CITTA' DI CARINI

PROVINCIA DI PALERMO

STUDIO IDRAULICO DEL BACINO DEL VALLONE DELLA NOCE

IL CAPO RIPARTIZIONE VI URBANISTICA E PIANIFICAZIONE TERRITORIALE
Dott. Ing. Giuseppe Badalamenti

STRUTTURA INCARICATA

Studio tecnico Ing. Vittorio Cacioppo
Via Massimo D'Azeglio, 27/C
90143 - PALERMO

PROGETTAZIONE

COLLABORATORI

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Dott.ssa Claudia Schirò

PROFILO LONGITUDINALE - SEZIONI TRASVERSALI HEC RAS POST OPERAM

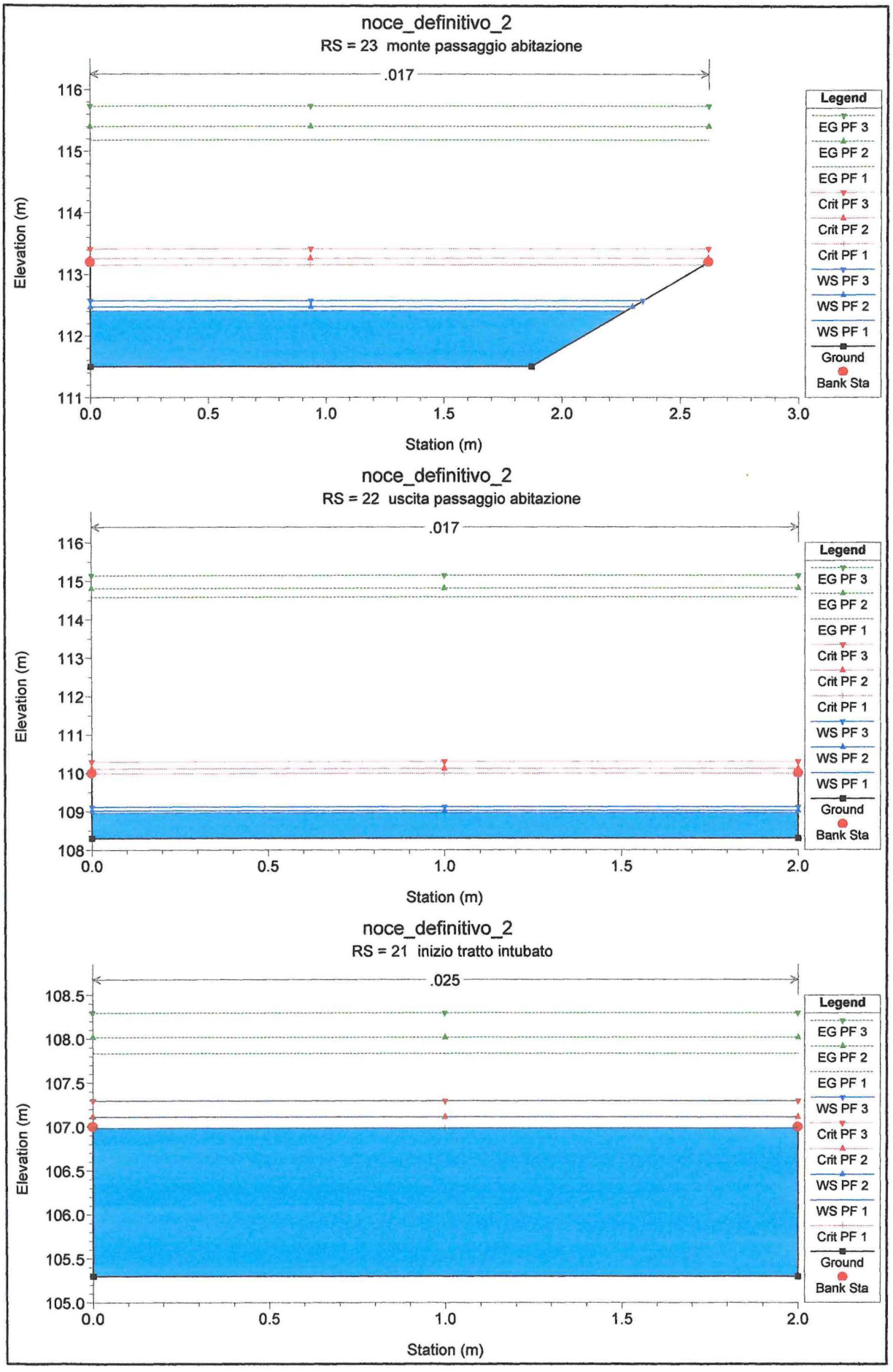
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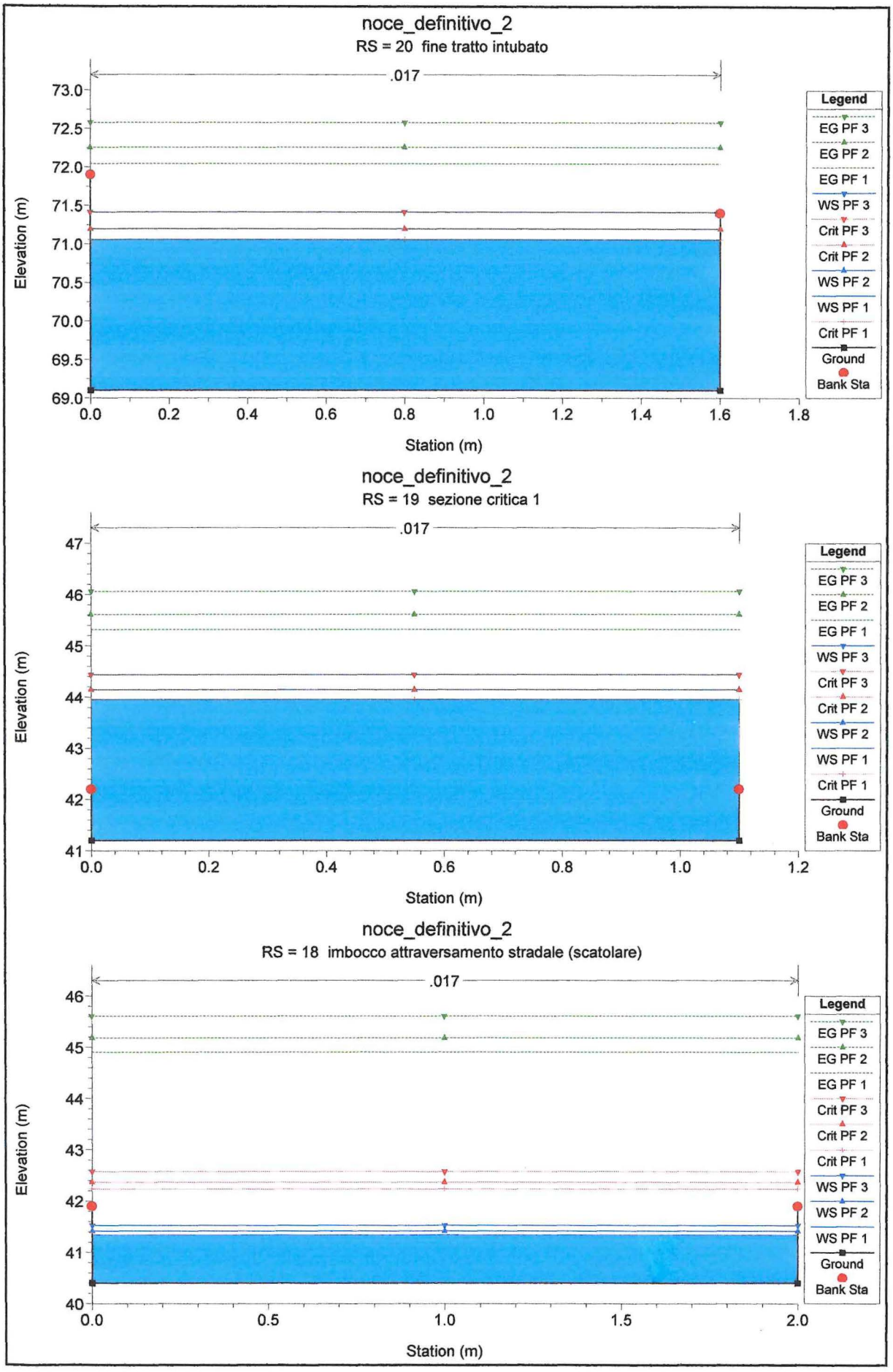
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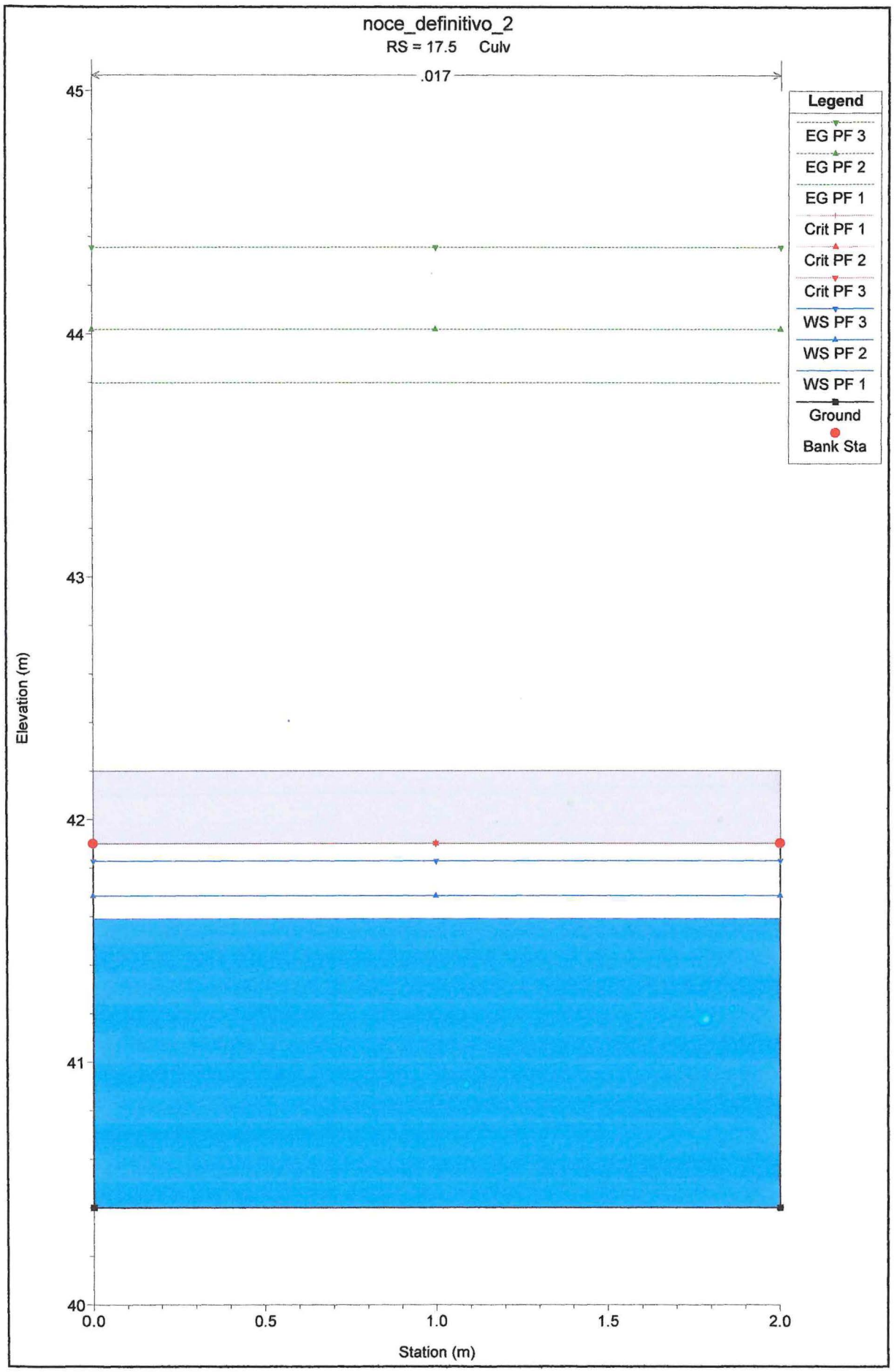
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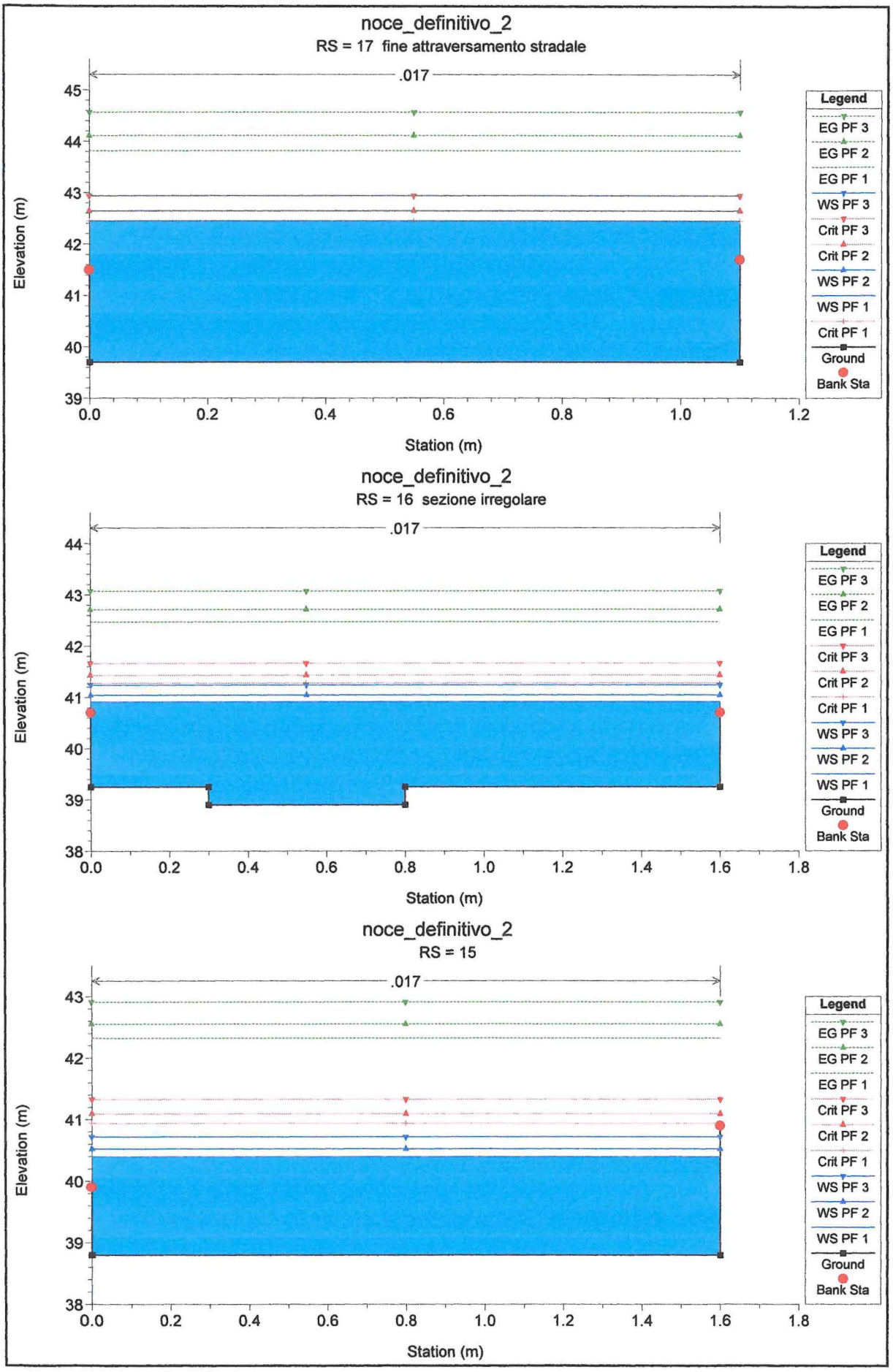
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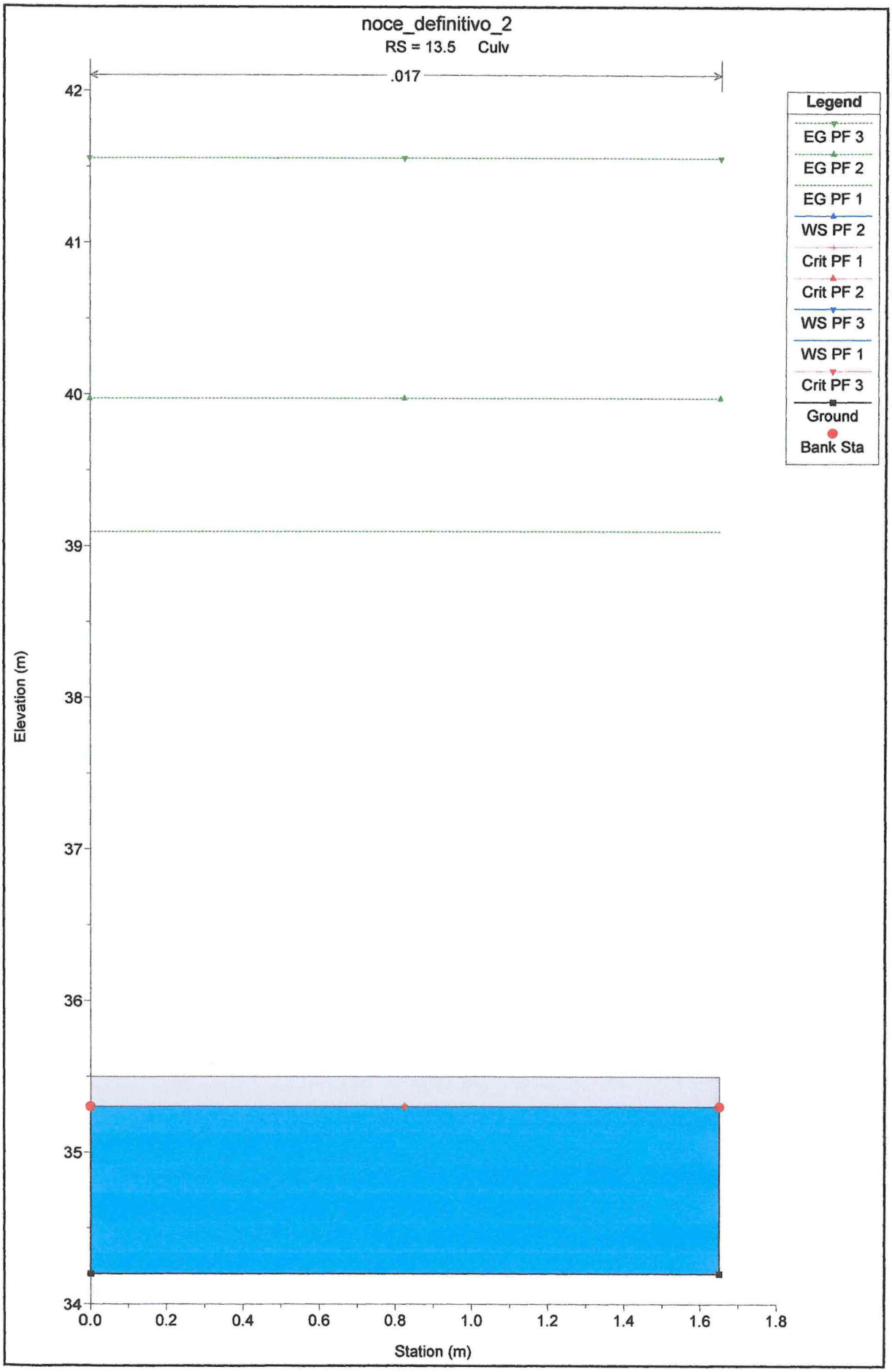
REVISIONE	DATA	DESCRIZIONE	REDATTO	CONTROLLATO	AUTORIZZATO
0	FEBBR. 2014	PRIMA EMISSIONE	V. Cacioppo	V. Cacioppo	V. Cacioppo

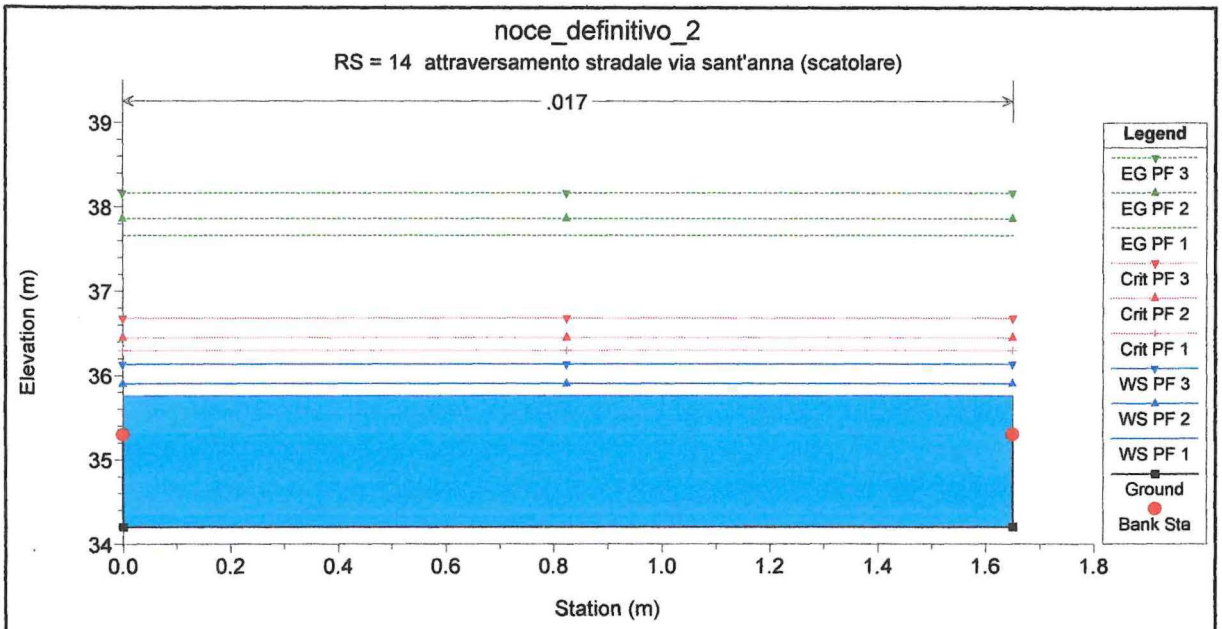

noce_definitivo_2
RS = 23 monte passaggio abitazione
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 22 uscita passaggio abitazione
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 21 inizio tratto intubato
.025
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

