



COMUNE DI AREZZO

Assessorato Urbanistica

Servizio Pianificazione Urbanistica e Governo del Territorio

Piano Strutturale

2019

PS

B Quadro conoscitivo

Indagini geologiche e idrauliche

Sindaco
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Assessore all' Urbanistica
Marco Sacchetti

Responsabile del Procedimento
Ing. Alessandro Farnè

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Criteria srl
Arch. Paolo Falqui
Arch. Luca Di Figlia
Urb. Matteo Scamporrino
Avv. Agostino Zanelli Quarantini

B1.2.1e

Settore Sud1 - fascicolo delle sezioni e profili idraulici

Garante dell'informazione e della partecipazione
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Dirigente Servizio Ambiente
Ing. Giovanni Baldini

Dirigente Servizio Progettazione Opere Pubbliche
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Ing. Gianfilippo Serra
Dott. Vittorio Serra
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Dott.ssa Cinzia Marcella Orrù

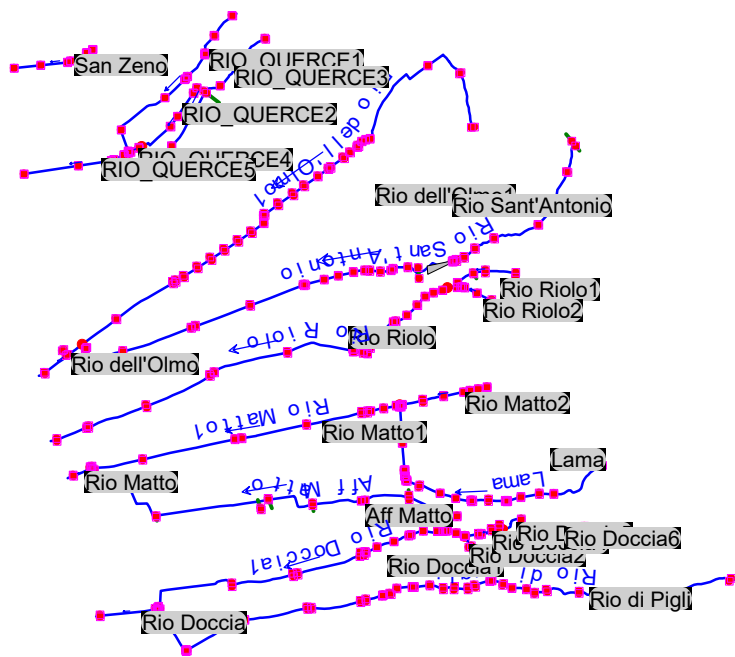
Indagini geologiche e idrauliche

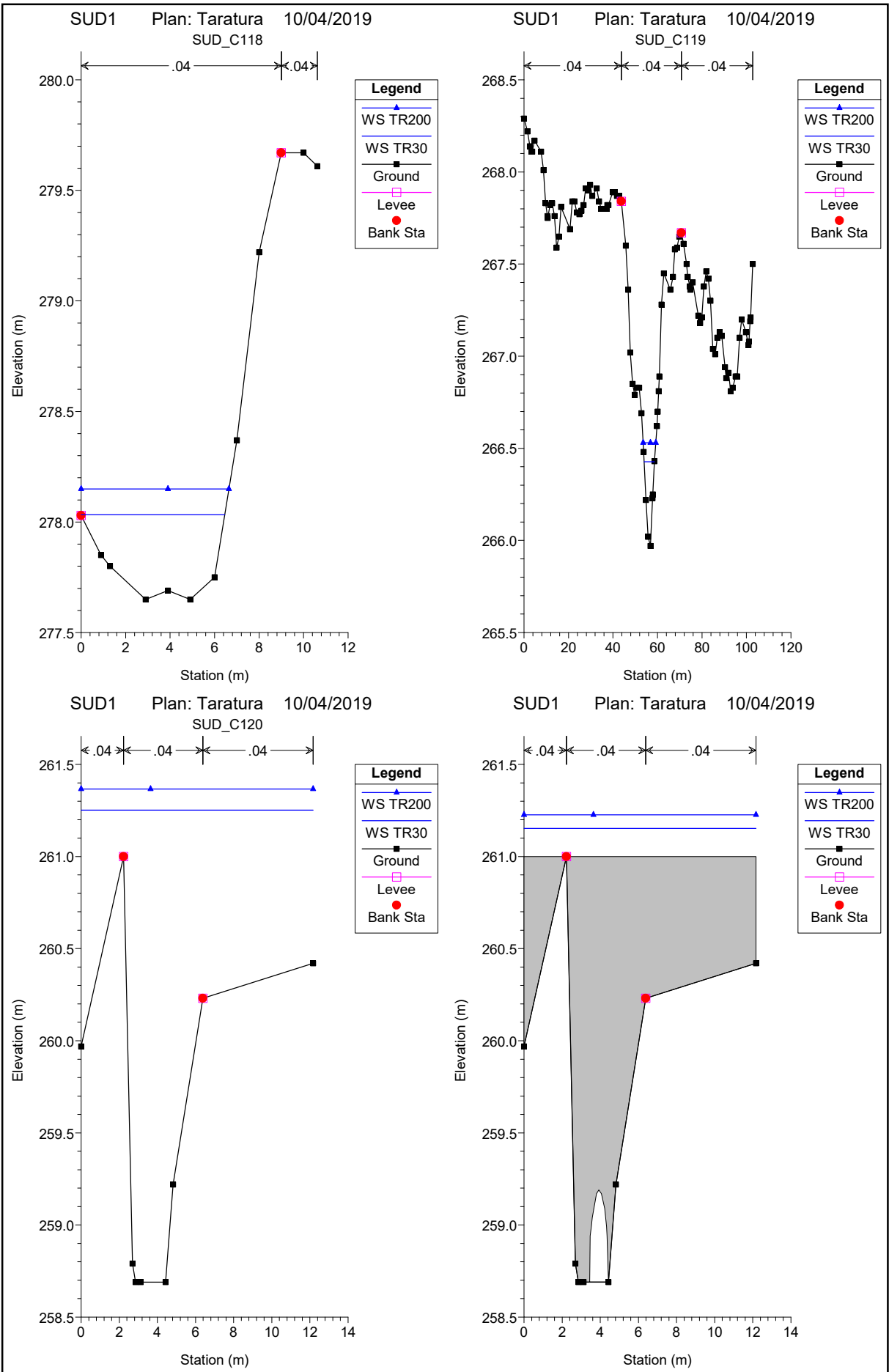
Geol. Maurizio Costa
Geol. Antonio Pitzalis
Ing. Pietro Chivaccini (Prima STP)
Ing. Elisa Formica

