0.01	47.53	13.65	0.00
Valli	8	Max WS	UF_TR30_D3	0.34	173.80	179.61		179.61	0.000000	0.00	0.01	0.01	51.02	13.65	0.00

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "Elsa_d"

FOSSO PODERE VALLI

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h, 5h, 7h

Dati idraulici

HEC-RAS River: Valli Reach: Valli Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Valli	66	Max WS	UF_TR200_D5	1.20	228.83	229.01	229.10	229.36	0.191213		2.64		0.46	4.66	2.70
Valli	66	Max WS	UF_TR200_D1	4.20	228.83	229.16	229.31	229.68	0.108527	0.16	3.21		1.31	6.86	2.29
Valli	66	Max WS	UF_TR200_D2	2.80	228.83	229.09	229.23	229.61	0.151421		3.18		0.88	5.71	2.59
Valli	66	Max WS	UF_TR200_D7	1.00	228.83	229.00	229.08	229.30	0.183175		2.45		0.41	4.50	2.61
Valli	66	Max WS	UF_TR200_D3	2.10	228.83	229.05	229.18	229.53	0.174796		3.06		0.69	5.26	2.70
Valli	64.5	Max WS	UF_TR200_D5	1.20	224.00	224.16	224.21	224.34	0.186850		1.90		0.63	10.42	2.47
Valli	64.5	Max WS	UF_TR200_D1	4.20	224.00	224.20	224.33	224.87	0.396181	0.29	3.63		1.16	13.27	3.84
Valli	64.5	Max WS	UF_TR200_D2	2.80	224.00	224.18	224.28	224.67	0.353672		3.09		0.91	11.69	3.54
Valli	64.5	Max WS	UF_TR200_D7	1.00	224.00	224.15	224.20	224.30	0.150917		1.67		0.60	10.26	2.20
Valli	64.5	Max WS	UF_TR200_D3	2.10	224.00	224.17	224.26	224.54	0.309608		2.70		0.78	11.11	3.25
Valli	64	Max WS	UF_TR200_D5	1.20	218.96	219.13	219.21	219.38	0.130481		2.23		0.54	5.35	2.24
Valli	64	Max WS	UF_TR200_D1	4.20	218.96	219.26	219.38	219.70	0.129256		2.94		1.43	9.29	2.39
Valli	64	Max WS	UF_TR200_D2	2.80	218.96	219.22	219.32	219.56	0.115012		2.60		1.08	7.69	2.22
Valli	64	Max WS	UF_TR200_D7	1.00	218.96	219.12	219.18	219.34	0.124690		2.08		0.48	5.13	2.17
Valli	64	Max WS	UF_TR200_D3	2.10	218.96	219.18	219.28	219.51	0.118109		2.54		0.83	6.26	2.23
Valli	63.5	Max WS	UF_TR200_D5	1.20	214.03	214.19	214.25	214.39	0.136414		1.99		0.60	7.39	2.22
Valli	63.5	Max WS	UF_TR200_D1	4.20	214.03	214.31	214.42	214.66	0.081967		2.60		1.62	9.01	1.96
Valli	63.5	Max WS	UF_TR200_D2	2.80	214.03	214.27	214.35	214.53	0.079403		2.23		1.25	8.57	1.86
Valli	63.5	Max WS	UF_TR200_D7	1.00	214.03	214.18	214.23	214.36	0.127292		1.90		0.53	6.51	2.14
Valli	63.5	Max WS	UF_TR200_D3	2.10	214.03	214.24	214.31	214.47	0.093837		2.13		0.99	8.20	1.96
Valli	63	Max WS	UF_TR200_D5	1.20	209.78	210.10	210.20	210.43	0.092033		2.57		0.47	2.81	2.02
Valli	63	Max WS	UF_TR200_D1	4.20	209.78	210.30	210.49	210.92	0.088250		3.49		1.20	4.44	2.14
Valli	63	Max WS	UF_TR200_D2	2.80	209.78	210.23	210.38	210.73	0.086674		3.14		0.89	3.80	2.07
Valli	63	Max WS	UF_TR200_D7	1.00	209.78	210.07	210.17	210.38	0.093424		2.46		0.41	2.65	2.01
Valli	63	Max WS	UF_TR200_D3	2.10	209.78	210.18	210.31	210.62	0.088441		2.95		0.71	3.39	2.05
Valli	62	Max WS	UF_TR200_D5	1.20	205.87	206.13	206.21	206.39	0.077481		2.22		0.54	3.60	1.84
Valli	62	Max WS	UF_TR200_D1	4.19	205.87	206.33	206.47	206.77	0.068636		2.94		1.43	5.72	1.88
Valli	62	Max WS	UF_TR200_D2	2.80	205.87	206.25	206.38	206.62	0.069712		2.69		1.04	4.80	1.85
Valli	62	Max WS	UF_TR200_D7	1.00	205.87	206.12	206.19	206.34	0.075021		2.09		0.48	3.42	1.79
Valli	62	Max WS	UF_TR200_D3	2.10	205.87	206.21	206.31	206.53	0.071985		2.53		0.83	4.31	1.84
Valli	61	Max WS	UF_TR200_D5	1.20	202.84	203.02	203.07	203.18	0.060619		1.80		0.67	5.09	1.59
Valli	61	Max WS	UF_TR200_D1	4.19	202.84	203.14	203.24	203.45	0.061407		2.59	0.77	2.10	14.71	1.74
Valli	61	Max WS	UF_TR200_D2	2.80	202.84	203.10	203.18	203.34	0.059289		2.23	0.61	1.53	12.63	1.66
Valli	61	Max WS	UF_TR200_D7	1.00	202.84	203.01	203.05	203.14	0.054266		1.64		0.61	4.96	1.49
Valli	61	Max WS	UF_TR200_D3	2.10	202.84	203.07	203.14	203.32	0.073263		2.21		0.95	6.14	1.80
Valli	60.5	Max WS	UF_TR200_D5	1.20	196.91	197.32	197.59	198.33	0.245225		4.44		0.27	1.29	3.10
Valli	60.5	Max WS	UF_TR200_D1	4.19	196.91	197.57	197.85	199.10	0.270322		5.52	0.92	0.82	4.98	3.49
Valli	60.5	Max WS	UF_TR200_D2	2.80	196.91	197.48	197.78	199.07	0.257834		5.58		0.50	1.77	3.35
Valli	60.5	Max WS	UF_TR200_D7	1.00	196.91	197.29	197.55	198.25	0.259444		4.34		0.23	1.19	3.15
Valli	60.5	Max WS	UF_TR200_D3	2.10	196.91	197.41	197.72	198.82	0.262791		5.25		0.40	1.57	3.32
Valli	60.313	Max WS	UF_TR200_D5	1.20	195.38	195.72		195.74	0.011732	0.64	0.65		1.86	11.91	0.55
Valli	60.313	Max WS	UF_TR200_D1	4.19	195.38	195.83		195.92	0.023423	1.26	1.32		3.26	12.51	0.85
Valli	60.313	Max WS	UF_TR200_D2	2.80	195.38	195.79		195.85	0.018196	1.01	1.05		2.74	12.29	0.73
Valli	60.313	Max WS	UF_TR200_D7	1.00	195.38	195.70		195.72	0.011687	0.60	0.60		1.66	11.82	0.54
Valli	60.313	Max WS	UF_TR200_D3	2.10	195.38	195.77		195.81	0.014656	0.85	0.87		2.45	12.17	0.64
Valli	60.125	Max WS	UF_TR200_D5	1.20	194.03	194.40	194.49	194.72	0.204173		2.52	0.85	0.48	2.99	1.95
Valli	60.125	Max WS	UF_TR200_D1	4.19	194.03	194.50	194.60	194.92	0.198250	1.84	3.32	1.47	1.64	14.94	2.07
Valli	60.125	Max WS	UF_TR200_D2	2.80	194.03	194.47	194.56	194.88	0.211422	1.29	3.14	1.34	1.17	14.57	2.09
Valli	60.125	Max WS	UF_TR200_D7	1.00	194.03	194.37	194.48	194.68	0.204843		2.45	0.66	0.41	2.62	1.94
Valli	60.125	Max WS	UF_TR200_D3	2.10	194.03	194.45	194.53	194.96	0.247889	0.66	3.20	1.32	0.69	5.88	2.23
Valli	60.12			Lat Struct											
Valli	60.11			Lat Struct											
Valli	60	Max WS	UF_TR200_D5	1.20	192.28	193.15		193.16	0.000019	0.04	0.11	0.04	14.28	22.52	0.04
Valli	60	Max WS	UF_TR200_D1	4.19	192.28	193.32		193.32	0.000124	0.10	0.32	0.11	18.35	27.55	0.10
Valli	60	Max WS	UF_TR200_D2	2.80	192.28	193.26		193.26	0.000069	0.08	0.23	0.08	16.78	25.52	0.08
Valli	60	Max WS	UF_TR200_D7	1.00	192.28	193.13		193.13	0.000014	0.03	0.10	0.04	13.78	21.87	0.03
Valli	60	Max WS	UF_TR200_D3	2.10	192.28	193.22		193.22	0.000044	0.06	0.18	0.07	15.88	24.48	0.06
Valli	59			Culvert											
Valli	58	Max WS	UF_TR200_D5	1.20	190.35	190.37	190.68	4271.29	52656.610000		282.91		0.00	0.47	952.57
Valli	58	Max WS	UF_TR200_D1	4.19	190.35	190.42	190.92	477.12	592.714700		74.99		0.06	1.57	127.01
Valli	58	Max WS	UF_TR200_D2	2.80	190.35	190.39	190.85	1164.38	4429.390000		138.21		0.02	1.03	314.74
Valli	58	Max WS	UF_TR200_D7	1.00	190.35	190.37	190.66	5266.24	79524.140000		315.52		0.00	0.41	1142.58
Valli	58	Max WS	UF_TR200_D3	2.10	190.35	190.38	190.78	1977.90	12056.160000		187.24		0.01	0.77	494.30
Valli	57.727	Max WS	UF_TR200_D5	1.20	189.77	189.84	190.25	431.36	1507.996000		68.83		0.02	0.48	115.80
Valli	57.727	Max WS	UF_TR200_D1	4.19	189.77	190.09	190.44	197.18	5.772897		11.79		0.36	2.12	9.21
Valli	57.727	Max WS	UF_TR200_D2	2.80	189.77	189.96	190.37	214.77	40.190760		22.06		0.13	1.27	22.31
Valli	57.727	Max WS	UF_TR200_D7	1.00	189.77	189.82	190.23	536.47	2796.085000		82.46		0.01	0.41	152.85
Valli	57.727	Max WS	UF_TR200_D3	2.10	189.77	189.90	190.33	249.07	155.707500		34.07		0.06	0.89	41.36
Valli	57.454	Max WS	UF_TR200_D5	1.20	189.36	189.61	189.76	190.19	0.455495		3.38		0.35	2.25	2.72
Valli	57.454	Max WS	UF_TR200_D1	4.17	189.36	189.91	190.04	190.34	0.117691		2.99	1.78	1.47	4.40	1.58
Valli	57.454	Max WS	UF_TR200_D2	2.80	189.36	189.76	189.93	190.36	0.262945		3.47	1.37	0.85	4.06	2.22
Valli	57.454	Max WS	UF_TR200_D7	0.69	189.36	189.60	189.67	189.81	0.167189		2.02		0.34	2.21	1.64
Valli	57.454	Max WS	UF_TR200_D3	2.10	189.36	189.69	189.86	190.41	0.422406		3.77		0.56	2.84	2.71
Valli	57.181	Max WS	UF_TR200_D5	1.20	188.89	189.00	189.34	204.91	38.184850		17.67		0.07	1.09	22.64
Valli	57.181	Max WS	UF_TR200_D1	4.13	188.89	189.27	189.66	192.18	1.401523		7.56		0.55	2.58	5.25
Valli	57.181	Max WS	UF_TR200_D2	2.80	188.89	189.15	189.54	193.84	3.469327		9.59		0.29	1.91	7.84
Valli	57.181	Max WS	UF_TR200_D7	1.00	188.89	188.98	189.30	210.76	70.018730		20.67		0.05	0.97	29.60
Valli	57.181	Max WS	UF_TR200_D3	2.10	188.89	189.09	189.46	195.92	7.231435		11.57		0.18	1.56	10.85
Valli	55.818	Max WS	UF_TR200_D5	1.20	184.27	184.66		184.73	0.018457		1.19	0.39	1.17	7.47	0.80
Valli	55.818	Max WS	UF_TR200_D1	4.09	184.27	184.89		185.00	0.014089	0.46	1.65	0.81	3.15	8.98	0.78
Valli	55.818	Max WS	UF_TR200_D2	2.79	184.27	184.81		184.90	0.013271	0.34	1.42	0.64	2.48	8.88	0.74
Valli	55.818	Max WS	UF_TR200_D7	1.00	184.27	184.63	184.62	184.70	0.020330		1.16	0.33	0.97	6.90	0.82
Valli	55.818	Max WS	UF_TR200_D3	2.10	184.27	184.76		184.83	0.014069	0.25	1.32	0.53	1.99	8.81	0.74
Valli	55	Max WS	UF_TR200_D5	1.20	184.21	184.61		184.66	0.007198		0.97	0.28	1.40	7.00	0.61
Valli	55	Max WS	UF_TR200_D1	3.54	184.21	184.82		184.91	0.008081		1.45	0.62	2.86	7.32	0.70
Valli	55	Max WS	UF_TR200_D2	2.53	184.21	184.75		184.82	0.007088		1.24	0.50	2.38	7.22	0.64
Valli	55	Max WS	UF_TR200_D7	1.00	184.21	184.59		184.63	0.006998		0.91	0.23	1.23	6.96	0.59
Valli	55	Max WS	UF_TR200_D3	1.99	184.21	184.70		184.76	0.007078		1.15	0.43	2.02	7.14	0.63
Valli	52.800	Max WS	UF_TR200_D5	1.20	183.93	184.29	184.27	184.39	0.014129	0.55	1.44	0.21	0.96	4.52	0.87
Valli	52.800	Max WS	UF_TR200_D1	3.97	183.93	184.55	184.57	184.72	0.011424	0.83	2.01	0.48	3.18	12.78	0.87
Valli	52.800	Max WS	UF_TR200_D2	2.79	183.93	184.47	184.46	184.61	0.012230	0.76	1.85	0.39	2.15	9.60	0.87
Valli	52.800	Max WS	UF_TR200_D7	1.00	183.93	184.26	184.24	184.35	0.014682	0.49	1.36	0.15	0.83	4.20	0.87
Valli	52.800	Max WS	UF_TR200_D3	2.10	183.93	184.40	184.39	184.53	0.012736	0.70	1.70	0.31	1.60	7.54	0.87

HEC-RAS River: Valli Reach: Valli Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Left	Vel Chnl	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Valli	50	Max WS	UF_TR200_D5	1.20	182.96	183.63		183.70	0.004150	0.34	1.23	0.36	1.19	2.71	0.52
Valli	50	Max WS	UF_TR200_D1	4.04	182.96	183.91		184.22	0.011043	0.66	2.63	0.66	2.17	4.50	0.90
Valli	50	Max WS	UF_TR200_D2	2.09	182.96	183.76		183.90	0.006016	0.45	1.71	0.46	1.58	3.31	0.65
Valli	50	Max WS	UF_TR200_D7	1.00	182.96	183.58		183.64	0.003789	0.32	1.12	0.32	1.07	2.62	0.49
Valli	50	Max WS	UF_TR200_D3	2.09	182.96	183.76		183.90	0.006014	0.45	1.71	0.46	1.58	3.31	0.64
Valli	45			Culvert											
Valli	40	Max WS	UF_TR200_D5	1.20	180.32	180.76		180.80	0.004745	0.21	0.94		1.86	12.74	0.50
Valli	40	Max WS	UF_TR200_D1	4.04	180.32	180.91		181.02	0.010421	0.62	1.71		3.74	12.74	0.77
Valli	40	Max WS	UF_TR200_D2	2.80	180.32	180.86		180.94	0.008497	0.47	1.45		3.05	12.74	0.69
Valli	40	Max WS	UF_TR200_D7	1.00	180.32	180.74		180.78	0.004310	0.16	0.87		1.60	12.74	0.48
Valli	40	Max WS	UF_TR200_D3	2.10	180.32	180.82		180.89	0.007084	0.36	1.26		2.60	12.74	0.63
Valli	39.91			Lat Struct											
Valli	39.81			Lat Struct											
Valli	38	Max WS	UF_TR200_D5	0.83	180.17	180.73		180.77	0.005918	0.17	0.99		1.13	9.38	0.55
Valli	38	Max WS	UF_TR200_D1	2.24	180.17	180.88		180.95	0.007015	0.47	1.39	0.29	2.60	9.98	0.64
Valli	38	Max WS	UF_TR200_D2	1.66	180.17	180.82		180.89	0.006659	0.38	1.25	0.19	2.09	9.98	0.61
Valli	38	Max WS	UF_TR200_D7	0.78	180.17	180.69	180.60	180.75	0.007961	0.16	1.10		0.85	6.84	0.63
Valli	38	Max WS	UF_TR200_D3	1.29	180.17	180.79		180.84	0.006170	0.30	1.14	0.12	1.74	9.86	0.58
Valli	37	Max WS	UF_TR200_D5	0.55	179.67	180.46		180.46	0.000336		0.29	0.09	2.23	7.07	0.14
Valli	37	Max WS	UF_TR200_D1	2.85	179.67	180.44		180.56	0.010240		1.57	0.45	2.13	7.04	0.77
Valli	37	Max WS	UF_TR200_D2	2.38	179.67	180.41		180.51	0.009174		1.44	0.37	1.92	6.97	0.72
Valli	37	Max WS	UF_TR200_D7	0.57	179.67	180.38		180.39	0.000715		0.38	0.08	1.70	6.90	0.20
Valli	37	Max WS	UF_TR200_D3	0.54	179.67	180.40		180.41	0.000536		0.34	0.08	1.84	6.95	0.17
Valli	31.7			Lat Struct											
Valli	30	Max WS	UF_TR200_D5	-1.27	179.40	180.45		180.46	0.000516	-0.02	-0.46	-0.13	3.26	15.53	0.18
Valli	30	Max WS	UF_TR200_D1	0.65	179.40	180.41		180.41	0.000169	0.01	0.26	0.06	2.93	6.91	0.10
Valli	30	Max WS	UF_TR200_D2	0.57	179.40	180.39		180.39	0.000144	0.01	0.23	0.05	2.79	6.70	0.09
Valli	30	Max WS	UF_TR200_D7	-0.69	179.40	180.38		180.39	0.000219	0.00	-0.28	-0.06	2.75	6.63	0.11
Valli	30	Max WS	UF_TR200_D3	-0.82	179.40	180.40		180.40	0.000286	-0.01	-0.33	-0.08	2.84	6.77	0.13
Valli	25			Culvert											
Valli	24	Max WS	UF_TR200_D5	-1.27	179.40	180.52		180.53	0.000357	-0.07	-0.41	-0.12	3.71	7.24	0.15
Valli	24	Max WS	UF_TR200_D1	0.65	179.40	180.12		180.17	0.002021		0.97		0.67	3.12	0.38
Valli	24	Max WS	UF_TR200_D2	-0.17	179.40	180.37		180.37	0.000014		-0.07	-0.02	2.65	6.58	0.03
Valli	24	Max WS	UF_TR200_D7	-0.73	179.40	180.46		180.46	0.000163	-0.03	-0.26	-0.07	3.25	7.24	0.10
Valli	24	Max WS	UF_TR200_D3	-0.82	179.40	180.47		180.48	0.000187	-0.03	-0.29	-0.08	3.37	7.24	0.11
Valli	22	Max WS	UF_TR200_D5	-3.99	179.40	180.44		180.49	0.002330		-1.09	-0.42	4.22	6.09	0.38
Valli	22	Max WS	UF_TR200_D1	0.65	179.40	180.14		180.15	0.000284		0.30	0.08	2.43	6.09	0.13
Valli	22	Max WS	UF_TR200_D2	-1.59	179.40	180.35		180.36	0.000548		-0.50	-0.18	3.67	6.09	0.19
Valli	22	Max WS	UF_TR200_D7	-2.97	179.40	180.40		180.43	0.001510		-0.86	-0.32	3.99	6.09	0.31
Valli	22	Max WS	UF_TR200_D3	-3.22	179.40	180.41		180.45	0.001705		-0.92	-0.35	4.05	6.09	0.33
Valli	21			Culvert											
Valli	20	Max WS	UF_TR200_D5	-3.99	178.39	180.64		180.64	0.000216		-0.46	-0.22	12.79	10.34	0.10
Valli	20	Max WS	UF_TR200_D1	0.22	178.39	179.72		179.72	0.000010		0.08	0.02	3.10	3.85	0.02
Valli	20	Max WS	UF_TR200_D2	-1.59	178.39	180.38		180.39	0.000062		-0.23	-0.10	10.18	10.34	0.06
Valli	20	Max WS	UF_TR200_D7	-2.99	178.39	180.54		180.55	0.000149		-0.37	-0.17	11.84	10.34	0.09
Valli	20	Max WS	UF_TR200_D3	-3.22	178.39	180.57		180.58	0.000162		-0.39	-0.18	12.13	10.34	0.09
Valli	19			Lat Struct											
Valli	18			Lat Struct											
Valli	10	Max WS	UF_TR200_D5	-17.08	178.10	180.50		180.56	0.001439	-0.55	-1.32	-0.61	20.48	17.38	0.33
Valli	10	Max WS	UF_TR200_D1	-0.02	178.10	179.72		179.72	0.000000	0.00	-0.01	0.00	6.94	17.38	0.00
Valli	10	Max WS	UF_TR200_D2	-11.05	178.10	180.30		180.33	0.001053	-0.42	-1.04	-0.46	16.95	17.38	0.28
Valli	10	Max WS	UF_TR200_D7	-14.78	178.10	180.43		180.48	0.001307	-0.50	-1.22	-0.56	19.19	17.38	0.31
Valli	10	Max WS	UF_TR200_D3	-15.43	178.10	180.45		180.50	0.001341	-0.52	-1.25	-0.57	19.59	17.38	0.32
Valli	9	Max WS	UF_TR200_D5	-17.09	175.43	180.56		180.56	0.000026	-0.06	-0.41	-0.16	62.23	13.65	0.06
Valli	9	Max WS	UF_TR200_D1	-0.03	175.43	179.72		179.72	0.000000	0.00	0.00	0.00	50.86	13.65	0.00
Valli	9	Max WS	UF_TR200_D2	-11.05	175.43	180.33		180.33	0.000013	-0.04	-0.28	-0.11	59.16	13.65	0.04
Valli	9	Max WS	UF_TR200_D7	-14.78	175.43	180.47		180.48	0.000020	-0.06	-0.36	-0.14	61.10	13.65	0.05
Valli	9	Max WS	UF_TR200_D3	-15.43	175.43	180.50		180.50	0.000022	-0.06	-0.37	-0.15	61.44	13.65	0.05
Valli	8	Max WS	UF_TR200_D5	-17.09	173.80	180.56		180.56	0.000052	-0.18	-0.43	-0.25	63.90	13.65	0.06
Valli	8	Max WS	UF_TR200_D1	-0.50	173.80	179.73		179.73	0.000000	-0.01	-0.01	-0.01	52.56	13.65	0.00
Valli	8	Max WS	UF_TR200_D2	-11.05	173.80	180.33		180.33	0.000025	-0.12	-0.29	-0.17	60.82	13.65	0.04
Valli	8	Max WS	UF_TR200_D7	-14.78	173.80	180.47		180.48	0.000041	-0.16	-0.38	-0.22	62.77	13.65	0.05
Valli	8	Max WS	UF_TR200_D3	-15.44	173.80	180.50		180.50	0.000044	-0.16	-0.39	-0.23	63.12	13.65	0.05