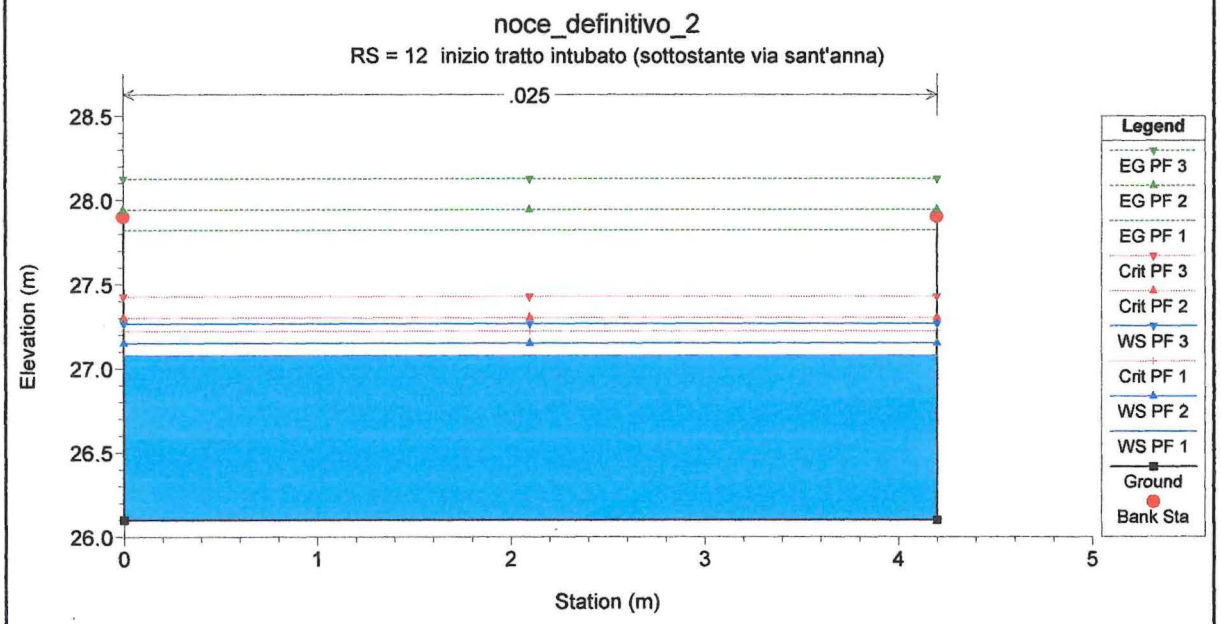

noce_definitivo_2
RS = 20 fine tratto intubato
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 19 sezione critica 1
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 18 imbocco attraversamento stradale (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

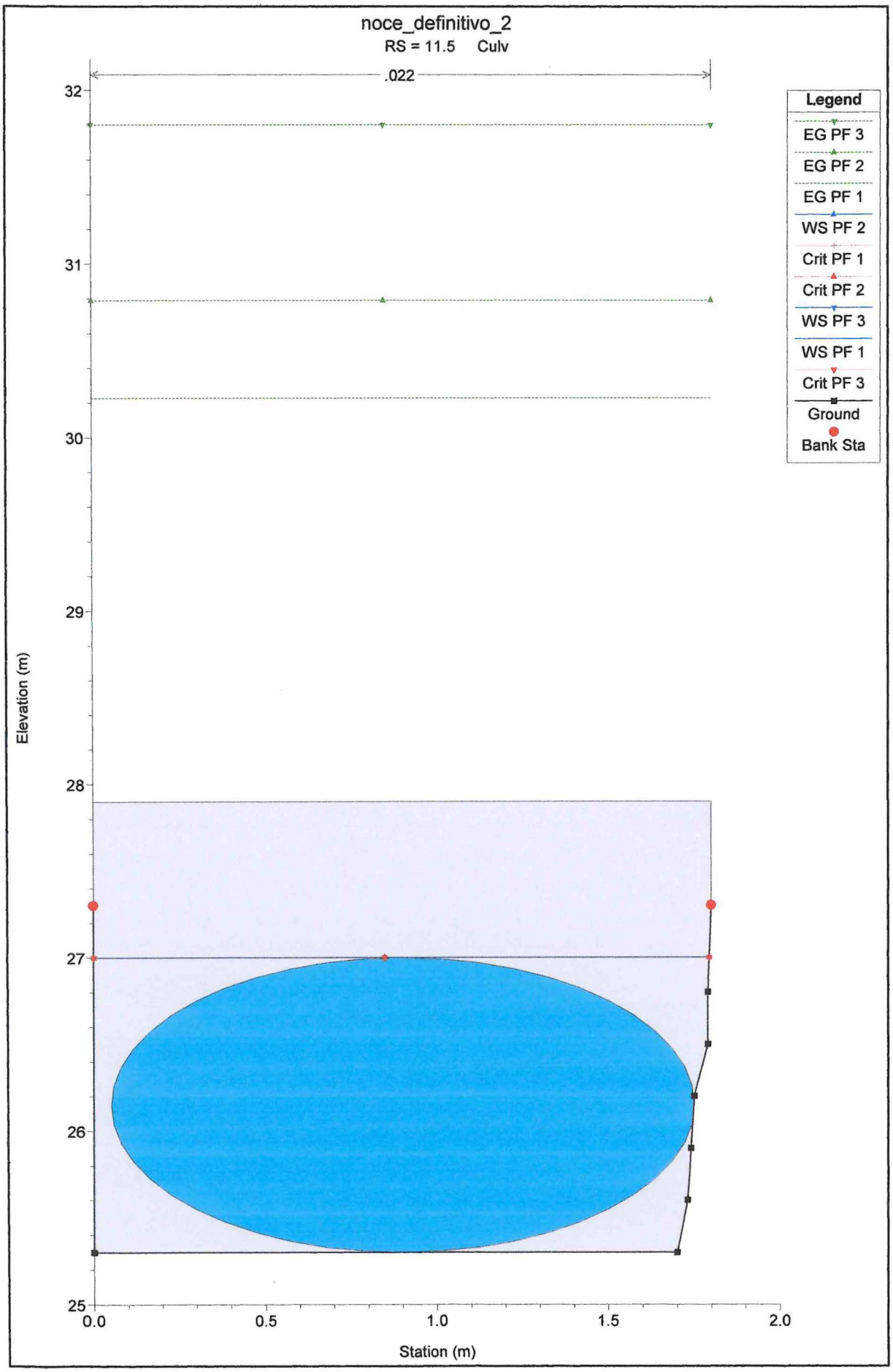

noce_definitivo_2
RS = 17.5 Culv
.017
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 1
Crit PF 2
Crit PF 3
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
45
44
43
42
41
40
0.0
0.5
1.0
1.5
2.0
Station (m)

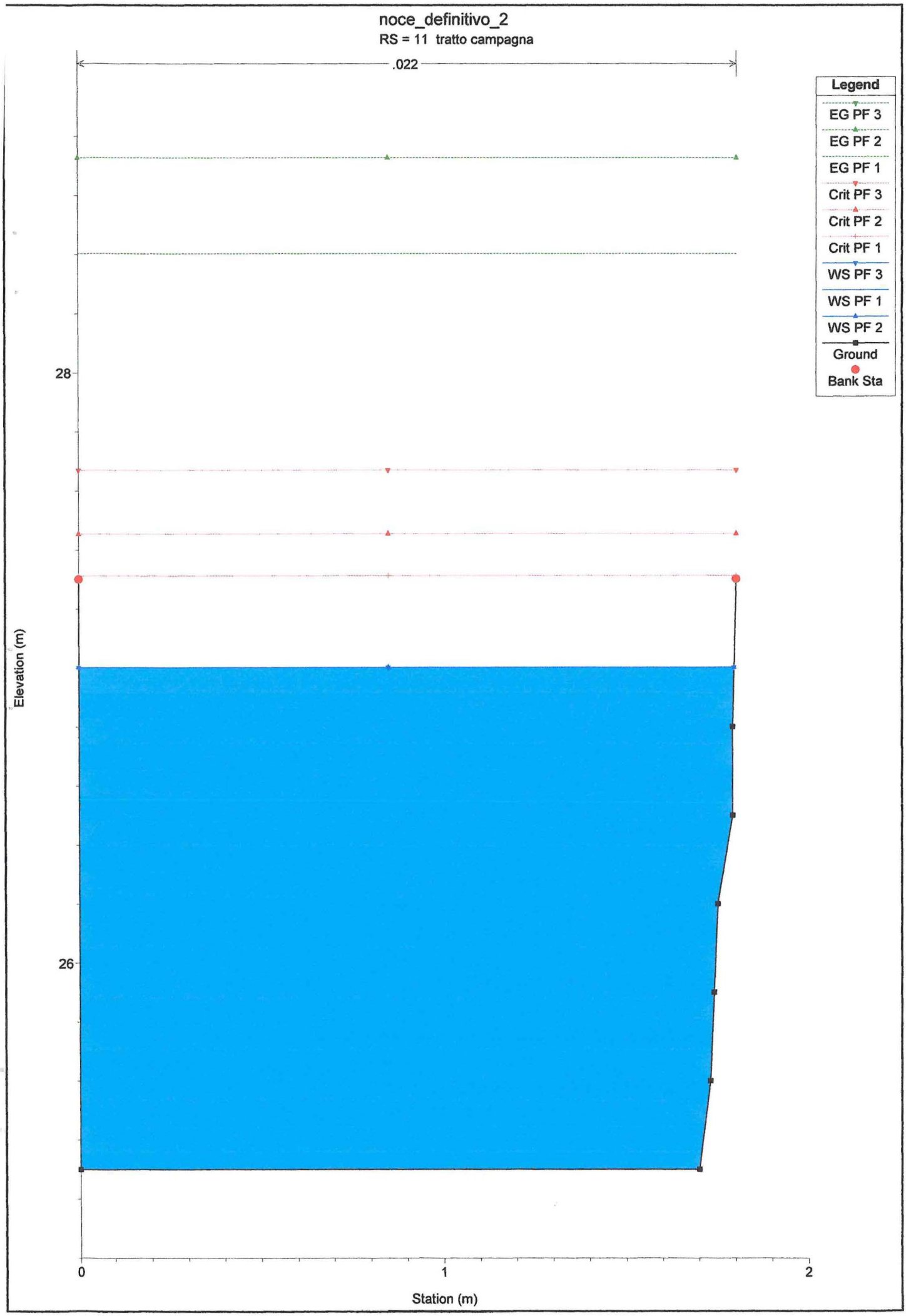

noce_definitivo_2
RS = 17 fine attraversamento stradale
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 16 sezione irregolare
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 15
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

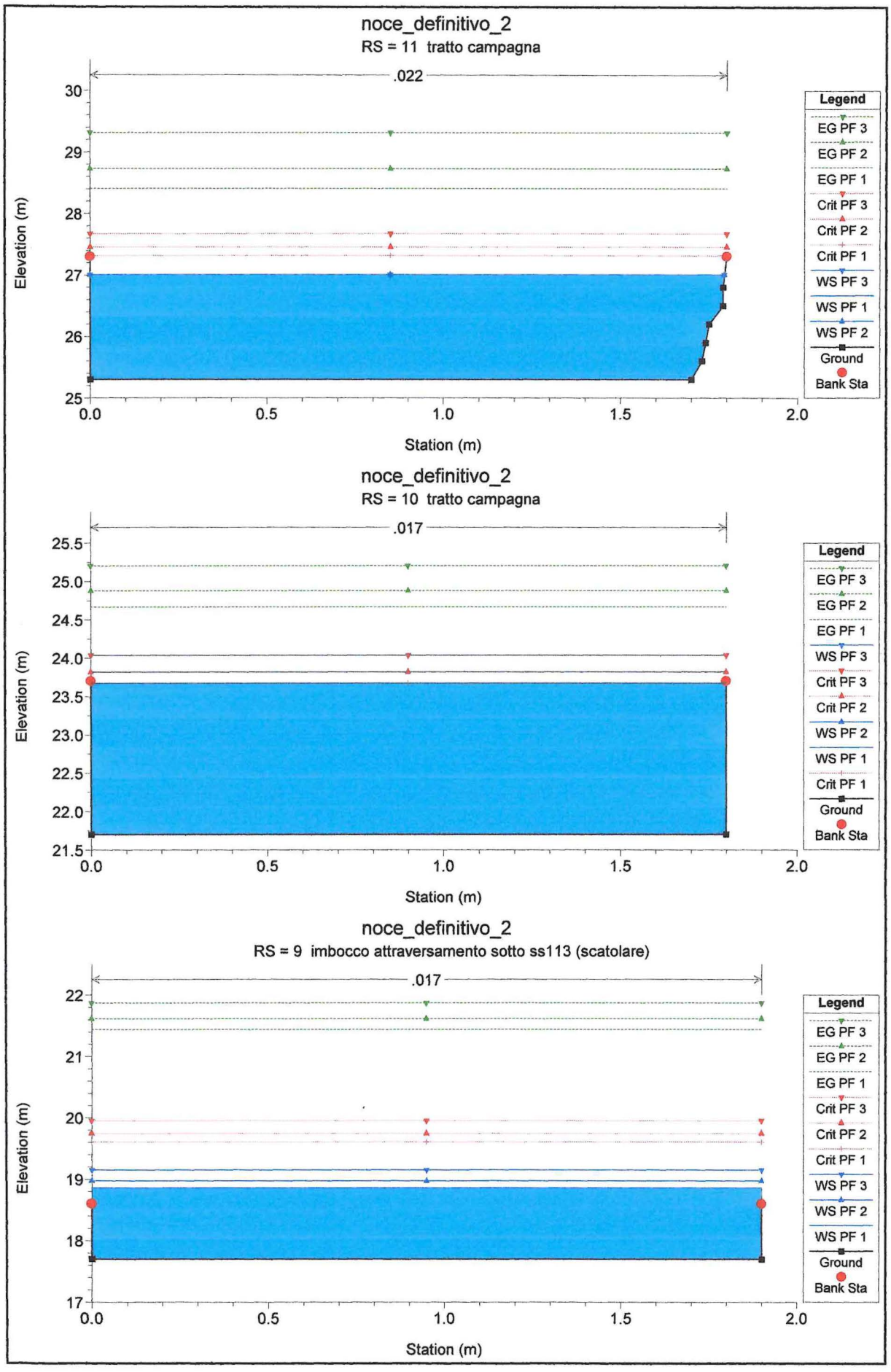

noce_definitivo_2
RS = 13.5 Culv
.017
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 2
Crit PF 1
Crit PF 2
WS PF 3
WS PF 1
Crit PF 3
Ground
Bank Sta
Elevation (m)
42
41
40
39
38
37
36
35
34
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
Station (m)

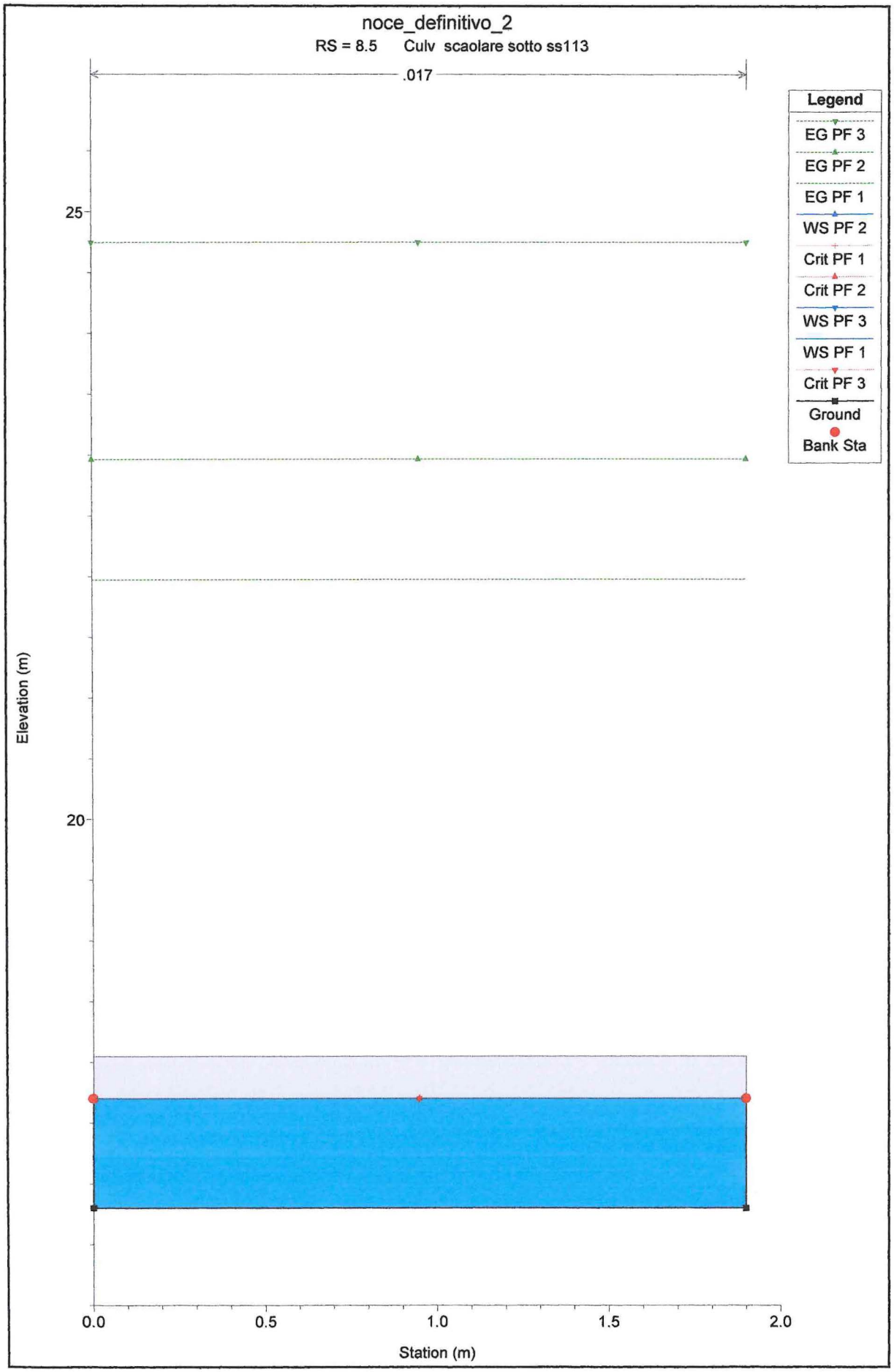

noce_definitivo_2
RS = 14 attraversamento stradale via sant'anna (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

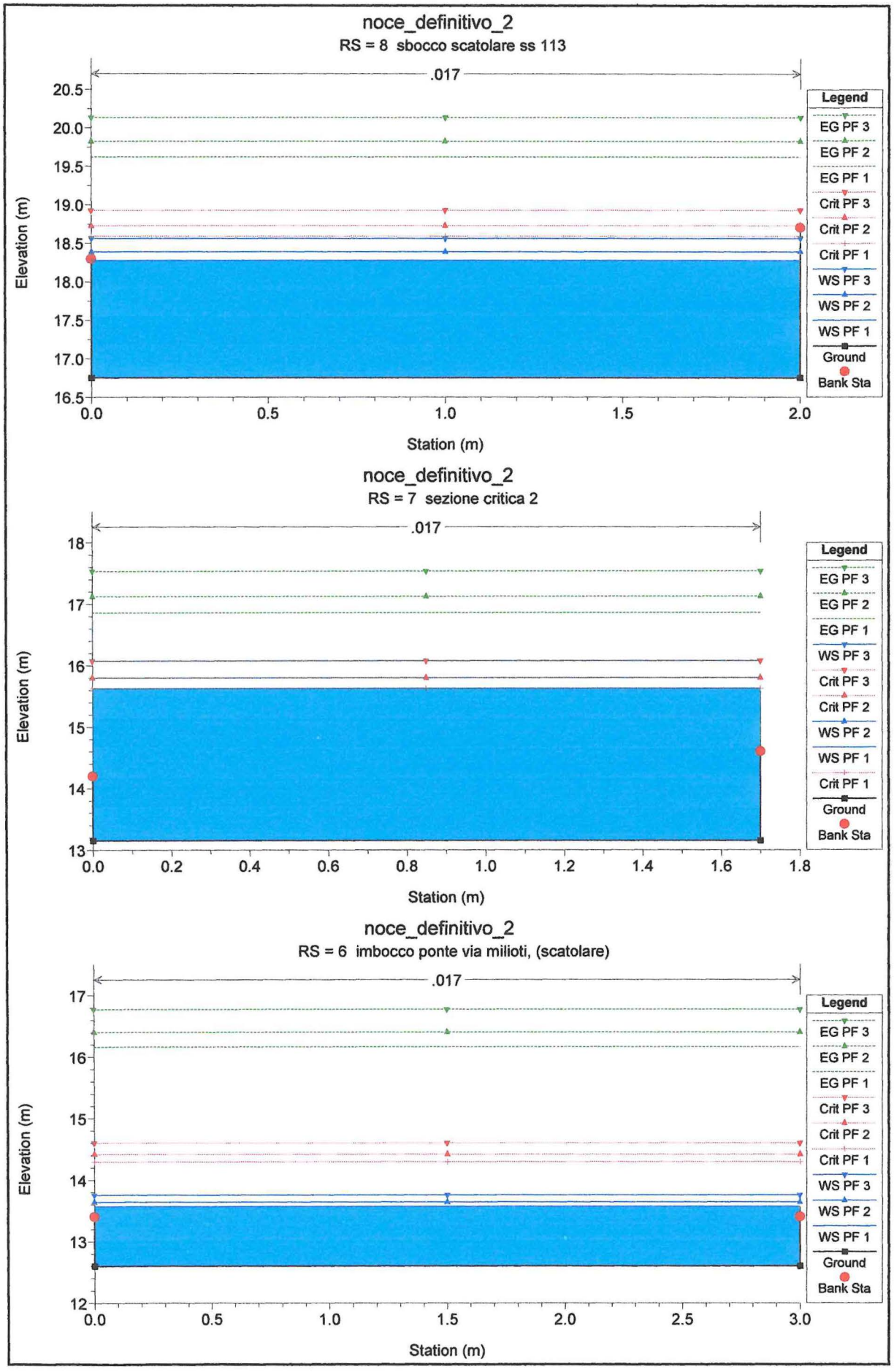

noce_definitivo_2
RS = 12 inizio tratto intubato (sottostante via sant'anna)
.025
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Bank Sta