Arch. Matteo Scamporrino

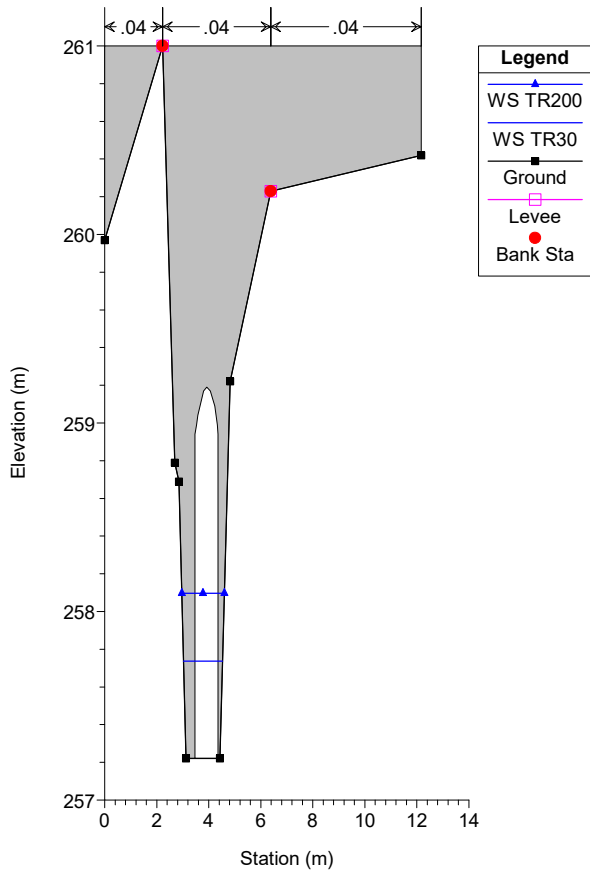
Urb. Luca Di Figlia

Avv. Agostino Zanelli Quarantini

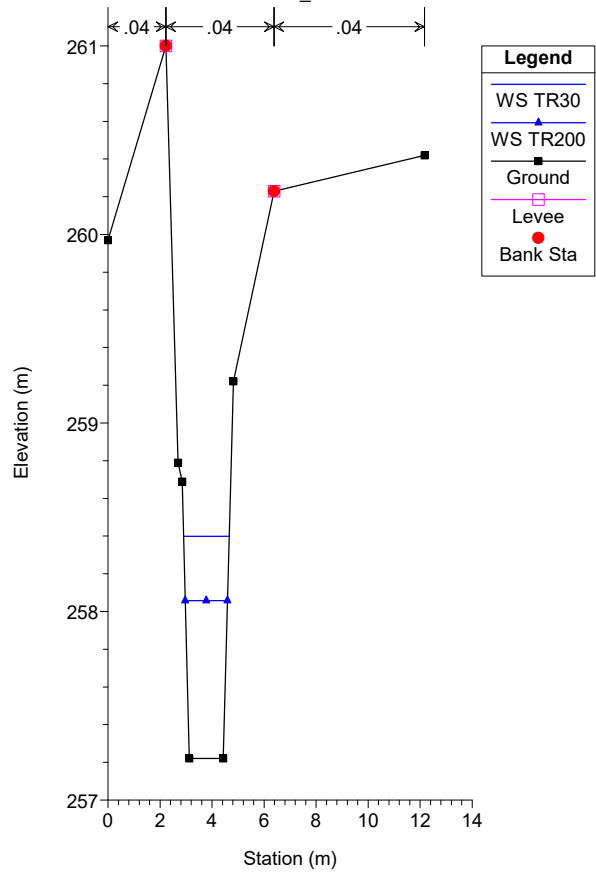




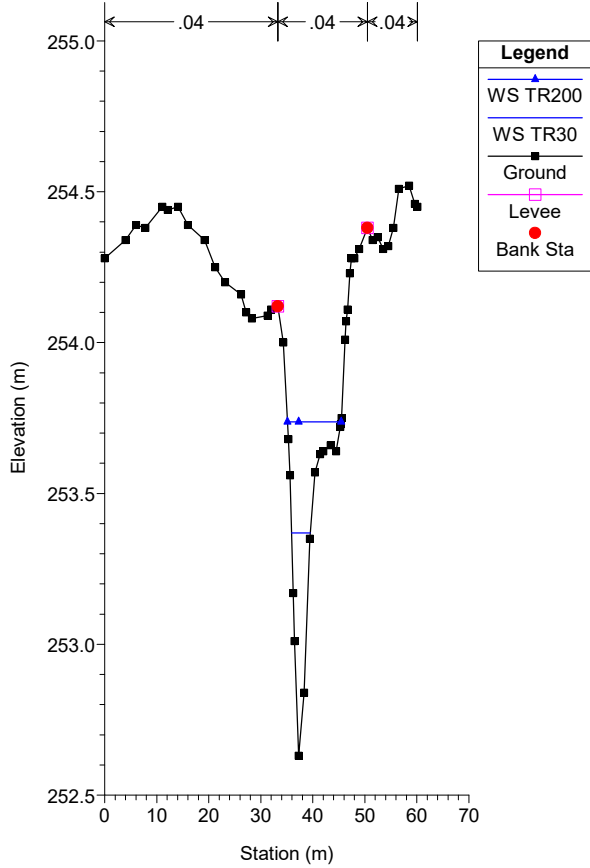
SUD1 Plan: Taratura 10/04/2019



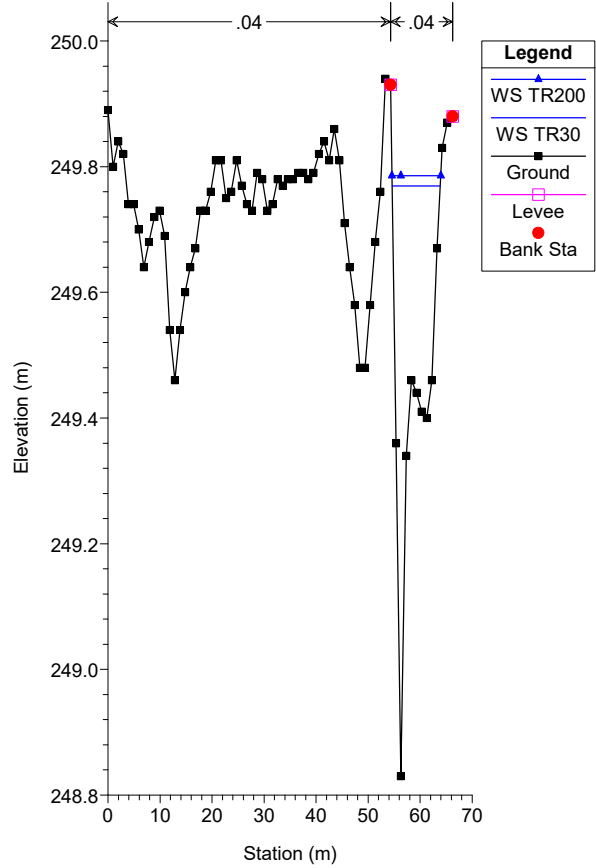
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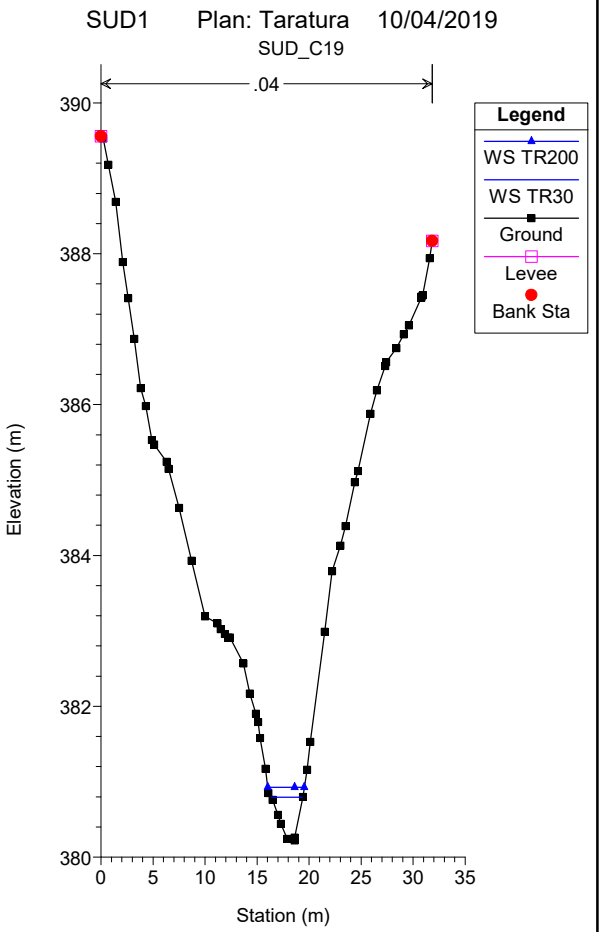
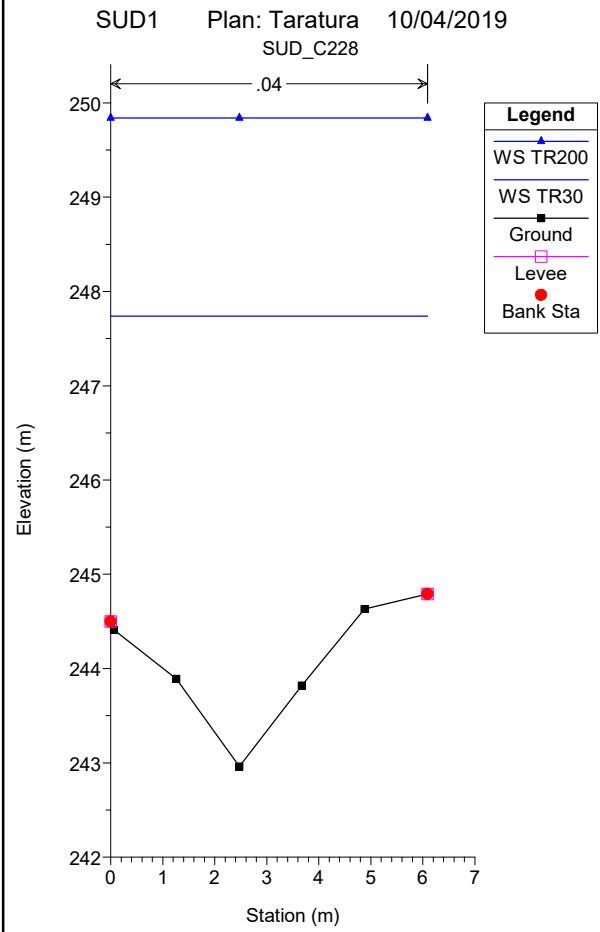
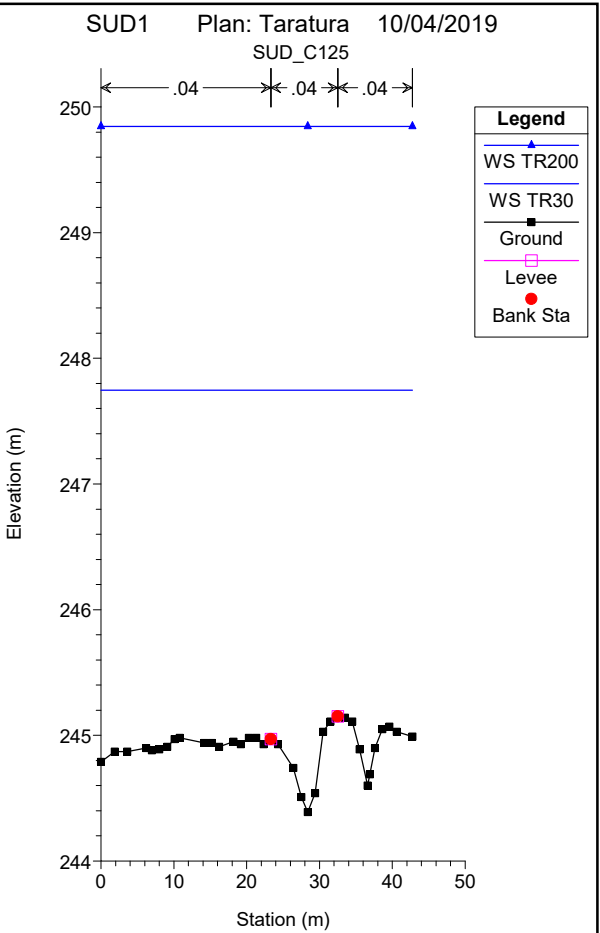
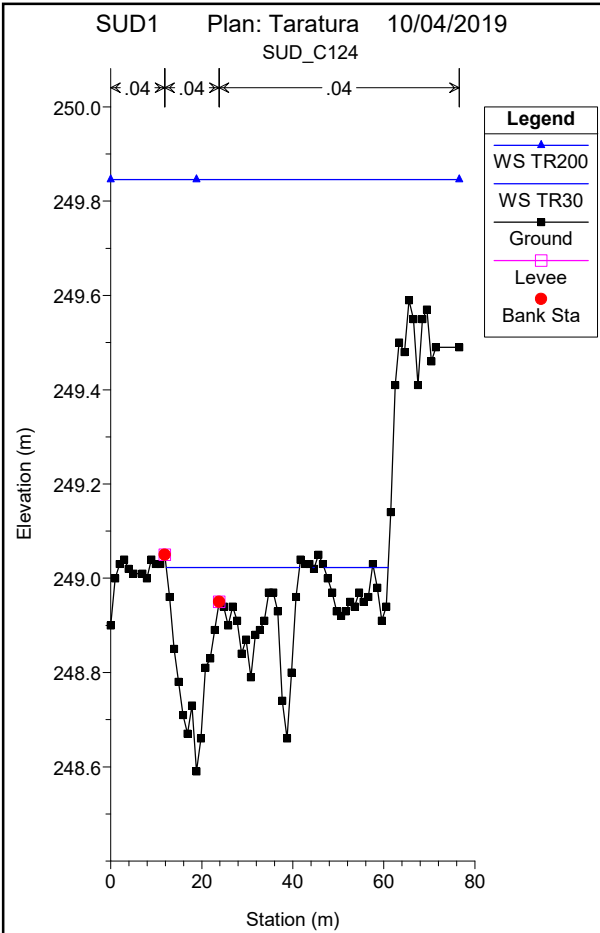


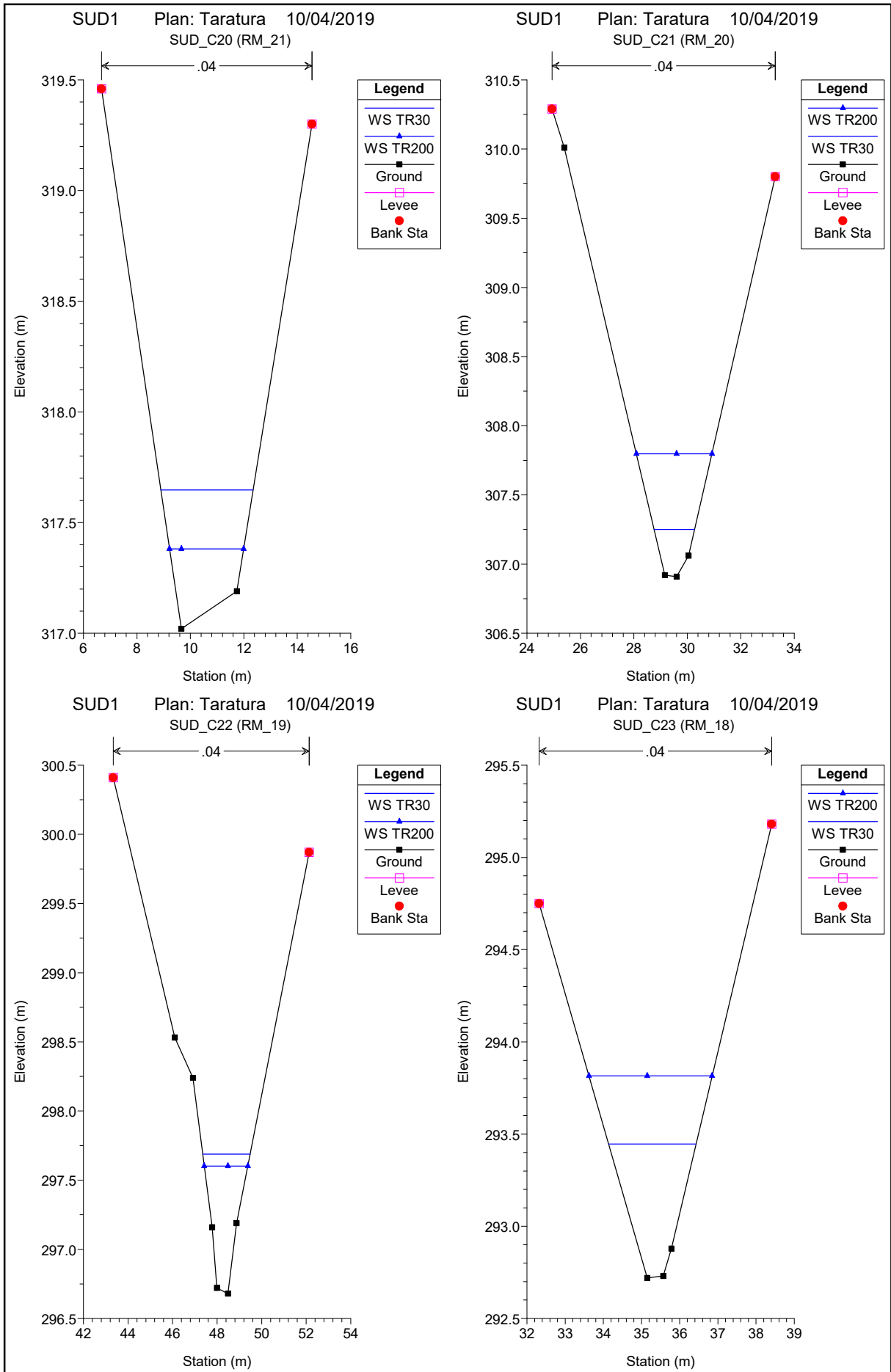
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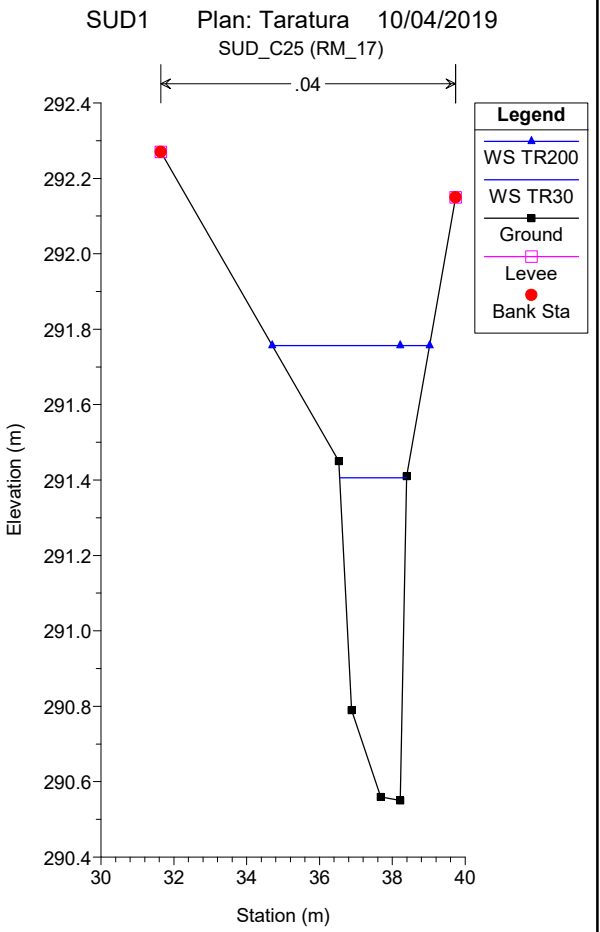
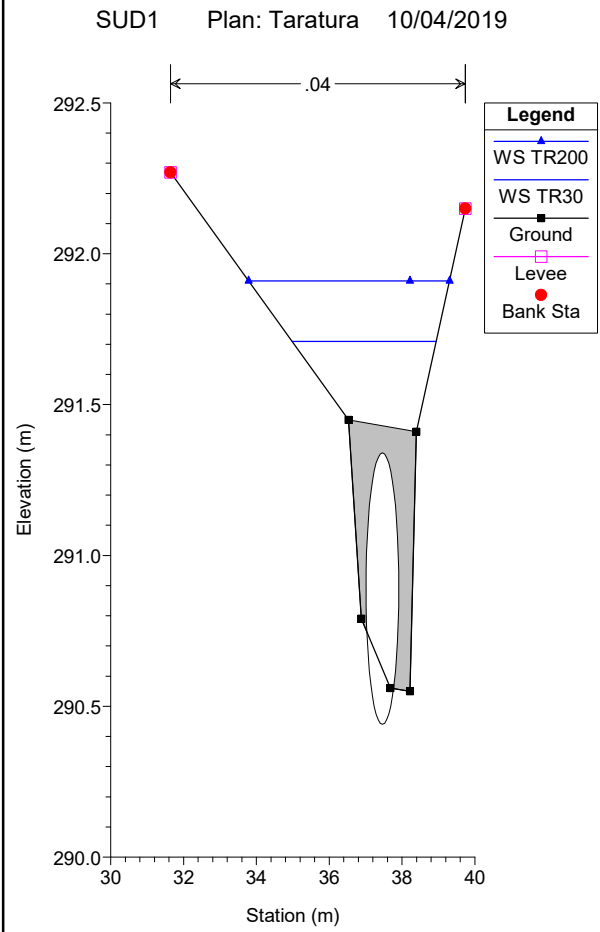
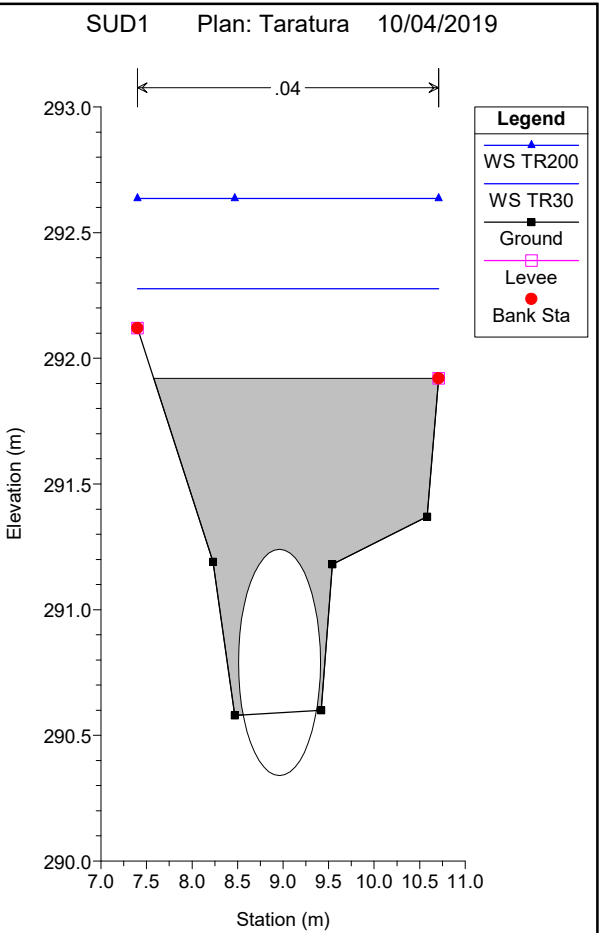
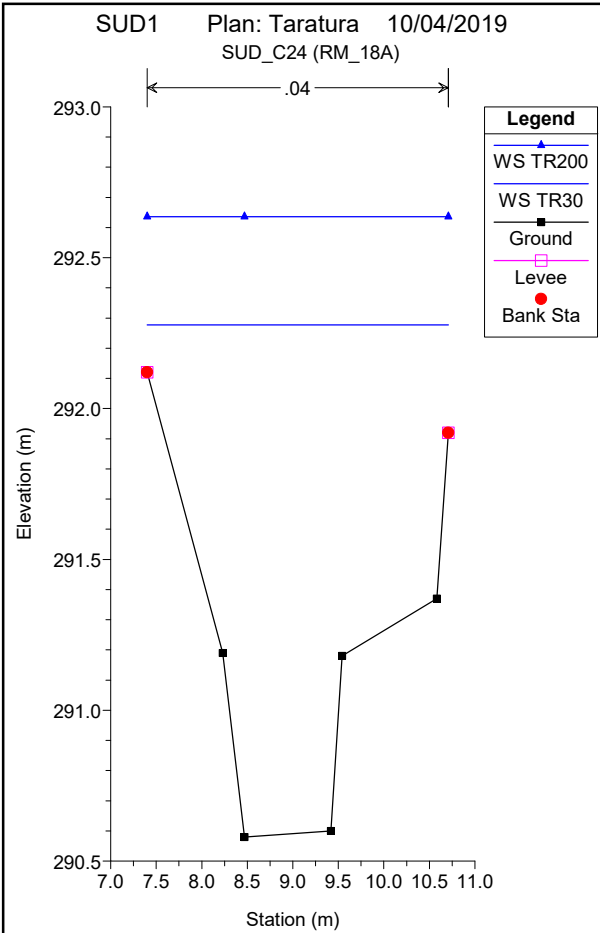