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

BOTRO DEL CONVENTO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

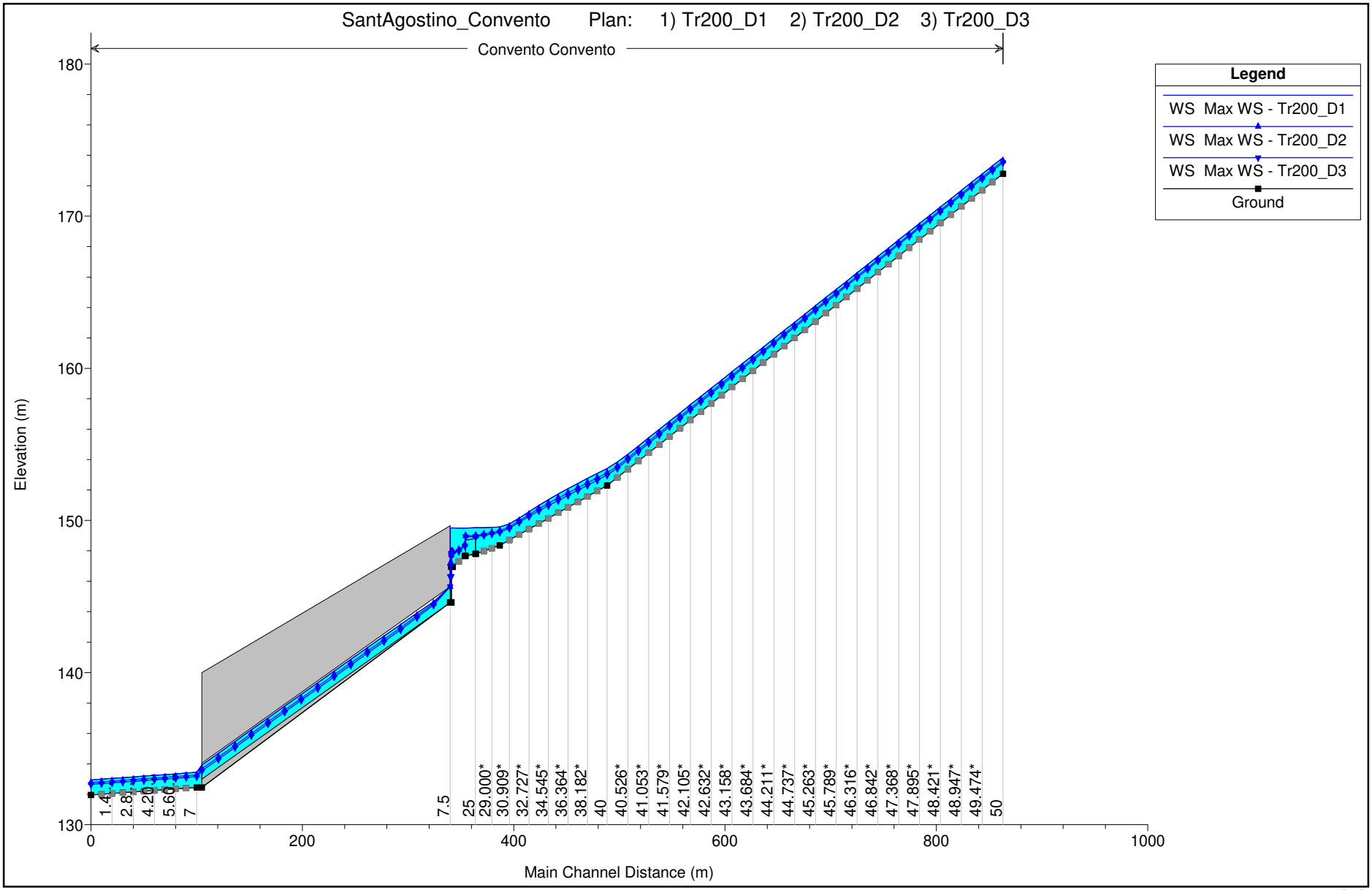
MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

BOTRO DEL CONVENTO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
Convento Convento
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Elevation (m)
Main Channel Distance (m)
180
170
160
150
140
130
0
200
400
600
800
1000
1.4
2.8
4.2
5.6
7
7.5
25
29.000*
30.909*
32.727*
34.545*
36.364*
38.182*
40
40.526*
41.053*
41.579*
42.105*
42.632*
43.158*
43.684*
44.211*
44.737*
45.263*
45.789*
46.316*
46.842*
47.368*
47.895*
48.421*
48.947*
49.474*
50

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

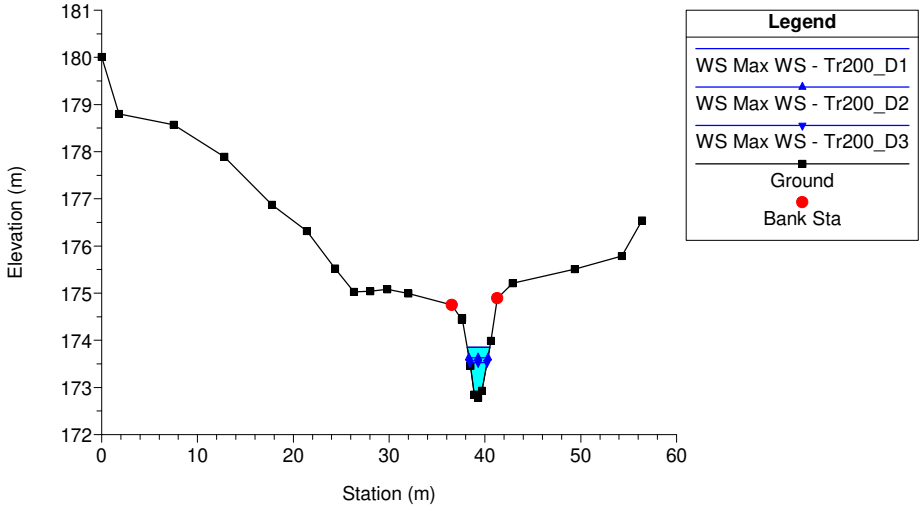
BOTRO DEL CONVENTO

MODELLAZIONE PER TR=200 anni

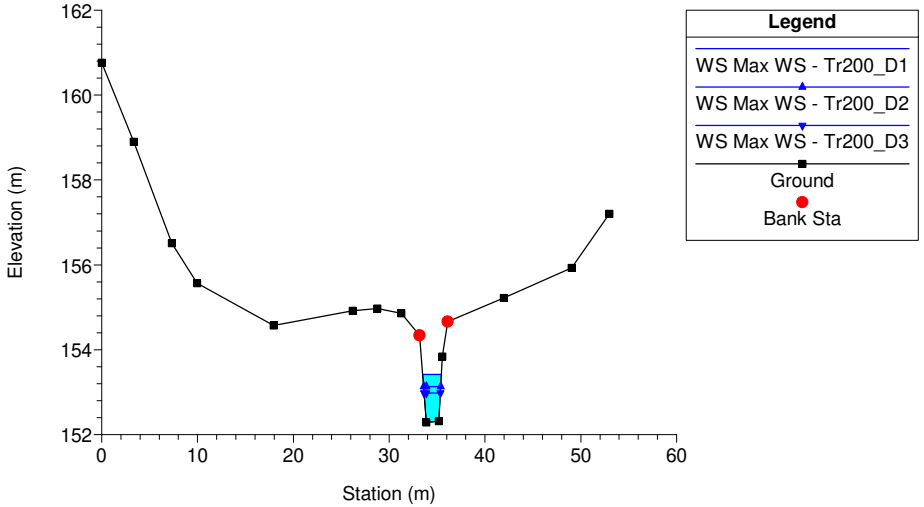
DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

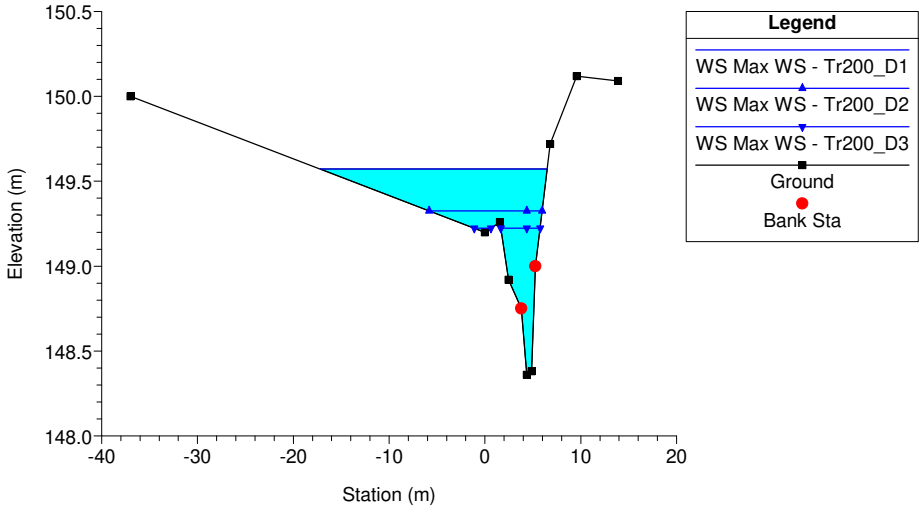
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 50 CONV_07



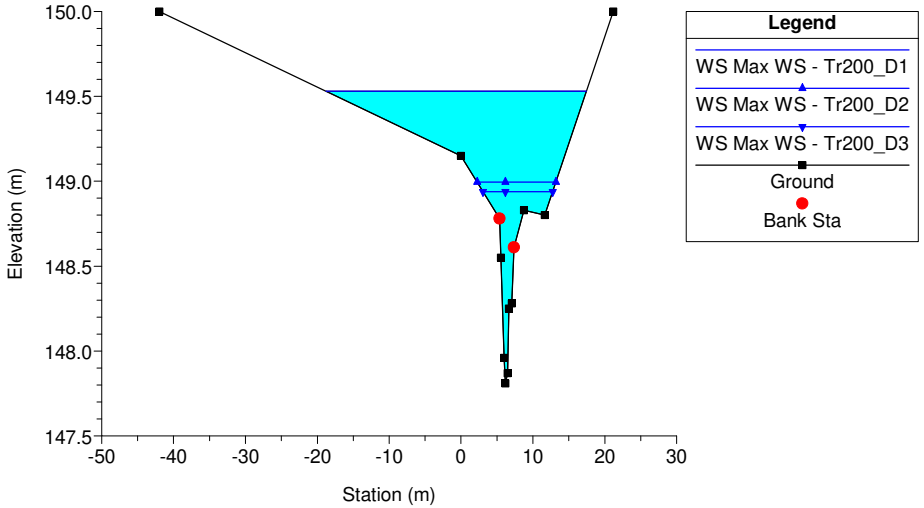
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 40 CONV_06



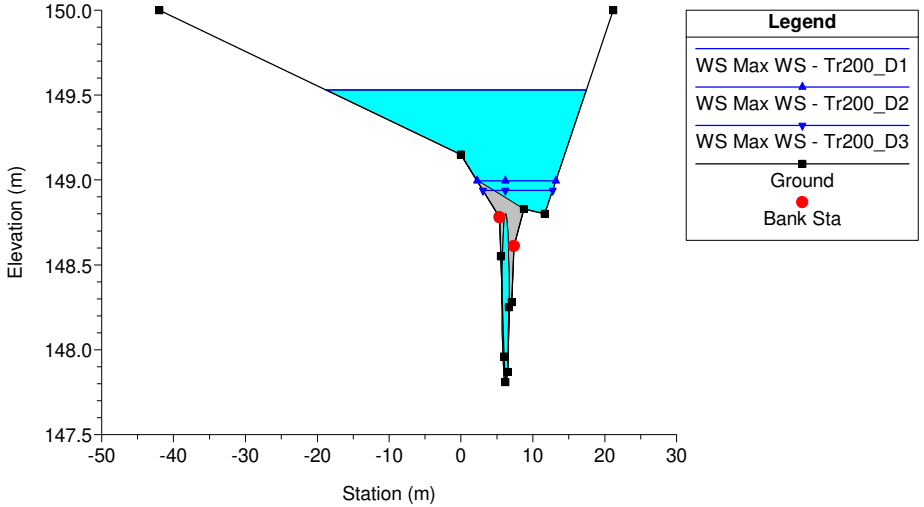
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 30 CONV_05



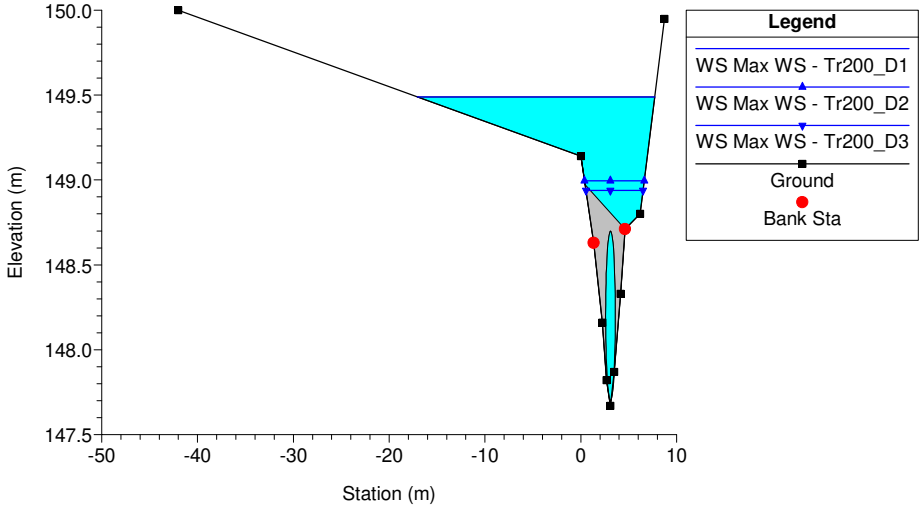
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 27 CONV_04



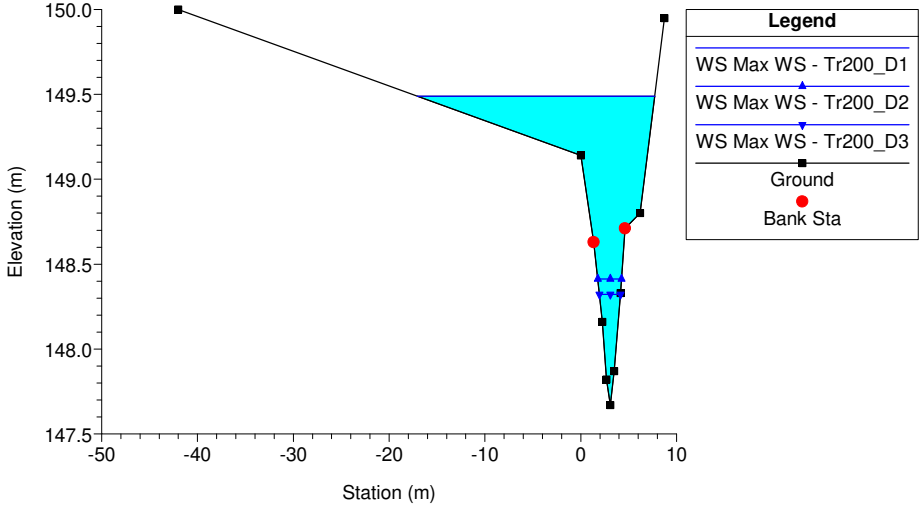
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 25 Culv



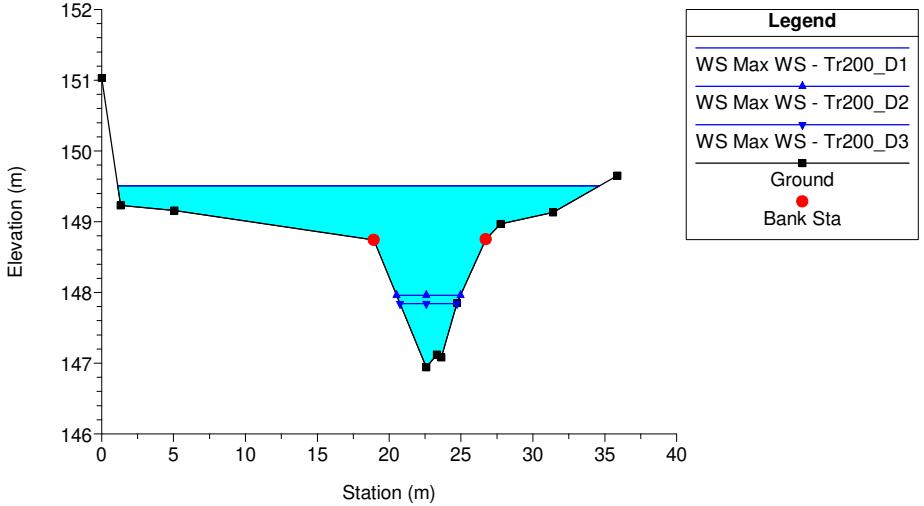
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 25 Culv



SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 24 CONV_03

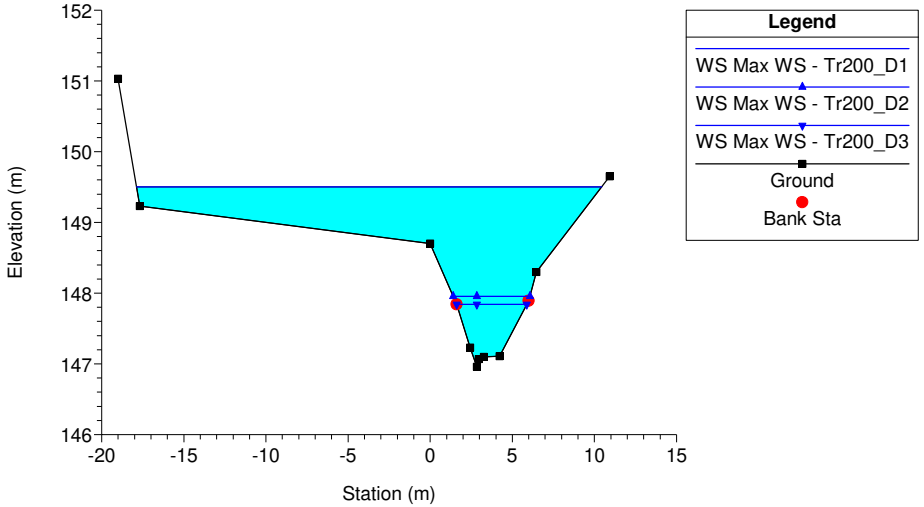


SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Convento Reach = Convento RS = 20 CONV_02