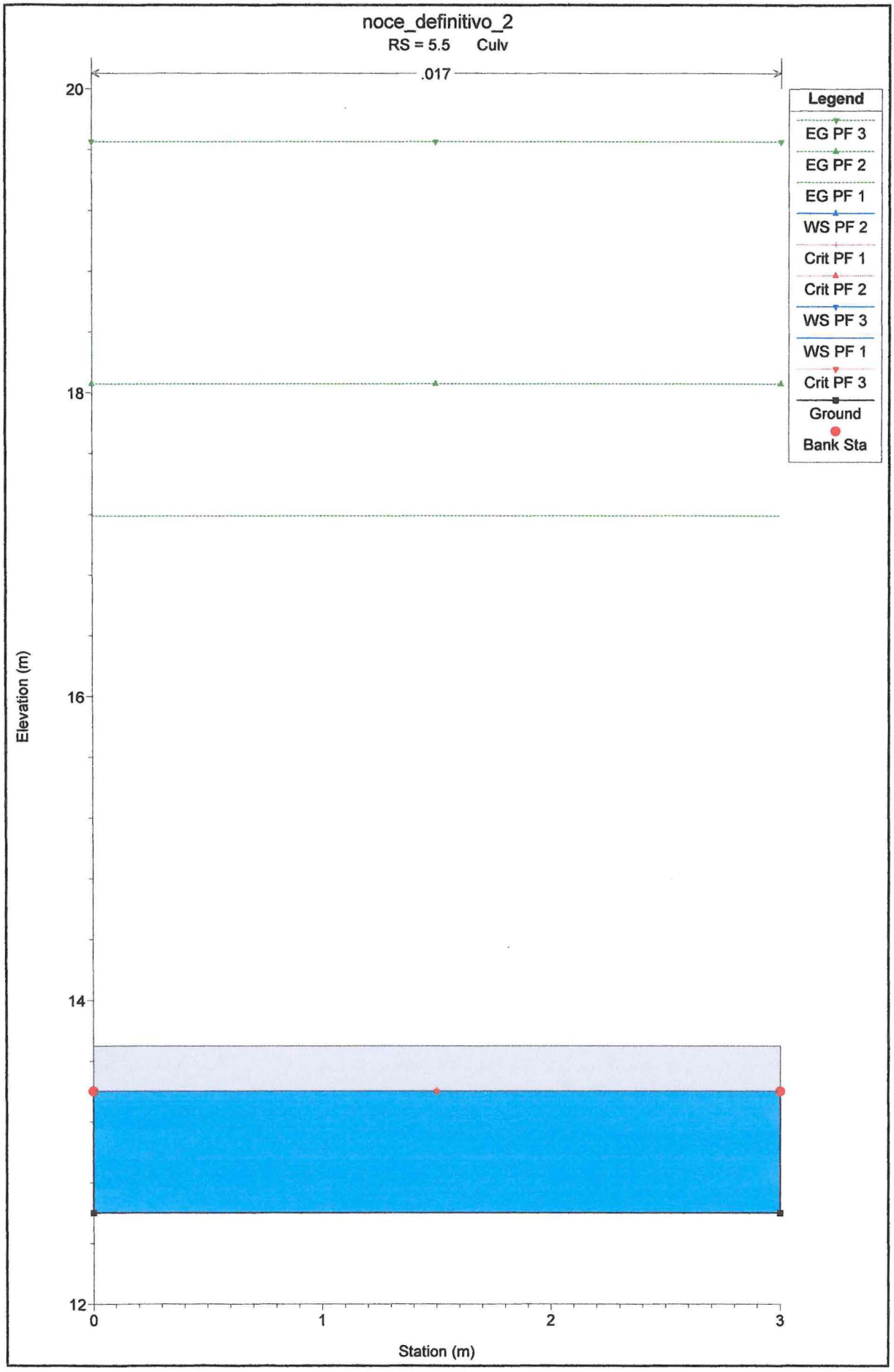

noce_definitivo_2
RS = 11.5 Culv
.022
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 2
Crit PF 1
Crit PF 2
WS PF 3
WS PF 1
Crit PF 3
Ground
Bank Sta
Elevation (m)
Station (m)
32
31
30
29
28
27
26
25
0.0
0.5
1.0
1.5
2.0


noce_definitivo_2
RS = 11 tratto campagna
.022
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 1
WS PF 2
Ground
Bank Sta
28
26
Elevation (m)
0
1
2
Station (m)


noce_definitivo_2
RS = 11 tratto campagna
.022
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 1
WS PF 2
Ground
Bank Sta
noce_definitivo_2
RS = 10 tratto campagna
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 9 imbocco attraversamento sotto ss113 (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

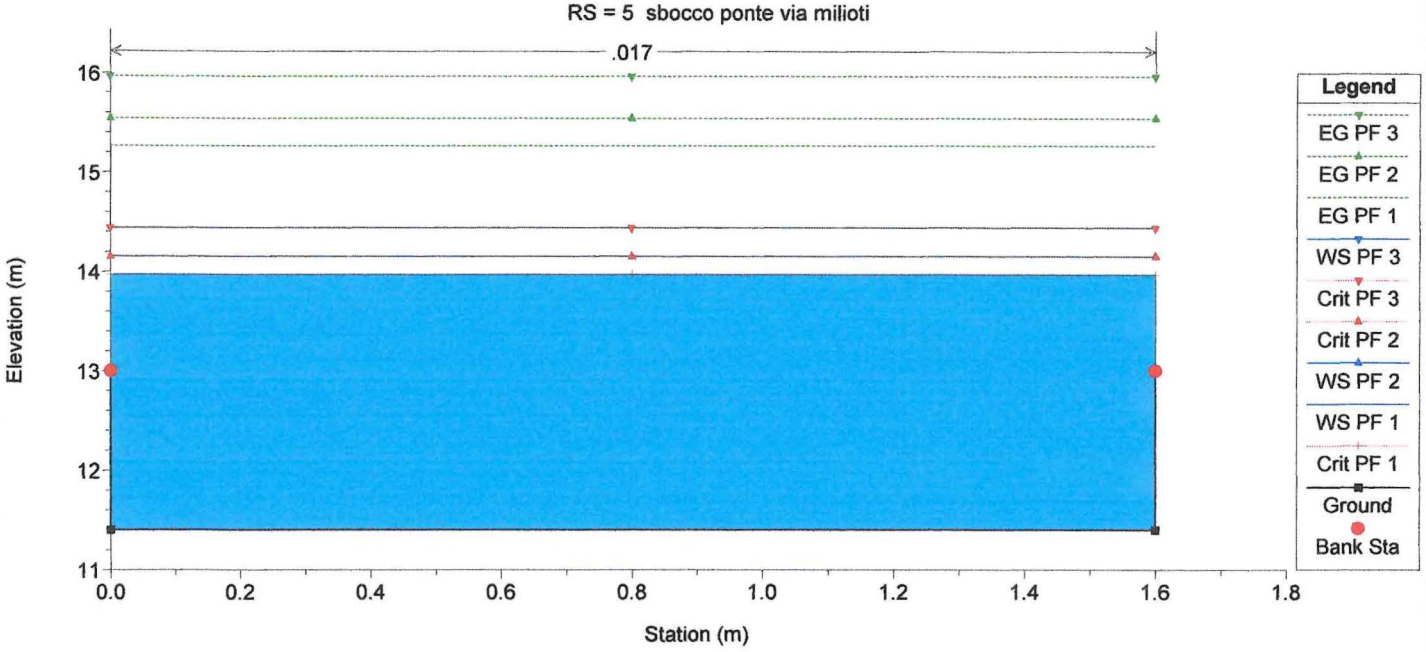

noce_definitivo_2
RS = 8.5 Culv scaolare sotto ss113
.017
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 2
Crit PF 1
Crit PF 2
WS PF 3
WS PF 1
Crit PF 3
Ground
Bank Sta
25
20
Elevation (m)
0.0
0.5
1.0
1.5
2.0
Station (m)


noce_definitivo_2
RS = 8 sbocco scatolare ss 113
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 7 sezione critica 2
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
noce_definitivo_2
RS = 6 imbocco ponte via milioti, (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta


noce_definitivo_2
RS = 5.5 Culv
.017
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 2
Crit PF 1
Crit PF 2
WS PF 3
WS PF 1
Crit PF 3
Ground
Bank Sta
Elevation (m)
20
18
16
14
12
0
1
2
3
Station (m)

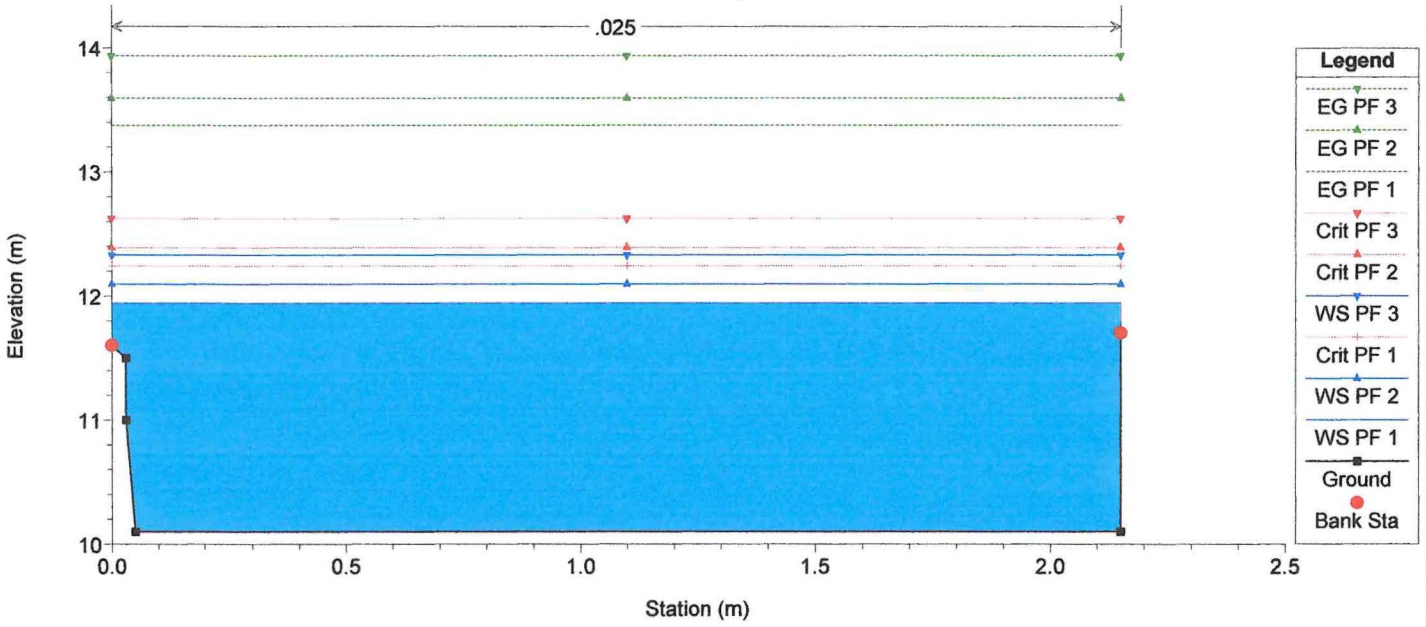
noce_definitivo_2

RS = 5 sbocco ponte via milioti



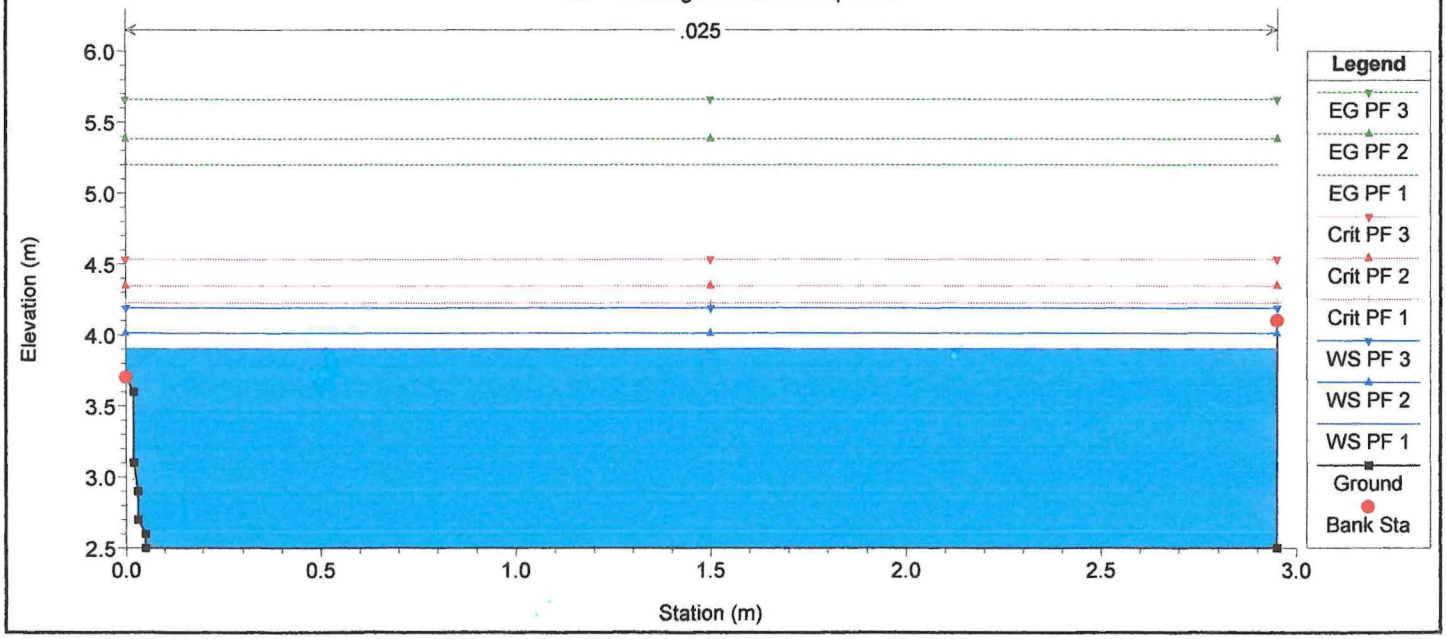
noce_definitivo_2

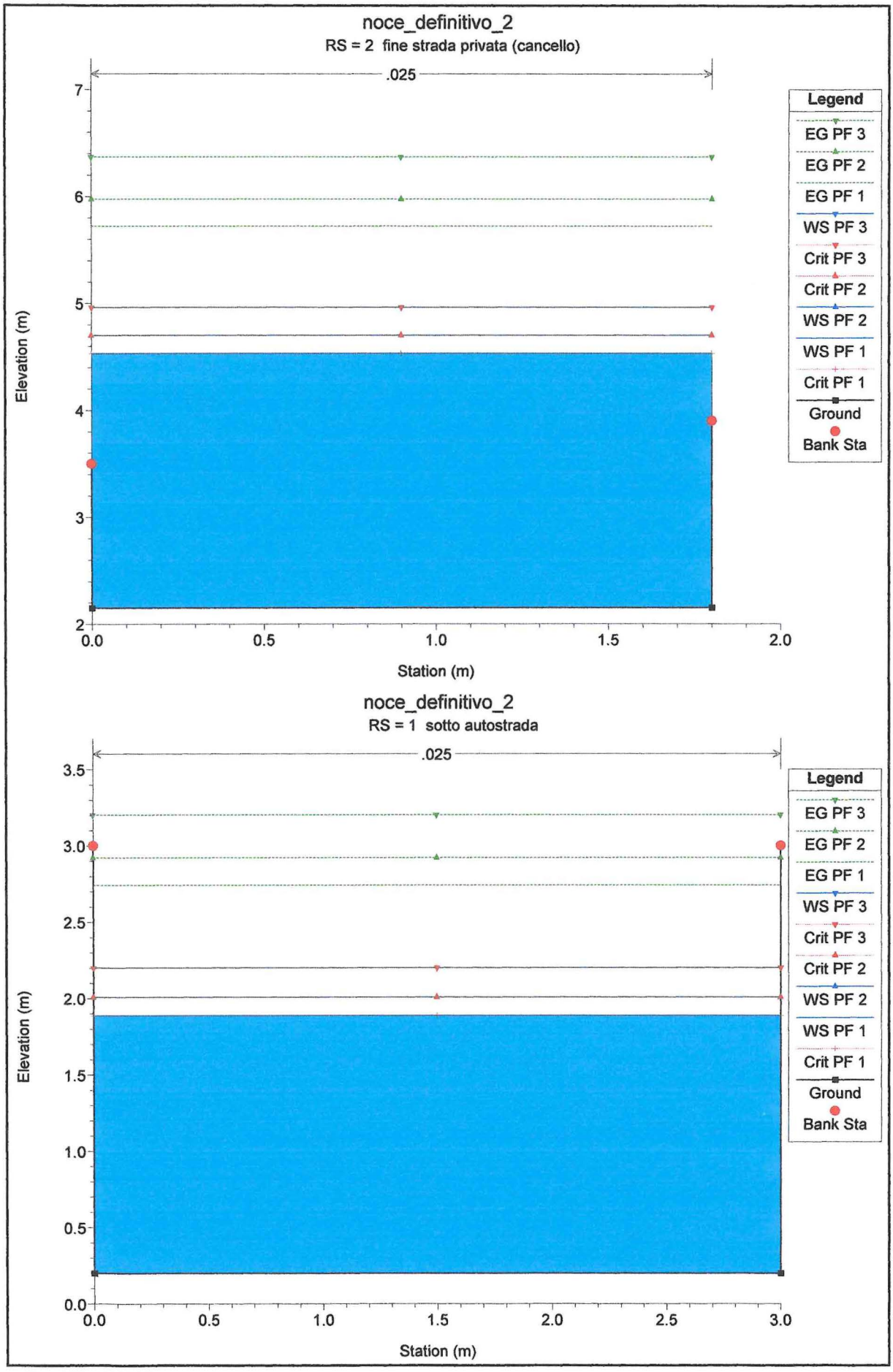
RS = 4 palo

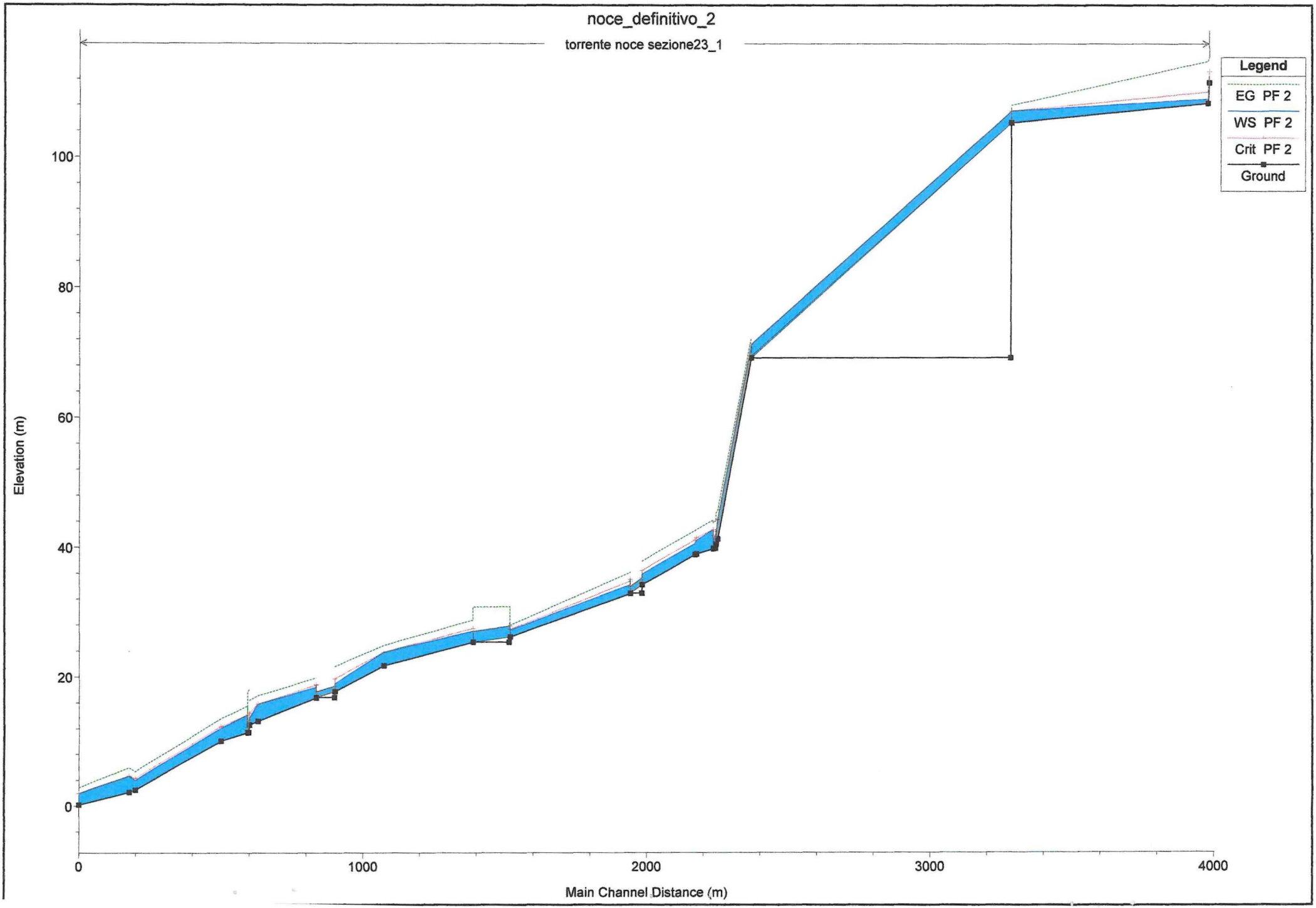


noce_definitivo_2

RS = 3 allargamento strada privata




noce_definitivo_2
RS = 2 fine strada privata (cancello)
.025
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
noce_definitivo_2
RS = 1 sotto autostrada
.025
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