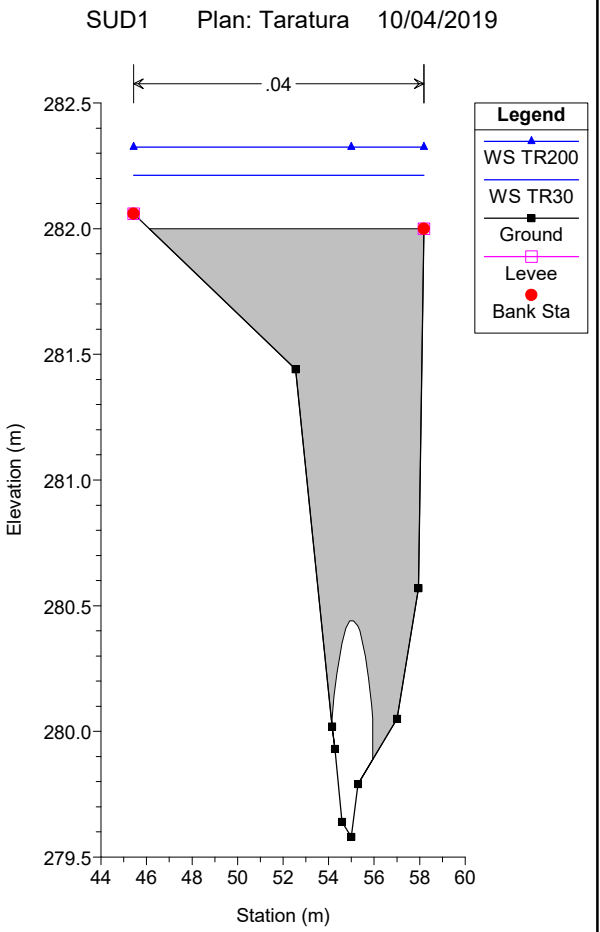
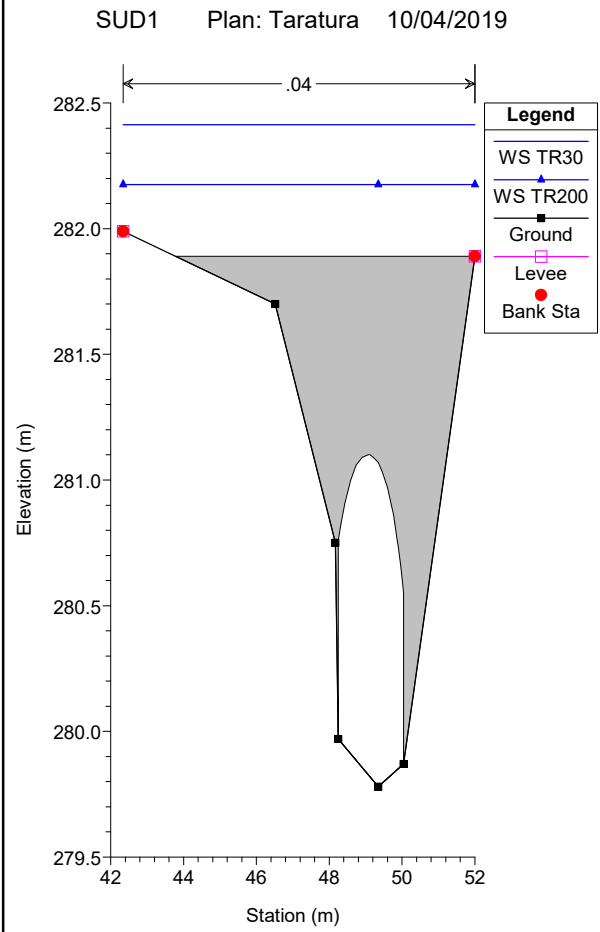
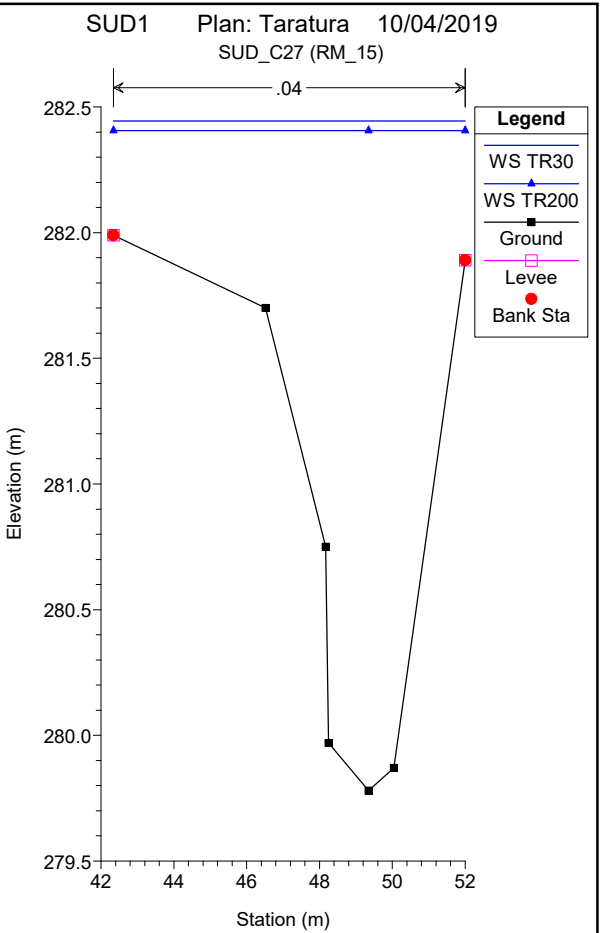
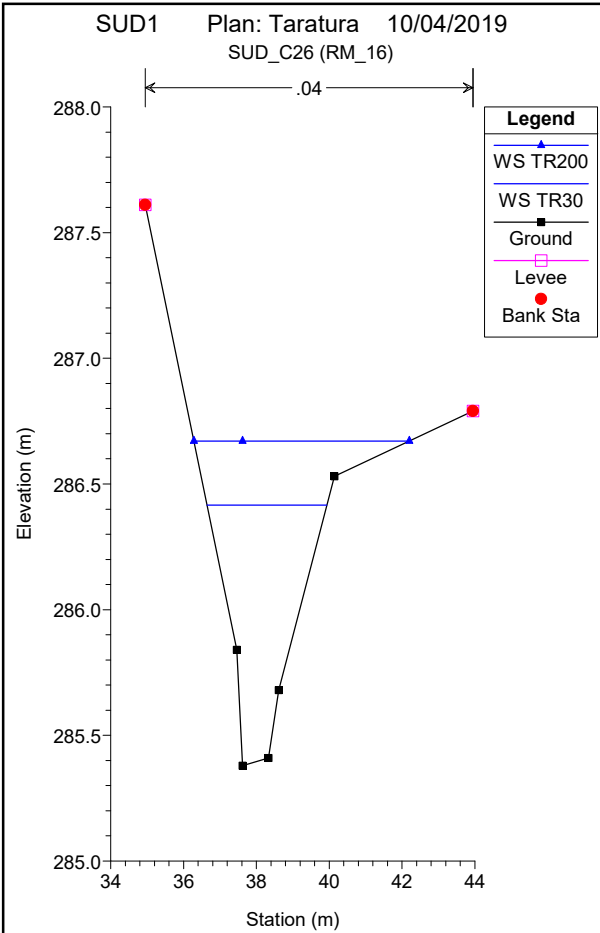
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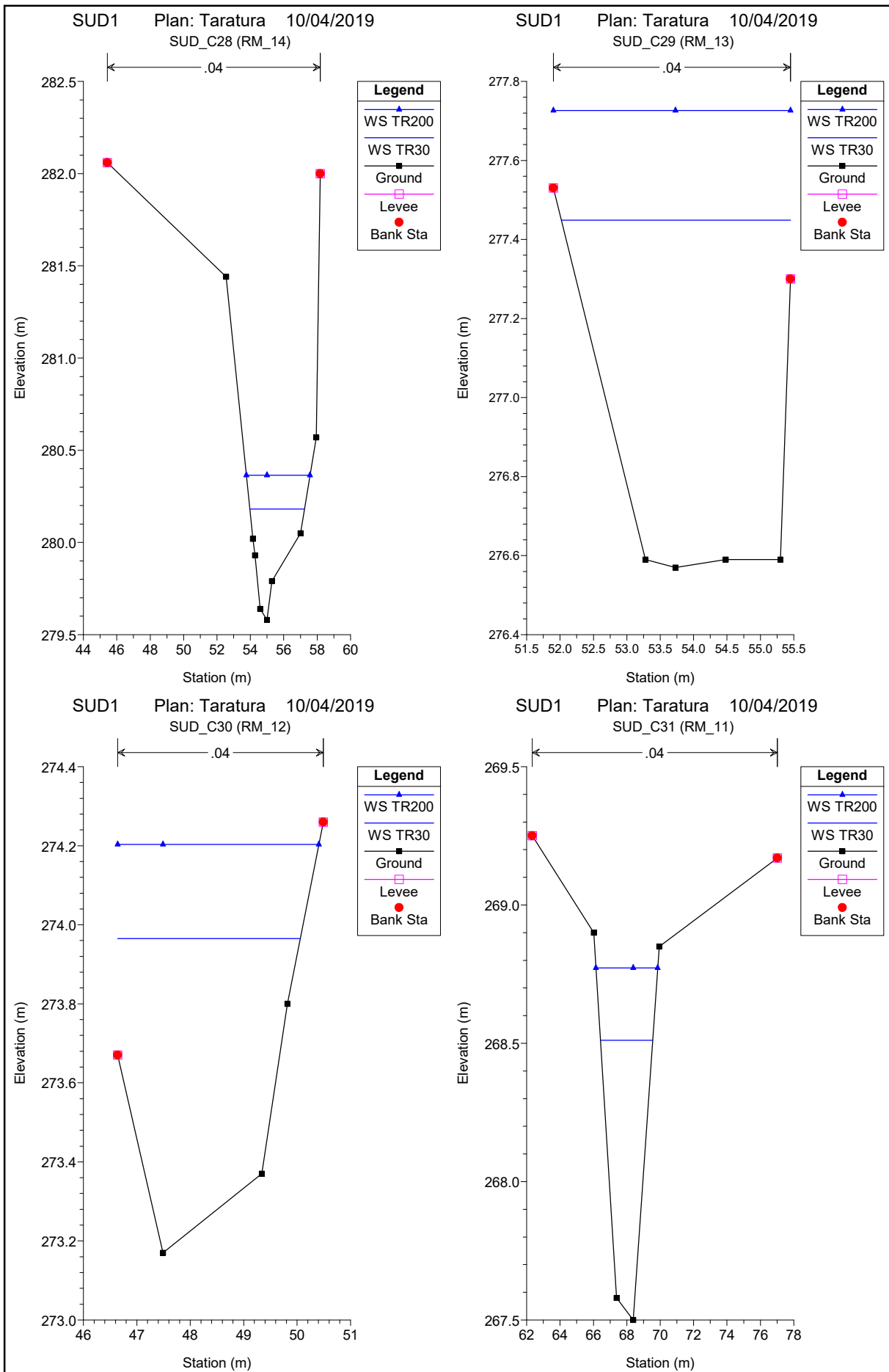