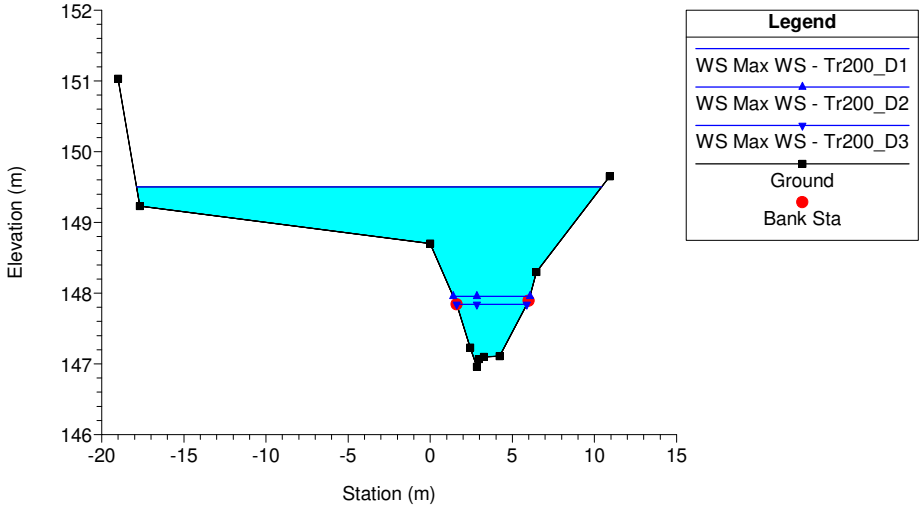
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 10 CONV_01



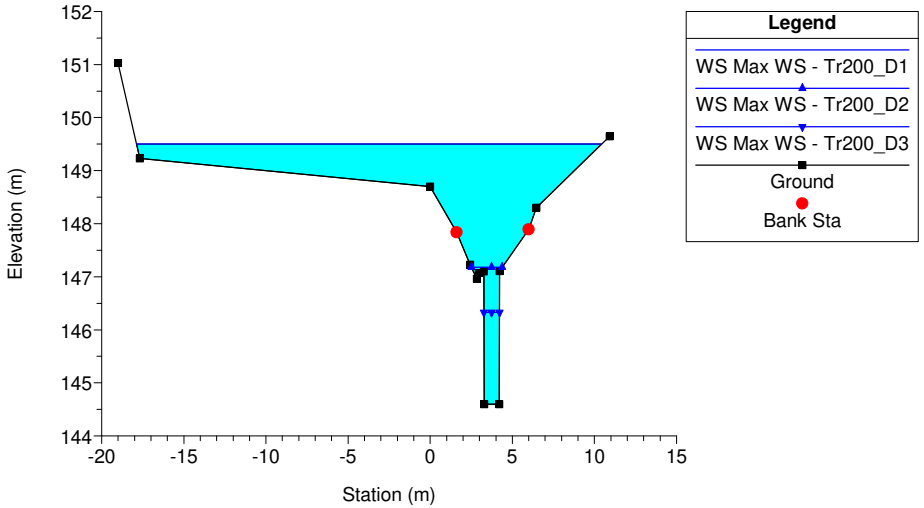
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 9.5 IS



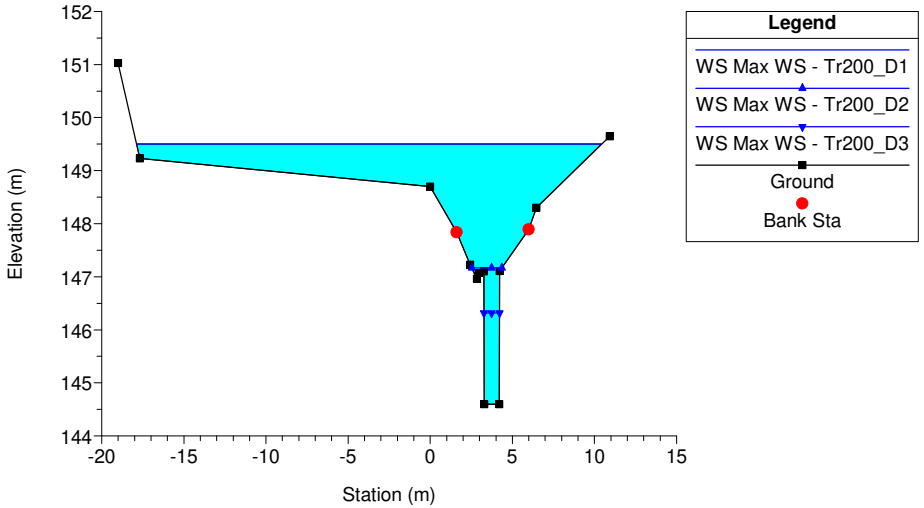
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 9 S11-Pozzetto



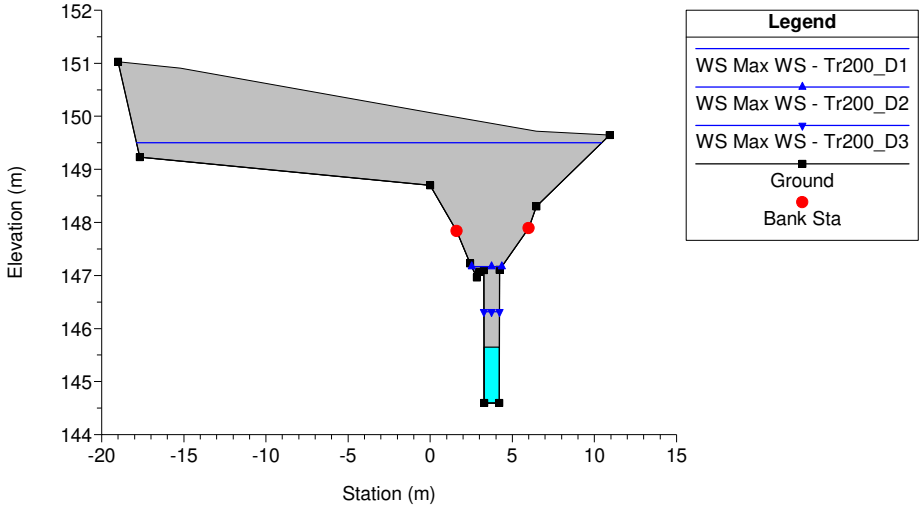
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 8 S11-Pozzetto



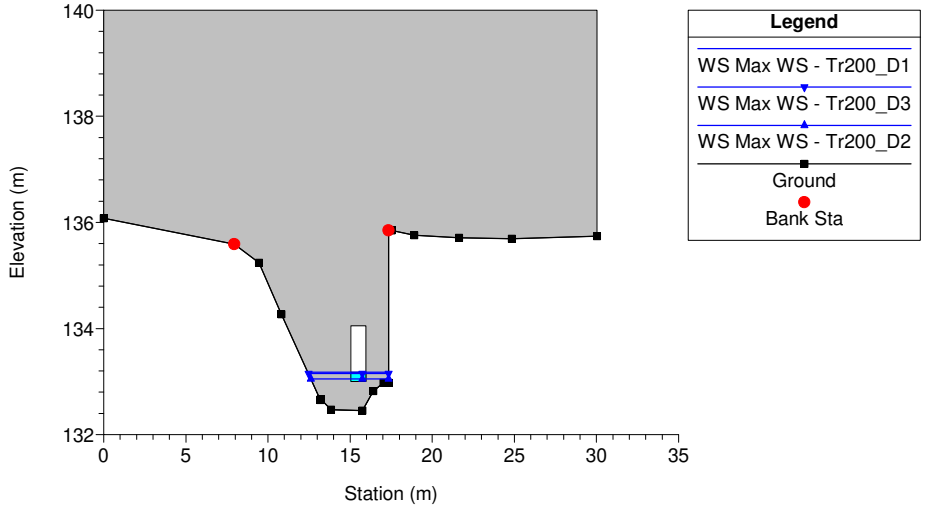
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 7.5 Culv



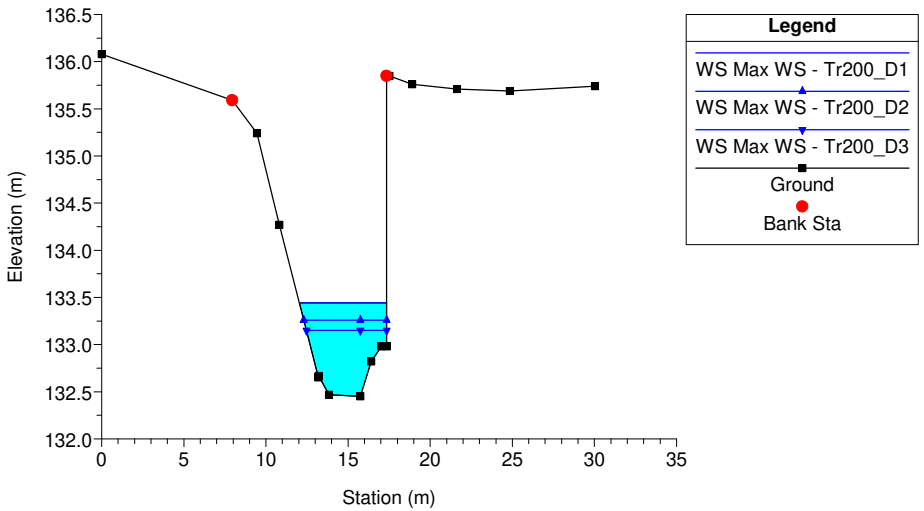
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 7.5 Culv



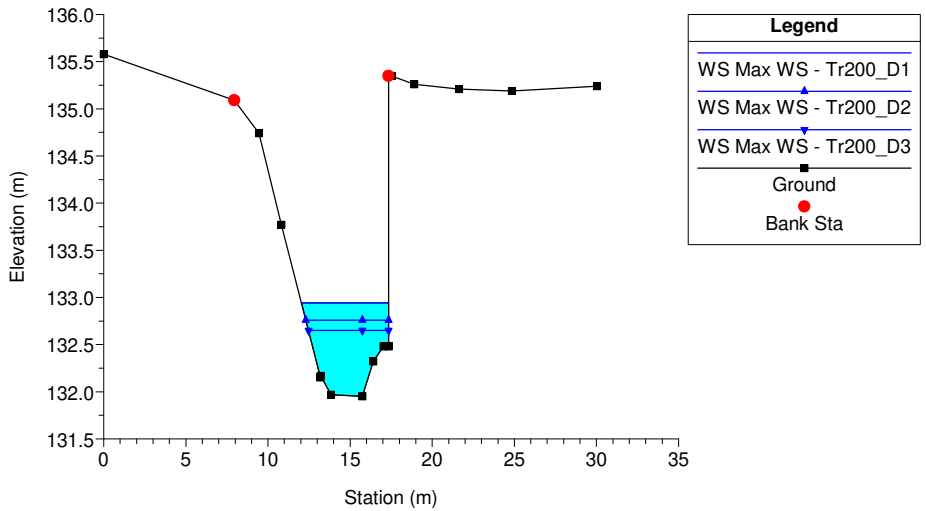
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 7



SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Convento Reach = Convento RS = 0



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

BOTRO DEL CONVENTO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Convento Reach: Convento Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Convento	50	Max WS	Tr200_D1	6.20	172.79	173.85	174.11	174.68	0.055097	4.02			1.54	2.38	1.60
Convento	50	Max WS	Tr200_D2	3.90	172.79	173.63	173.85	174.32	0.058493	3.68			1.06	1.99	1.61
Convento	50	Max WS	Tr200_D3	2.90	172.79	173.53	173.70	174.10	0.055214	3.35			0.87	1.81	1.55
Convento	40	Max WS	Tr200_D1	6.19	152.29	153.42	153.50	154.01	0.035595	3.40			1.82	1.95	1.12
Convento	40	Max WS	Tr200_D2	3.90	152.29	153.13	153.20	153.61	0.036505	3.07			1.27	1.78	1.16
Convento	40	Max WS	Tr200_D3	2.90	152.29	152.98	153.05	153.39	0.036671	2.84			1.02	1.70	1.17
Convento	30	Max WS	Tr200_D1	5.87	148.36	149.57		149.68	0.006406	1.96	0.52	0.54	7.03	23.68	0.61
Convento	30	Max WS	Tr200_D2	3.90	148.36	149.33	149.25	149.60	0.016021	2.59	0.58	0.59	2.67	11.81	0.93
Convento	30	Max WS	Tr200_D3	2.90	148.36	149.22	149.23	149.44	0.014602	2.26	0.86	0.44	1.74	5.86	0.87
Convento	27	Max WS	Tr200_D1	5.82	147.81	149.53		149.55	0.001087	0.90	0.23	0.36	14.58	36.24	0.25
Convento	27	Max WS	Tr200_D2	3.90	147.81	149.00		149.16	0.010774	2.00	0.39	0.55	2.98	10.97	0.72
Convento	27	Max WS	Tr200_D3	2.90	147.81	148.94		149.07	0.008811	1.72	0.29	0.41	2.39	9.69	0.64
Convento	25			Culvert											
Convento	24	Max WS	Tr200_D1	5.81	147.67	149.49		149.53	0.001071	1.02	0.19	0.35	9.88	24.77	0.28
Convento	24	Max WS	Tr200_D2	3.90	147.67	148.41	148.66	149.21	0.080973	3.95			0.99	2.49	2.00
Convento	24	Max WS	Tr200_D3	2.90	147.67	148.32	148.55	149.03	0.084976	3.74			0.78	2.21	2.01
Convento	20	Max WS	Tr200_D1	5.81	146.94	149.50		149.51	0.000087	0.35	0.10	0.08	25.11	33.50	0.09
Convento	20	Max WS	Tr200_D2	3.90	146.94	147.96		148.08	0.006952	1.53			2.55	4.46	0.64
Convento	20	Max WS	Tr200_D3	2.90	146.94	147.84		147.94	0.006704	1.40			2.06	3.97	0.62
Convento	10	Max WS	Tr200_D1	5.81	146.96	149.50	147.90	149.51	0.000096	0.44	0.11	0.12	24.06	28.32	0.09
Convento	10	Max WS	Tr200_D2	3.90	146.96	147.96	147.75	148.06	0.005648	1.45	0.17	0.11	2.71	4.67	0.59
Convento	10	Max WS	Tr200_D3	2.90	146.96	147.84	147.65	147.93	0.006042	1.33			2.19	4.27	0.59
Convento	9.5			Inl Struct											
Convento	9	Max WS	Tr200_D1	5.81	144.60	149.50		149.51	0.000111	0.34	0.12	0.13	26.36	28.31	0.07
Convento	9	Max WS	Tr200_D2	3.90	144.60	147.18		147.30	0.011439	1.55			2.52	1.87	0.43
Convento	9	Max WS	Tr200_D3	2.90	144.60	146.33		146.49	0.014781	1.79			1.62	0.94	0.44
Convento	8	Max WS	Tr200_D1	5.81	144.60	149.50		149.51	0.000111	0.34	0.12	0.13	26.36	28.31	0.07
Convento	8	Max WS	Tr200_D2	3.90	144.60	147.17		147.29	0.011663	1.56			2.50	1.83	0.43
Convento	8	Max WS	Tr200_D3	2.90	144.60	146.32		146.48	0.015104	1.80			1.61	0.94	0.44
Convento	7.5			Culvert											
Convento	7	Max WS	Tr200_D1	5.81	132.45	133.44		133.55	0.005013	1.49			3.90	5.31	0.55
Convento	7	Max WS	Tr200_D2	3.90	132.45	133.26		133.35	0.005031	1.32			2.97	5.04	0.55
Convento	7	Max WS	Tr200_D3	2.90	132.45	133.15		133.22	0.005083	1.20			2.42	4.88	0.54
Convento	0	Max WS	Tr200_D1	5.81	131.95	132.94	132.68	133.05	0.005009	1.49			3.90	5.31	0.55
Convento	0	Max WS	Tr200_D2	3.90	131.95	132.76	132.55	132.85	0.005037	1.32			2.96	5.04	0.55
Convento	0	Max WS	Tr200_D3	2.90	131.95	132.65	132.46	132.72	0.005090	1.20			2.42	4.88	0.54

ALLEGATI

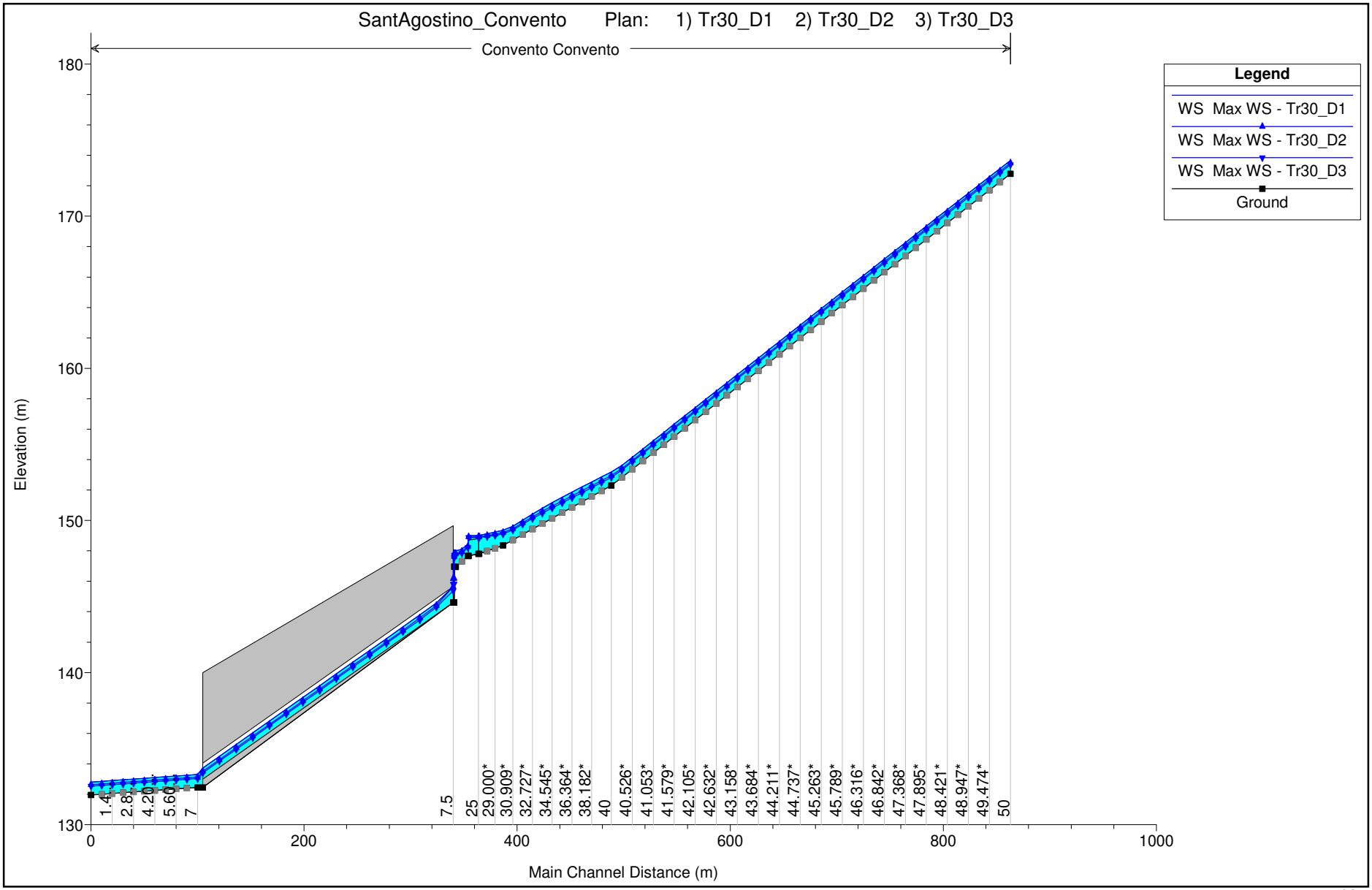
MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

BOTRO DEL CONVENTO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
Convento Convento
Legend
WS Max WS - Tr30_D1
WS Max WS - Tr30_D2
WS Max WS - Tr30_D3
Ground
Elevation (m)
Main Channel Distance (m)
180
170
160
150
140
130
0
200
400
600
800
1000
1.4
2.8
4.2
5.6
7
7.5
25
29.000*
30.909*
32.727*
34.545*
36.364*
38.182*
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40.526*
41.053*
41.579*
42.105*
42.632*
43.158*
43.684*
44.211*
44.737*
45.263*
45.789*
46.316*
46.842*
47.368*
47.895*
48.421*
48.947*
49.474*
50