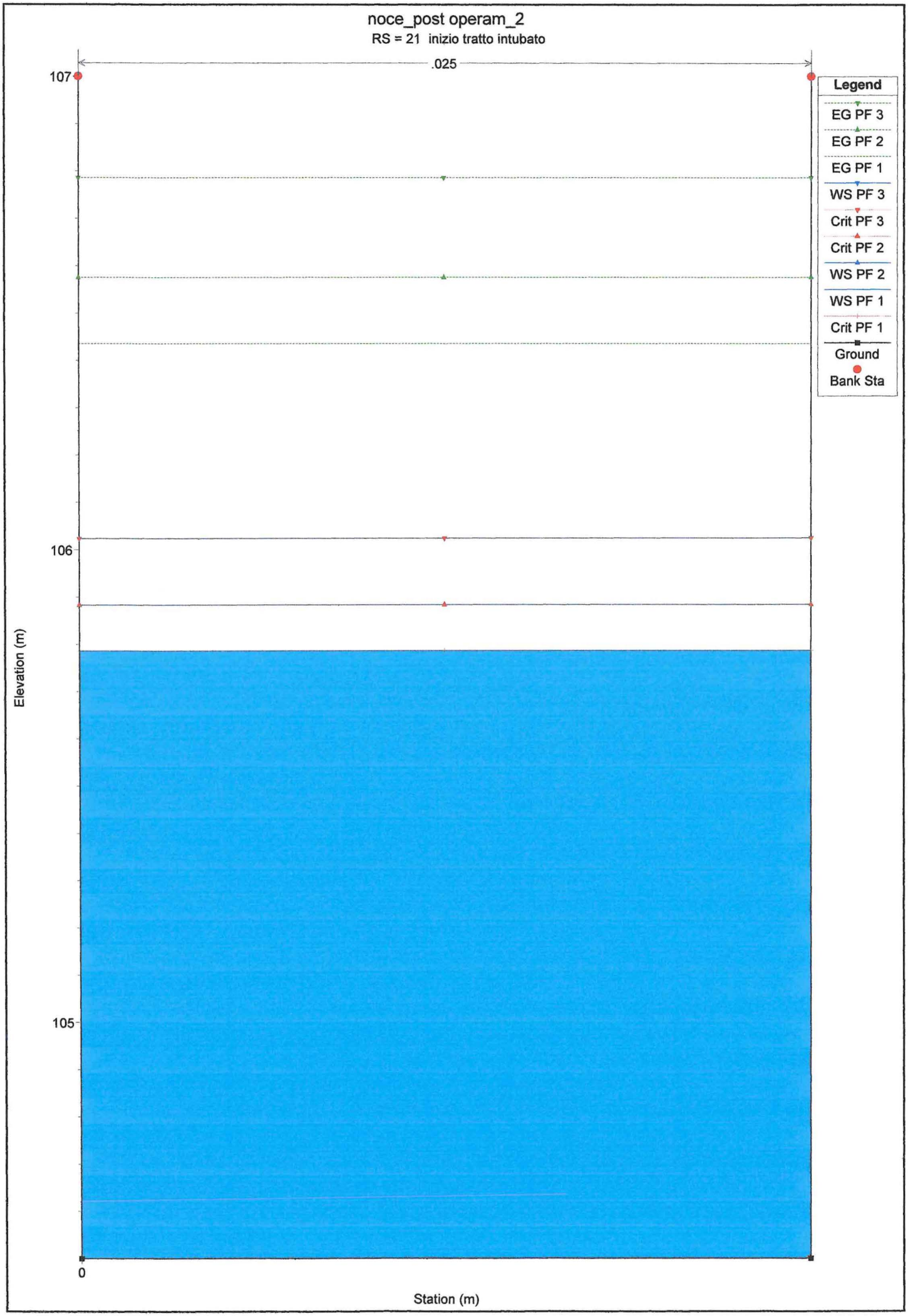

noce_definitivo_2
torrente noce sezione23_1
Legend
EG PF 2
WS PF 2
Crit PF 2
Ground
Elevation (m)
100
80
60
40
20
0
0
1000
2000
3000
4000
Main Channel Distance (m)

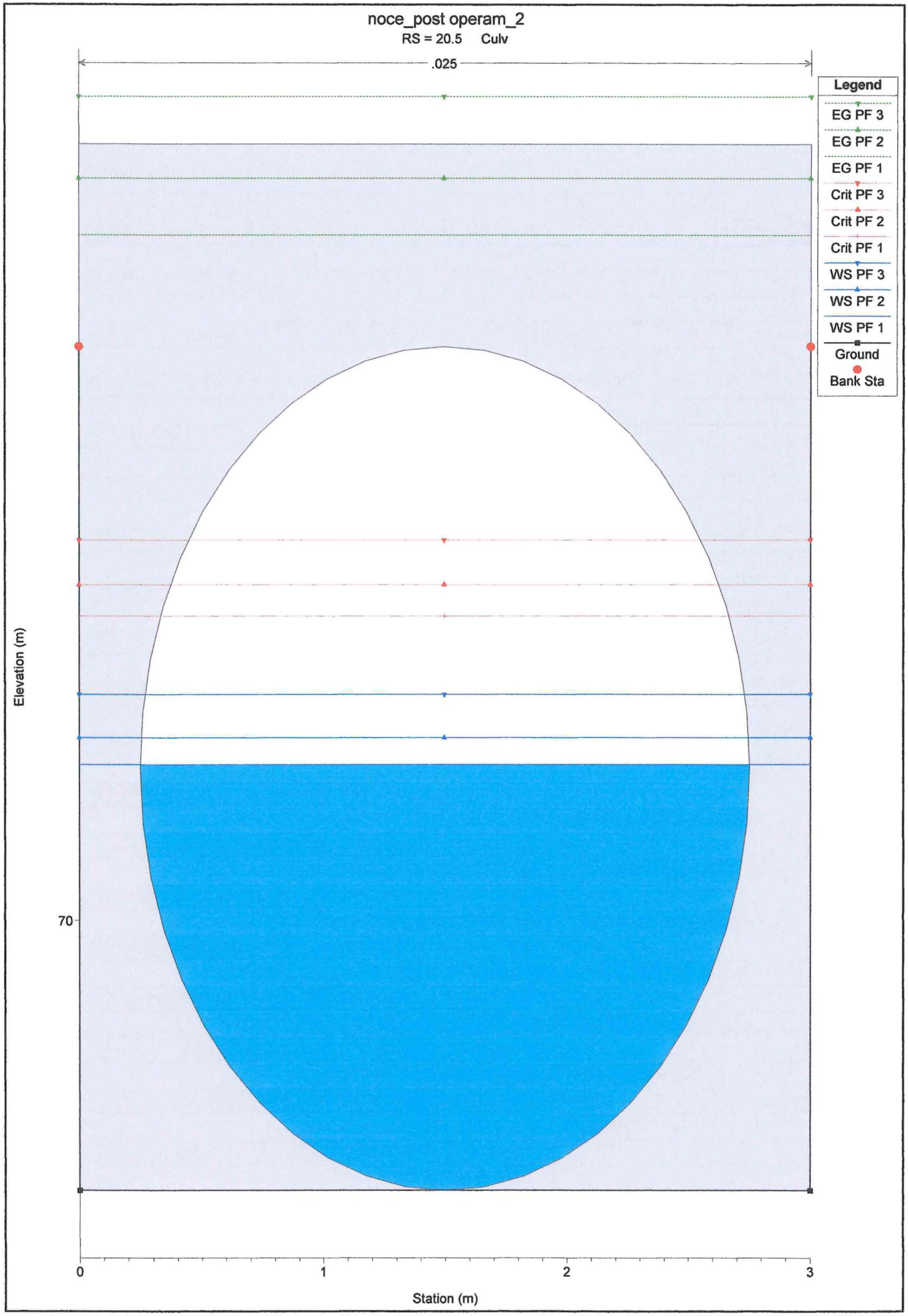
HEC-RAS Plan: noce_definit River: torrente noce Reach: sezione23_1

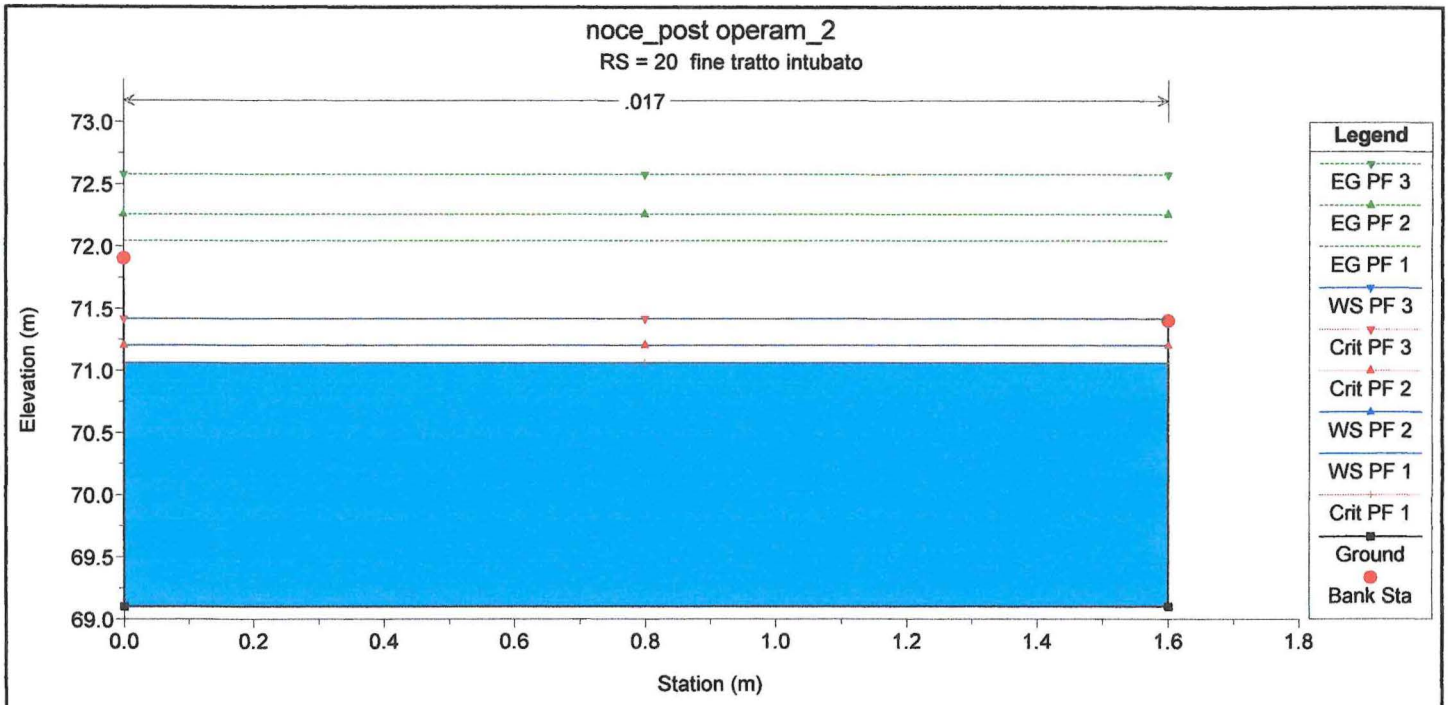
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
sezione23_1	23	PF 1	13.77	111.50	112.40	113.15	115.18	0.040038	7.38	1.87	2.27	2.60
sezione23_1	23	PF 2	15.29	111.50	112.47	113.26	115.40	0.040042	7.59	2.02	2.30	2.59
sezione23_1	23	PF 3	17.68	111.50	112.57	113.41	115.73	0.040045	7.88	2.24	2.34	2.57
sezione23_1	22	PF 1	13.77	108.30	108.96	109.99	114.58	0.109755	10.51	1.31	2.00	4.14
sezione23_1	22	PF 2	15.29	108.30	109.02	110.11	114.81	0.105230	10.66	1.43	2.00	4.02
sezione23_1	22	PF 3	17.68	108.30	109.11	110.30	115.14	0.099594	10.88	1.63	2.00	3.85
sezione23_1	21	PF 1	13.77	105.30	106.99	106.99	107.84	0.019397	4.08	3.37	2.00	1.00
sezione23_1	21	PF 2	15.29	105.30	107.11	107.11	108.02	0.020016	4.22	3.62	2.00	1.00
sezione23_1	21	PF 3	17.68	105.30	107.30	107.30	108.30	0.021072	4.43	3.99	2.00	1.00
sezione23_1	20.5		Culvert									
sezione23_1	20	PF 1	13.77	69.10	71.06	71.06	72.04	0.011914	4.40	3.13	1.60	1.00
sezione23_1	20	PF 2	15.29	69.10	71.20	71.20	72.26	0.012442	4.56	3.35	1.60	1.00
sezione23_1	20	PF 3	17.68	69.10	71.41	71.41	72.58	0.013186	4.78	3.70	1.60	1.00
sezione23_1	19	PF 1	15.66	41.20	43.95	43.95	45.32	0.021985	5.18	3.02	1.10	1.00
sezione23_1	19	PF 2	17.38	41.20	44.14	44.14	45.61	0.023280	5.37	3.23	1.10	1.00
sezione23_1	19	PF 3	20.11	41.20	44.44	44.44	46.06	0.025239	5.65	3.56	1.10	1.00
sezione23_1	18	PF 1	15.66	40.40	41.34	42.24	44.90	0.053282	8.36	1.87	2.00	2.76
sezione23_1	18	PF 2	17.38	40.40	41.41	42.37	45.18	0.053508	8.60	2.02	2.00	2.73
sezione23_1	18	PF 3	20.11	40.40	41.52	42.58	45.60	0.054088	8.95	2.25	2.00	2.70
sezione23_1	17.5		Culvert									
sezione23_1	17.4	PF 1	15.66	39.75	40.84	41.59	43.48	0.035784	7.20	2.17	2.00	2.21
sezione23_1	17.4	PF 2	17.38	39.75	40.93	41.72	43.70	0.035684	7.38	2.36	2.00	2.17
sezione23_1	17.4	PF 3	20.11	39.75	41.07	41.93	44.04	0.035760	7.63	2.63	2.00	2.12
sezione23_1	17	PF 1	15.66	39.70	42.45	42.45	43.82	0.021990	5.18	3.02	1.10	1.00
sezione23_1	17	PF 2	17.38	39.70	42.64	42.64	44.11	0.023226	5.37	3.24	1.10	1.00
sezione23_1	17	PF 3	20.11	39.70	42.94	42.94	44.56	0.025172	5.64	3.56	1.10	1.00
sezione23_1	16	PF 1	15.66	38.90	40.91	41.28	42.47	0.022158	5.54	2.83	1.60	1.33
sezione23_1	16	PF 2	17.38	38.90	41.04	41.43	42.71	0.022864	5.73	3.03	1.60	1.33
sezione23_1	16	PF 3	20.11	38.90	41.24	41.66	43.07	0.023985	6.00	3.35	1.60	1.32
sezione23_1	15	PF 1	15.66	38.80	40.39	40.94	42.32	0.025341	6.15	2.55	1.60	1.56
sezione23_1	15	PF 2	17.38	38.80	40.52	41.09	42.55	0.025789	6.31	2.75	1.60	1.54
sezione23_1	15	PF 3	20.11	38.80	40.72	41.33	42.91	0.026623	6.56	3.07	1.60	1.51
sezione23_1	14	PF 1	15.66	34.20	35.75	36.29	37.66	0.024597	6.11	2.56	1.65	1.56
sezione23_1	14	PF 2	17.38	34.20	35.90	36.44	37.86	0.024314	6.20	2.80	1.65	1.52
sezione23_1	14	PF 3	20.11	34.20	36.13	36.68	38.16	0.023874	6.31	3.19	1.65	1.45
sezione23_1	13.5		Culvert									
sezione23_1	13.4	PF 1	15.66	32.85	34.94	34.94	35.99	0.011968	4.54	3.45	1.65	1.00
sezione23_1	13.4	PF 2	17.38	32.85	35.09	35.09	36.22	0.012493	4.69	3.70	1.65	1.00
sezione23_1	13.4	PF 3	20.11	32.85	35.33	35.33	36.56	0.013294	4.92	4.08	1.65	1.00
sezione23_1	13	PF 1	15.66	32.80	34.12	34.64	35.91	0.021623	5.94	2.64	2.00	1.65
sezione23_1	13	PF 2	17.38	32.80	34.22	34.77	36.14	0.022211	6.14	2.83	2.00	1.65
sezione23_1	13	PF 3	20.11	32.80	34.36	34.97	36.47	0.023137	6.43	3.13	2.00	1.64
sezione23_1	12	PF 1	15.66	26.10	27.07	27.22	27.82	0.015729	3.82	4.09	4.20	1.24
sezione23_1	12	PF 2	17.38	26.10	27.15	27.30	27.94	0.015650	3.94	4.41	4.20	1.23
sezione23_1	12	PF 3	20.11	26.10	27.26	27.43	28.13	0.015544	4.11	4.89	4.20	1.22
sezione23_1	11.5		Culvert									
sezione23_1	11	PF 1	15.66	25.30	27.00	27.31	28.40	0.027211	5.24	2.99	1.79	1.30
sezione23_1	11	PF 2	17.38	25.30	27.00	27.45	28.73	0.033516	5.82	2.99	1.79	1.44
sezione23_1	11	PF 3	20.11	25.30	27.00	27.67	29.31	0.044872	6.73	2.99	1.79	1.67
sezione23_1	10	PF 1	15.66	21.70	23.67	23.67	24.66	0.010712	4.42	3.55	1.80	1.00
sezione23_1	10	PF 2	17.38	21.70	23.82	23.82	24.88	0.011112	4.56	3.81	1.80	1.00
sezione23_1	10	PF 3	20.11	21.70	24.03	24.03	25.20	0.011779	4.79	4.20	1.80	1.00
sezione23_1	9	PF 1	15.66	17.70	18.86	19.61	21.44	0.034770	7.11	2.20	1.90	2.11
sezione23_1	9	PF 2	17.38	17.70	18.97	19.74	21.61	0.033756	7.20	2.41	1.90	2.04
sezione23_1	9	PF 3	20.11	17.70	19.15	19.95	21.87	0.032375	7.31	2.75	1.90	1.94
sezione23_1	8.5		Culvert									
sezione23_1	8.4	PF 1	15.66	16.80	18.70	18.70	19.66	0.009947	4.33	3.62	1.90	1.00
sezione23_1	8.4	PF 2	17.38	16.80	18.84	18.84	19.86	0.010310	4.48	3.88	1.90	1.00
sezione23_1	8.4	PF 3	20.11	16.80	19.05	19.05	20.18	0.010944	4.70	4.28	1.90	1.00
sezione23_1	8	PF 1	15.66	16.75	18.27	18.59	19.62	0.014951	5.14	3.05	2.00	1.33
sezione23_1	8	PF 2	17.38	16.75	18.39	18.73	19.82	0.015362	5.31	3.28	2.00	1.32
sezione23_1	8	PF 3	20.11	16.75	18.56	18.93	20.13	0.016023	5.55	3.62	2.00	1.32

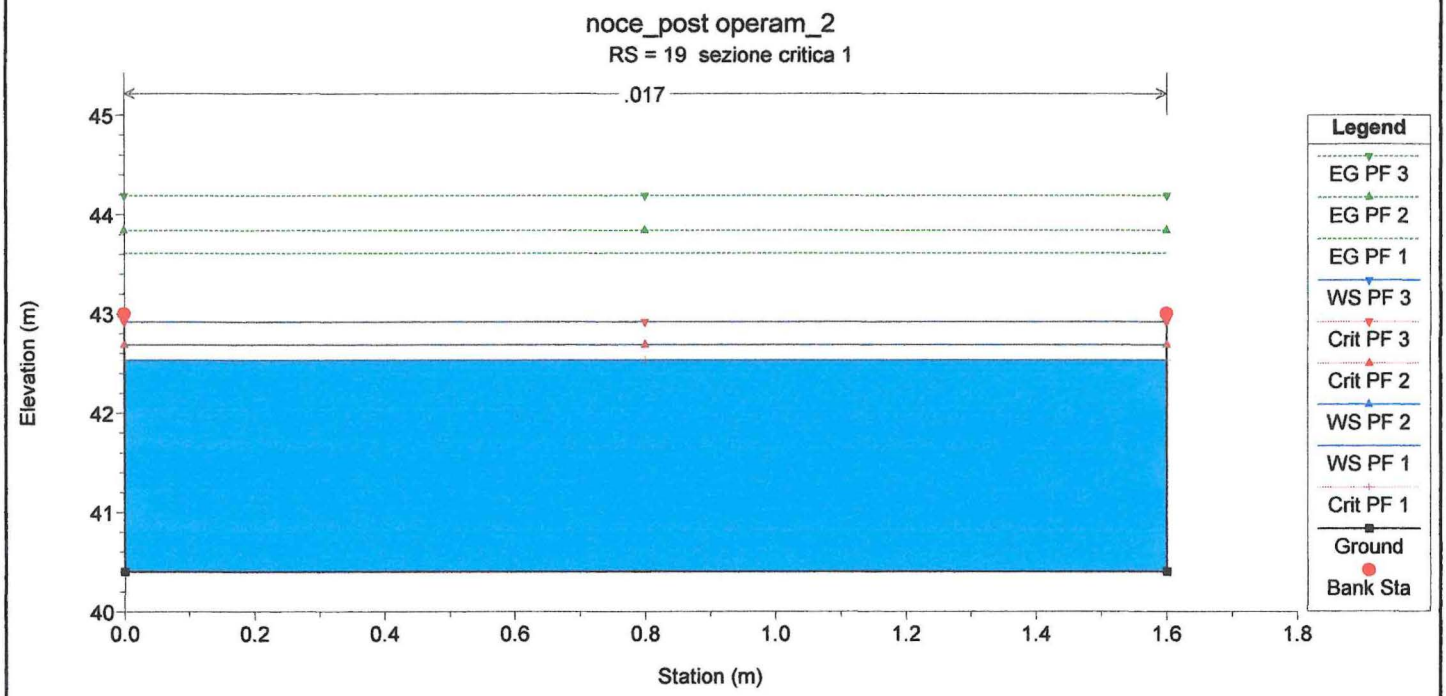
HEC-RAS Plan: noce_definit River: torrente noce Reach: sezione23_1 (Continued)