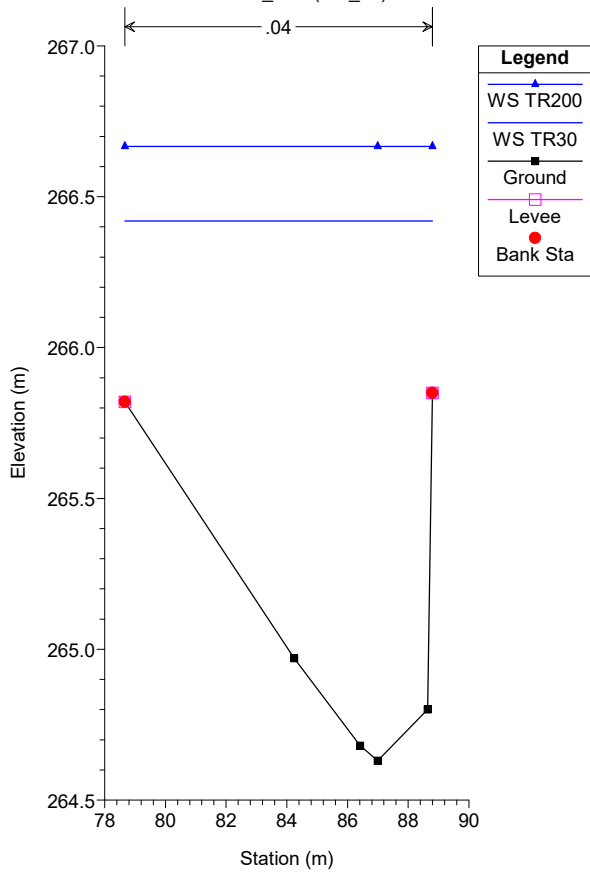




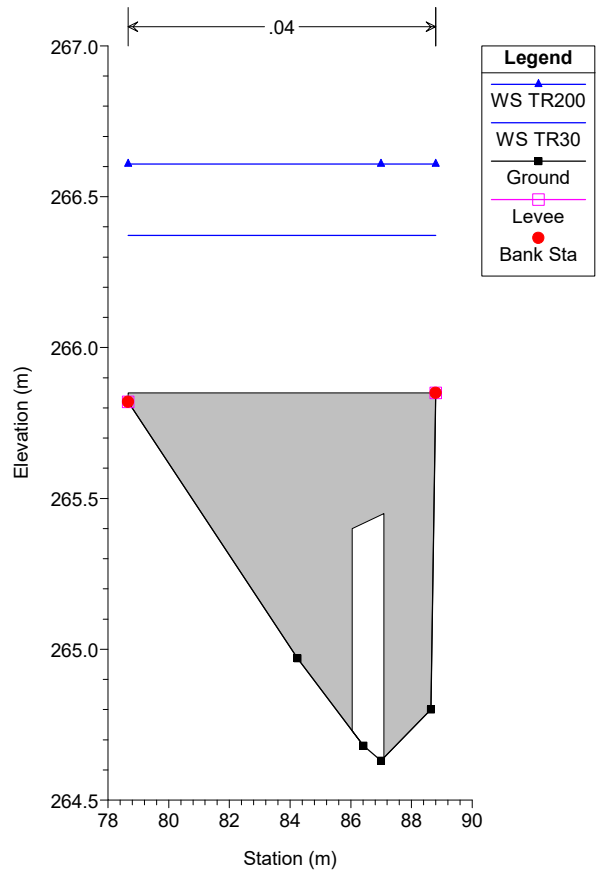




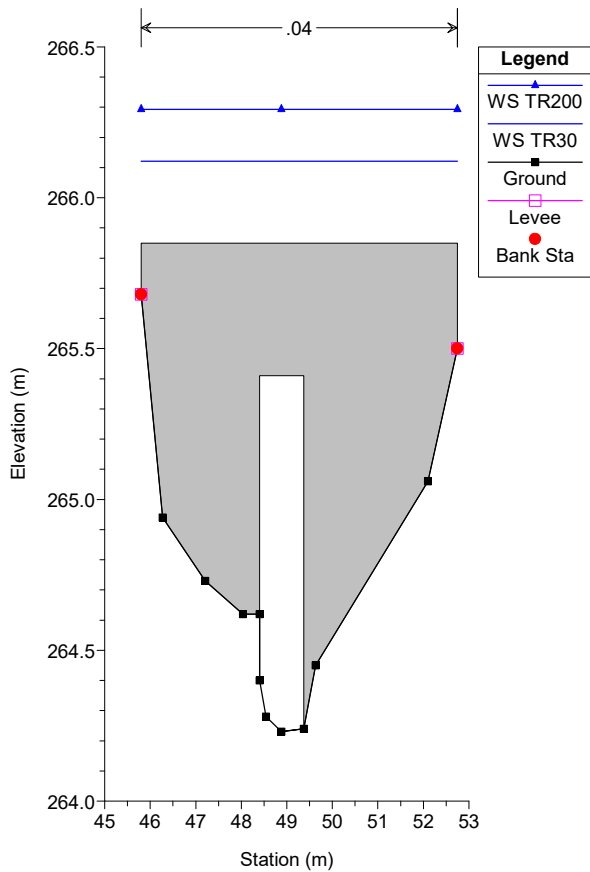
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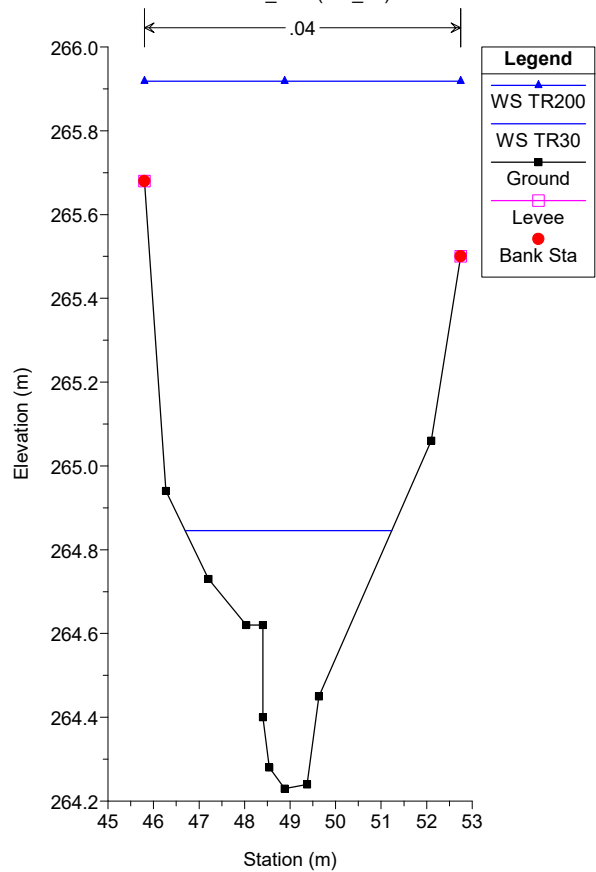
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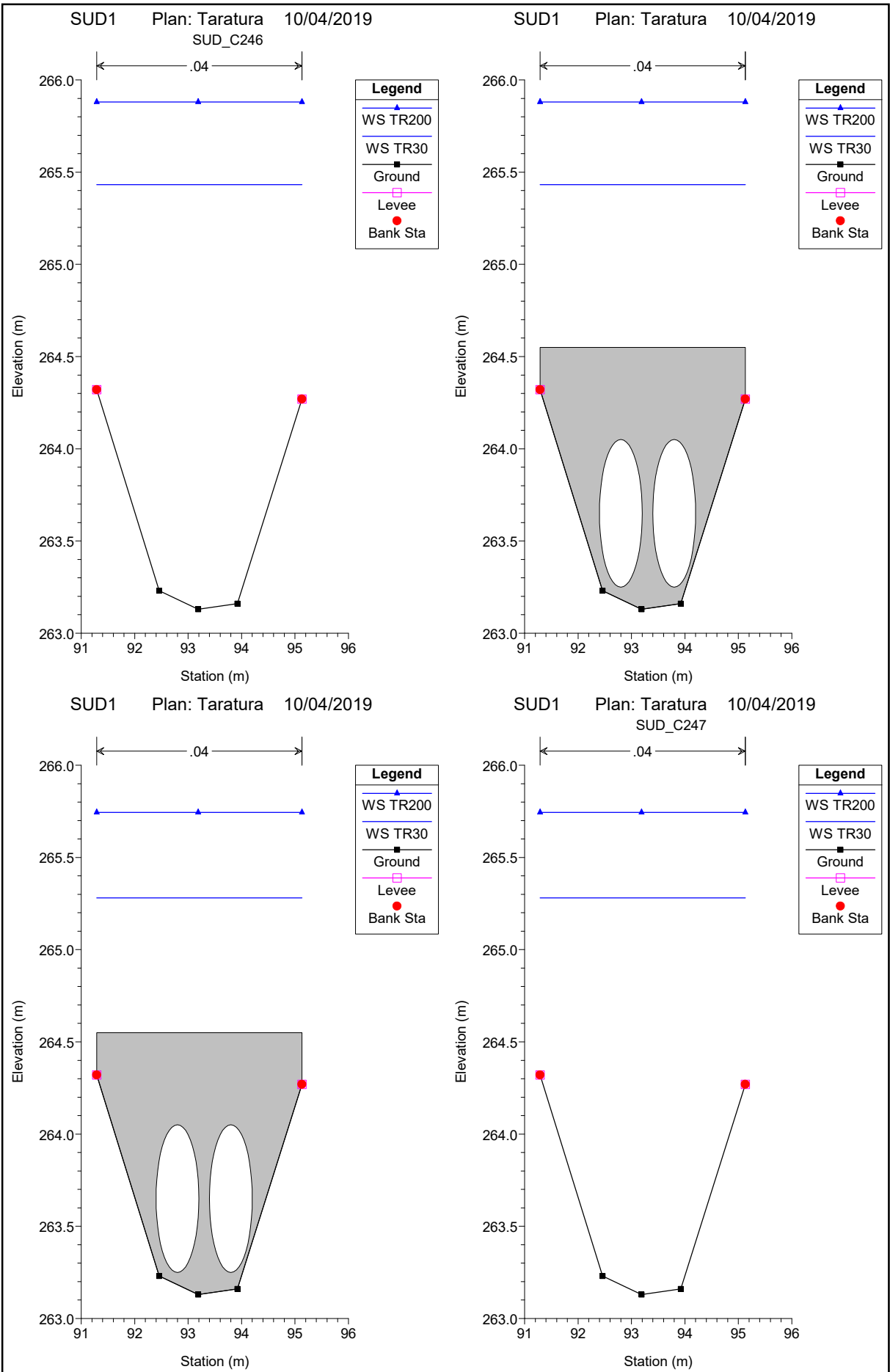