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

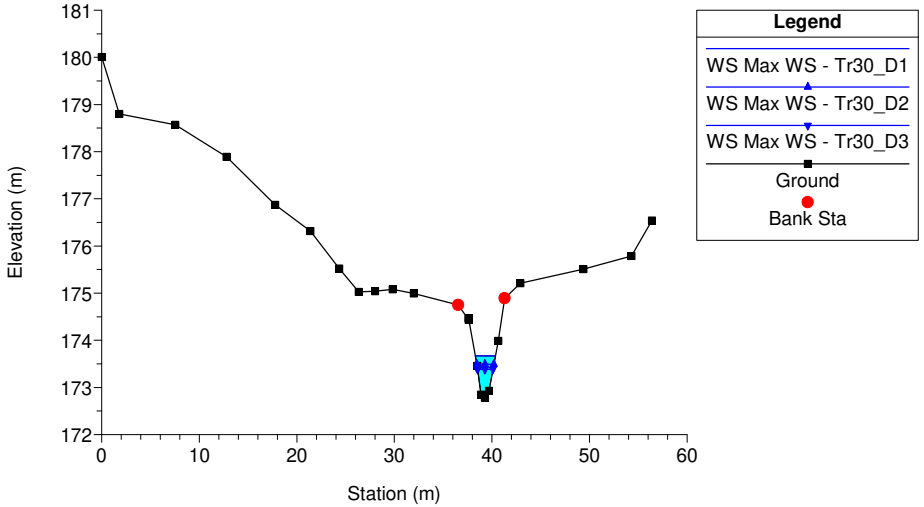
BOTRO DEL CONVENTO

MODELLAZIONE PER TR=30 anni

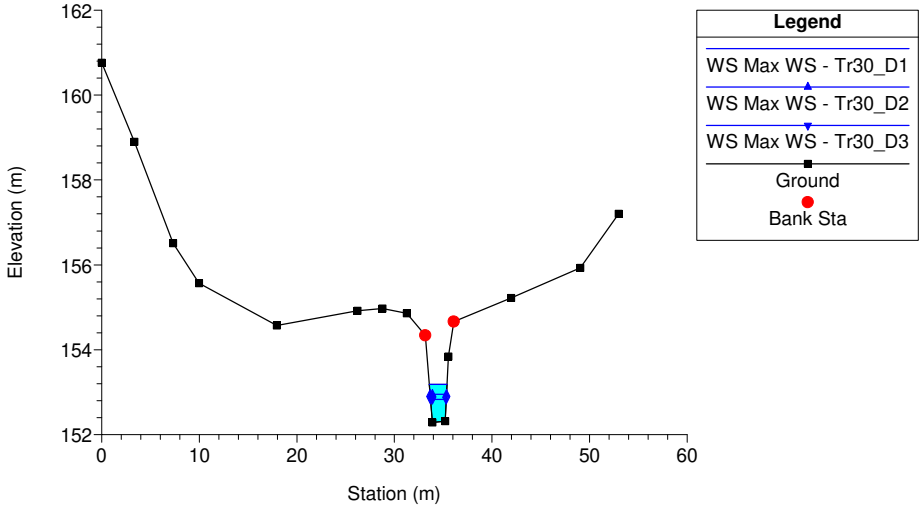
DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

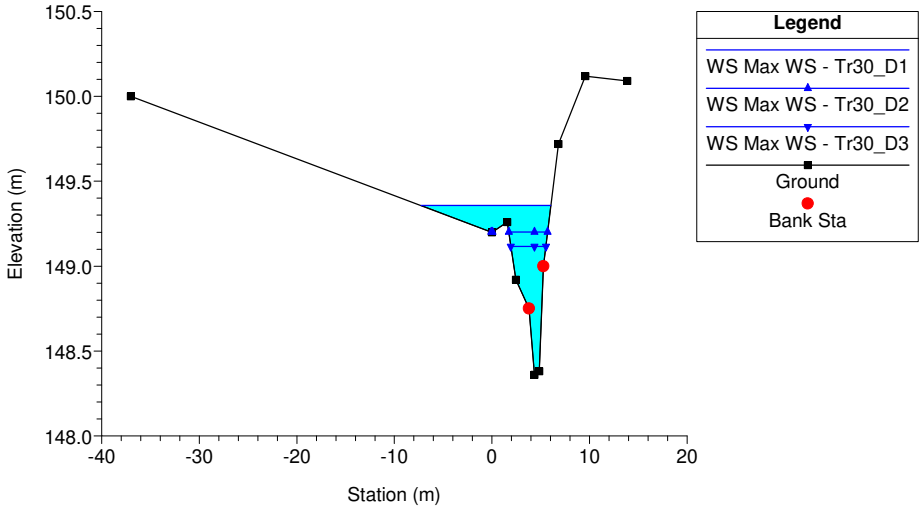
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Convento Reach = Convento RS = 50 CONV_07



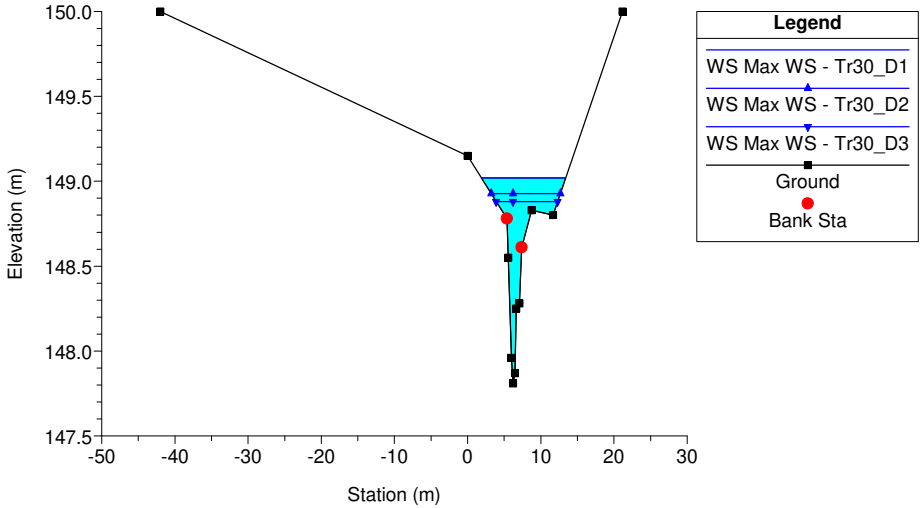
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Convento Reach = Convento RS = 40 CONV_06



SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Convento Reach = Convento RS = 30 CONV_05

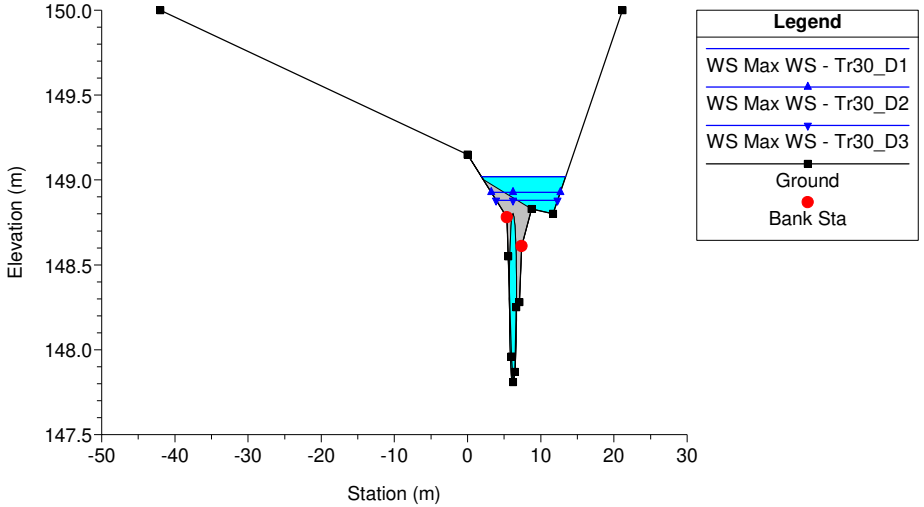


SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Convento Reach = Convento RS = 27 CONV_04



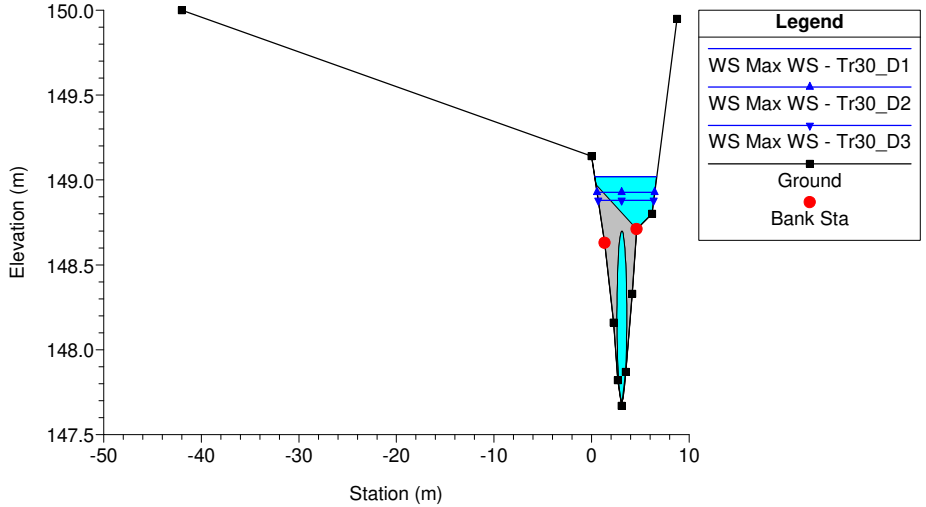
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 25 Culv



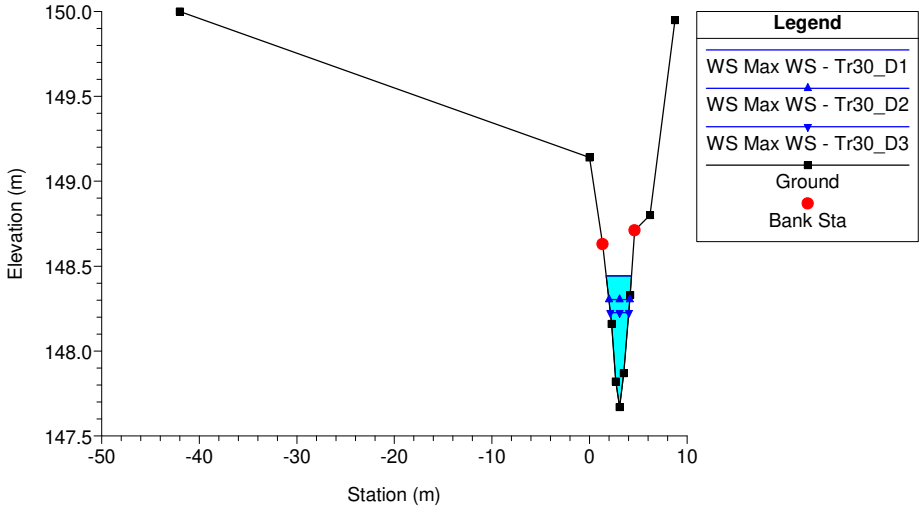
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 25 Culv



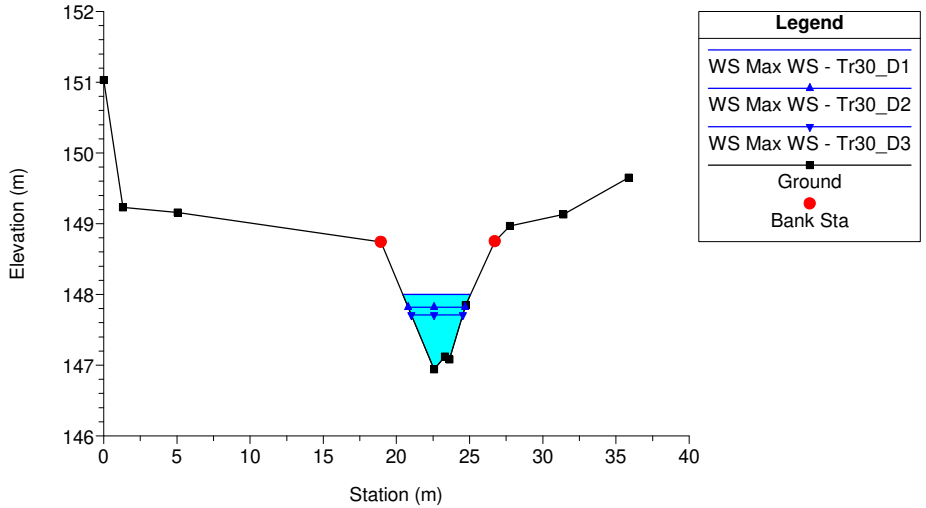
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 24 CONV_03



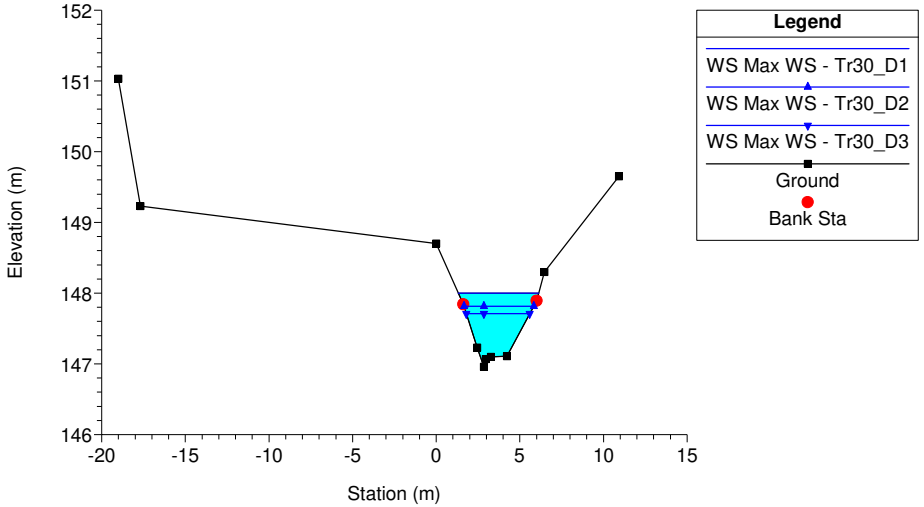
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 20 CONV_02



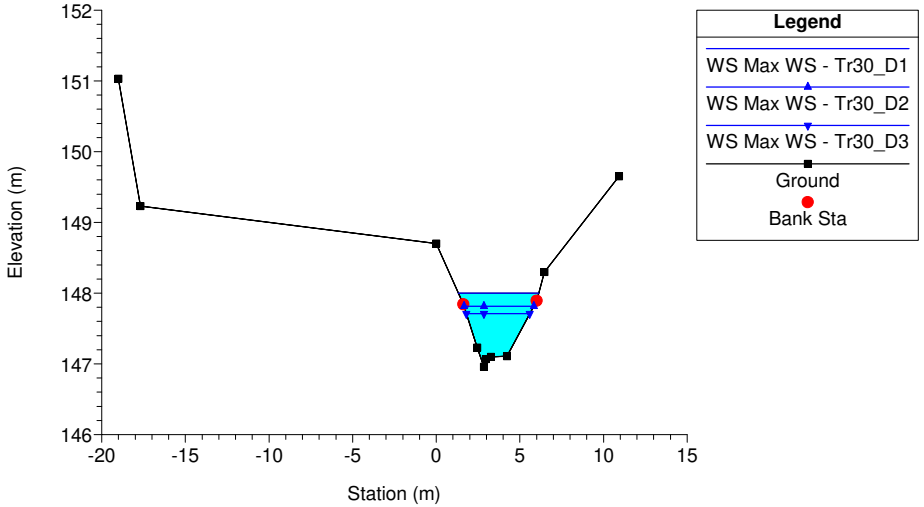
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 10 CONV_01



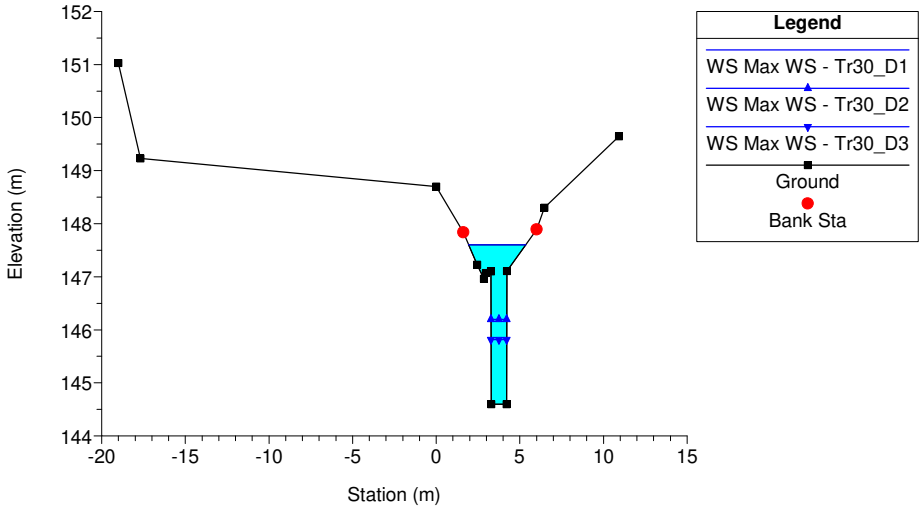
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 9.5 IS



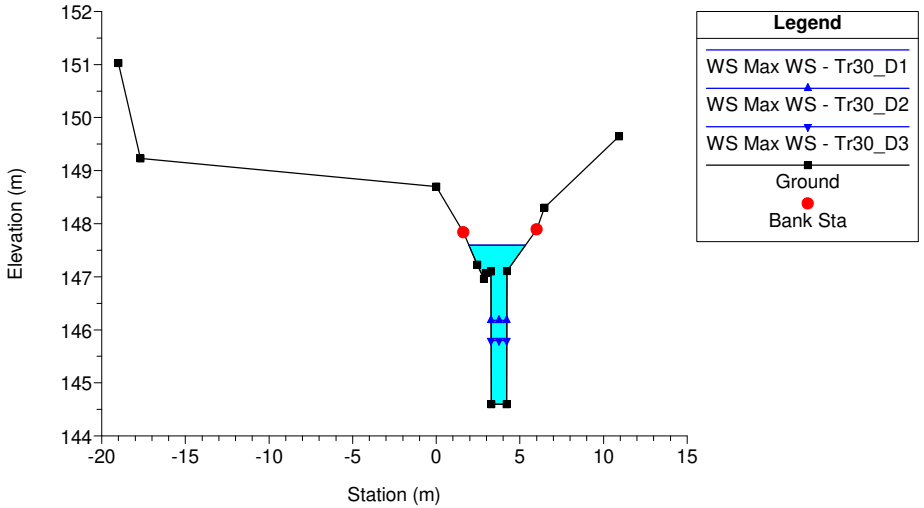
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 9 S11-Pozzetto



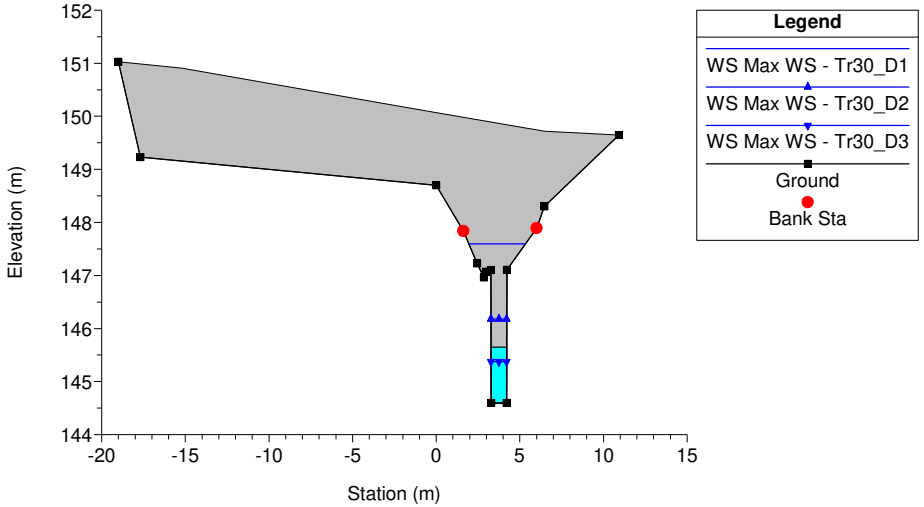
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 8 S11-Pozzetto



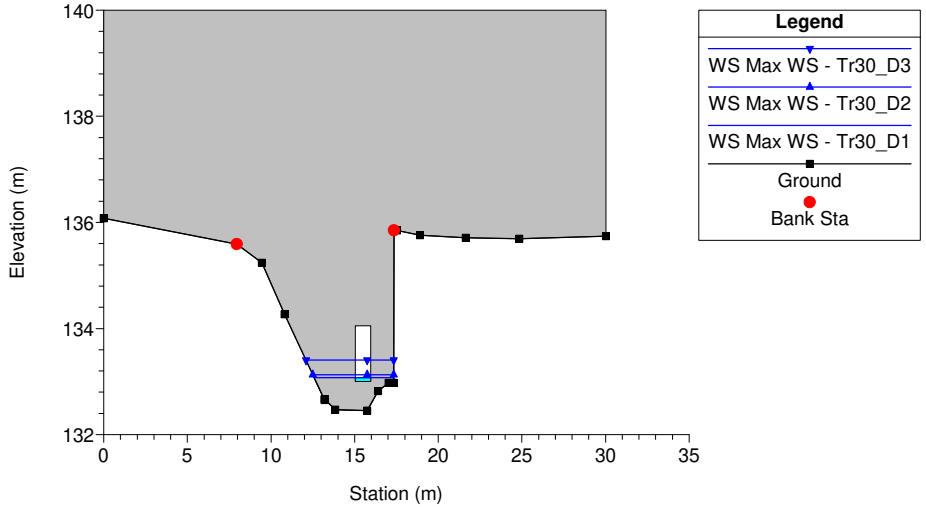
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 7.5 Culv