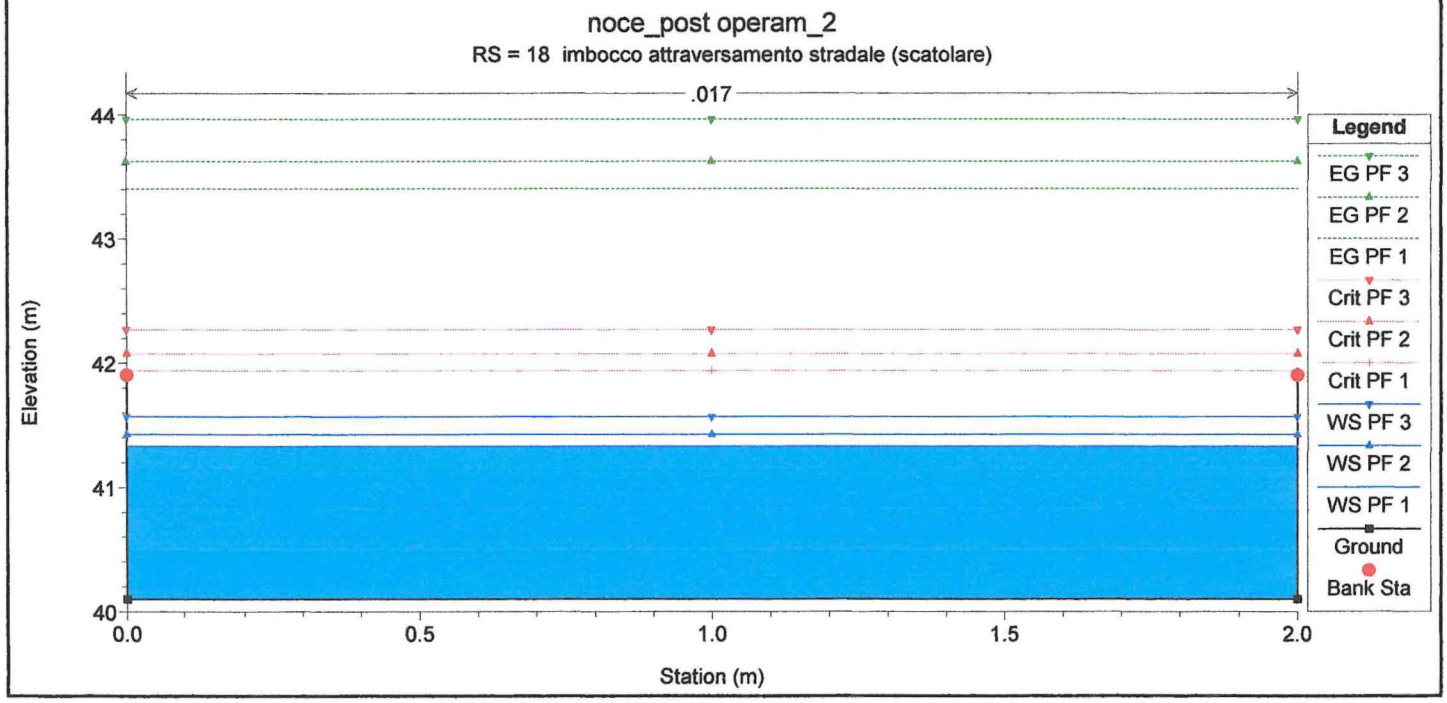
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
sezione23_1	7	PF 1	20.70	13.15	15.62	15.62	16.86	0.012921	4.93	4.20	1.70	1.00
sezione23_1	7	PF 2	22.95	13.15	15.80	15.80	17.12	0.013517	5.10	4.50	1.70	1.00
sezione23_1	7	PF 3	26.59	13.15	16.07	16.07	17.53	0.014457	5.35	4.97	1.70	1.00
sezione23_1	6	PF 1	20.70	12.60	13.57	14.29	16.16	0.029829	7.13	2.90	3.00	2.31
sezione23_1	6	PF 2	22.95	12.60	13.64	14.41	16.40	0.029993	7.36	3.12	3.00	2.30
sezione23_1	6	PF 3	26.59	12.60	13.75	14.60	16.77	0.030321	7.70	3.45	3.00	2.29
sezione23_1	5.5		Culvert									
sezione23_1	5.4	PF 1	20.70	11.45	13.14	13.14	13.99	0.006528	4.08	5.08	3.00	1.00
sezione23_1	5.4	PF 2	22.95	11.45	13.26	13.26	14.17	0.006687	4.22	5.44	3.00	1.00
sezione23_1	5.4	PF 3	26.59	11.45	13.45	13.45	14.45	0.006964	4.43	6.00	3.00	1.00
sezione23_1	5	PF 1	20.70	11.40	13.97	13.97	15.26	0.014207	5.04	4.11	1.60	1.00
sezione23_1	5	PF 2	22.95	11.40	14.15	14.15	15.54	0.014894	5.22	4.40	1.60	1.00
sezione23_1	5	PF 3	26.59	11.40	14.44	14.44	15.96	0.015880	5.47	4.86	1.60	1.00
sezione23_1	4	PF 1	20.70	10.10	11.94	12.24	13.37	0.029667	5.30	3.90	2.15	1.26
sezione23_1	4	PF 2	22.95	10.10	12.09	12.39	13.59	0.029846	5.42	4.23	2.15	1.23
sezione23_1	4	PF 3	26.59	10.10	12.33	12.62	13.93	0.030383	5.61	4.74	2.15	1.21
sezione23_1	3	PF 1	20.70	2.50	3.90	4.22	5.20	0.024714	5.05	4.10	2.95	1.37
sezione23_1	3	PF 2	22.95	2.50	4.01	4.35	5.38	0.024784	5.18	4.43	2.95	1.35
sezione23_1	3	PF 3	26.59	2.50	4.19	4.53	5.66	0.024747	5.37	4.95	2.95	1.32
sezione23_1	2	PF 1	20.70	2.15	4.53	4.53	5.72	0.025739	4.83	4.29	1.80	1.00
sezione23_1	2	PF 2	22.95	2.15	4.70	4.70	5.97	0.026929	5.00	4.59	1.80	1.00
sezione23_1	2	PF 3	26.59	2.15	4.96	4.96	6.37	0.028766	5.26	5.06	1.80	1.00
sezione23_1	1	PF 1	20.70	0.20	1.89	1.89	2.74	0.014216	4.09	5.06	3.00	1.01
sezione23_1	1	PF 2	22.95	0.20	2.01	2.01	2.92	0.014591	4.23	5.42	3.00	1.00
sezione23_1	1	PF 3	26.59	0.20	2.20	2.20	3.20	0.015074	4.43	6.00	3.00	1.00

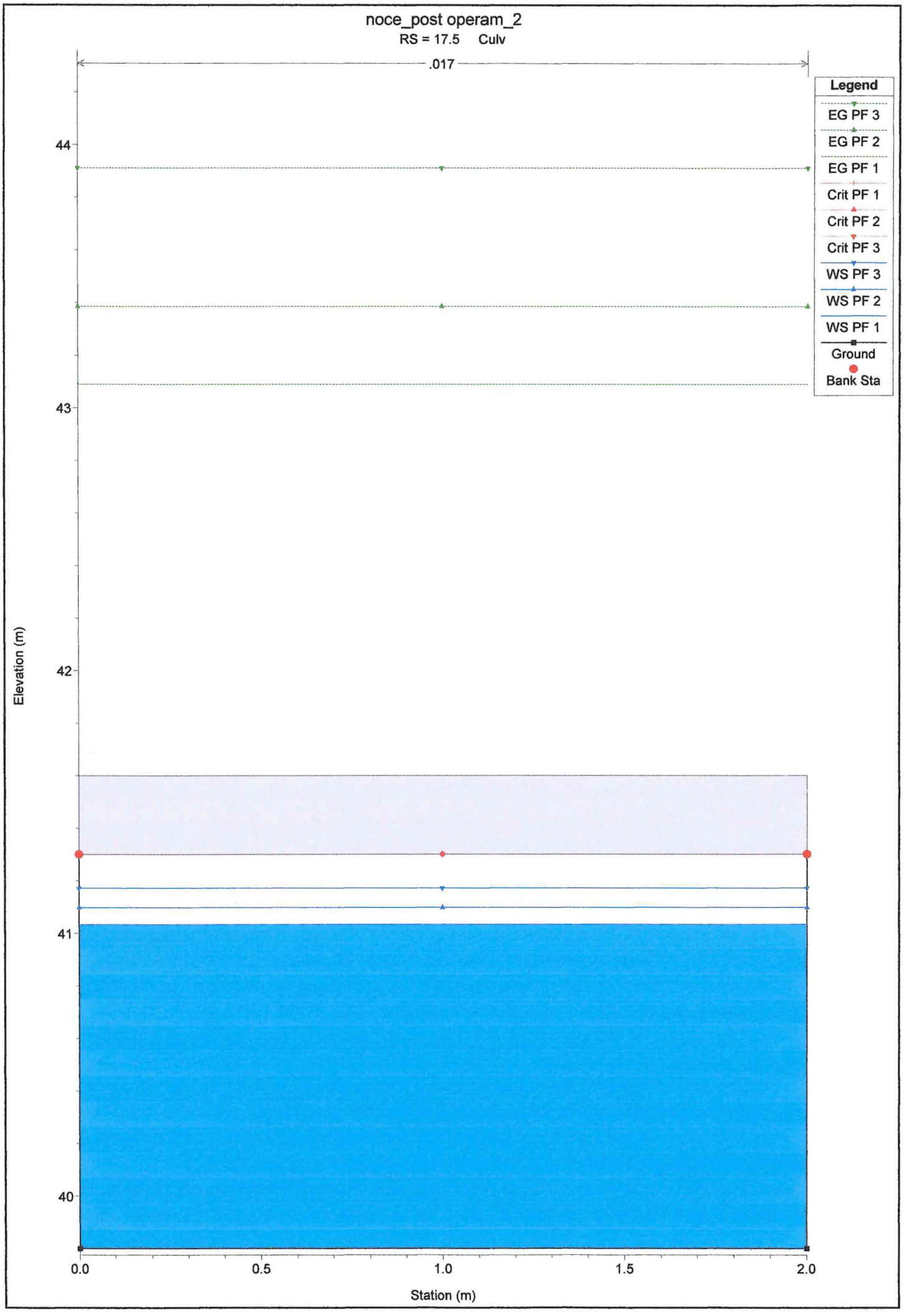

noce_post operam_2
RS = 21 inizio tratto intubato
.025
107
106
105
0
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

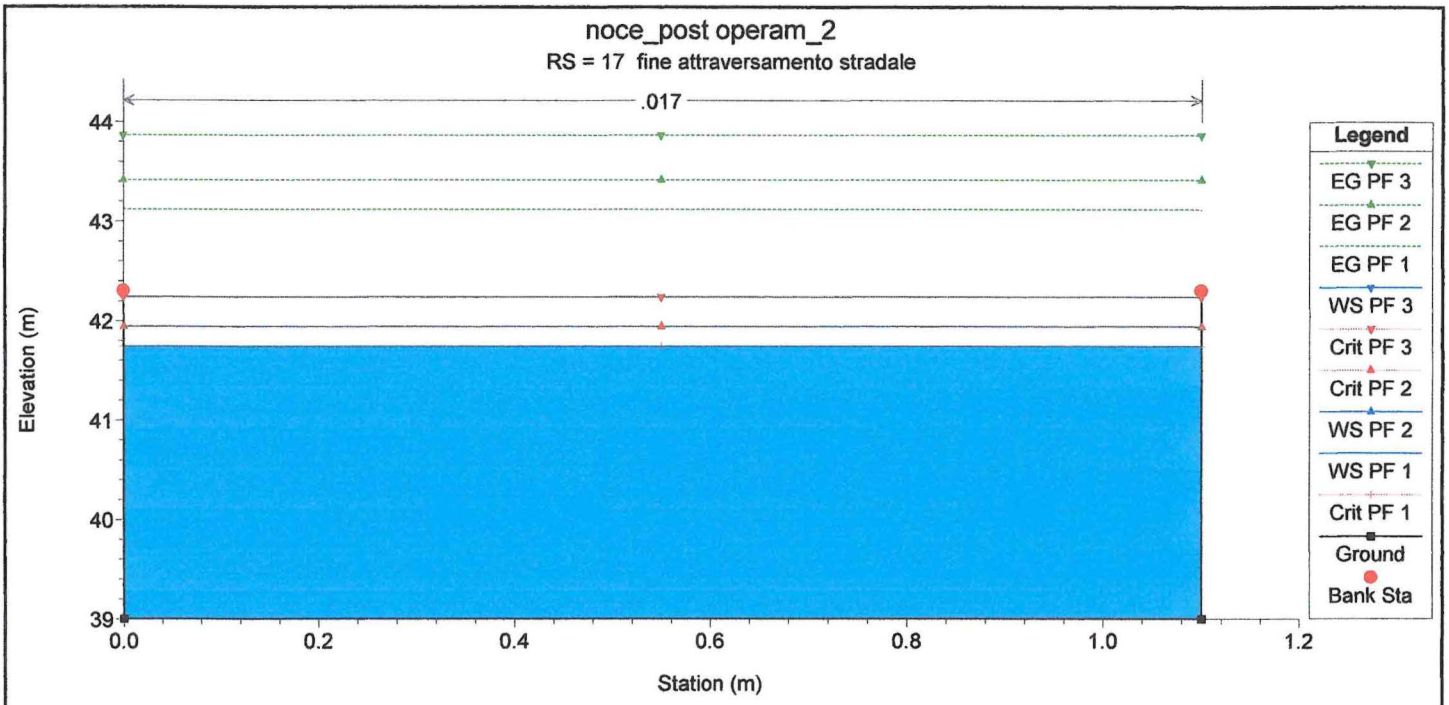

noce_post operam_2
RS = 20.5 Culv
.025
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
70
0
1
2
3
Station (m)

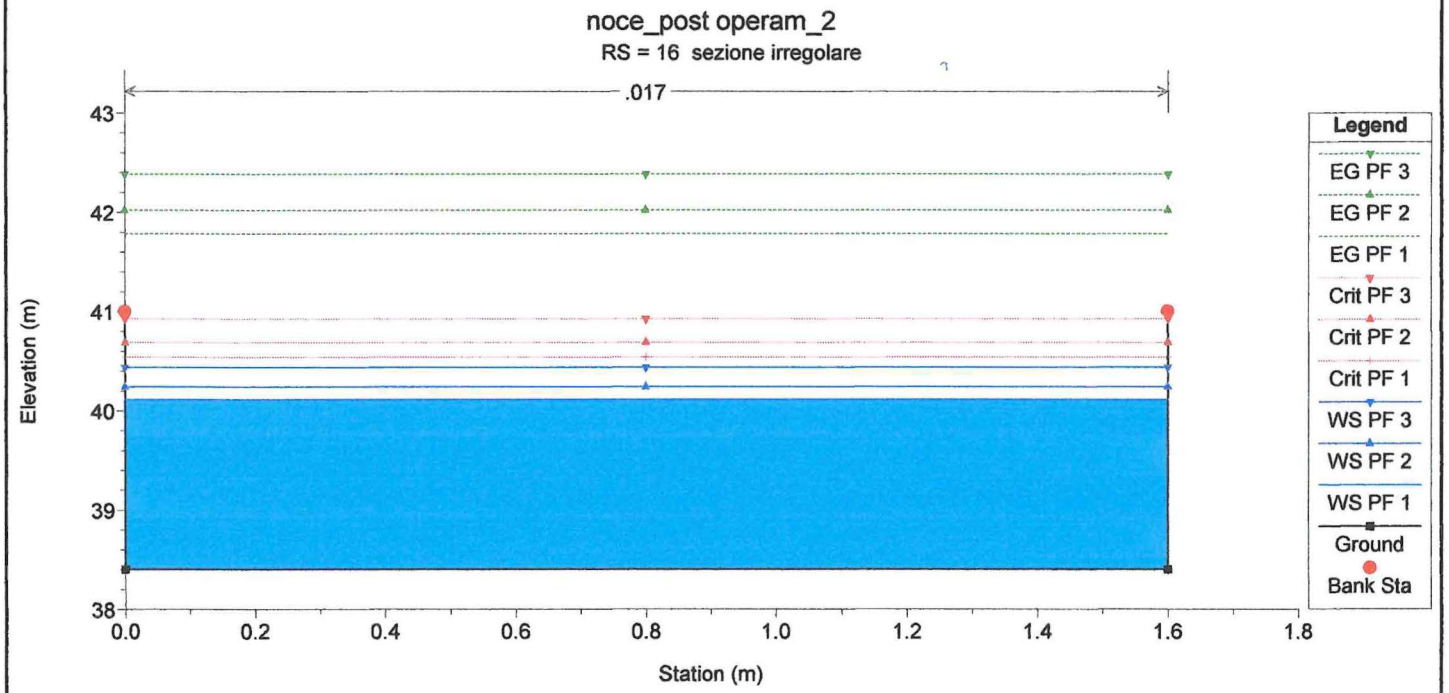

noce_post operam_2
RS = 20 fine tratto intubato
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

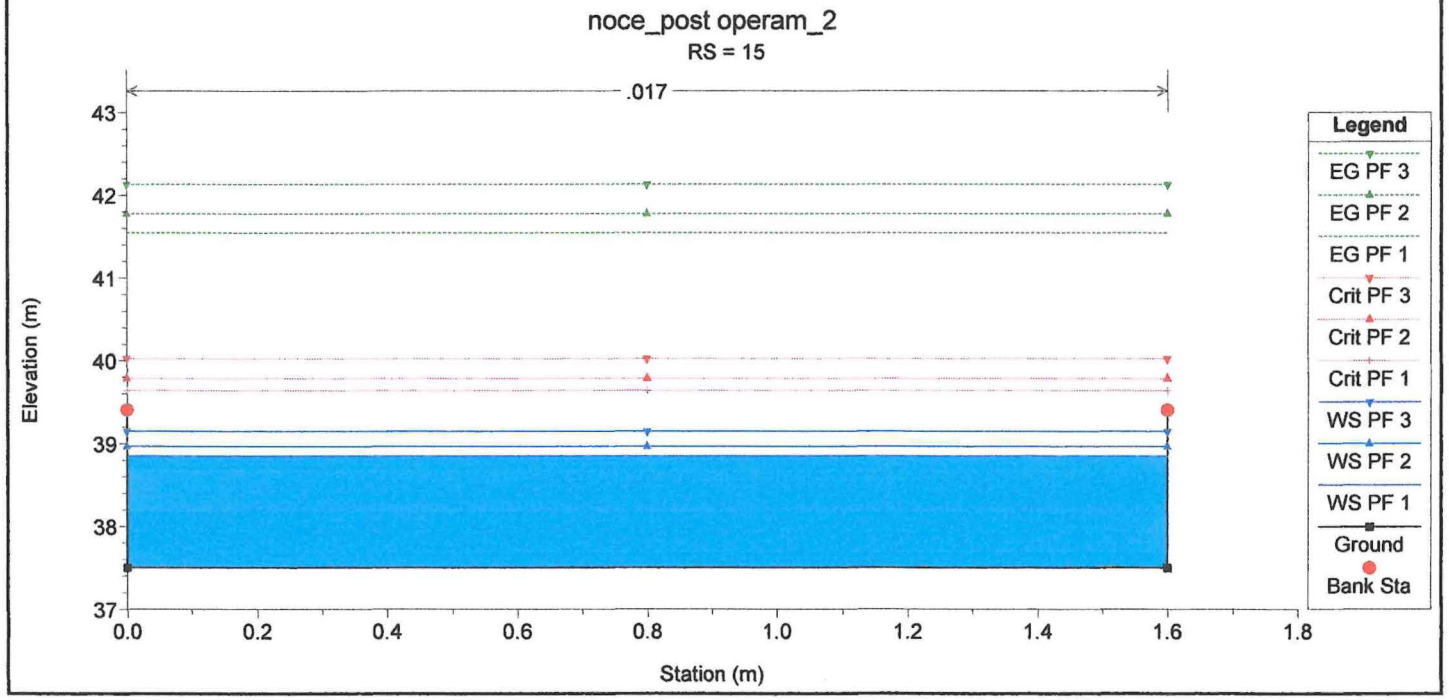

noce_post operam_2
RS = 19 sezione critica 1
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

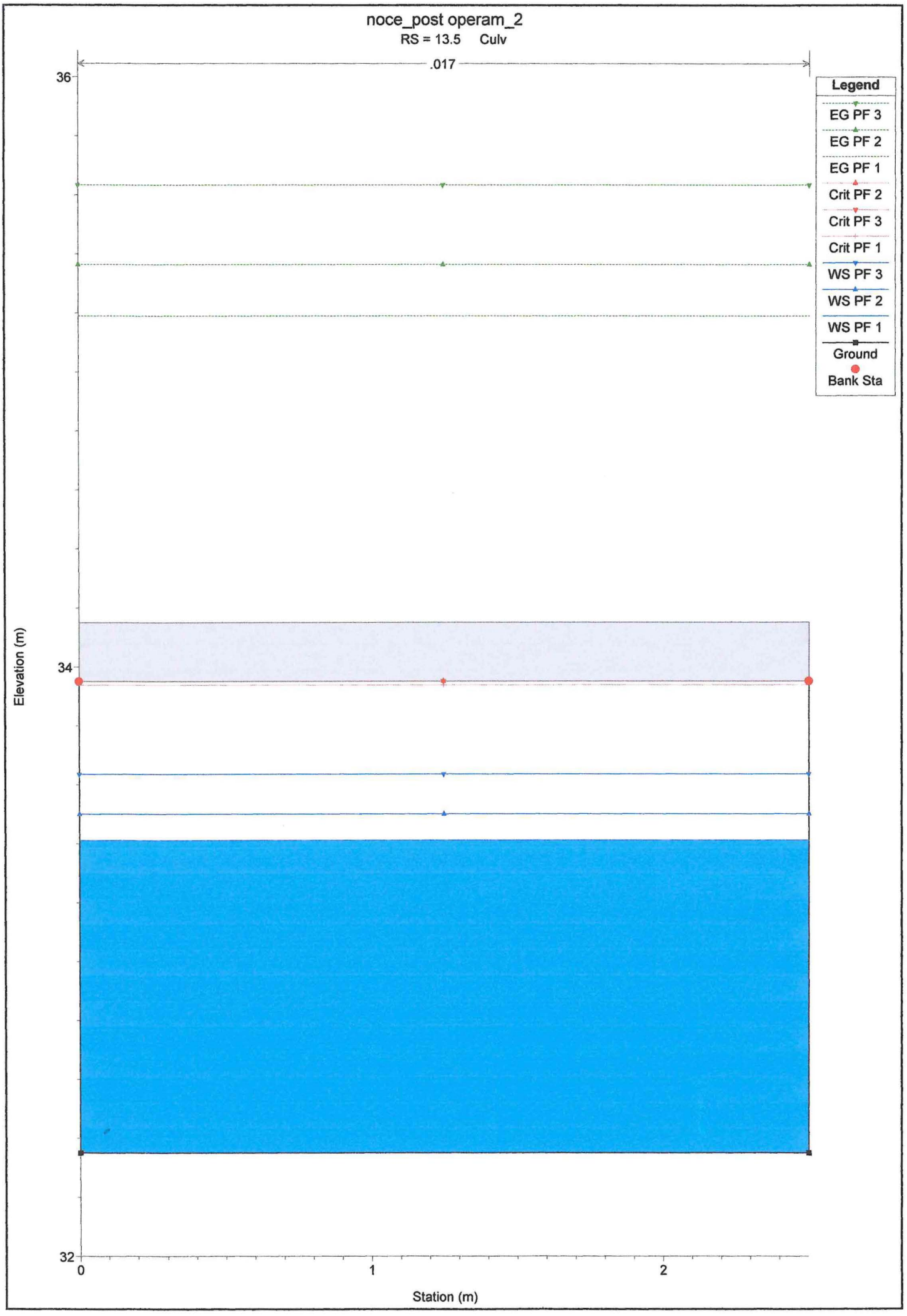

noce_post operam_2
RS = 18 imbocco attraversamento stradale (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