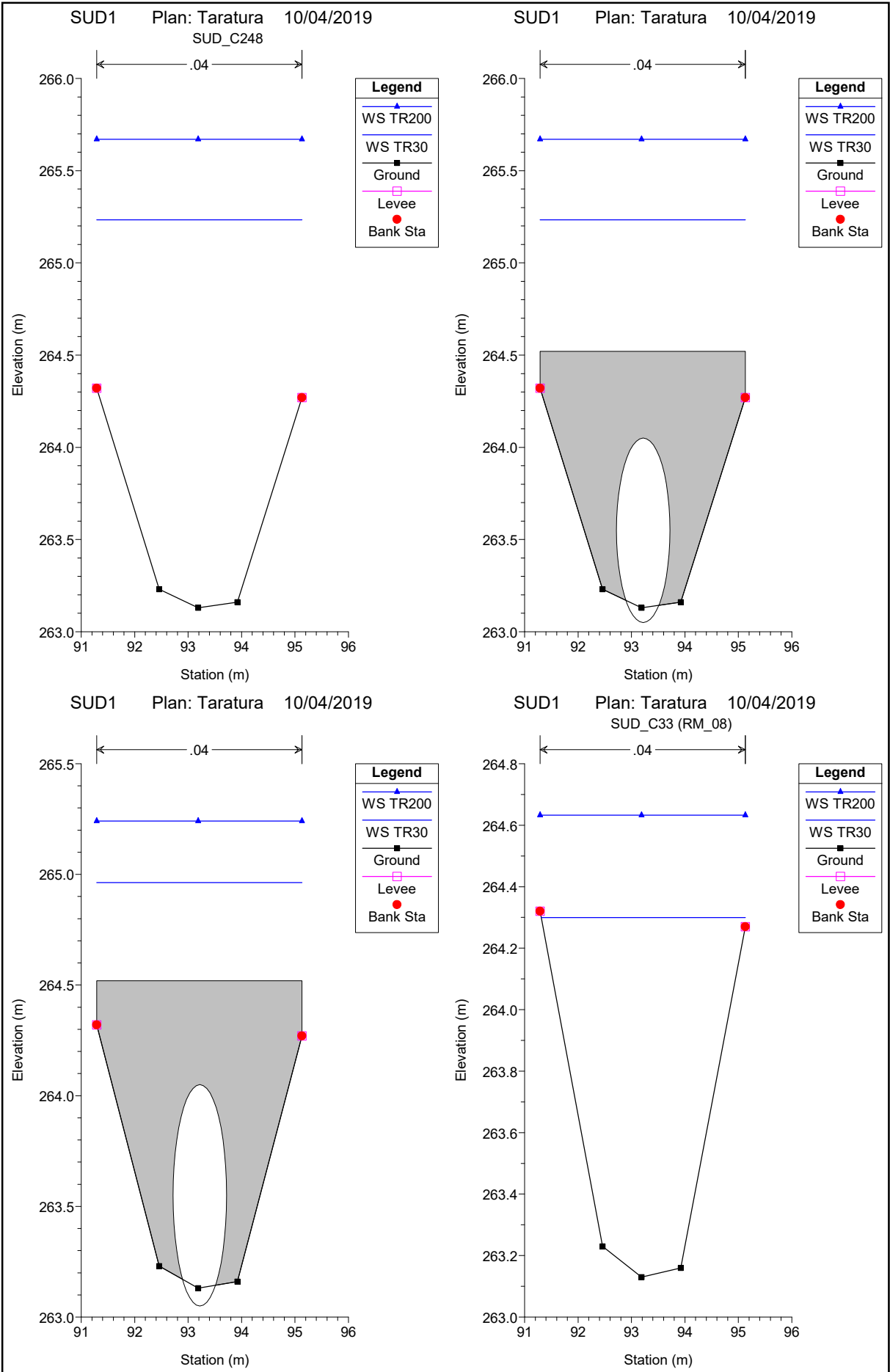
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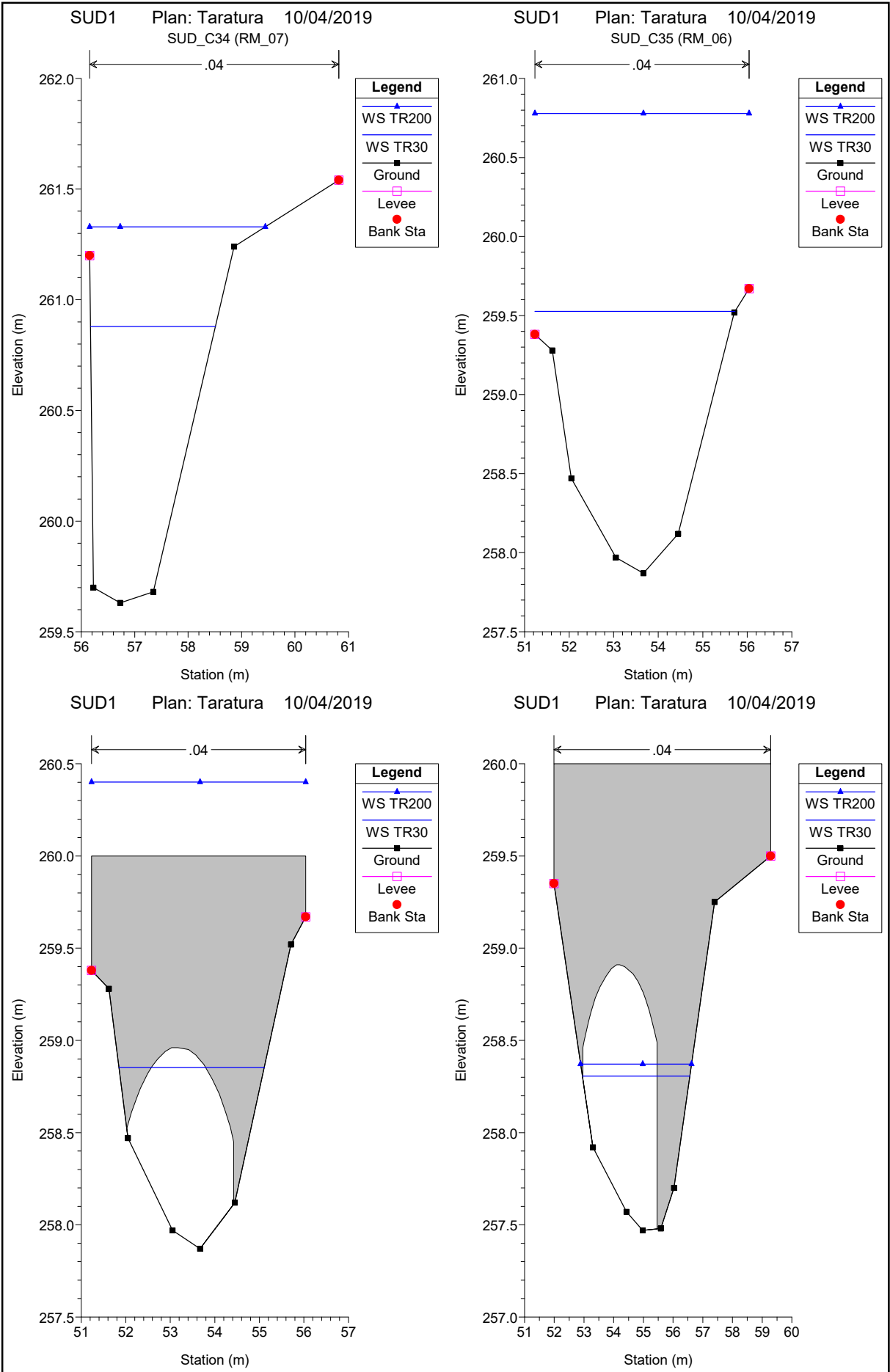