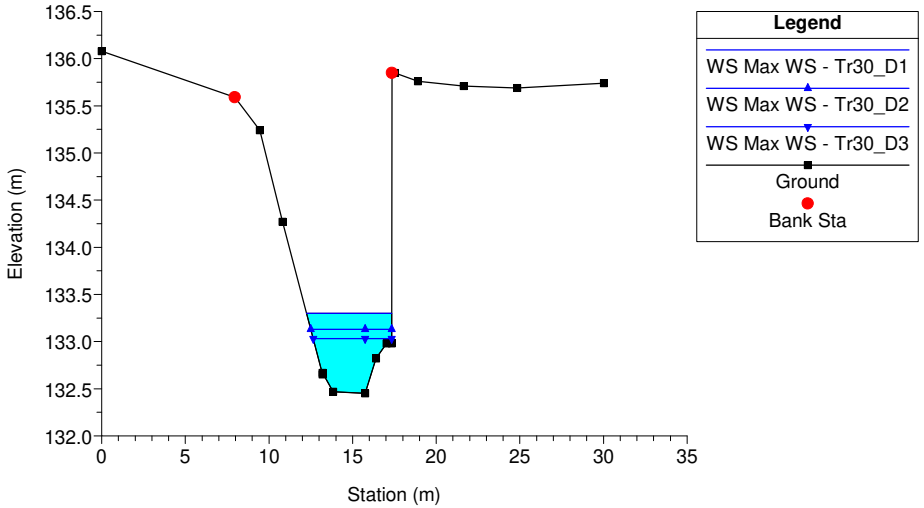
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 7.5 Culv



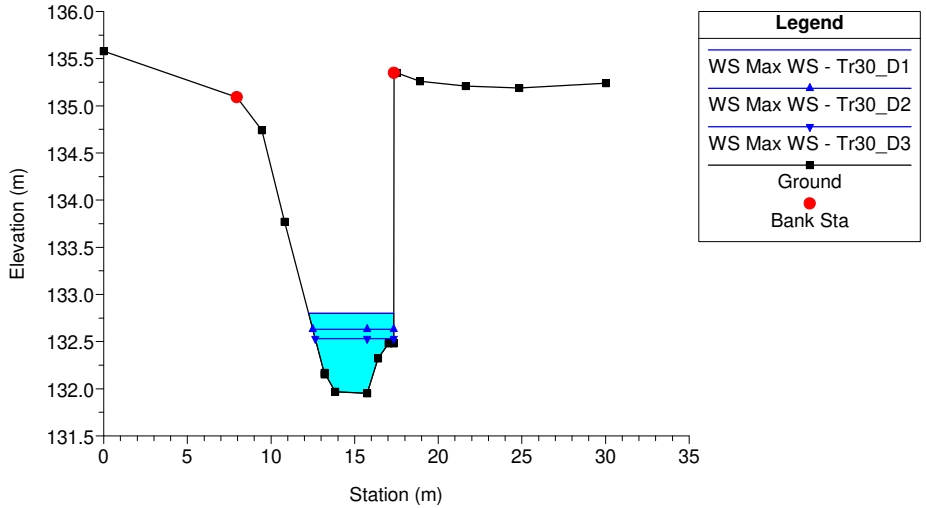
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 7



SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Convento Reach = Convento RS = 0



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

BOTRO DEL CONVENTO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Convento Reach: Convento Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Convento	50	Max WS	Tr30_D1	4.30	172.79	173.67	173.90	174.40	0.058835	3.77			1.14	2.06	1.62
Convento	50	Max WS	Tr30_D2	2.70	172.79	173.50	173.67	174.06	0.057189	3.34			0.81	1.75	1.57
Convento	50	Max WS	Tr30_D3	2.00	172.79	173.39	173.55	173.90	0.062073	3.19			0.63	1.57	1.61
Convento	40	Max WS	Tr30_D1	4.29	152.29	153.18	153.26	153.68	0.036230	3.13			1.37	1.81	1.15
Convento	40	Max WS	Tr30_D2	2.70	152.29	152.95	153.02	153.35	0.037093	2.80			0.96	1.68	1.18
Convento	40	Max WS	Tr30_D3	2.00	152.29	152.83	152.89	153.18	0.038673	2.62			0.76	1.61	1.21
Convento	30	Max WS	Tr30_D1	4.29	148.36	149.36	149.23	149.62	0.015567	2.62	0.60	0.62	3.06	13.31	0.92
Convento	30	Max WS	Tr30_D2	2.70	148.36	149.20	149.18	149.41	0.014500	2.20	0.86	0.41	1.63	4.12	0.86
Convento	30	Max WS	Tr30_D3	2.00	148.36	149.12	149.09	149.29	0.013740	1.96	0.72	0.28	1.31	3.59	0.82
Convento	27	Max WS	Tr30_D1	4.29	147.81	149.02		149.20	0.011083	2.07	0.43	0.60	3.25	11.51	0.73
Convento	27	Max WS	Tr30_D2	2.70	147.81	148.93		149.05	0.008261	1.65	0.27	0.38	2.29	9.44	0.62
Convento	27	Max WS	Tr30_D3	2.00	147.81	148.88		148.97	0.006296	1.38	0.18	0.26	1.87	8.39	0.54
Convento	25			Culvert											
Convento	24	Max WS	Tr30_D1	4.29	147.67	148.44	148.70	149.27	0.079776	4.02			1.07	2.59	2.00
Convento	24	Max WS	Tr30_D2	2.70	147.67	148.30	148.52	148.99	0.084965	3.67			0.74	2.15	2.00
Convento	24	Max WS	Tr30_D3	2.00	147.67	148.23	148.42	148.83	0.086915	3.45			0.58	1.89	1.99
Convento	20	Max WS	Tr30_D1	4.29	146.94	148.00		148.12	0.006970	1.56			2.74	4.63	0.65
Convento	20	Max WS	Tr30_D2	2.70	146.94	147.82		147.91	0.006608	1.37			1.97	3.88	0.61
Convento	20	Max WS	Tr30_D3	2.00	146.94	147.71		147.79	0.006612	1.27			1.58	3.52	0.60
Convento	10	Max WS	Tr30_D1	4.29	146.96	148.00	147.78	148.11	0.005486	1.49	0.21	0.15	2.91	4.80	0.59
Convento	10	Max WS	Tr30_D2	2.70	146.96	147.82	147.63	147.90	0.005996	1.30			2.08	4.18	0.59
Convento	10	Max WS	Tr30_D3	2.00	146.96	147.71	147.54	147.78	0.006155	1.21			1.66	3.79	0.58
Convento	9.5			Inl Struct											
Convento	9	Max WS	Tr30_D1	4.29	144.60	147.60		147.68	0.005492	1.18			3.64	3.41	0.36
Convento	9	Max WS	Tr30_D2	2.70	144.60	146.19		146.36	0.015504	1.81			1.49	0.94	0.46
Convento	9	Max WS	Tr30_D3	2.00	144.60	145.82		145.97	0.016055	1.76			1.14	0.94	0.51
Convento	8	Max WS	Tr30_D1	4.29	144.60	147.60		147.67	0.005571	1.19			3.62	3.39	0.37
Convento	8	Max WS	Tr30_D2	2.70	144.60	146.18		146.35	0.015904	1.83			1.48	0.94	0.47
Convento	8	Max WS	Tr30_D3	2.00	144.60	145.80		145.96	0.016626	1.78			1.12	0.94	0.52
Convento	7.5			Culvert											
Convento	7	Max WS	Tr30_D1	4.29	132.45	133.30		133.39	0.005039	1.36			3.16	5.10	0.55
Convento	7	Max WS	Tr30_D2	2.70	132.45	133.13		133.20	0.005044	1.17			2.31	4.85	0.54
Convento	7	Max WS	Tr30_D3	2.00	132.45	133.03		133.09	0.005487	1.08			1.84	4.71	0.55
Convento	0	Max WS	Tr30_D1	4.28	131.95	132.80	132.58	132.89	0.005027	1.35			3.16	5.10	0.55
Convento	0	Max WS	Tr30_D2	2.70	131.95	132.63	132.44	132.70	0.005051	1.17			2.31	4.85	0.54
Convento	0	Max WS	Tr30_D3	2.00	131.95	132.53	132.36	132.59	0.005482	1.08			1.85	4.71	0.55

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=30 e 200 ANNI

DURATA DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale

Sezioni Trasversali

Dati idraulici

ALLEGATI

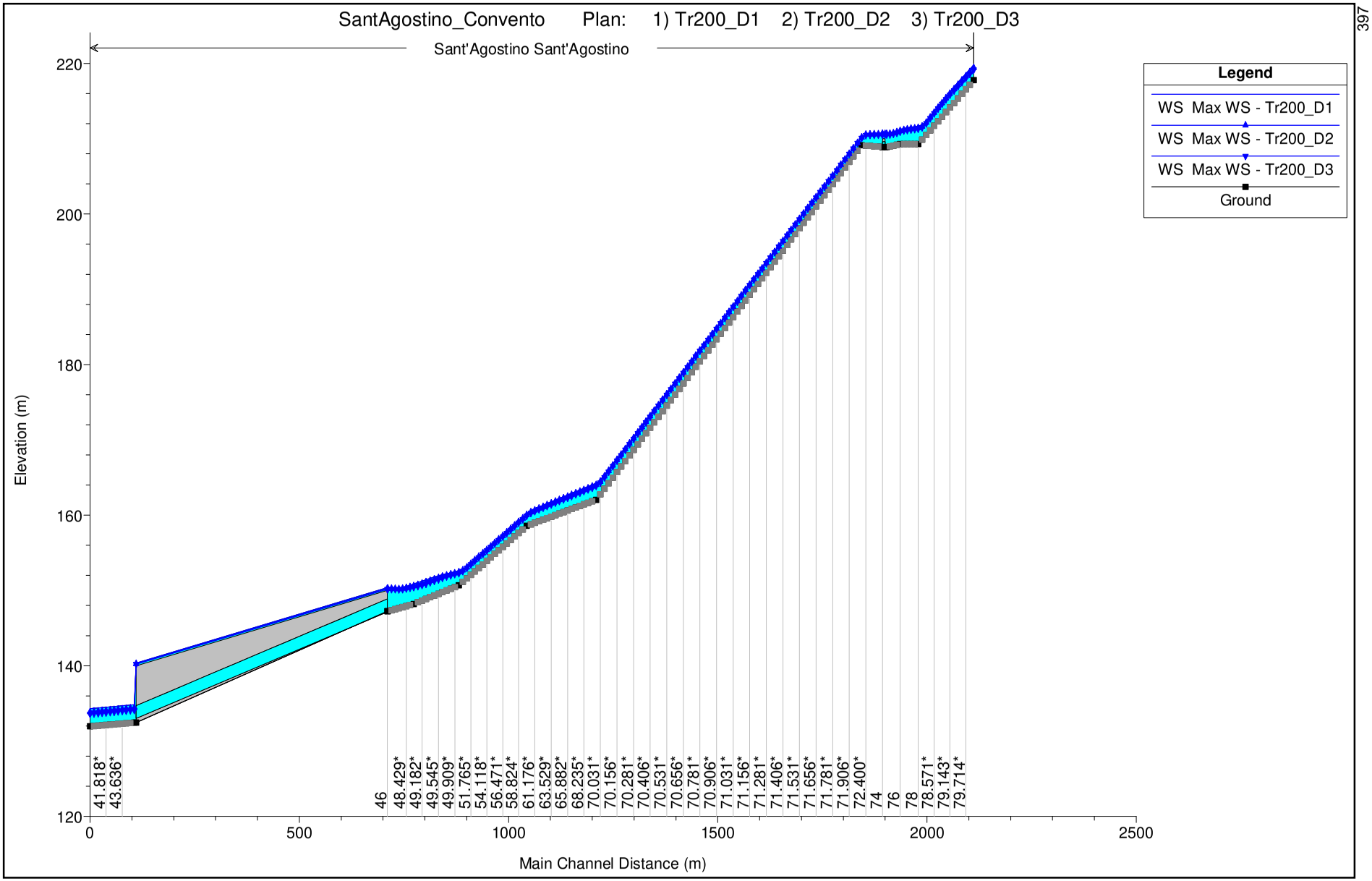
MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
Sant'Agostino Sant'Agostino
Legend
WS Max WS - Tr200_D1
WS Max WS - Tr200_D2
WS Max WS - Tr200_D3
Ground
Elevation (m)
Main Channel Distance (m)
220
200
180
160
140
120
0
500
1000
1500
2000
2500
41.818*
43.636*
46
48.429*
49.182*
49.545*
49.909*
51.765*
54.118*
56.471*
58.824*
61.176*
63.529*
65.882*
68.235*
70.031*
70.156*
70.281*
70.406*
70.531*
70.656*
70.781*
70.906*
71.031*
71.156*
71.281*
71.406*
71.531*
71.656*
71.781*
71.906*
72.400*
74
76
78
78.571*
79.143*
79.714*

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

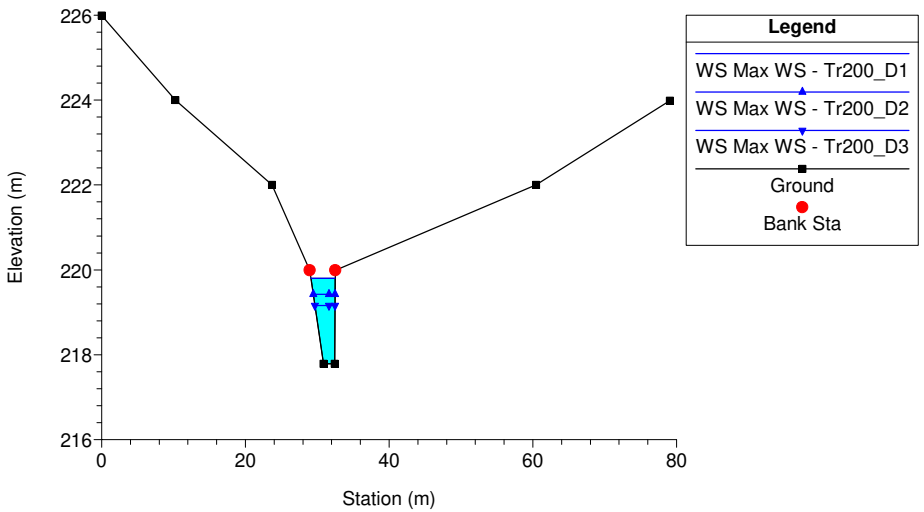
FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=200 anni

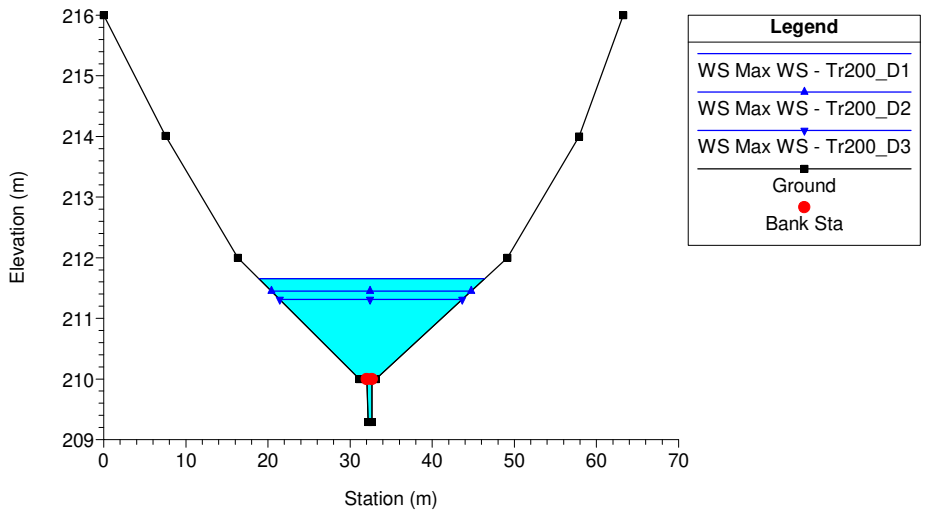
DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

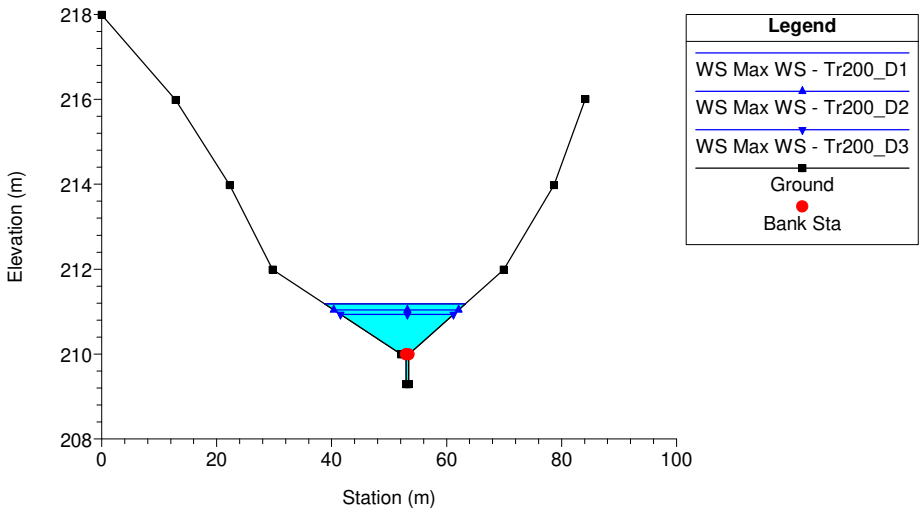
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 80 AGO_11



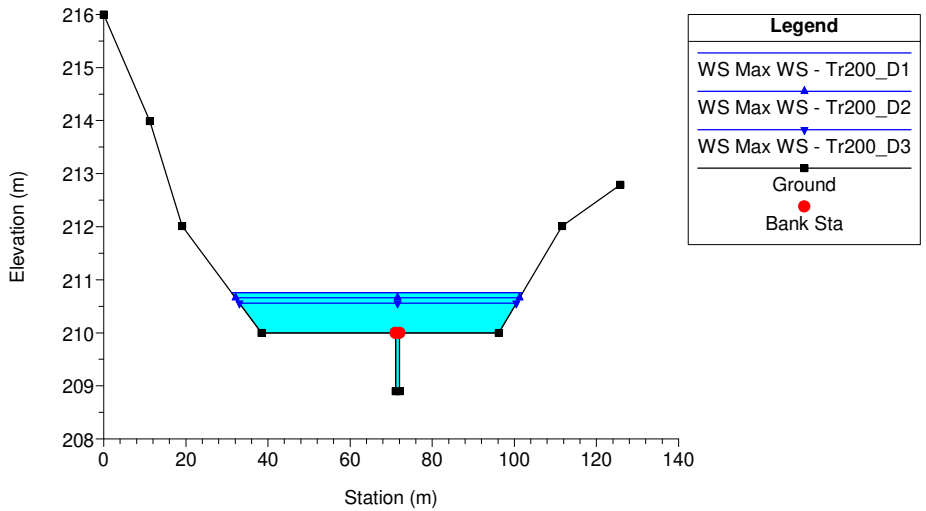
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 78 AGO_10



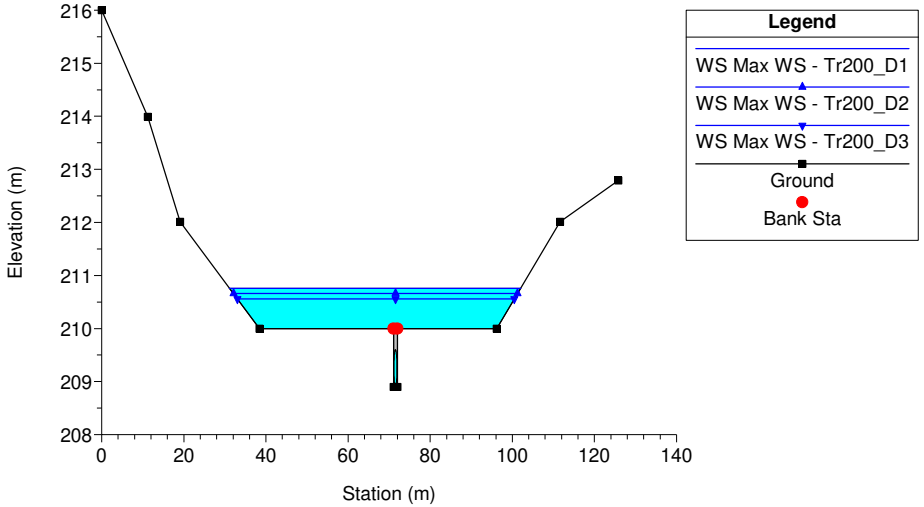
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 76 AGO_09