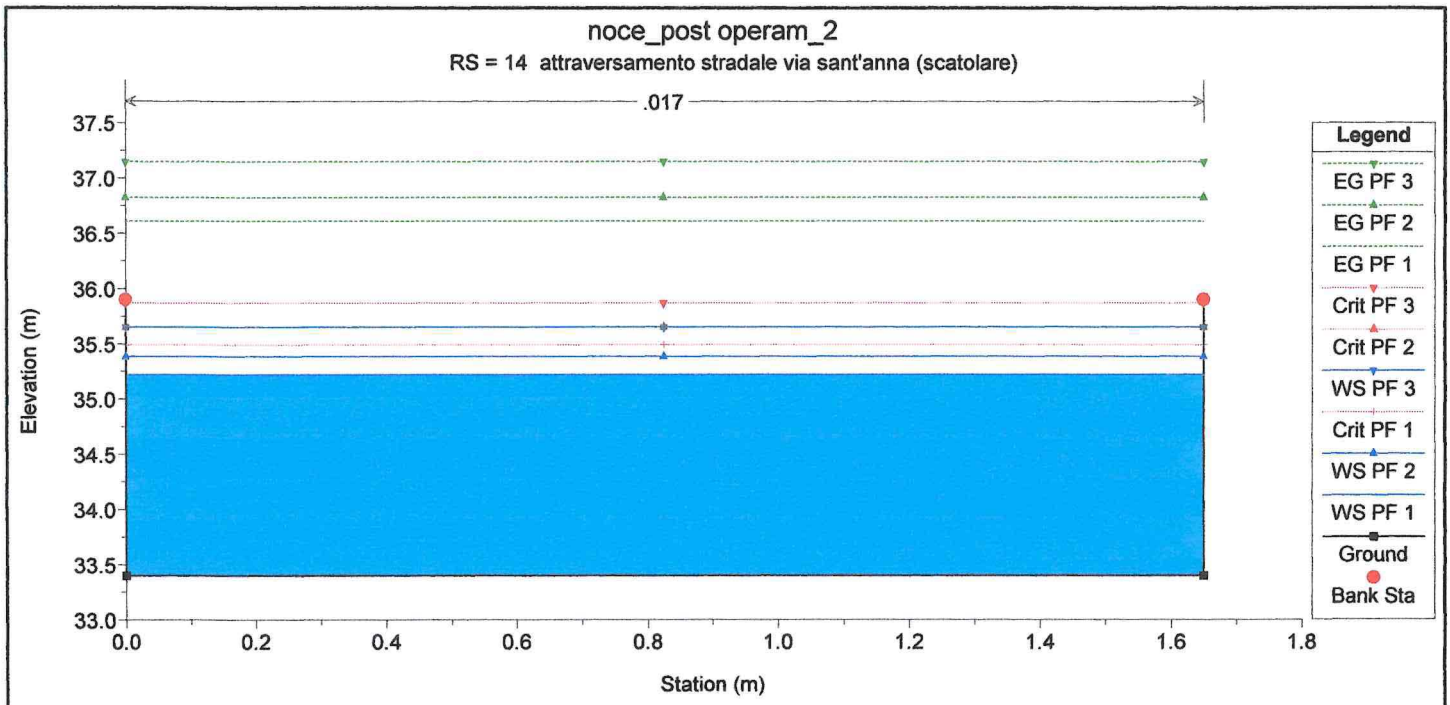

noce_post operam_2
RS = 17.5 Culv
.017
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 1
Crit PF 2
Crit PF 3
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
44
43
42
41
40
0.0
0.5
1.0
1.5
2.0
Station (m)

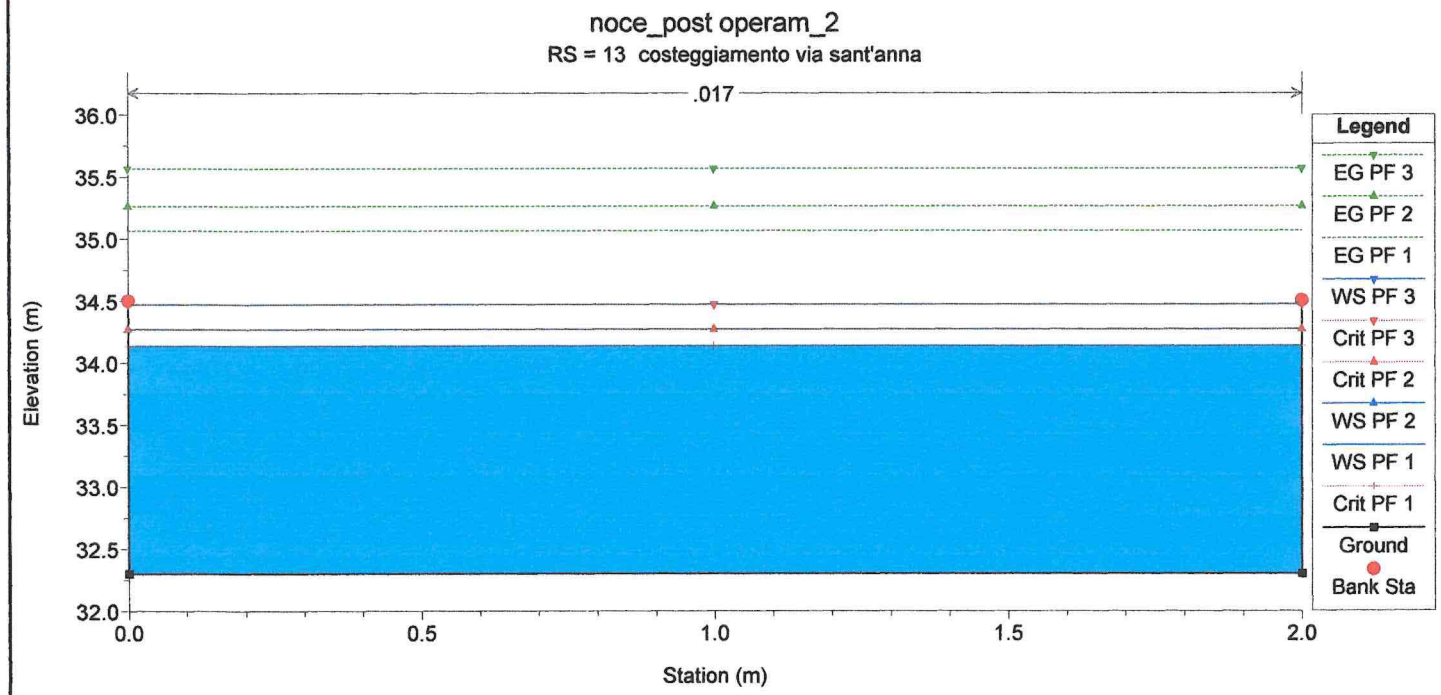

noce_post operam_2
RS = 17 fine attraversamento stradale
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

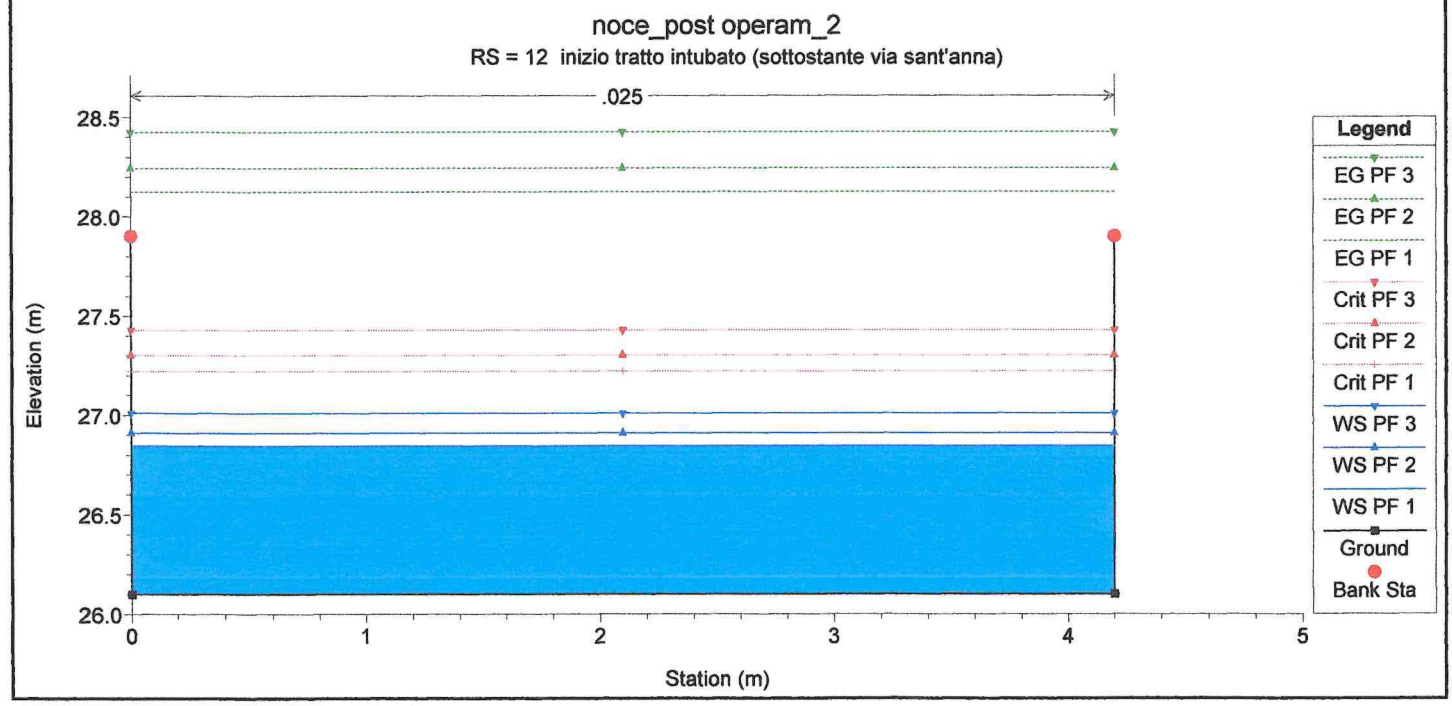

noce_post operam_2
RS = 16 sezione irregolare
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

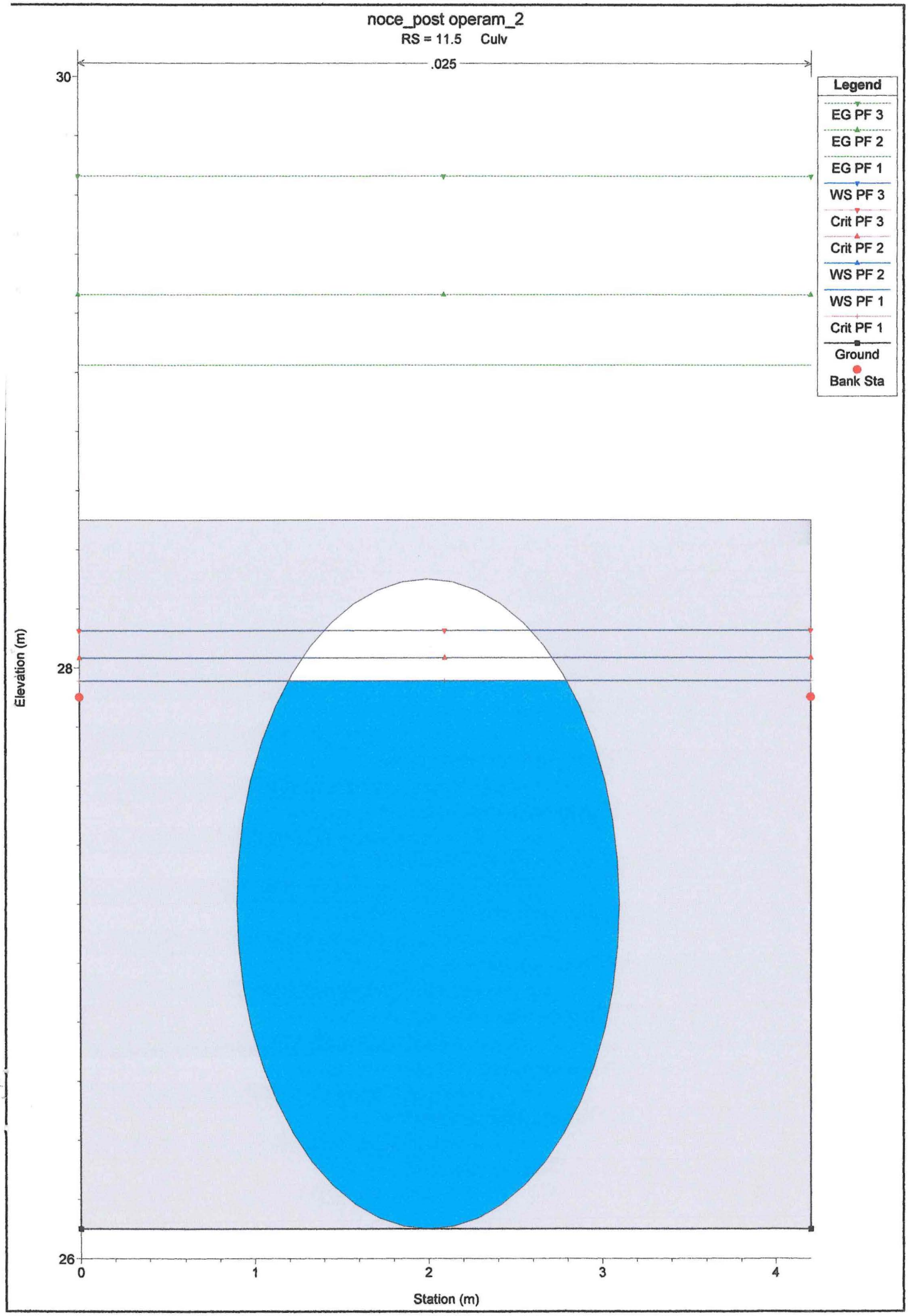

noce_post operam_2
RS = 15
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

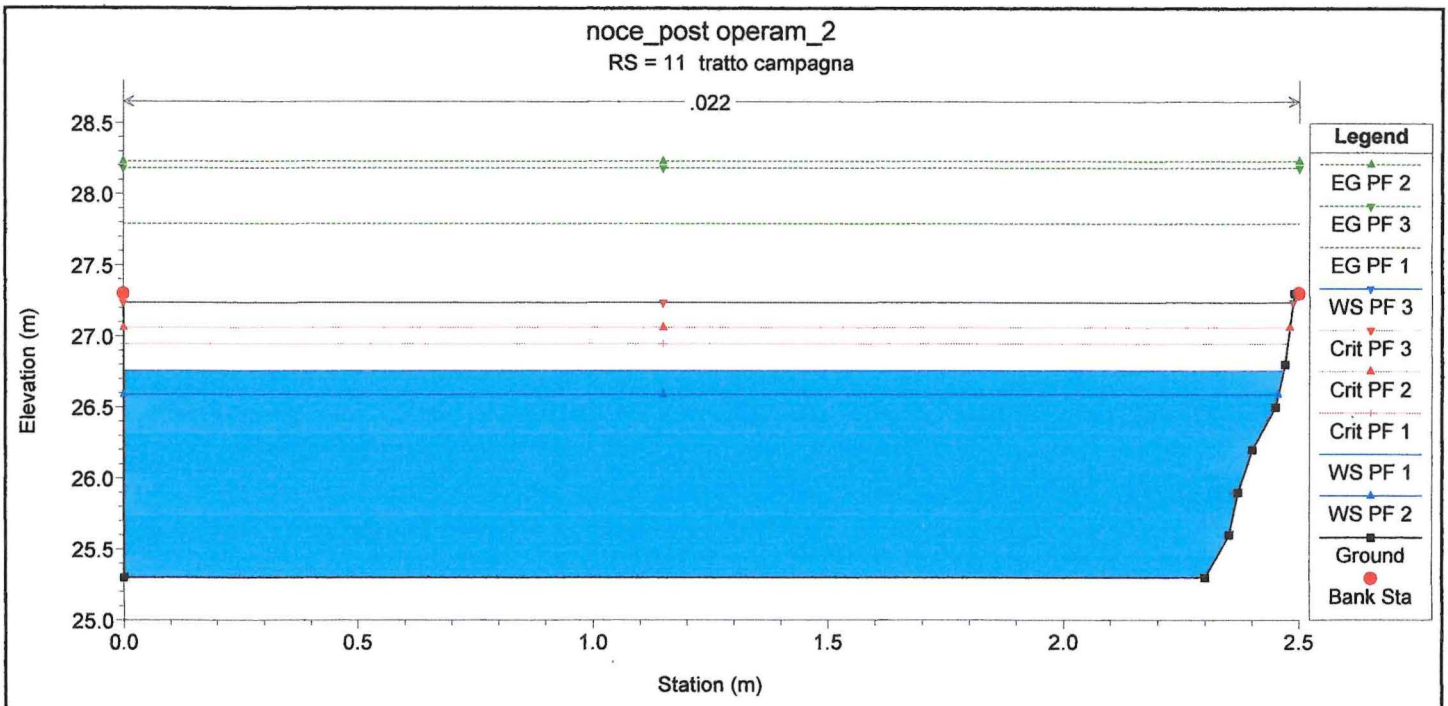

noce_post operam_2
RS = 13.5 Culv
.017
36
34
32
0
1
2
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 2
Crit PF 3
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

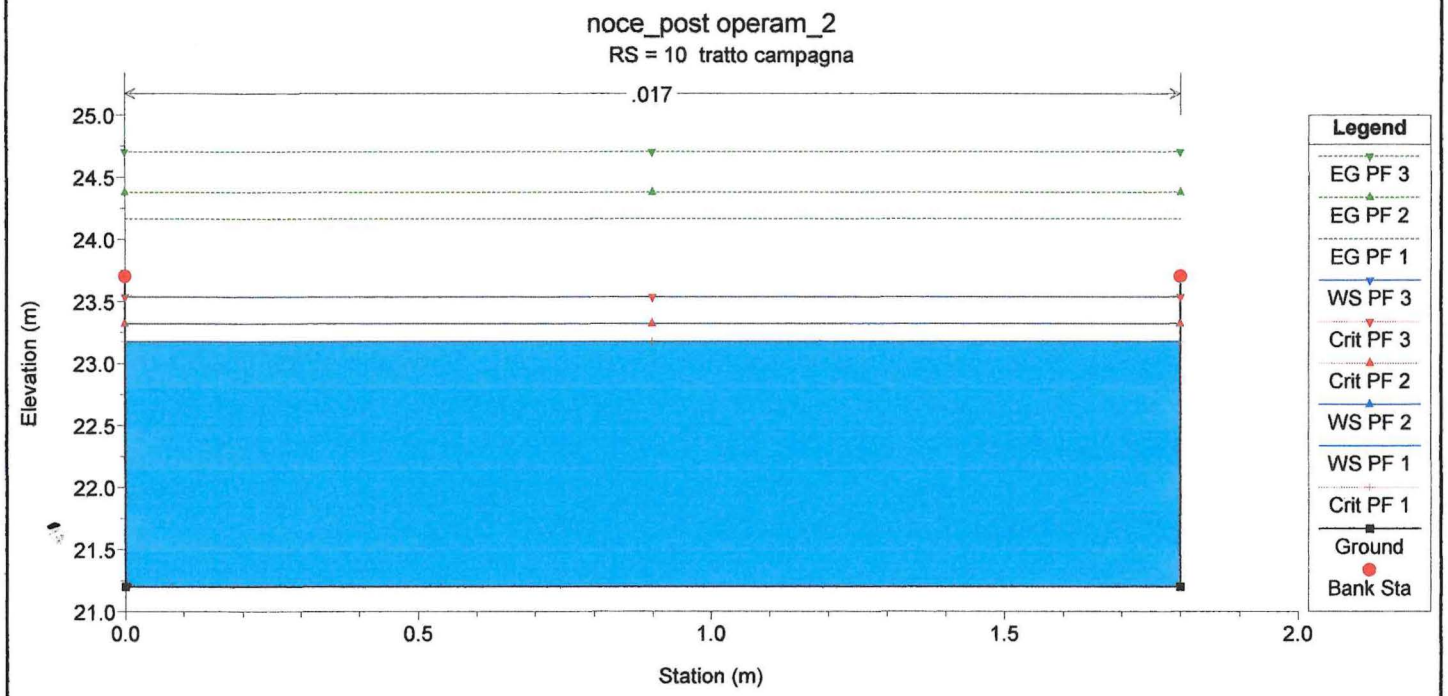

noce_post operam_2
RS = 14 attraversamento stradale via sant'anna (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Bank Sta