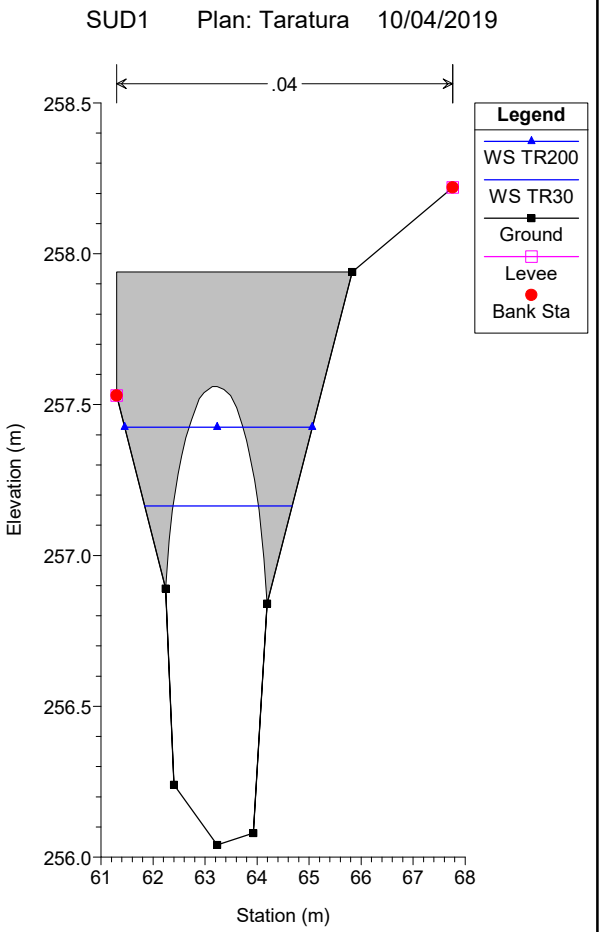
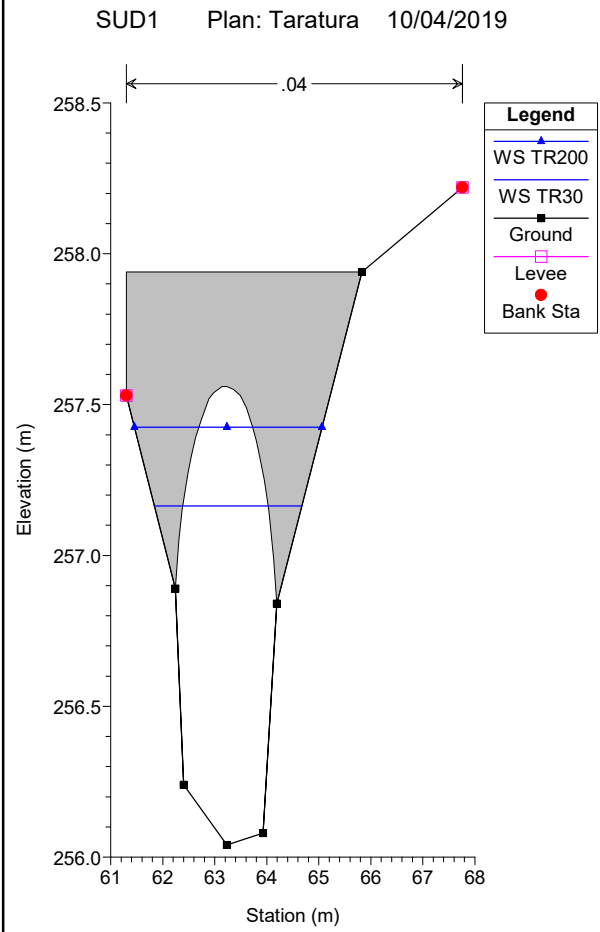
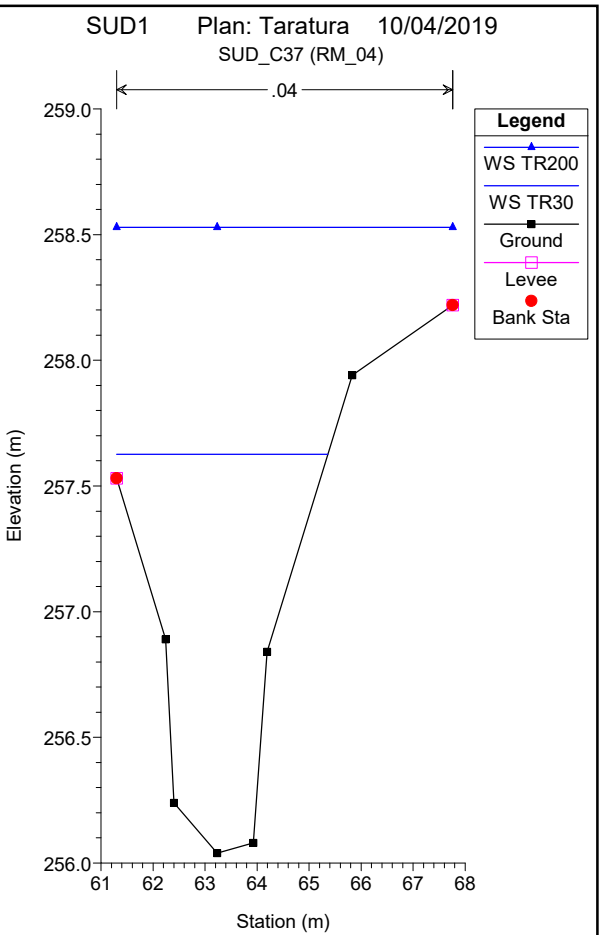
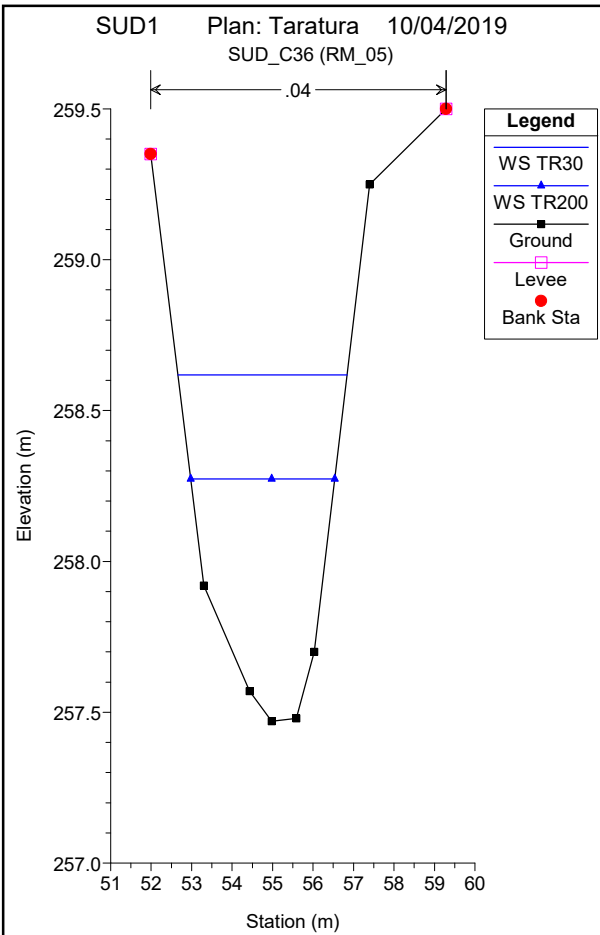
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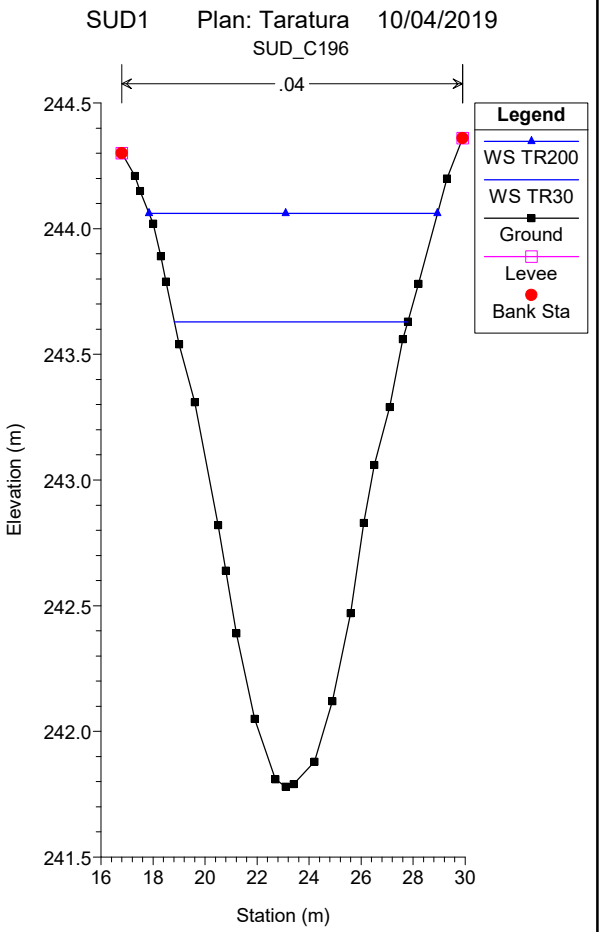
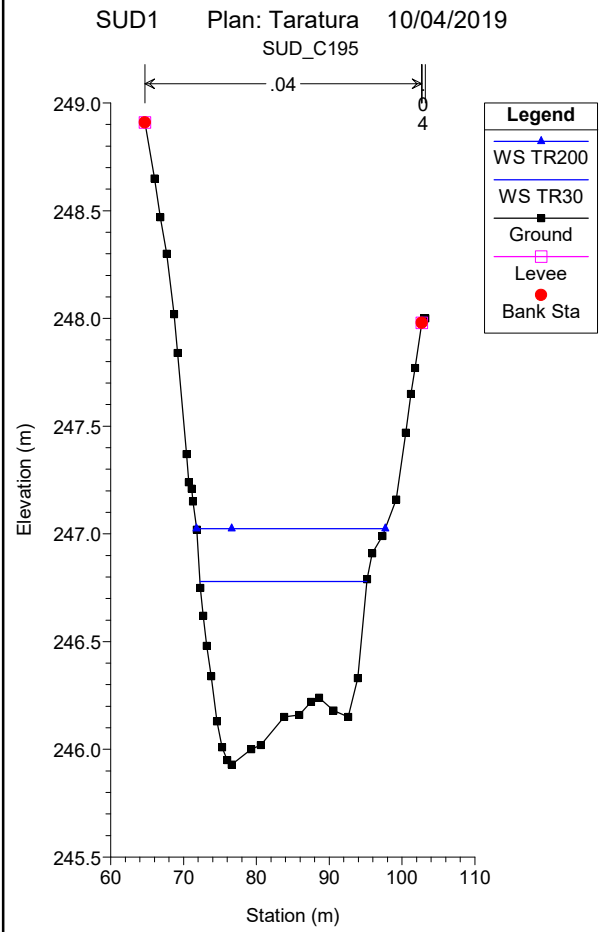
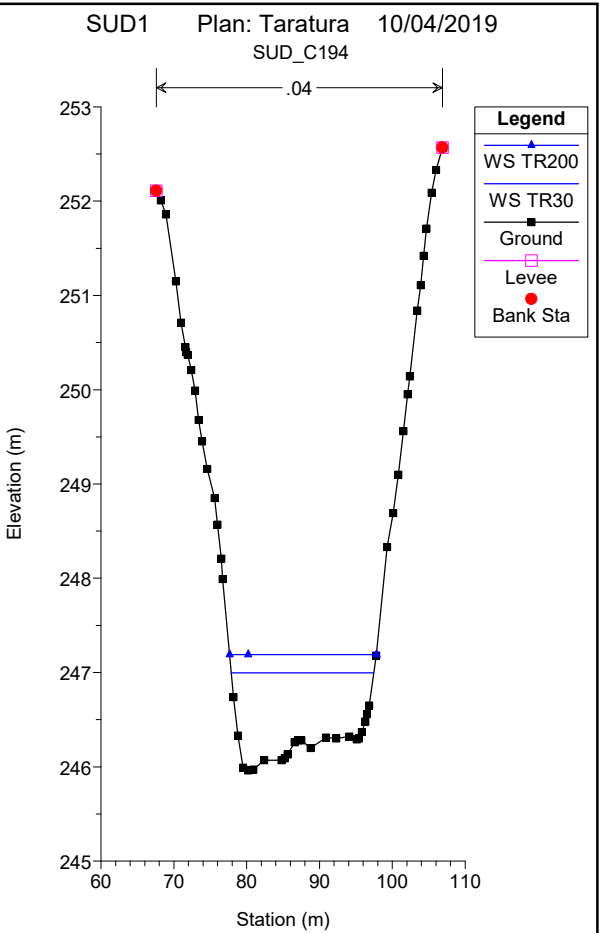
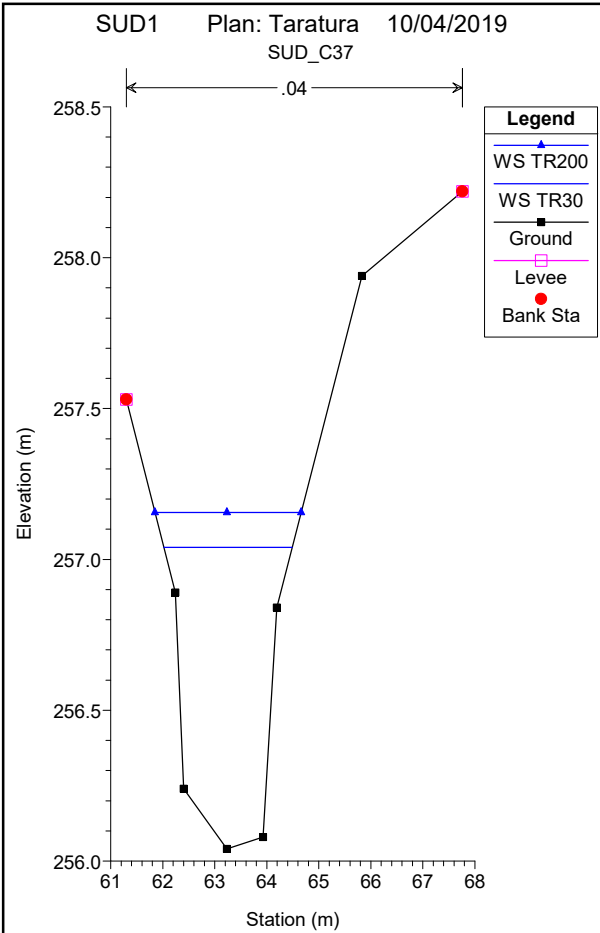