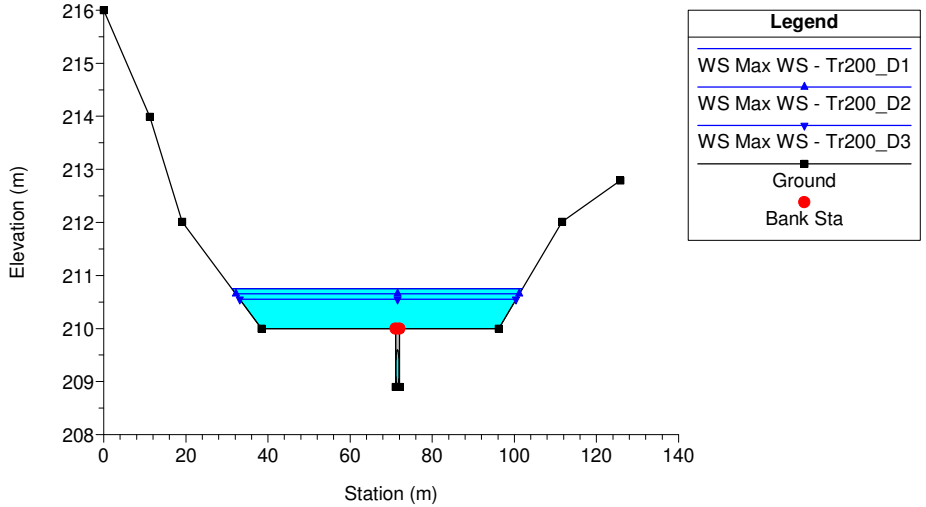
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 75 AGO_08



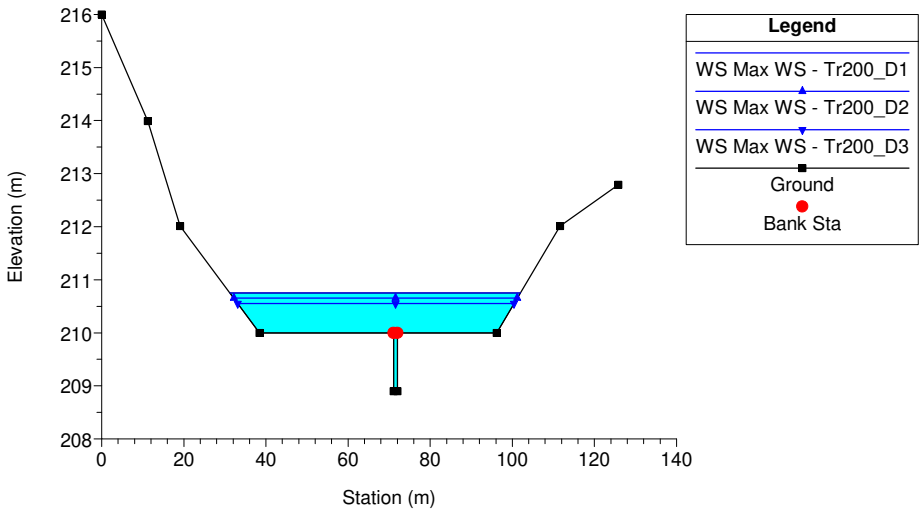
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 74.5 Culv



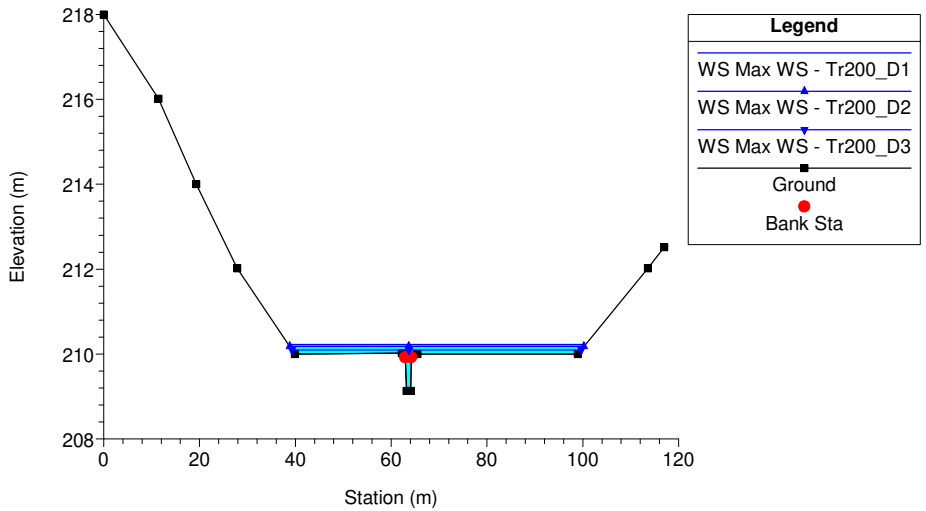
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 74.5 Culv



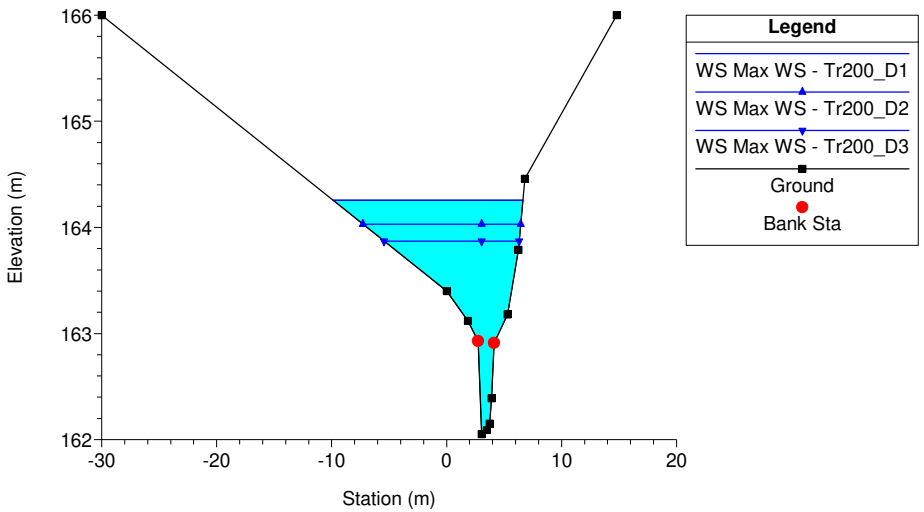
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 74 AGO_07



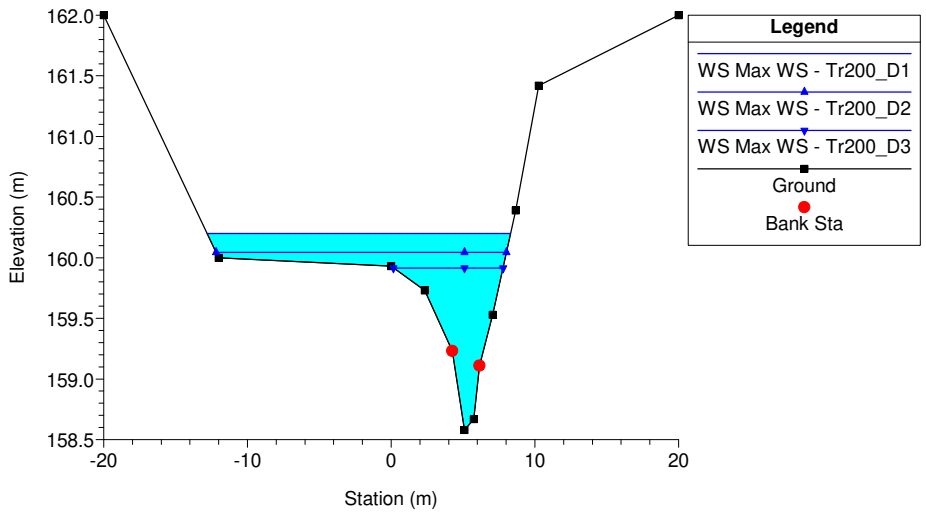
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 72 AGO_06



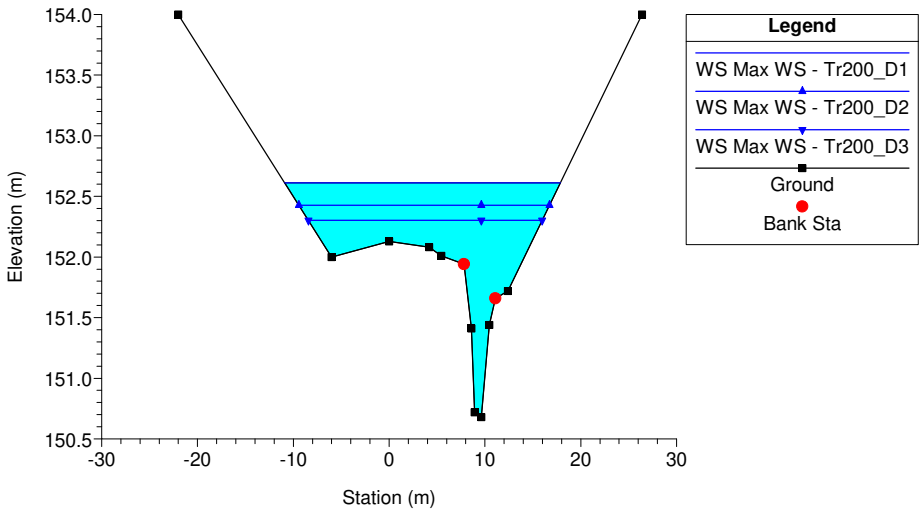
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 70 AGO_05



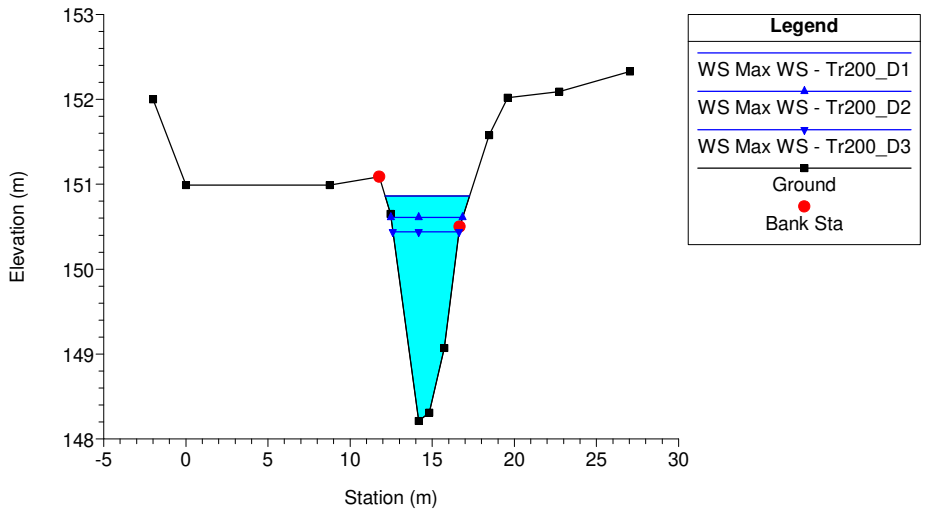
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 60 AGO_04



SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 50 AGO_03

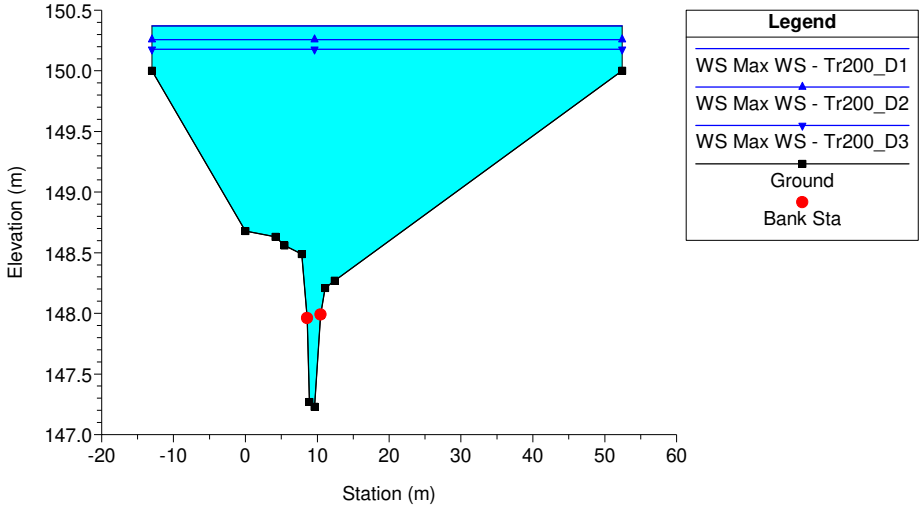


SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 49 AGO_02



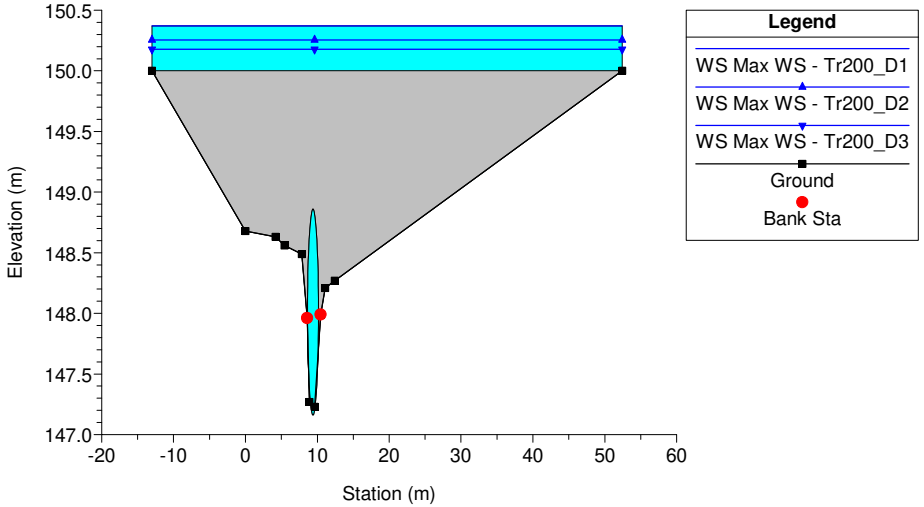
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 47 AGO_01



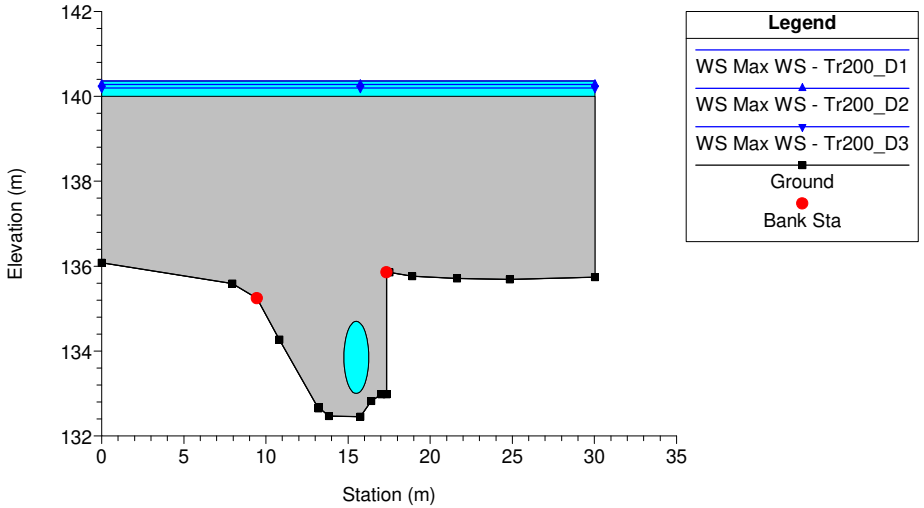
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 46 Culv



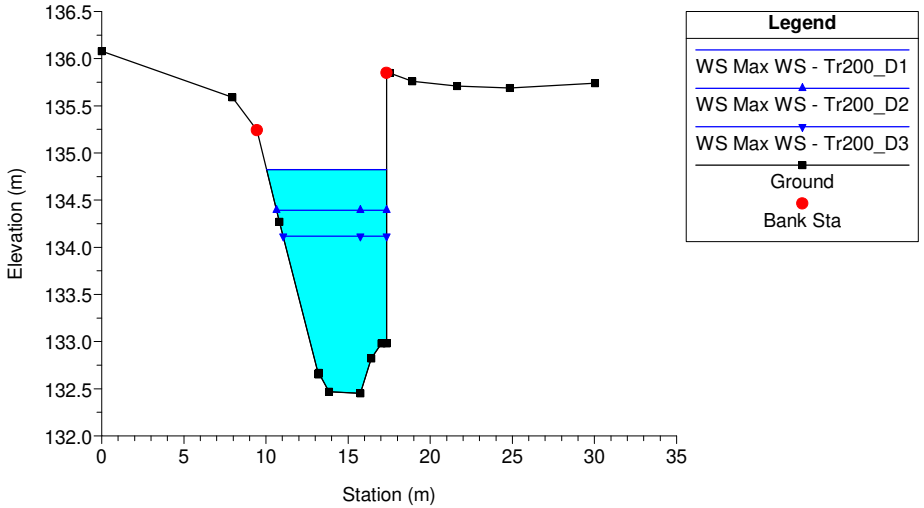
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 46 Culv



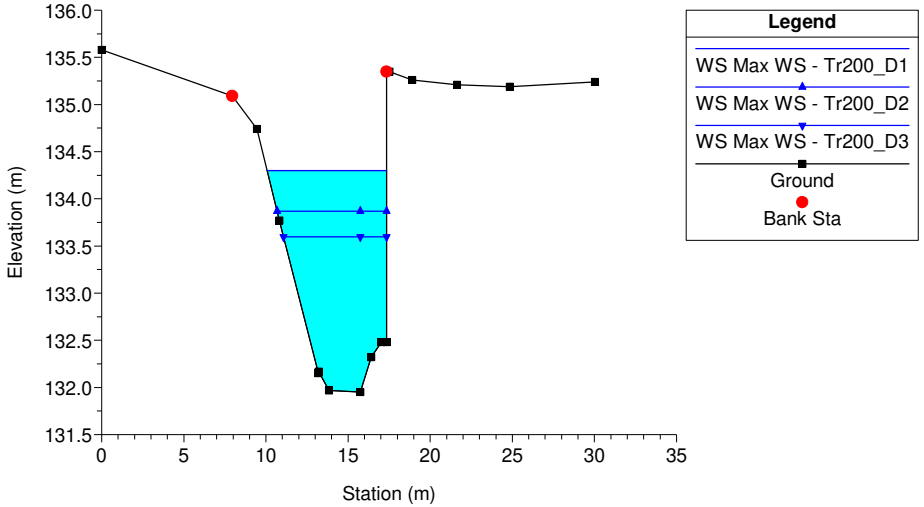
SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 45



SantAgostino_Convento Plan: 1) Tr200_D1 2) Tr200_D2 3) Tr200_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 40 muro a destra, incinazione???