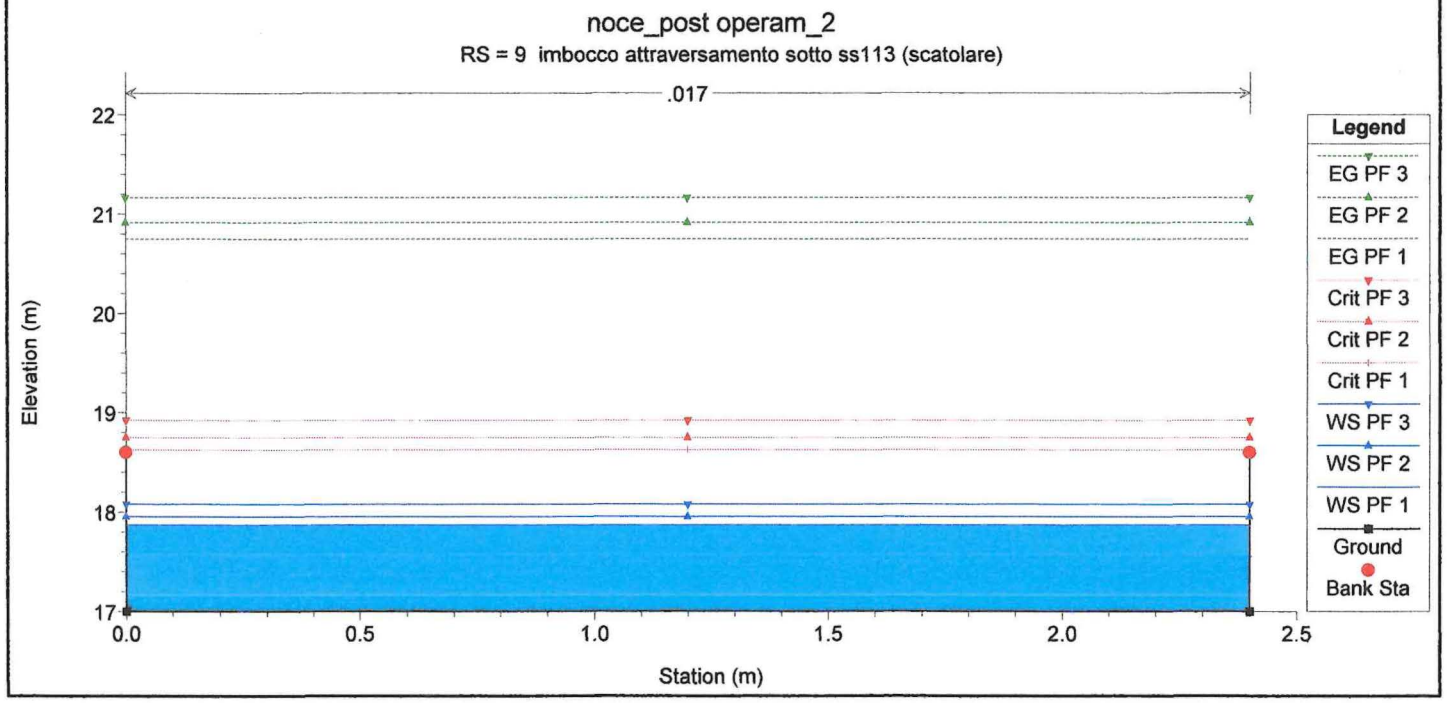

noce_post operam_2
RS = 13 costeggiamento via sant'anna
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

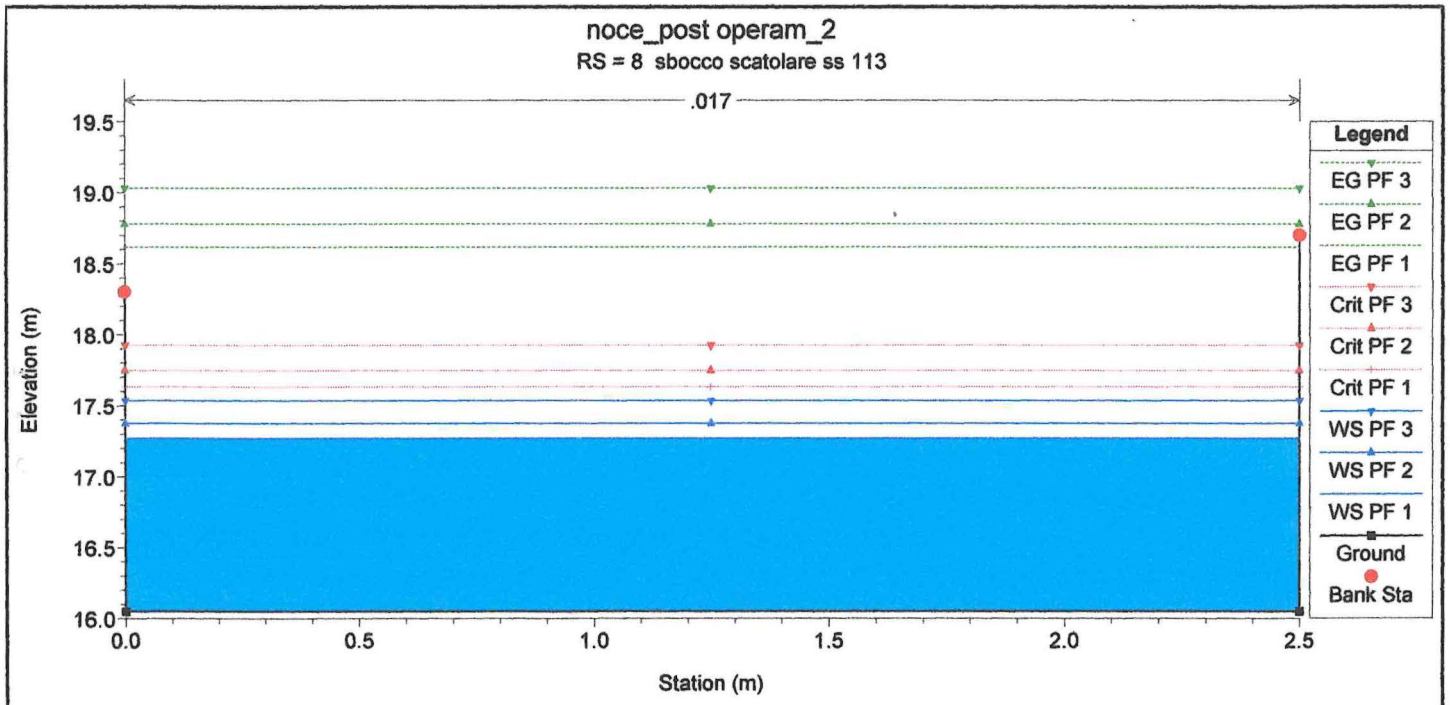

noce_post operam_2
RS = 12 inizio tratto intubato (sottostante via sant'anna)
.025
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

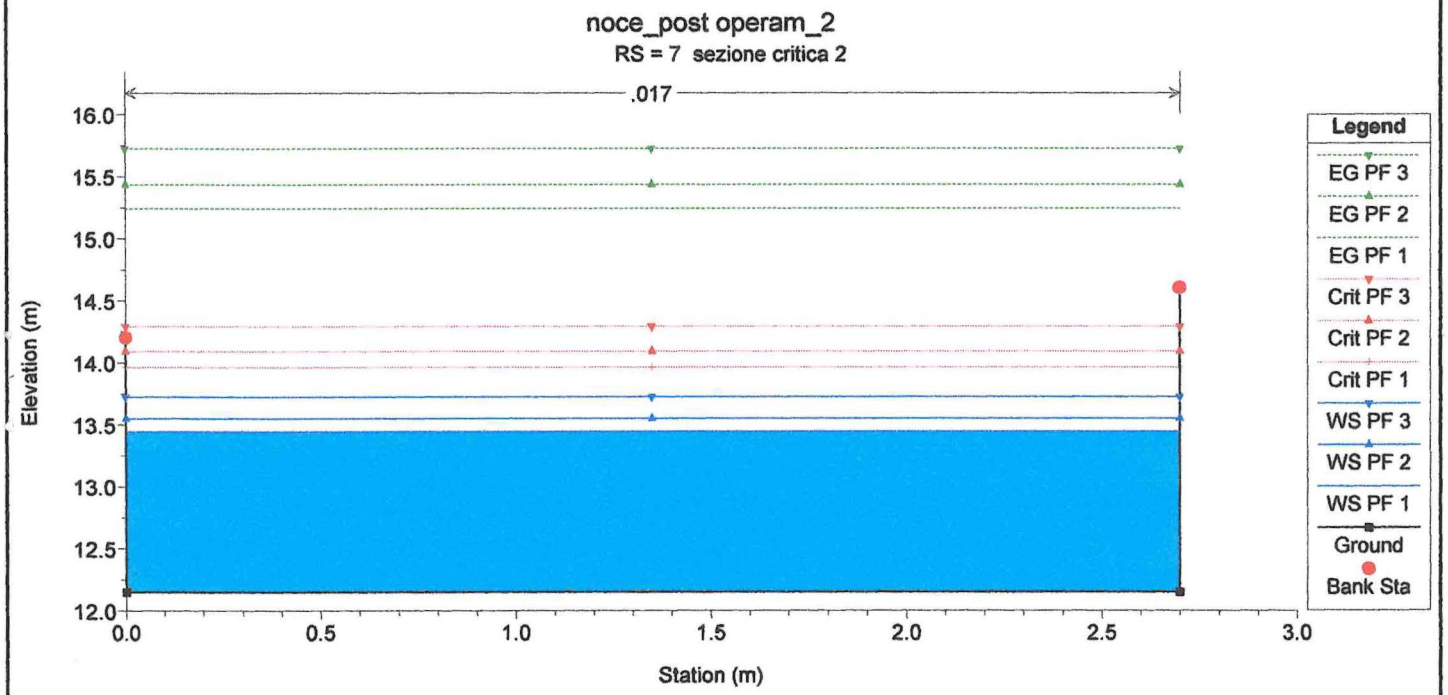

noce_post operam_2
RS = 11.5 Culv
.025
30
28
26
0
1
2
3
4
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

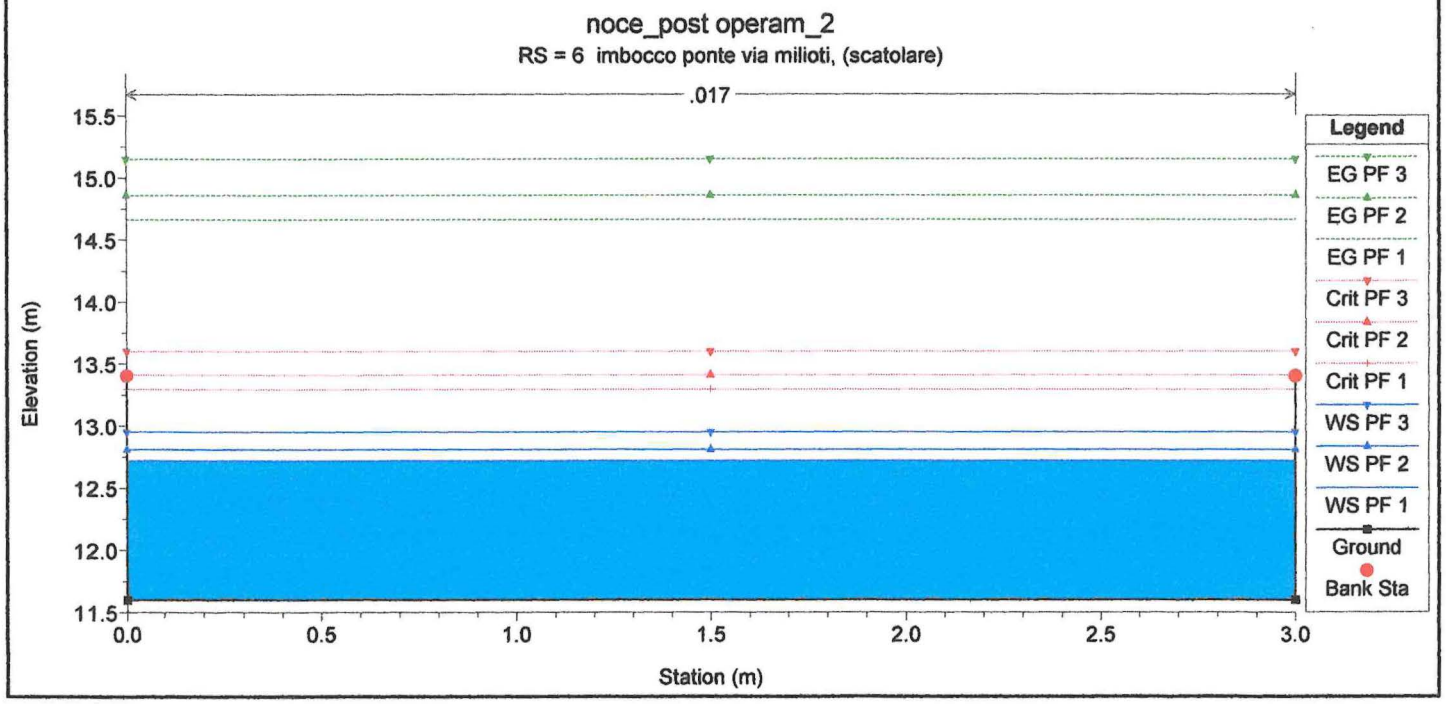

noce_post operam_2
RS = 11 tratto campagna
.022
Elevation (m)
Station (m)
Legend
EG PF 2
EG PF 3
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 1
WS PF 2
Ground
Bank Sta

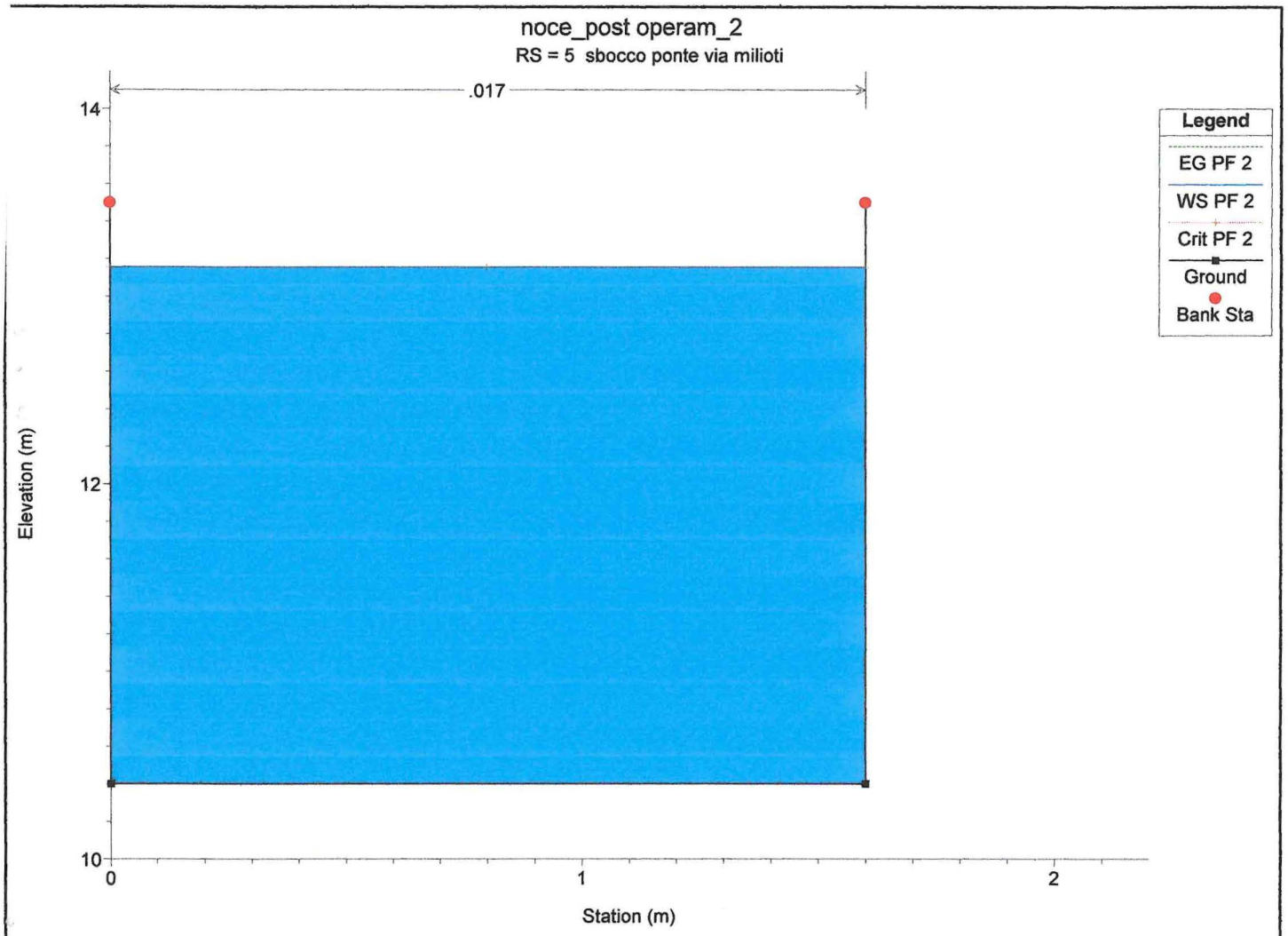

noce_post operam_2
RS = 10 tratto campagna
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
WS PF 3
Crit PF 3
Crit PF 2
WS PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

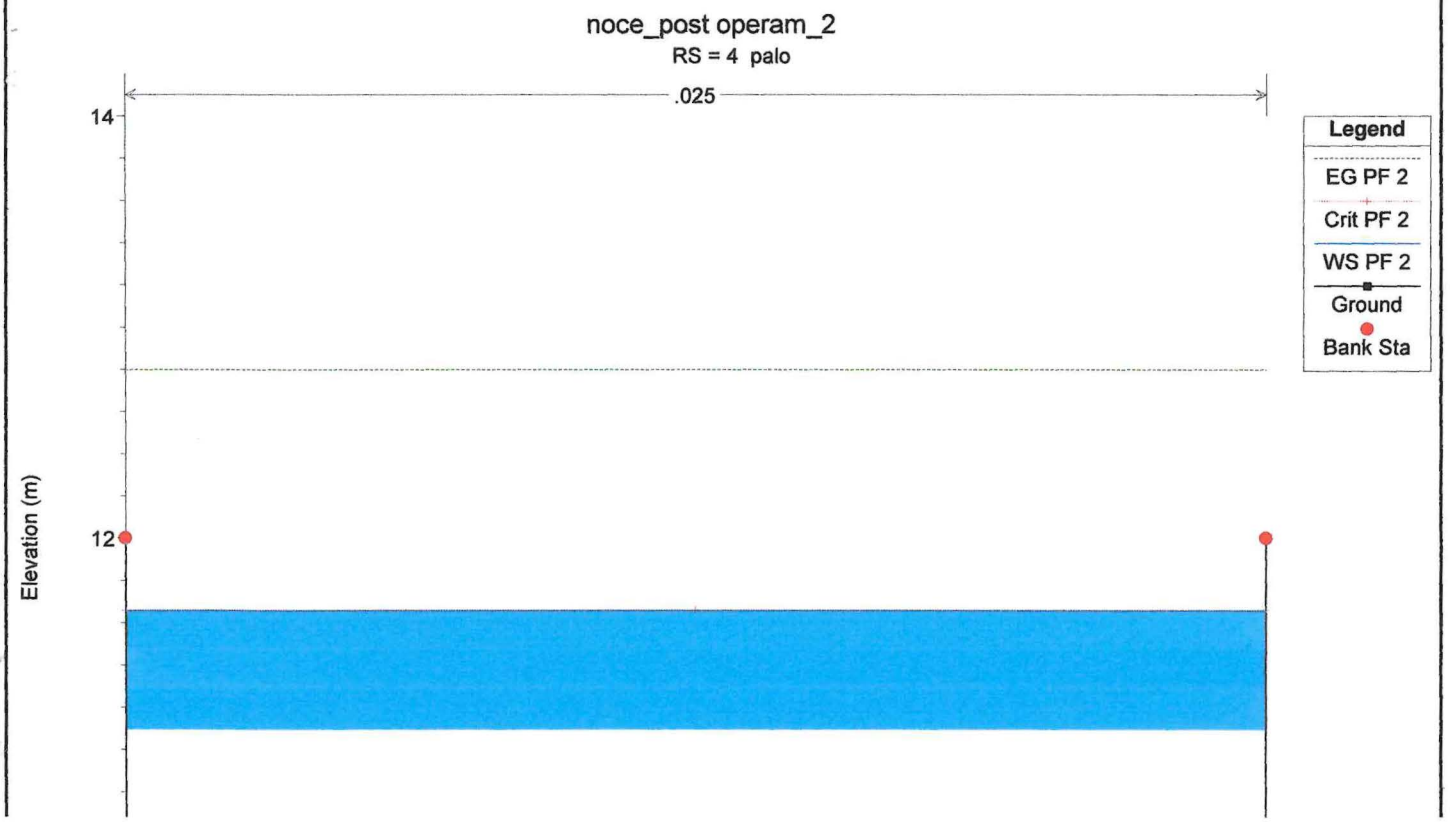

noce_post operam_2
RS = 9 imbocco attraversamento sotto ss113 (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