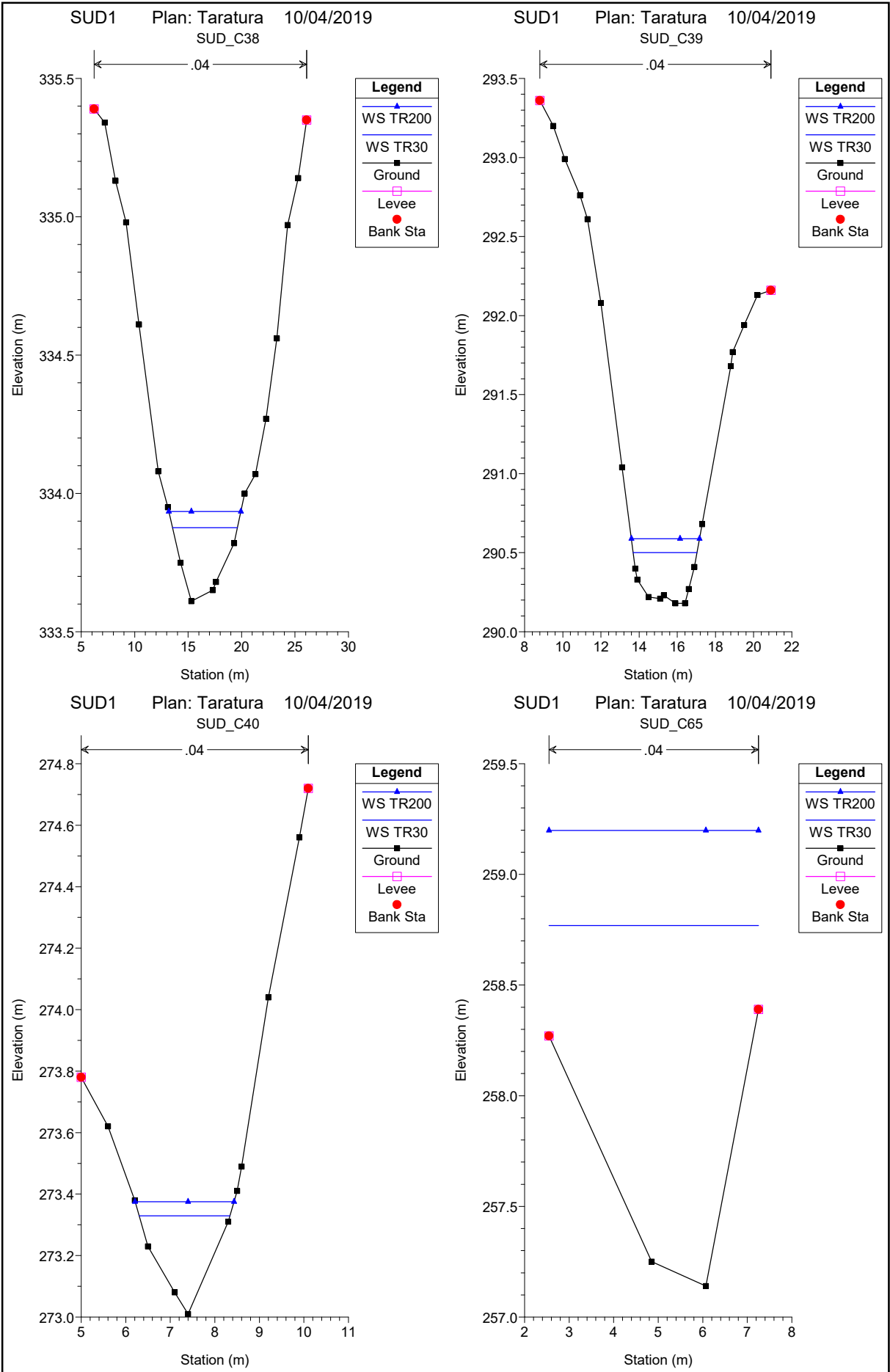


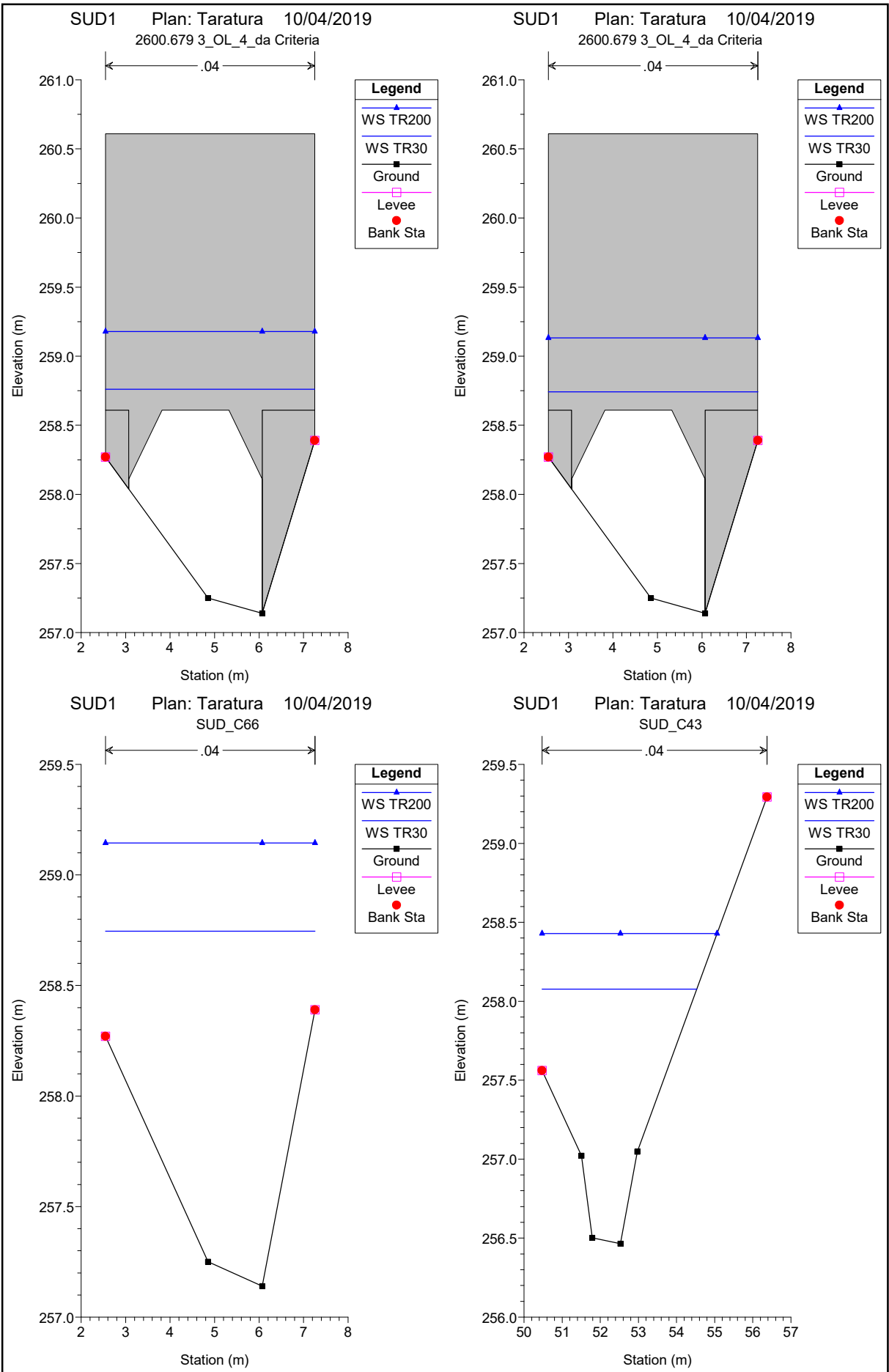


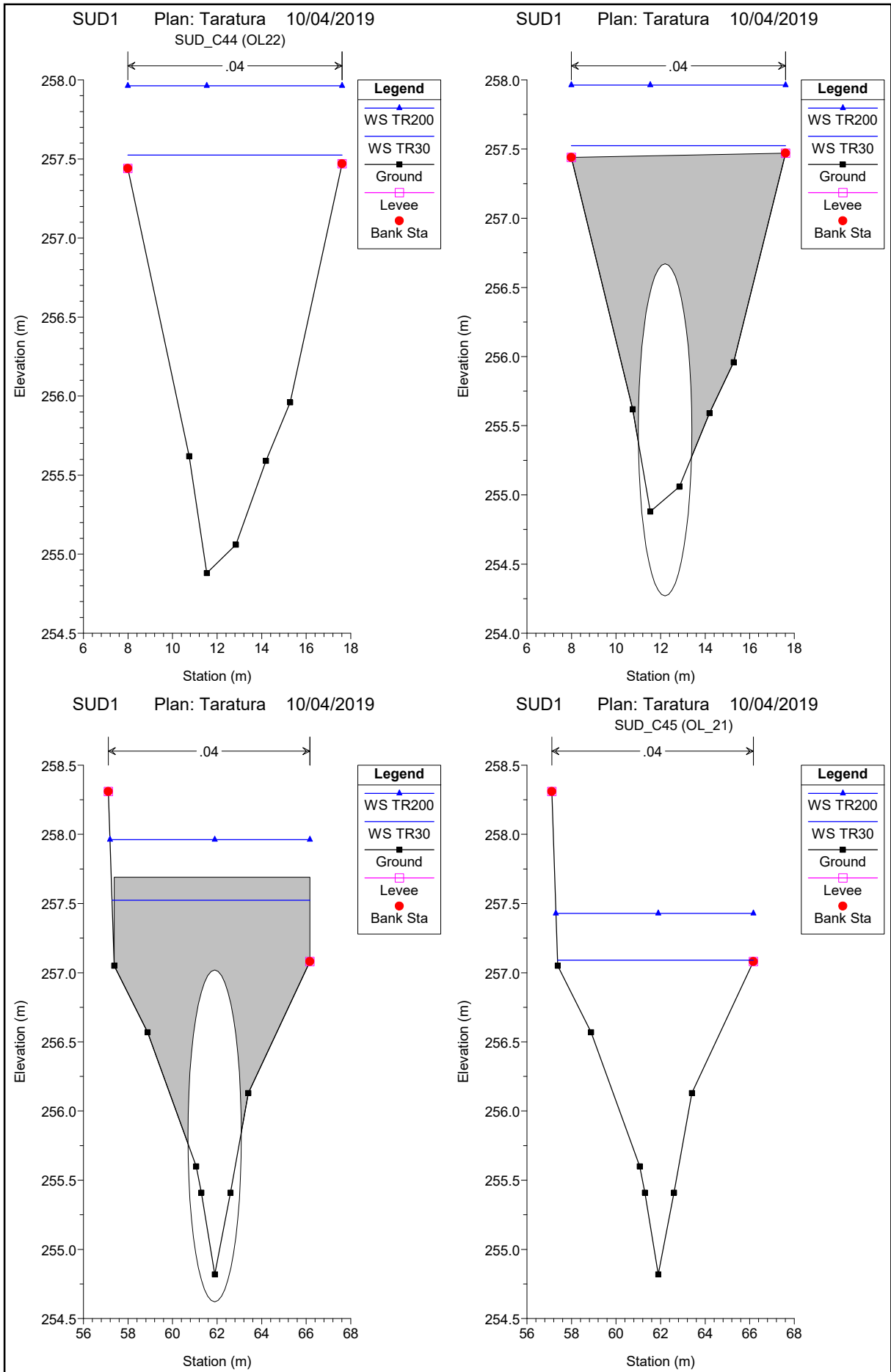


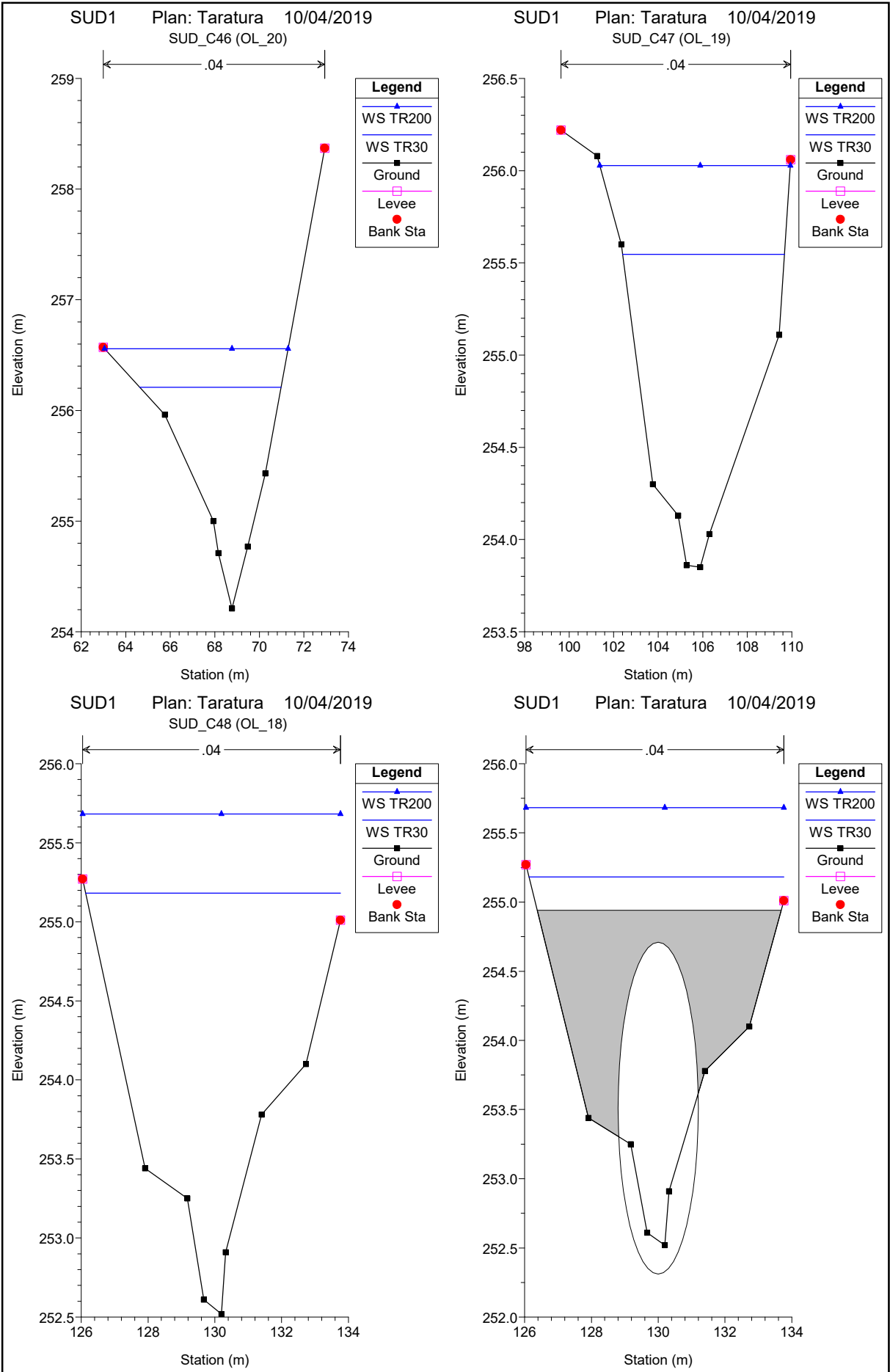


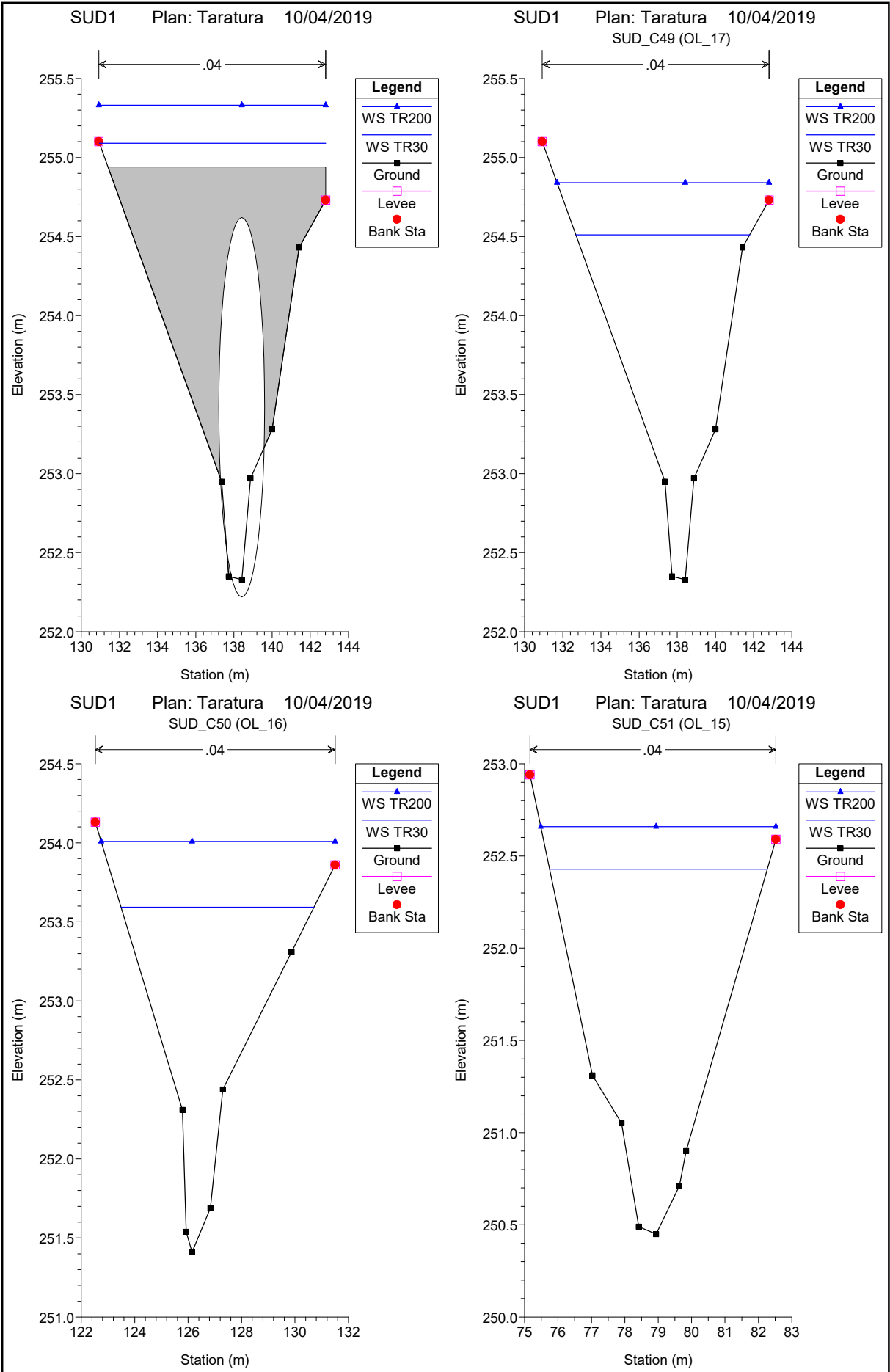


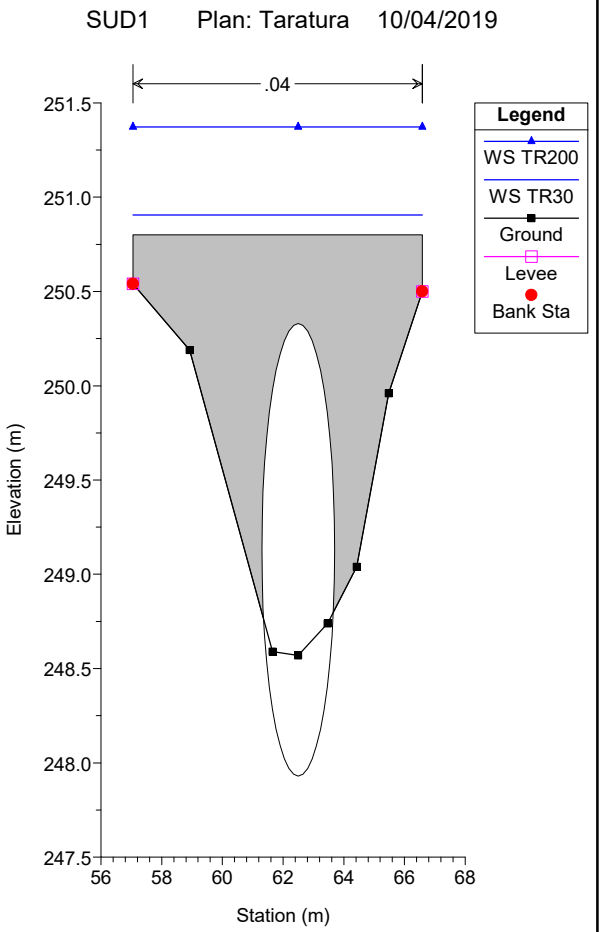