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=200 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Sant'Agostino Reach: Sant'Agostino Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Sant'Agostino	80	Max WS	Tr200_D1	29.80	217.79	219.80	220.63	221.65	0.060298	6.02			4.95	3.36	1.59
Sant'Agostino	80	Max WS	Tr200_D2	20.30	217.79	219.42	219.89	220.93	0.058664	5.45			3.73	3.02	1.57
Sant'Agostino	80	Max WS	Tr200_D3	15.20	217.79	219.16	219.57	220.49	0.059528	5.11			2.97	2.78	1.58
Sant'Agostino	78	Max WS	Tr200_D1	29.74	209.29	211.66		211.73	0.005913	1.82	1.17	1.15	24.80	27.51	0.38
Sant'Agostino	78	Max WS	Tr200_D2	20.30	209.29	211.45		211.51	0.005218	1.60	1.01	0.99	19.46	24.33	0.36
Sant'Agostino	78	Max WS	Tr200_D3	15.20	209.29	211.31		211.36	0.004665	1.45	0.90	0.88	16.30	22.24	0.33
Sant'Agostino	76	Max WS	Tr200_D1	29.72	209.29	211.19		211.37	0.023213	2.63	1.87	1.79	15.79	24.57	0.61
Sant'Agostino	76	Max WS	Tr200_D2	20.29	209.29	211.04		211.18	0.020353	2.33	1.61	1.54	12.43	21.75	0.56
Sant'Agostino	76	Max WS	Tr200_D3	15.20	209.29	210.93		211.05	0.019183	2.17	1.46	1.39	10.20	19.65	0.54
Sant'Agostino	75	Max WS	Tr200_D1	29.69	208.90	210.76		210.78	0.002021	0.89	0.58	0.58	49.93	70.88	0.21
Sant'Agostino	75	Max WS	Tr200_D2	20.29	208.90	210.66		210.67	0.001496	0.74	0.46	0.46	42.99	69.16	0.18
Sant'Agostino	75	Max WS	Tr200_D3	15.20	208.90	210.56		210.57	0.001435	0.69	0.41	0.41	36.15	67.42	0.17
Sant'Agostino	74.5			Culvert											
Sant'Agostino	74	Max WS	Tr200_D1	29.69	208.90	210.75		210.77	0.002115	0.90	0.59	0.59	49.20	70.70	0.21
Sant'Agostino	74	Max WS	Tr200_D2	20.29	208.90	210.65		210.67	0.001557	0.75	0.47	0.47	42.45	69.03	0.18
Sant'Agostino	74	Max WS	Tr200_D3	15.20	208.90	210.55		210.56	0.001502	0.71	0.41	0.41	35.61	67.29	0.18
Sant'Agostino	72	Max WS	Tr200_D1	29.67	209.13	210.22	210.34	210.67	0.088053	5.31	1.74	1.80	14.27	62.00	1.73
Sant'Agostino	72	Max WS	Tr200_D2	20.28	209.13	210.18	210.28	210.57	0.075903	4.77	1.38	1.44	11.51	61.41	1.59
Sant'Agostino	72	Max WS	Tr200_D3	15.20	209.13	210.10	210.24	211.24	0.168477	6.69	1.36	1.46	6.68	60.37	2.34
Sant'Agostino	70	Max WS	Tr200_D1	29.64	162.05	164.26	164.39	164.81	0.023127	4.60	1.73	2.11	12.12	16.50	1.05
Sant'Agostino	70	Max WS	Tr200_D2	20.28	162.05	164.03	164.17	164.55	0.022855	4.22	1.50	1.87	8.73	13.73	1.02
Sant'Agostino	70	Max WS	Tr200_D3	15.20	162.05	163.87	164.02	164.38	0.022992	3.97	1.34	1.69	6.70	11.75	1.01
Sant'Agostino	60	Max WS	Tr200_D1	29.62	158.58	160.20	160.58	161.77	0.049007	6.90	1.65	2.34	9.01	21.11	1.87
Sant'Agostino	60	Max WS	Tr200_D2	20.28	158.58	160.05	160.43	161.76	0.052088	6.58	1.10	2.19	5.82	20.21	1.89
Sant'Agostino	60	Max WS	Tr200_D3	15.20	158.58	159.92	160.32	161.38	0.048149	5.88	1.45	1.91	3.83	7.62	1.78
Sant'Agostino	50	Max WS	Tr200_D1	29.60	150.68	152.61	152.64	152.92	0.011955	3.29	1.13	1.19	17.31	28.76	0.89
Sant'Agostino	50	Max WS	Tr200_D2	20.28	150.68	152.43	152.49	152.74	0.012892	3.11	0.91	1.09	12.23	26.15	0.90
Sant'Agostino	50	Max WS	Tr200_D3	15.20	150.68	152.30	152.40	152.63	0.013823	2.99	0.73	1.02	9.11	24.40	0.92
Sant'Agostino	49	Max WS	Tr200_D1	29.57	148.21	150.86	151.23	151.72	0.019795	4.11		0.68	7.28	5.15	1.05
Sant'Agostino	49	Max WS	Tr200_D2	20.28	148.21	150.61		151.18	0.014944	3.34		0.26	6.08	4.37	0.89
Sant'Agostino	49	Max WS	Tr200_D3	15.20	148.21	150.44		150.85	0.011850	2.83			5.38	4.03	0.78
Sant'Agostino	48.9			Lat Struct											
Sant'Agostino	48.8			Lat Struct											
Sant'Agostino	47	Max WS	Tr200_D1	29.37	147.23	150.37		150.38	0.000246	0.73	0.31	0.31	87.90	65.41	0.14
Sant'Agostino	47	Max WS	Tr200_D2	20.19	147.23	150.26		150.26	0.000154	0.56	0.23	0.23	80.48	65.41	0.11
Sant'Agostino	47	Max WS	Tr200_D3	15.17	147.23	150.18		150.18	0.000107	0.46	0.19	0.18	75.34	65.41	0.09
Sant'Agostino	46			Culvert											
Sant'Agostino	45	Max WS	Tr200_D1	29.35	132.45	134.82		135.10	0.004822	2.32			12.64	7.31	0.56
Sant'Agostino	45	Max WS	Tr200_D2	20.19	132.45	134.39		134.62	0.004809	2.10			9.61	6.70	0.56
Sant'Agostino	45	Max WS	Tr200_D3	15.17	132.45	134.12		134.31	0.004787	1.94			7.82	6.30	0.56
Sant'Agostino	40	Max WS	Tr200_D1	29.32	131.95	134.30	133.68	134.58	0.005002	2.35			12.46	7.28	0.57
Sant'Agostino	40	Max WS	Tr200_D2	20.19	131.95	133.87	133.36	134.10	0.005017	2.13			9.47	6.67	0.57
Sant'Agostino	40	Max WS	Tr200_D3	15.17	131.95	133.60	133.16	133.79	0.005012	1.97			7.69	6.27	0.57

ALLEGATI

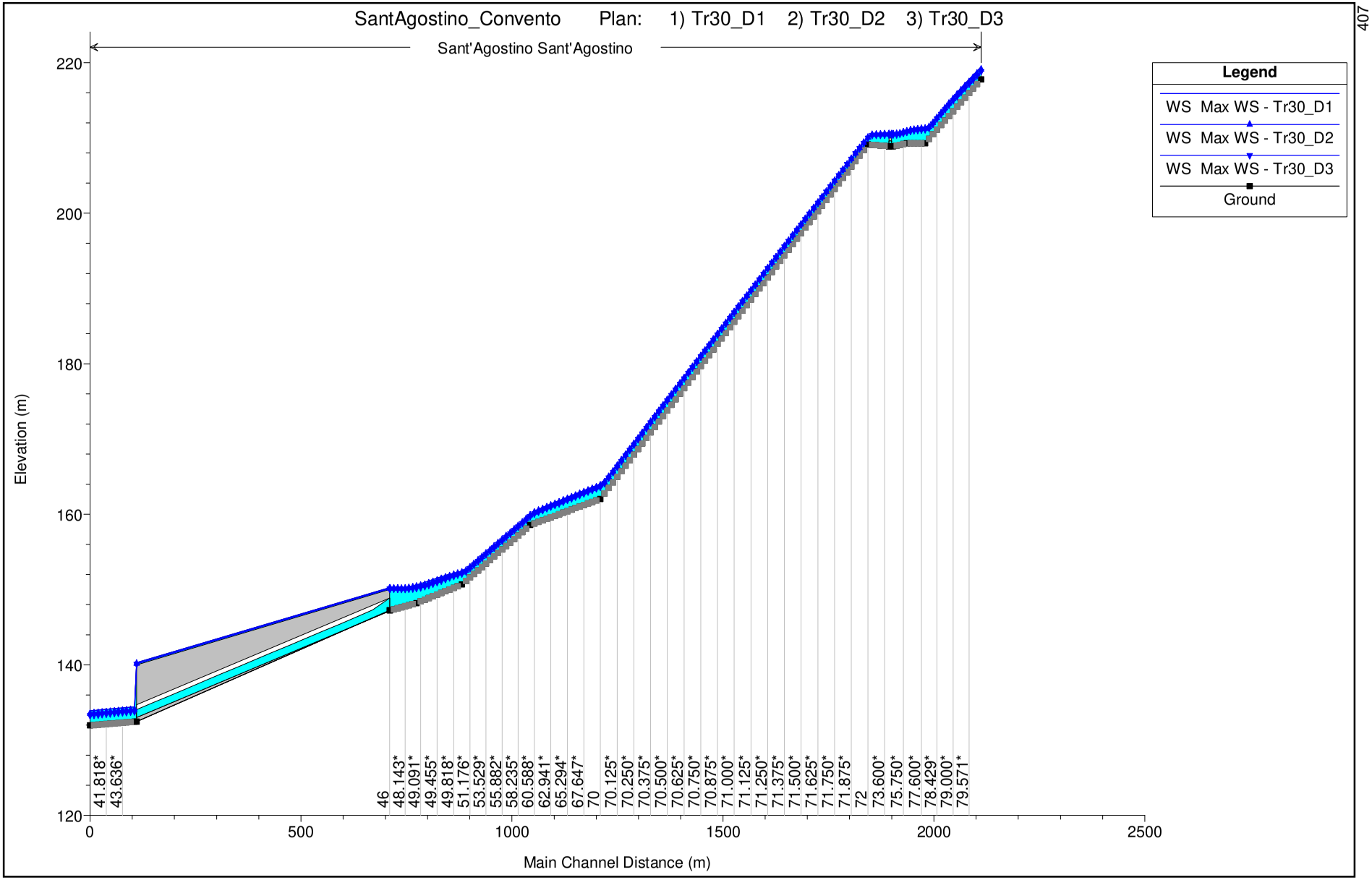
MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Profilo longitudinale


SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
Sant'Agostino Sant'Agostino
Legend
WS Max WS - Tr30_D1
WS Max WS - Tr30_D2
WS Max WS - Tr30_D3
Ground
Elevation (m)
Main Channel Distance (m)
220
200
180
160
140
120
0
500
1000
1500
2000
2500
41.818*
43.636*
46
48.143*
49.091*
49.455*
49.818*
51.176*
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72
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75.750*
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78.429*
79.000*
79.571*

ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

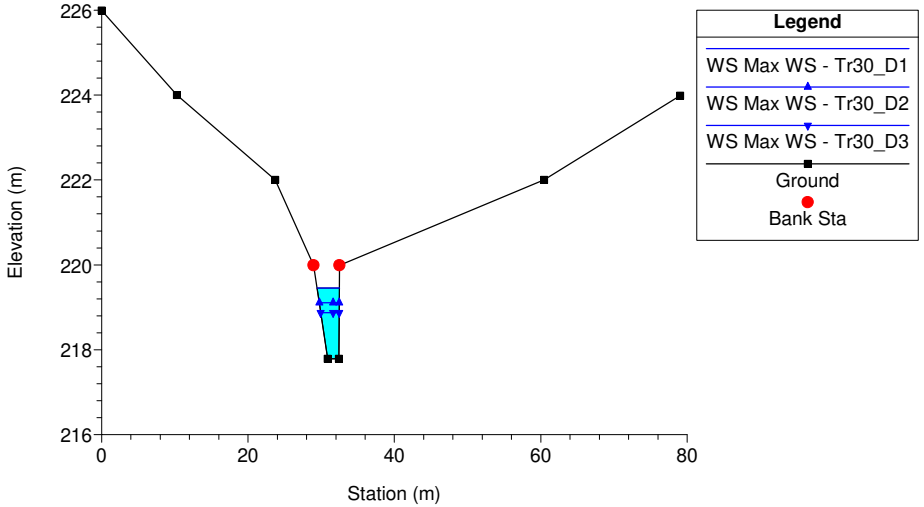
FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=30 anni

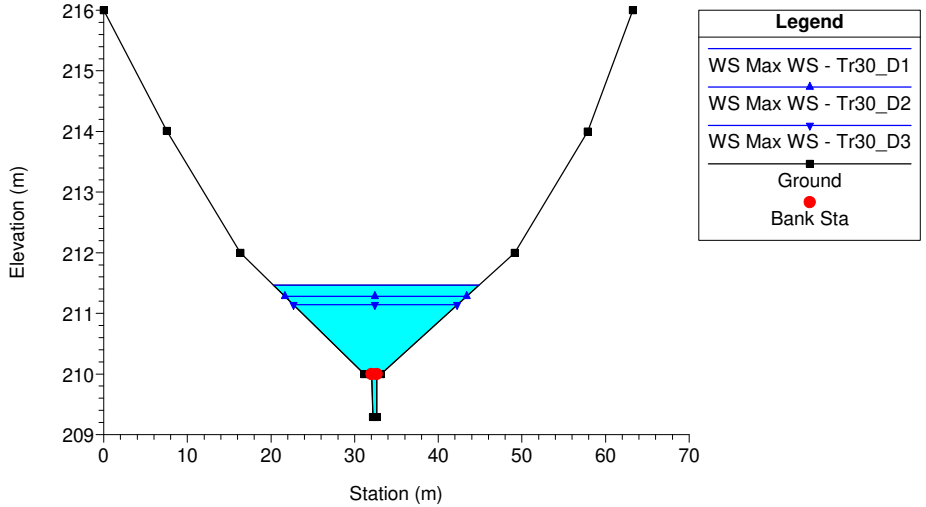
DURATE DI PIOGGIA: 1h, 2h, 3h

Sezioni Trasversali (da monte verso valle)

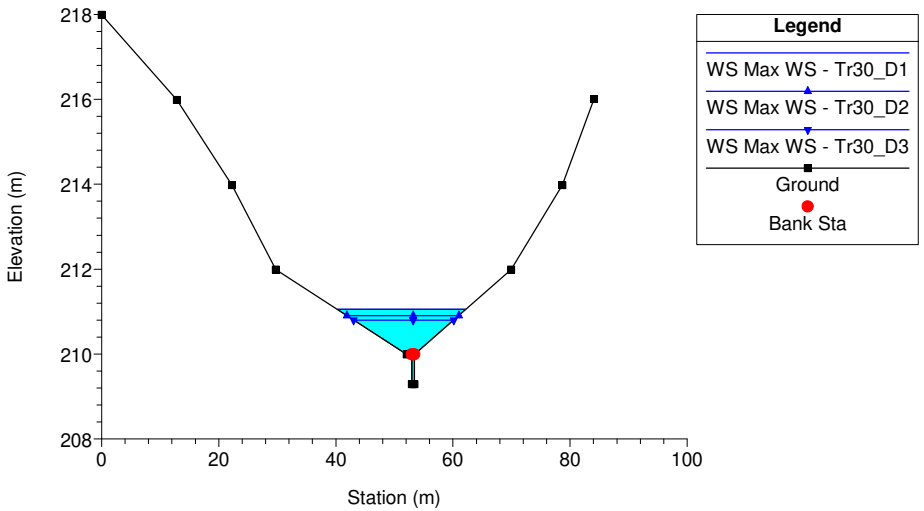
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 80 AGO_11



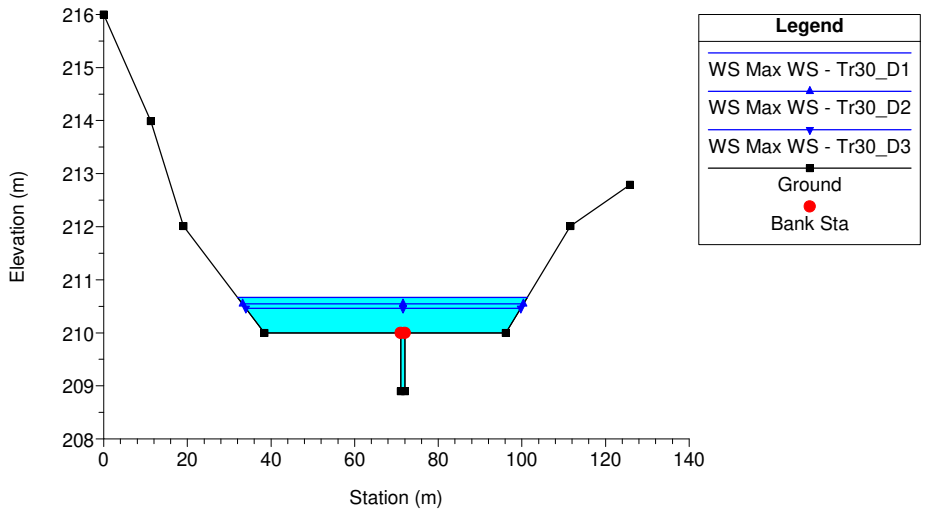
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 78 AGO_10



SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 76 AGO_09

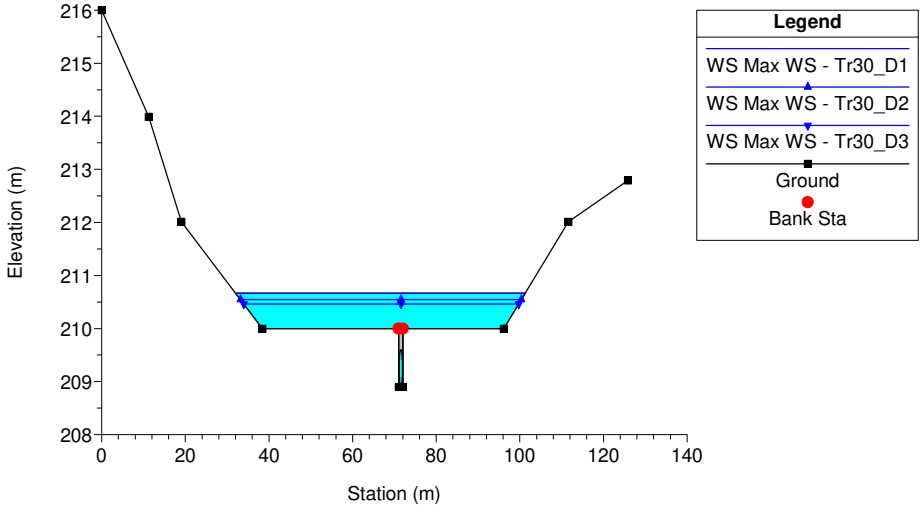


SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 75 AGO_08



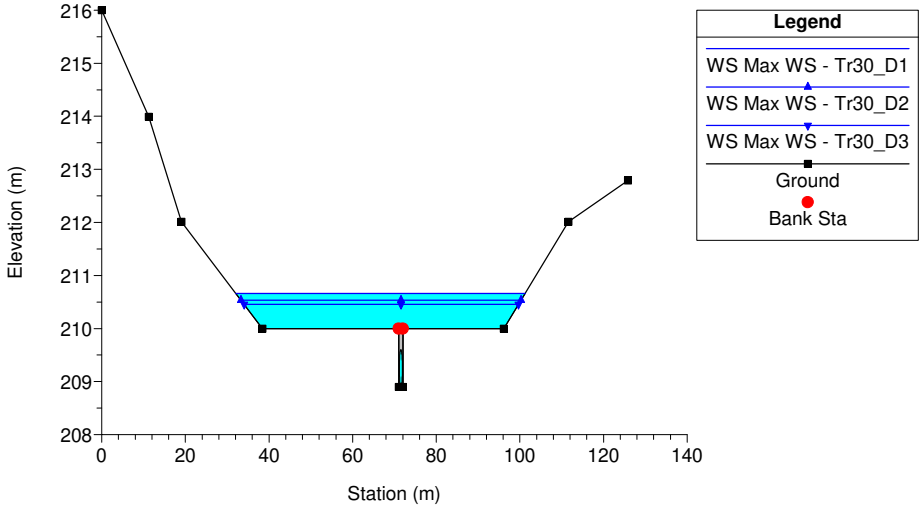
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 74.5 Culv



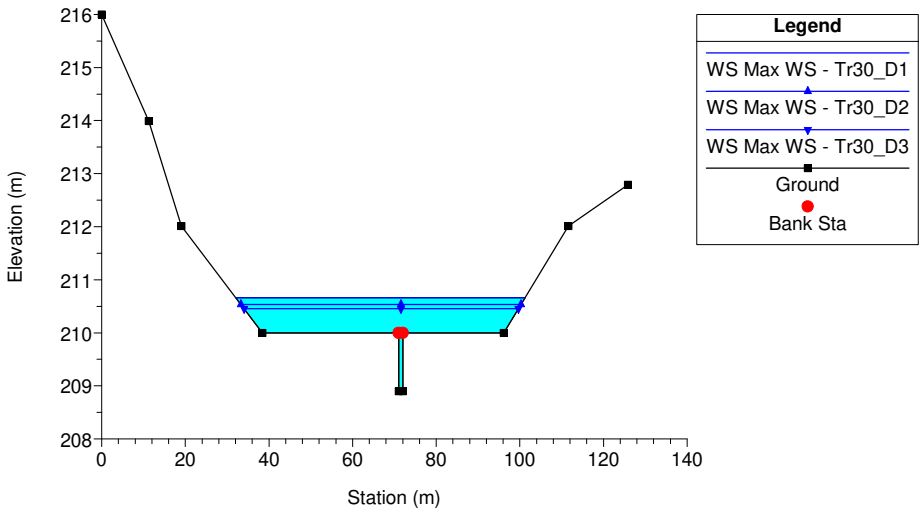
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 74.5 Culv



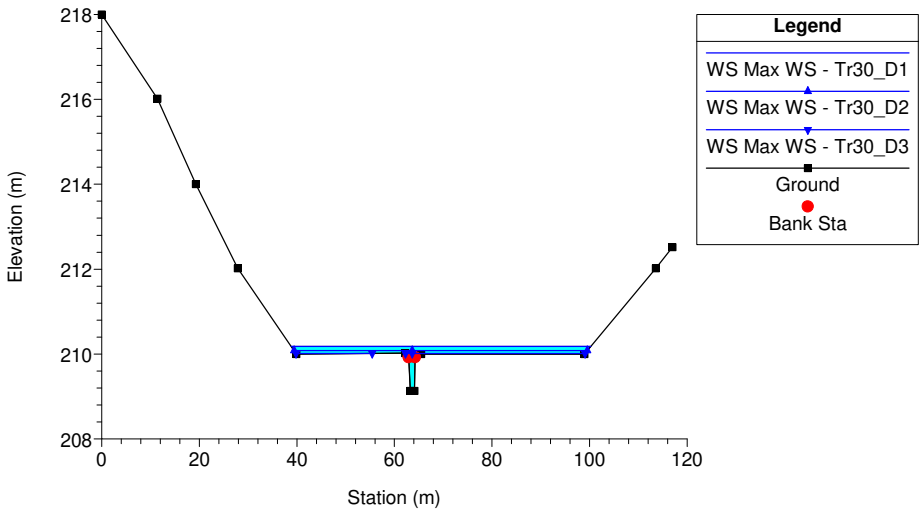
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 74 AGO_07