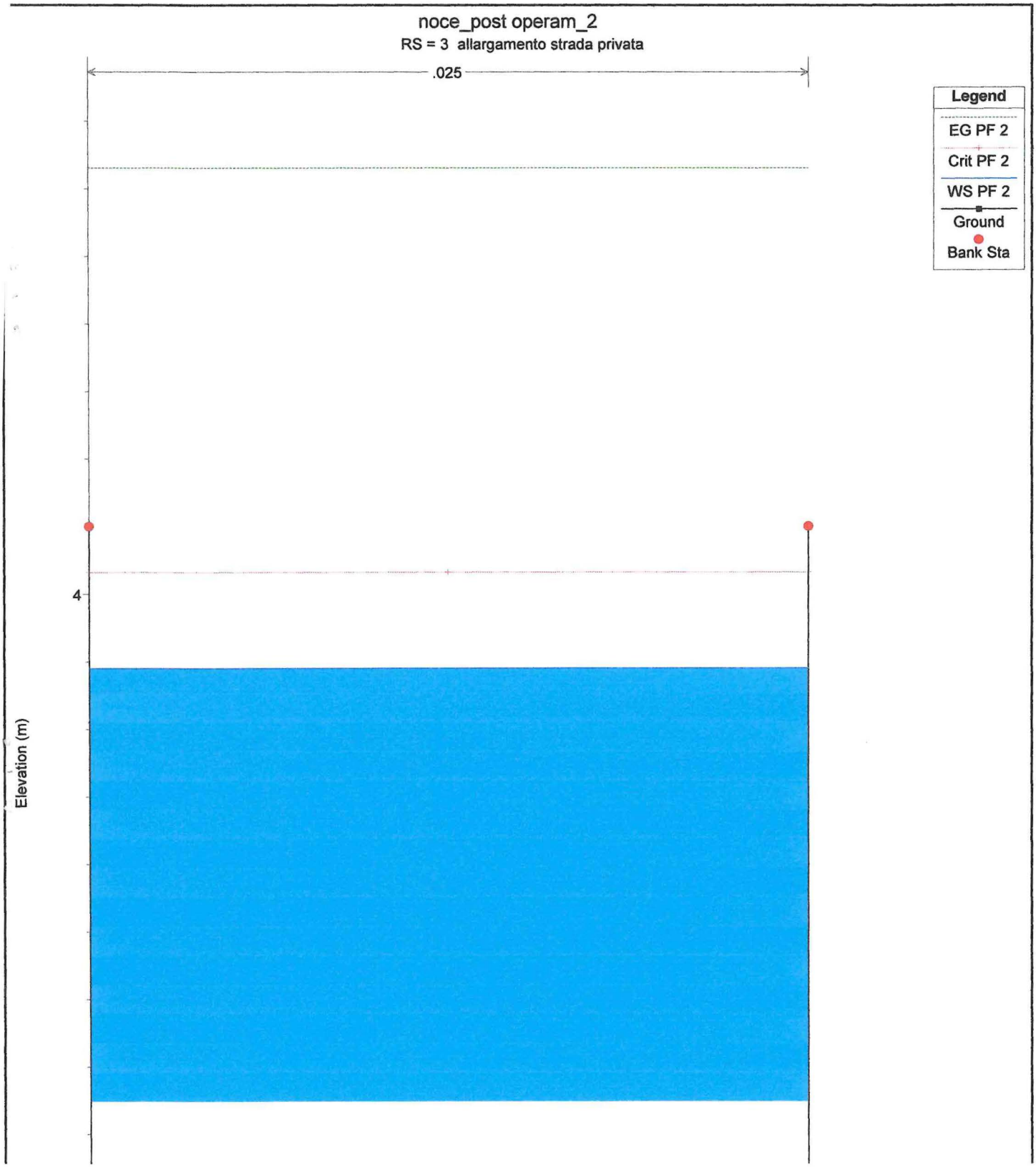

noce_post operam_2
RS = 8 sbocco scatolare ss 113
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

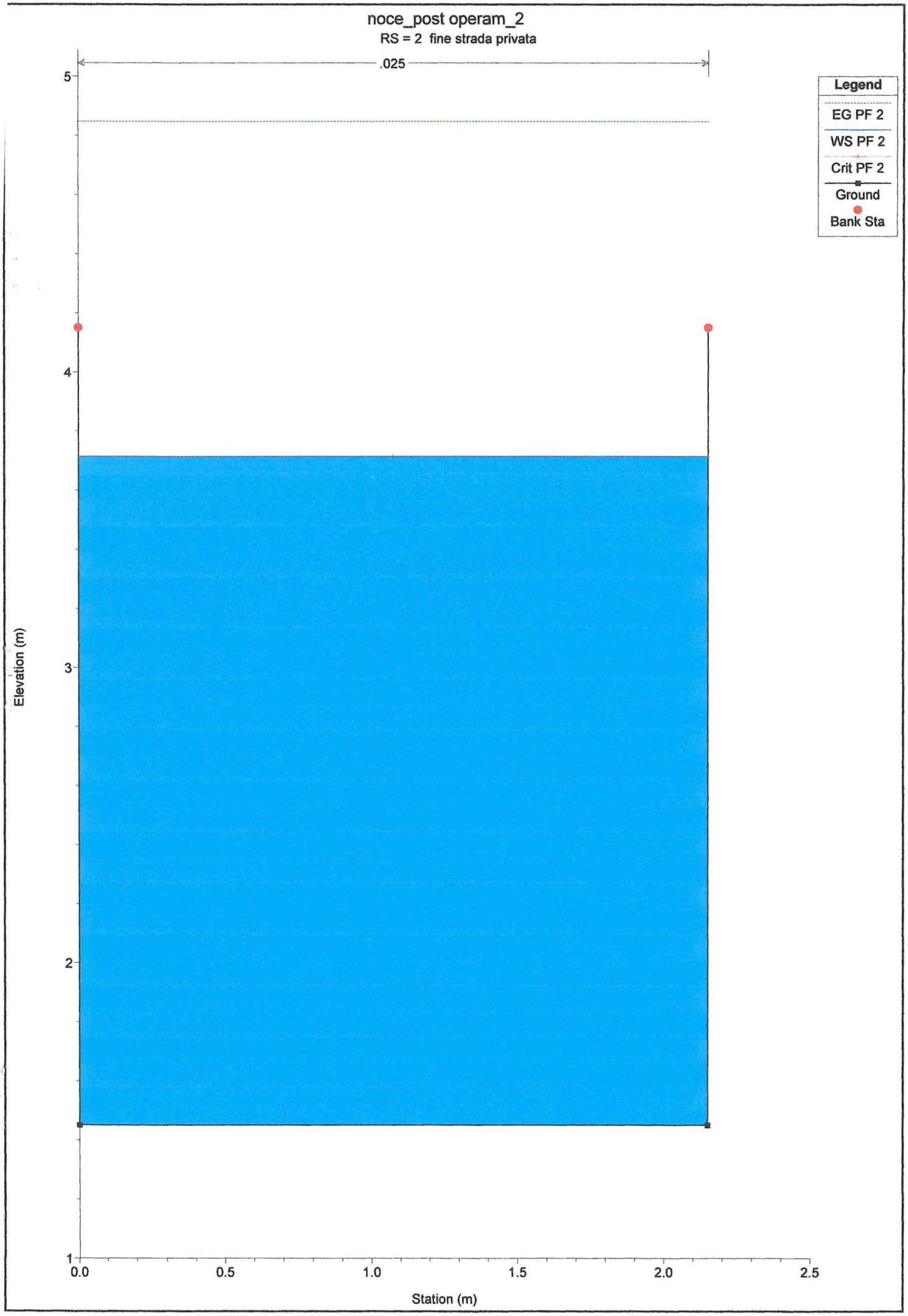

noce_post operam_2
RS = 7 sezione critica 2
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

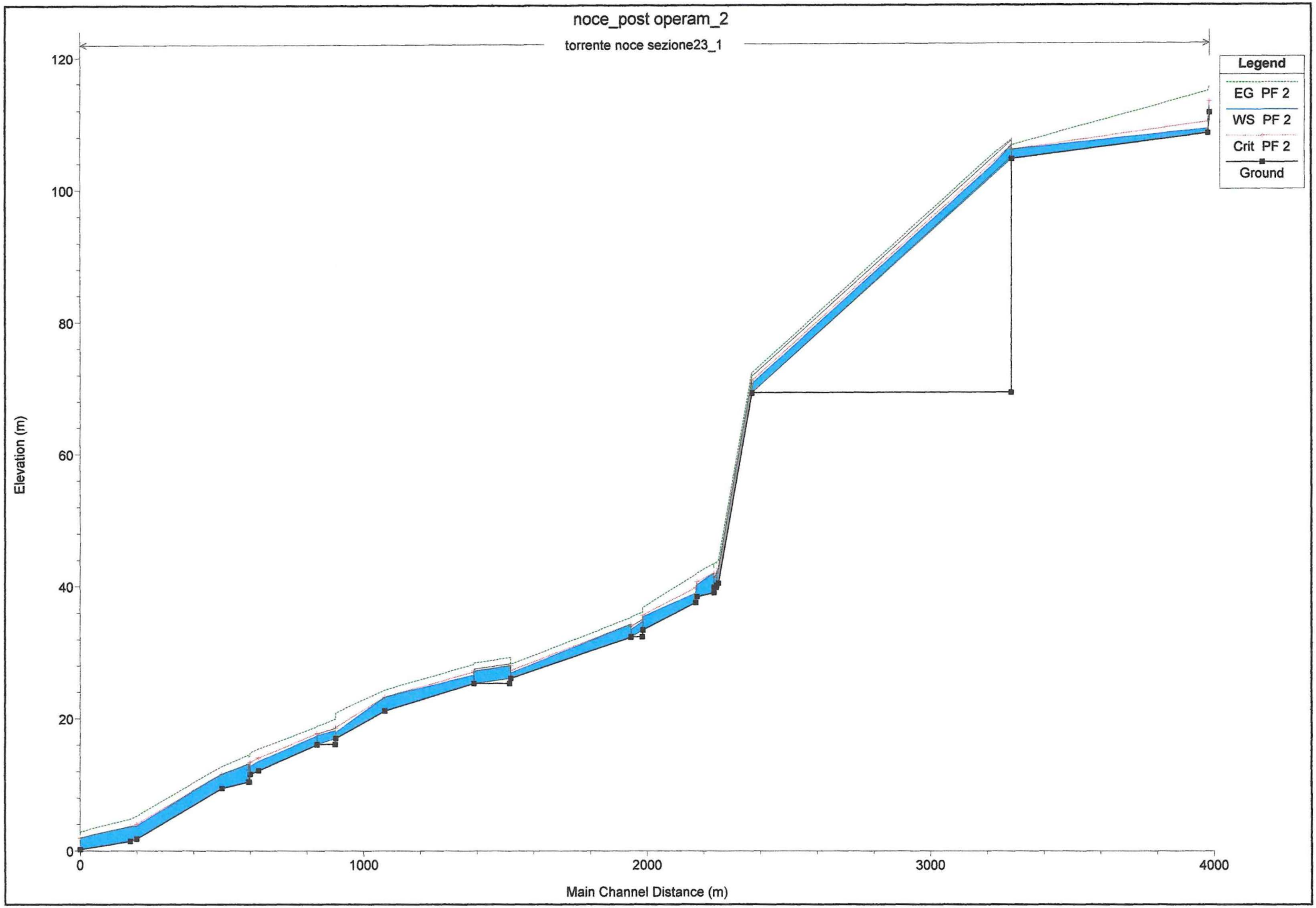

noce_post operam_2
RS = 6 imbocco ponte via milioti, (scatolare)
.017
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta


noce_post operam_2
RS = 5 sbocco ponte via milioti
.017
14
12
10
0
1
2
Elevation (m)
Station (m)
Legend
EG PF 2
WS PF 2
Crit PF 2
Ground
Bank Sta


noce_post operam_2
RS = 4 palo
.025
14
12
Elevation (m)
Legend
EG PF 2
Crit PF 2
WS PF 2
Ground
Bank Sta


noce_post operam_2
RS = 3 allargamento strada privata
.025
Legend
EG PF 2
Crit PF 2
WS PF 2
Ground
Bank Sta
4
Elevation (m)


noce_post operam_2
RS = 2 fine strada privata
.025
Legend
EG PF 2
WS PF 2
Crit PF 2
Ground
Bank Sta
Elevation (m)
5
4
3
2
1
0.0
0.5
1.0
1.5
2.0
2.5
Station (m)


noce_post operam_2
torrente noce sezione23_1
Legend
EG PF 2
WS PF 2
Crit PF 2
Ground
Elevation (m)
120
100
80
60
40
20
0
0
1000
2000
3000
4000
Main Channel Distance (m)

HEC-RAS Plan: Plan 03 River: torrente noce Reach: sezione23_1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
sezione23_1	23	PF 1	13.77	111.50	112.40	113.15	115.18	0.040038	7.38	1.87	2.27	2.60
sezione23_1	23	PF 2	15.29	111.50	112.47	113.26	115.40	0.040042	7.59	2.02	2.30	2.59
sezione23_1	23	PF 3	17.68	111.50	112.57	113.41	115.73	0.040045	7.88	2.24	2.34	2.57
sezione23_1	22	PF 1	13.77	108.30	108.96	109.99	114.58	0.109755	10.51	1.31	2.00	4.14
sezione23_1	22	PF 2	15.29	108.30	109.02	110.11	114.81	0.105230	10.66	1.43	2.00	4.02
sezione23_1	22	PF 3	17.68	108.30	109.11	110.30	115.14	0.099594	10.88	1.63	2.00	3.85
sezione23_1	21	PF 1	13.77	104.50	105.79	105.79	106.44	0.013015	3.57	3.86	3.00	1.01
sezione23_1	21	PF 2	15.29	104.50	105.88	105.88	106.57	0.013170	3.69	4.15	3.00	1.00
sezione23_1	21	PF 3	17.68	104.50	106.02	106.02	106.79	0.013590	3.87	4.57	3.00	1.00
sezione23_1	20.5		Culvert									
sezione23_1	20.4	PF 1	13.77	69.20	70.46	70.49	71.14	0.013720	3.64	3.78	3.00	1.04
sezione23_1	20.4	PF 2	15.29	69.20	70.54	70.58	71.28	0.014310	3.80	4.02	3.00	1.05
sezione23_1	20.4	PF 3	17.68	69.20	70.67	70.72	71.49	0.014967	4.01	4.41	3.00	1.06
sezione23_1	20	PF 1	13.77	69.10	71.06	71.06	72.04	0.011846	4.39	3.14	1.60	1.00
sezione23_1	20	PF 2	15.29	69.10	71.20	71.20	72.26	0.012374	4.55	3.36	1.60	1.00
sezione23_1	20	PF 3	17.68	69.10	71.42	71.42	72.58	0.013171	4.77	3.70	1.60	1.00
sezione23_1	19	PF 1	15.66	40.40	42.53	42.53	43.61	0.012565	4.59	3.41	1.60	1.00
sezione23_1	19	PF 2	17.38	40.40	42.68	42.68	43.84	0.013142	4.76	3.65	1.60	1.00
sezione23_1	19	PF 3	20.11	40.40	42.92	42.92	44.19	0.014021	4.99	4.03	1.60	1.00
sezione23_1	18	PF 1	15.66	40.10	41.33	41.94	43.40	0.026031	6.38	2.45	2.00	1.84
sezione23_1	18	PF 2	17.38	40.10	41.42	42.07	43.62	0.026453	6.57	2.64	2.00	1.82
sezione23_1	18	PF 3	20.11	40.10	41.57	42.27	43.96	0.027174	6.86	2.93	2.00	1.81
sezione23_1	17.5		Culvert									
sezione23_1	17.4	PF 1	15.66	39.80	41.64	41.64	42.56	0.009380	4.26	3.67	2.00	1.00
sezione23_1	17.4	PF 2	17.38	39.80	41.77	41.77	42.76	0.009745	4.42	3.94	2.00	1.00
sezione23_1	17.4	PF 3	20.11	39.80	41.98	41.98	43.06	0.010220	4.62	4.35	2.00	1.00
sezione23_1	17	PF 1	15.66	39.00	41.74	41.74	43.12	0.022092	5.20	3.01	1.10	1.00
sezione23_1	17	PF 2	17.38	39.00	41.94	41.94	43.41	0.023327	5.38	3.23	1.10	1.00
sezione23_1	17	PF 3	20.11	39.00	42.24	42.24	43.86	0.025213	5.65	3.56	1.10	1.00
sezione23_1	16	PF 1	15.66	38.40	40.11	40.54	41.76	0.021321	5.73	2.73	1.60	1.40
sezione23_1	16	PF 2	17.38	38.40	40.24	40.68	42.02	0.022029	5.91	2.94	1.60	1.39
sezione23_1	16	PF 3	20.11	38.40	40.43	40.92	42.38	0.023124	6.18	3.25	1.60	1.38
sezione23_1	15	PF 1	15.66	37.50	38.85	39.64	41.54	0.038283	7.27	2.15	1.60	2.00
sezione23_1	15	PF 2	17.38	37.50	38.96	39.78	41.77	0.038381	7.43	2.34	1.60	1.96
sezione23_1	15	PF 3	20.11	37.50	39.14	40.02	42.13	0.038705	7.65	2.63	1.60	1.91
sezione23_1	14	PF 1	15.66	33.40	35.22	35.49	36.61	0.016820	5.23	3.00	1.65	1.24
sezione23_1	14	PF 2	17.38	33.40	35.38	35.65	36.82	0.016787	5.32	3.27	1.65	1.21
sezione23_1	14	PF 3	20.11	33.40	35.65	35.87	37.15	0.016667	5.42	3.71	1.65	1.15
sezione23_1	13.5		Culvert									
sezione23_1	13.4	PF 1	15.66	32.35	33.41	33.93	35.19	0.021128	5.90	2.65	2.50	1.83
sezione23_1	13.4	PF 2	17.38	32.35	33.50	34.05	35.36	0.020903	6.04	2.88	2.50	1.80
sezione23_1	13.4	PF 3	20.11	32.35	33.63	34.22	35.63	0.020810	6.26	3.21	2.50	1.76
sezione23_1	13	PF 1	15.66	32.30	34.14	34.14	35.06	0.009388	4.27	3.67	2.00	1.00
sezione23_1	13	PF 2	17.38	32.30	34.27	34.27	35.26	0.009748	4.42	3.94	2.00	1.00
sezione23_1	13	PF 3	20.11	32.30	34.47	34.47	35.56	0.010298	4.64	4.34	2.00	1.00
sezione23_1	12	PF 1	15.66	26.10	26.84	27.22	28.12	0.034803	5.01	3.13	4.20	1.85
sezione23_1	12	PF 2	17.38	26.10	26.91	27.30	28.24	0.033509	5.12	3.40	4.20	1.82
sezione23_1	12	PF 3	20.11	26.10	27.01	27.43	28.42	0.031870	5.27	3.82	4.20	1.77
sezione23_1	11.5		Culvert									
sezione23_1	11	PF 1	15.66	25.30	26.32	26.88	28.25	0.039762	6.16	2.54	2.50	1.95
sezione23_1	11	PF 2	17.38	25.30	26.48	27.00	28.25	0.032739	5.89	2.95	2.50	1.73
sezione23_1	11	PF 3	20.11	25.30	27.17	27.17	28.11	0.013170	4.30	4.67	2.50	1.00
sezione23_1	10	PF 1	15.66	21.20	23.18	23.18	24.16	0.010639	4.40	3.56	1.80	1.00
sezione23_1	10	PF 2	17.38	21.20	23.32	23.32	24.38	0.011086	4.56	3.81	1.80	1.00
sezione23_1	10	PF 3	20.11	21.20	23.53	23.53	24.70	0.011770	4.79	4.20	1.80	1.00
sezione23_1	9	PF 1	15.66	17.00	17.87	18.63	20.75	0.040753	7.52	2.08	2.40	2.58
sezione23_1	9	PF 2	17.38	17.00	17.95	18.75	20.91	0.039172	7.63	2.28	2.40	2.50
sezione23_1	9	PF 3	20.11	17.00	18.08	18.92	21.16	0.037296	7.79	2.58	2.40	2.40
sezione23_1	8.5		Culvert									
sezione23_1	8.4	PF 1	15.66	16.10	17.36	17.68	18.62	0.013402	4.99	3.14	2.50	1.42
sezione23_1	8.4	PF 2	17.38	16.10	17.46	17.80	18.79	0.013343	5.11	3.40	2.50	1.40
sezione23_1	8.4	PF 3	20.11	16.10	17.63	17.97	19.04	0.013115	5.25	3.83	2.50	1.35

HEC-RAS Plan: Plan 03 River: torrente noce Reach: sezione23_1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
sezione23_1	8	PF 1	15.66	16.05	17.27	17.63	18.61	0.014525	5.14	3.05	2.50	1.49
sezione23_1	8	PF 2	17.38	16.05	17.37	17.75	18.78	0.014430	5.26	3.30	2.50	1.46
sezione23_1	8	PF 3	20.11	16.05	17.54	17.92	19.03	0.014200	5.41	3.71	2.50	1.42
sezione23_1	7	PF 1	20.70	12.15	13.44	13.96	15.24	0.017775	5.94	3.48	2.70	1.67
sezione23_1	7	PF 2	22.95	12.15	13.55	14.09	15.43	0.017618	6.08	3.78	2.70	1.64
sezione23_1	7	PF 3	26.59	12.15	13.72	14.29	15.72	0.017386	6.27	4.24	2.70	1.60
sezione23_1	6	PF 1	20.70	11.60	12.72	13.29	14.66	0.019972	6.18	3.35	3.00	1.87
sezione23_1	6	PF 2	22.95	11.60	12.81	13.41	14.85	0.019856	6.34	3.62	3.00	1.84
sezione23_1	6	PF 3	26.59	11.60	12.95	13.60	15.15	0.019698	6.57	4.05	3.00	1.81
sezione23_1	5.5		Culvert									
sezione23_1	5.4	PF 1	20.70	10.45	11.41	12.14	14.06	0.030895	7.22	2.87	3.00	2.36
sezione23_1	5.4	PF 2	22.95	10.45	11.49	12.26	14.24	0.029842	7.35	3.12	3.00	2.30
sezione23_1	5.4	PF 3	26.59	10.45	12.45	12.45	13.45	0.006970	4.43	6.00	3.00	1.00
sezione23_1	5	PF 1	20.70	10.40	12.97	12.97	14.26	0.014133	5.03	4.11	1.60	1.00
sezione23_1	5	PF 2	22.95	10.40	13.16	13.16	14.54	0.014820	5.21	4.41	1.60	1.00
sezione23_1	5	PF 3	26.59	10.40	13.44	13.44	14.96	0.015893	5.47	4.86	1.60	1.00
sezione23_1	4	PF 1	20.70	9.40	11.46	11.51	12.57	0.021774	4.68	4.42	2.15	1.04
sezione23_1	4	PF 2	22.95	9.40	11.65	11.66	12.80	0.021386	4.73	4.85	2.15	1.01
sezione23_1	4	PF 3	26.59	9.40	11.90	11.90	13.15	0.022444	4.95	5.37	2.15	1.00
sezione23_1	3	PF 1	20.70	1.80	3.64	3.91	5.04	0.028854	5.24	3.95	2.15	1.24
sezione23_1	3	PF 2	22.95	1.80	3.78	4.06	5.26	0.029416	5.39	4.26	2.15	1.22
sezione23_1	3	PF 3	26.59	1.80	4.07	4.29	5.58	0.028150	5.44	4.89	2.15	1.15
sezione23_1	2	PF 1	20.70	1.45	3.56	3.56	4.62	0.020383	4.56	4.54	2.15	1.00
sezione23_1	2	PF 2	22.95	1.45	3.71	3.71	4.85	0.021181	4.72	4.87	2.15	1.00
sezione23_1	2	PF 3	26.59	1.45	3.95	3.95	5.20	0.022457	4.95	5.37	2.15	1.00
sezione23_1	1	PF 1	20.70	0.20	1.89	1.89	2.74	0.014097	4.08	5.08	3.00	1.00
sezione23_1	1	PF 2	22.95	0.20	2.01	2.01	2.92	0.014475	4.22	5.44	3.00	1.00
sezione23_1	1	PF 3	26.59	0.20	2.20	2.20	3.20	0.015073	4.43	6.00	3.00	1.00