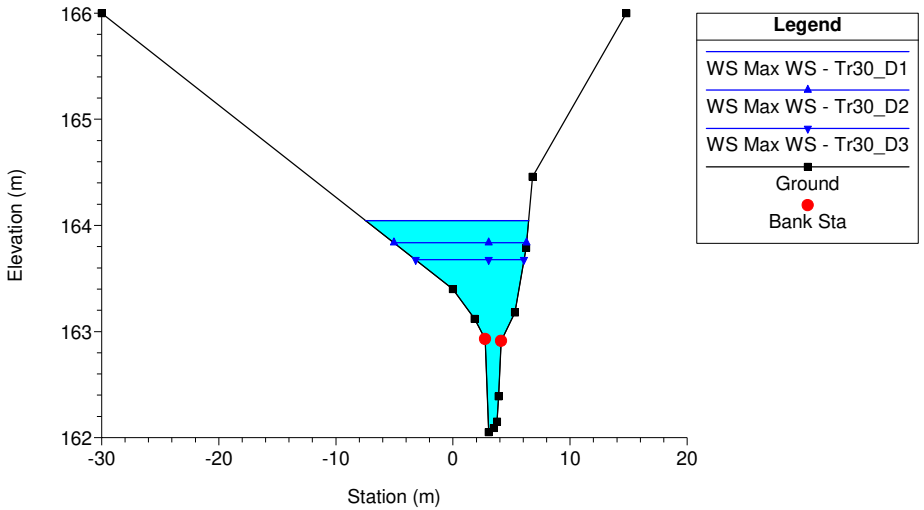


SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

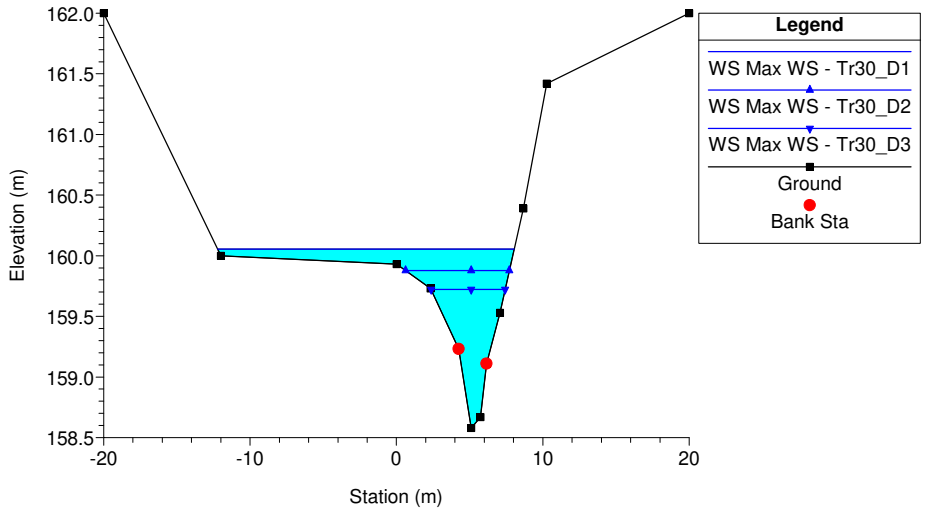
River = Sant'Agostino Reach = Sant'Agostino RS = 72 AGO_06



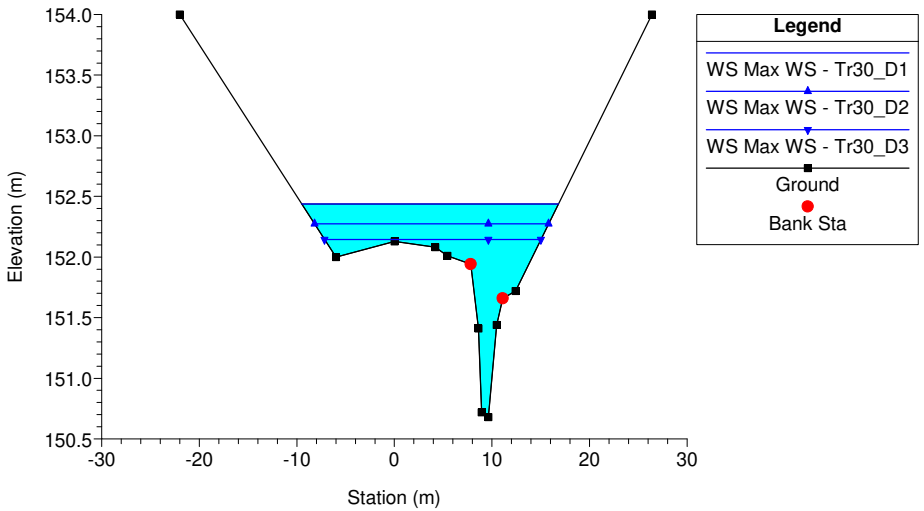
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 70 AGO_05



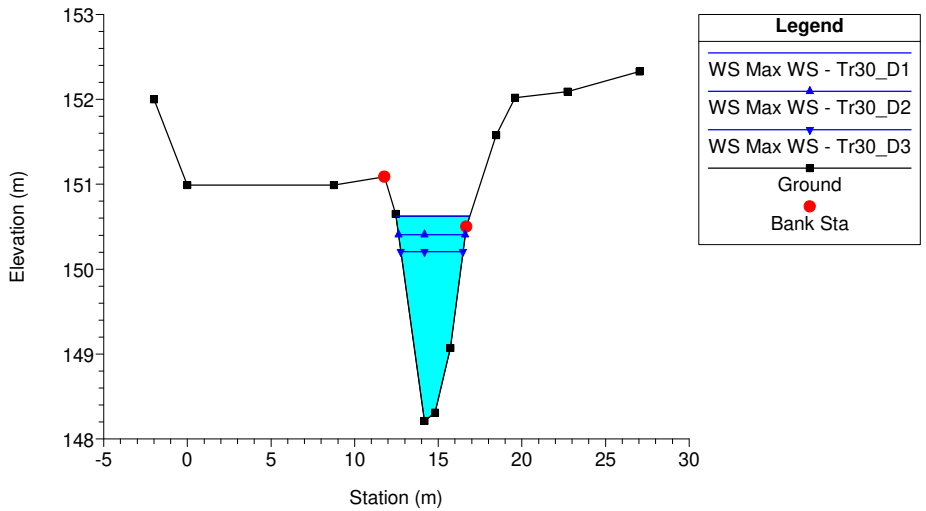
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 60 AGO_04



SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 50 AGO_03

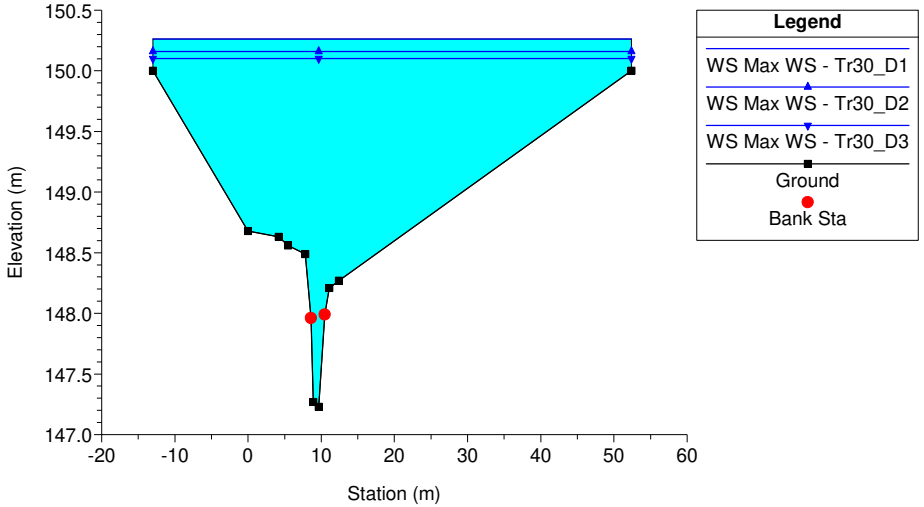


SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3
River = Sant'Agostino Reach = Sant'Agostino RS = 49 AGO_02



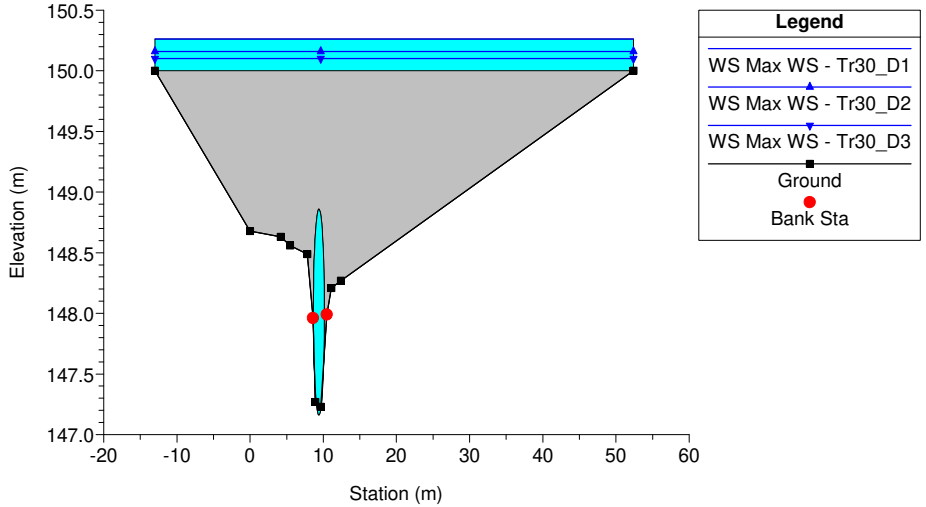
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 47 AGO_01



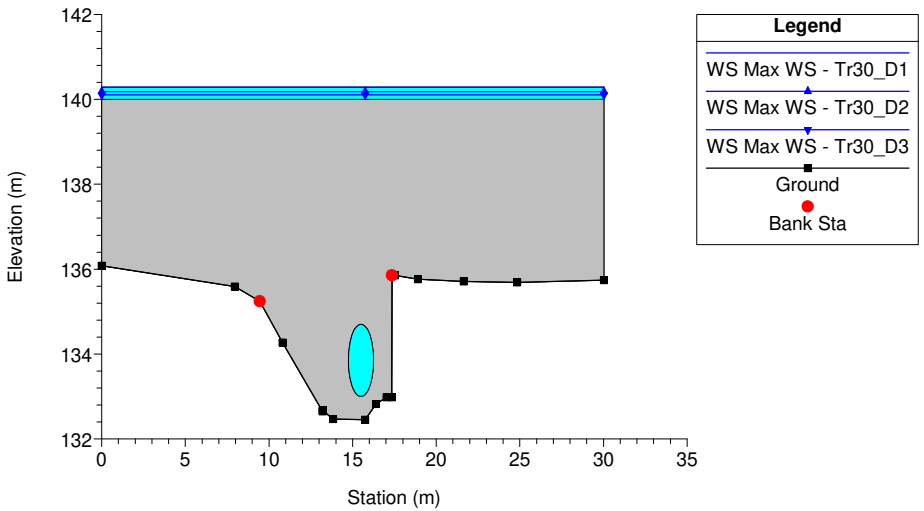
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 46 Culv



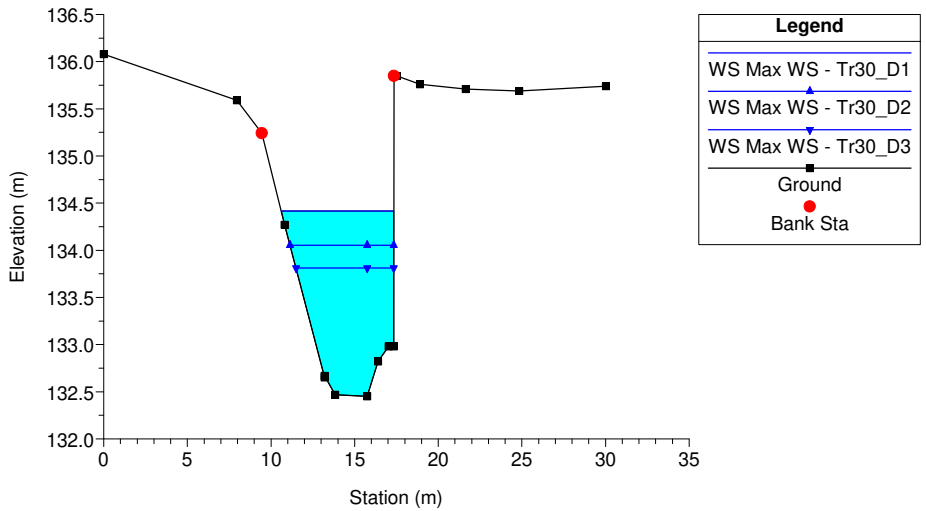
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 46 Culv



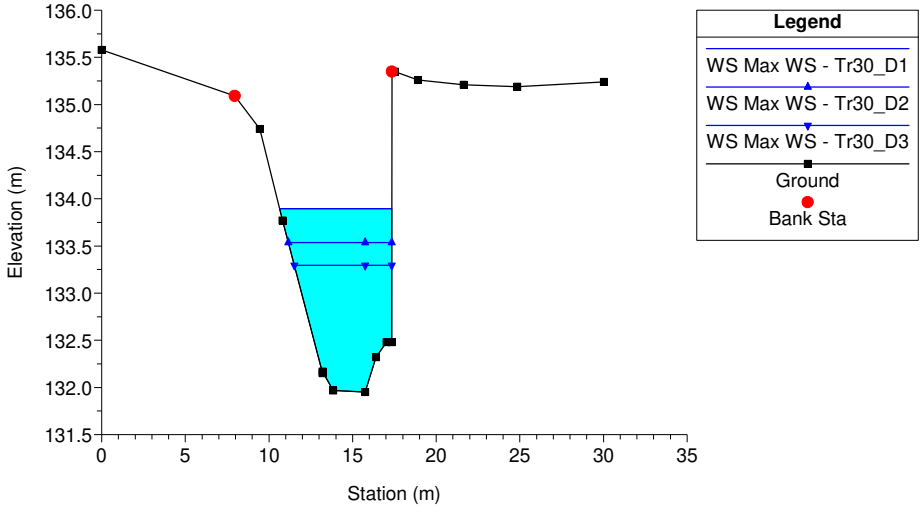
SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 45



SantAgostino_Convento Plan: 1) Tr30_D1 2) Tr30_D2 3) Tr30_D3

River = Sant'Agostino Reach = Sant'Agostino RS = 40 muro a destra, incinazione???



ALLEGATI

MODELLAZIONE HEC-RAS 5.0.7 "SantAgostino_Convento"

FOSSO DI SANT'AGOSTINO

MODELLAZIONE PER TR=30 anni

DURATE DI PIOGGIA: 1h, 2h, 3h

Dati idraulici

HEC-RAS River: Sant'Agostino Reach: Sant'Agostino Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Vel Left	Vel Right	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m/s)	(m/s)	(m2)	(m)	
Sant'Agostino	80	Max WS	Tr30_D1	21.00	217.79	219.45	219.93	220.99	0.058694	5.49			3.82	3.05	1.57
Sant'Agostino	80	Max WS	Tr30_D2	14.20	217.79	219.11	219.50	220.40	0.059497	5.03			2.82	2.74	1.58
Sant'Agostino	80	Max WS	Tr30_D3	10.40	217.79	218.88	219.22	220.00	0.060791	4.70			2.21	2.53	1.60
Sant'Agostino	78	Max WS	Tr30_D1	20.96	209.29	211.47		211.53	0.005286	1.62	1.03	1.01	19.84	24.57	0.36
Sant'Agostino	78	Max WS	Tr30_D2	14.20	209.29	211.28		211.33	0.004595	1.42	0.88	0.86	15.56	21.72	0.33
Sant'Agostino	78	Max WS	Tr30_D3	10.40	209.29	211.14		211.18	0.004209	1.29	0.78	0.76	12.68	19.57	0.31
Sant'Agostino	76	Max WS	Tr30_D1	20.94	209.29	211.05		211.20	0.020656	2.36	1.63	1.56	12.66	21.95	0.57
Sant'Agostino	76	Max WS	Tr30_D2	14.19	209.29	210.91		211.02	0.019154	2.15	1.44	1.36	9.69	19.14	0.54
Sant'Agostino	76	Max WS	Tr30_D3	10.40	209.29	210.80		210.90	0.018245	2.00	1.30	1.23	7.78	17.09	0.52
Sant'Agostino	75	Max WS	Tr30_D1	20.91	208.90	210.67		210.68	0.001524	0.74	0.47	0.47	43.58	69.31	0.18
Sant'Agostino	75	Max WS	Tr30_D2	14.19	208.90	210.54		210.55	0.001384	0.68	0.39	0.39	34.98	67.12	0.17
Sant'Agostino	75	Max WS	Tr30_D3	10.40	208.90	210.46		210.47	0.001241	0.62	0.34	0.34	29.63	65.73	0.16
Sant'Agostino	74.5			Culvert											
Sant'Agostino	74	Max WS	Tr30_D1	20.92	208.90	210.66		210.67	0.001587	0.76	0.48	0.47	43.02	69.17	0.18
Sant'Agostino	74	Max WS	Tr30_D2	14.19	208.90	210.53		210.54	0.001468	0.69	0.40	0.40	34.32	66.95	0.17
Sant'Agostino	74	Max WS	Tr30_D3	10.40	208.90	210.45		210.46	0.001325	0.64	0.34	0.34	29.01	65.56	0.16
Sant'Agostino	72	Max WS	Tr30_D1	20.91	209.13	210.18	210.28	210.58	0.075732	4.78	1.40	1.46	11.77	61.47	1.59
Sant'Agostino	72	Max WS	Tr30_D2	14.19	209.13	210.08	210.23	211.69	0.214694	7.44	1.32	1.45	5.58	60.13	2.63
Sant'Agostino	72	Max WS	Tr30_D3	10.40	209.13	210.01	210.20	215.12	0.454242	10.24	0.64	0.70	1.65	52.44	3.77
Sant'Agostino	70	Max WS	Tr30_D1	20.88	162.05	164.05	164.19	164.57	0.022942	4.26	1.52	1.90	8.95	13.92	1.02
Sant'Agostino	70	Max WS	Tr30_D2	14.18	162.05	163.84	163.98	164.34	0.022856	3.90	1.30	1.65	6.30	11.32	1.00
Sant'Agostino	70	Max WS	Tr30_D3	10.40	162.05	163.68	163.83	164.16	0.023062	3.65	1.14	1.46	4.65	9.26	0.99
Sant'Agostino	60	Max WS	Tr30_D1	20.86	158.58	160.05	160.44	161.78	0.052397	6.63	1.14	2.21	6.01	20.26	1.90
Sant'Agostino	60	Max WS	Tr30_D2	14.18	158.58	159.88	160.29	161.31	0.048835	5.78	1.42	1.86	3.55	7.10	1.79
Sant'Agostino	60	Max WS	Tr30_D3	10.40	158.58	159.72	160.19	160.96	0.049440	5.24	1.42	1.60	2.60	5.06	1.75
Sant'Agostino	50	Max WS	Tr30_D1	20.84	150.68	152.44	152.50	152.76	0.012849	3.12	0.93	1.10	12.55	26.32	0.90
Sant'Agostino	50	Max WS	Tr30_D2	14.18	150.68	152.27	152.36	152.61	0.014095	2.97	0.69	1.00	8.42	24.00	0.92
Sant'Agostino	50	Max WS	Tr30_D3	10.40	150.68	152.14	152.27	152.52	0.016244	2.92	0.41	0.93	5.42	22.16	0.97
Sant'Agostino	49	Max WS	Tr30_D1	20.82	148.21	150.62		151.21	0.015239	3.39		0.29	6.15	4.41	0.90
Sant'Agostino	49	Max WS	Tr30_D2	14.18	148.21	150.40		150.78	0.011084	2.71			5.23	3.98	0.75
Sant'Agostino	49	Max WS	Tr30_D3	10.40	148.21	150.21		150.48	0.009055	2.33			4.47	3.71	0.68
Sant'Agostino	48.9			Lat Struct											
Sant'Agostino	48.8			Lat Struct											
Sant'Agostino	47	Max WS	Tr30_D1	20.71	147.23	150.26		150.27	0.000159	0.57	0.24	0.23	80.92	65.41	0.11
Sant'Agostino	47	Max WS	Tr30_D2	14.15	147.23	150.16		150.16	0.000097	0.44	0.18	0.17	74.20	65.41	0.09
Sant'Agostino	47	Max WS	Tr30_D3	10.39	147.23	150.10		150.10	0.000062	0.34	0.14	0.13	70.25	65.41	0.07
Sant'Agostino	46			Culvert											
Sant'Agostino	45	Max WS	Tr30_D1	20.70	132.45	134.42		134.65	0.004820	2.12			9.78	6.73	0.56
Sant'Agostino	45	Max WS	Tr30_D2	14.15	132.45	134.05		134.24	0.004794	1.90			7.43	6.21	0.56
Sant'Agostino	45	Max WS	Tr30_D3	10.39	132.45	133.81		133.97	0.004758	1.74			5.97	5.85	0.55
Sant'Agostino	40	Max WS	Tr30_D1	20.69	131.95	133.90	133.38	134.13	0.005017	2.15			9.64	6.70	0.57
Sant'Agostino	40	Max WS	Tr30_D2	14.15	131.95	133.53	133.11	133.73	0.005022	1.94			7.31	6.18	0.57
Sant'Agostino	40	Max WS	Tr30_D3	10.39	131.95	133.29	132.94	133.45	0.005004	1.77			5.87	5.83	0.56