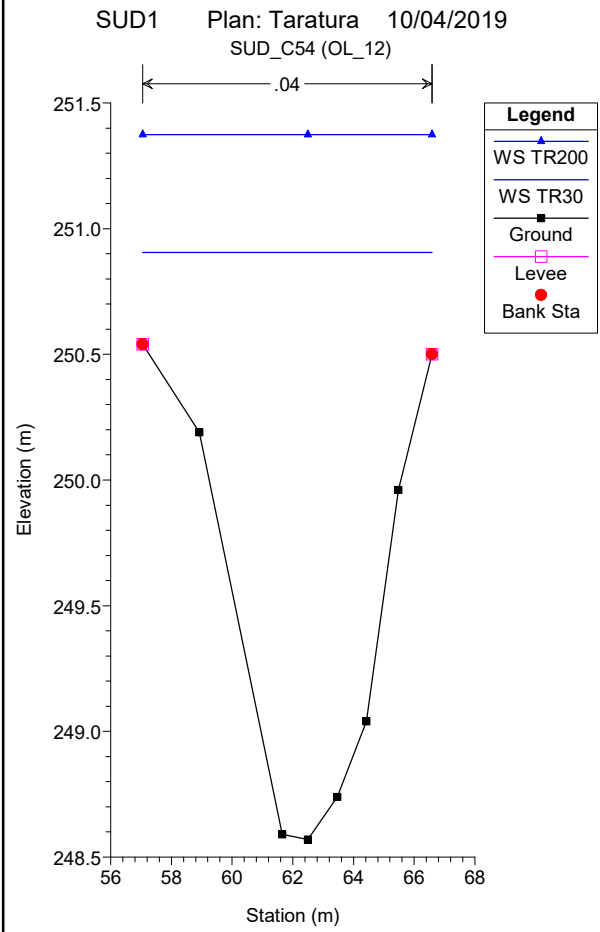
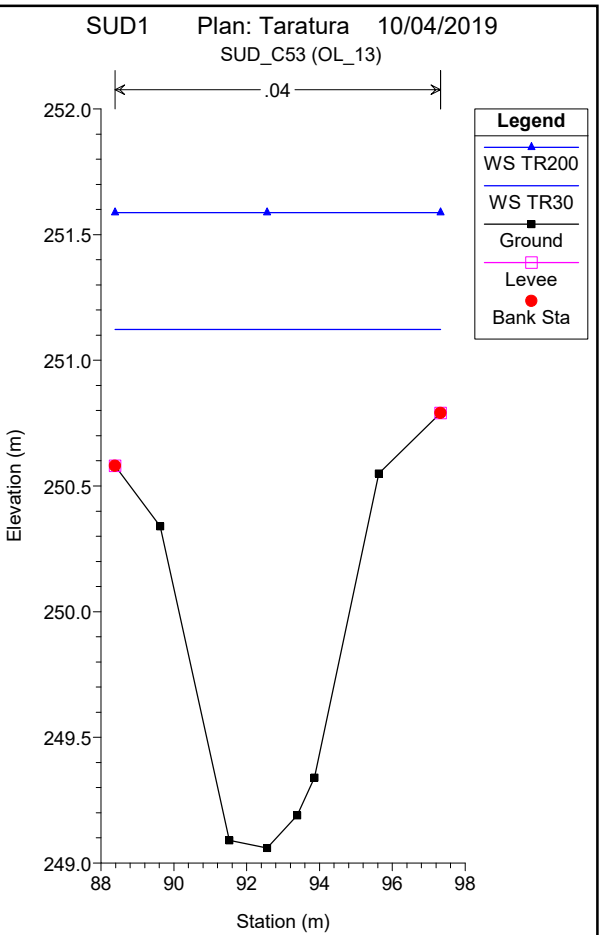
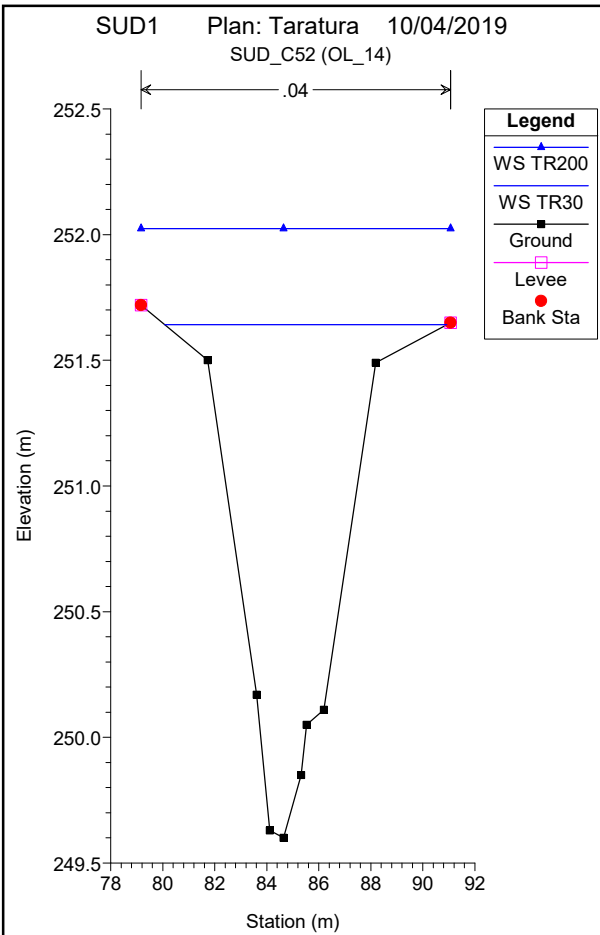


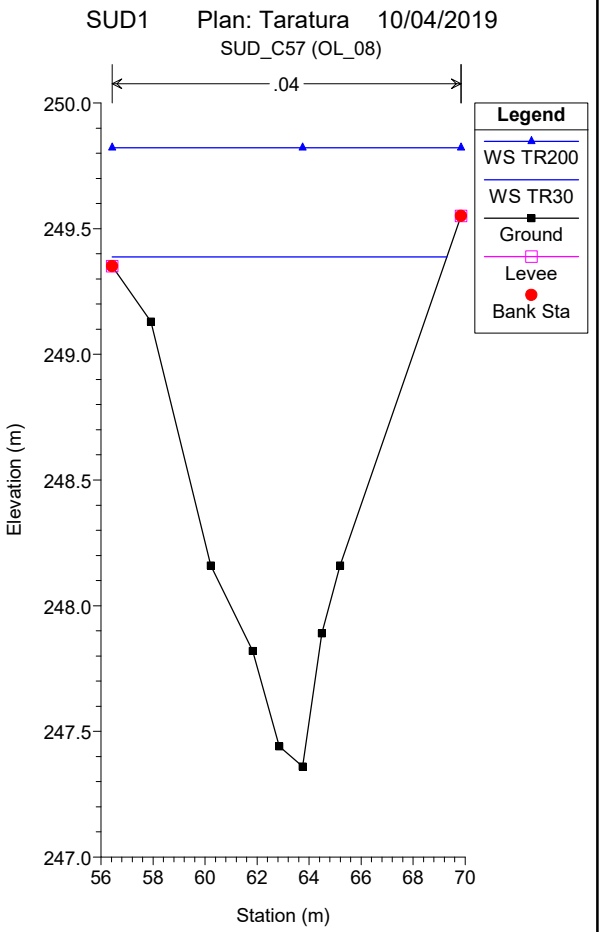
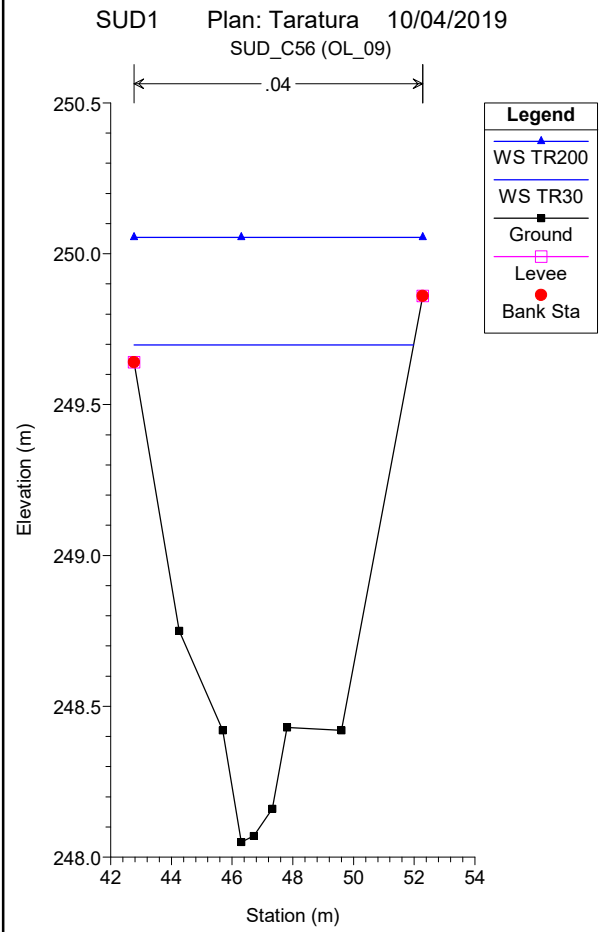
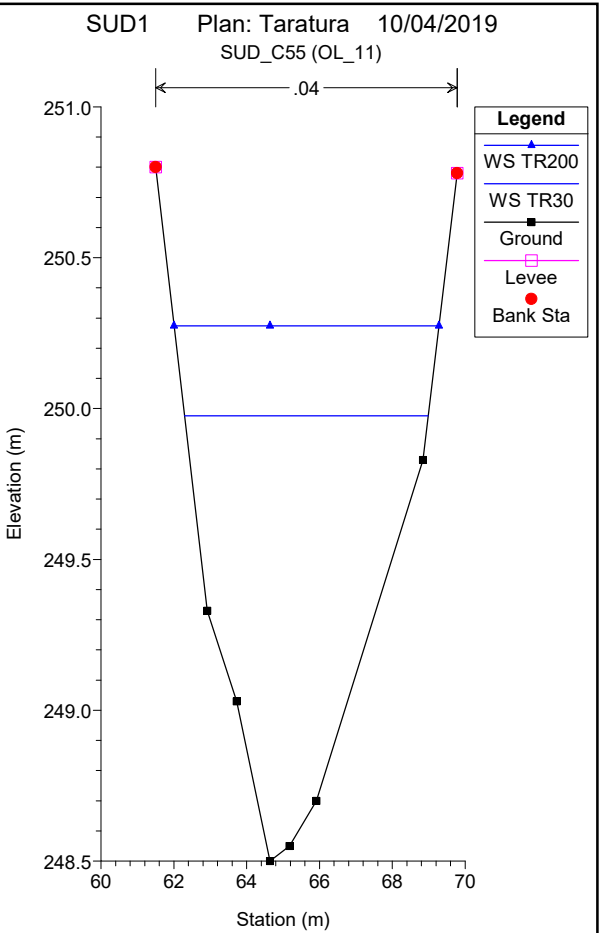
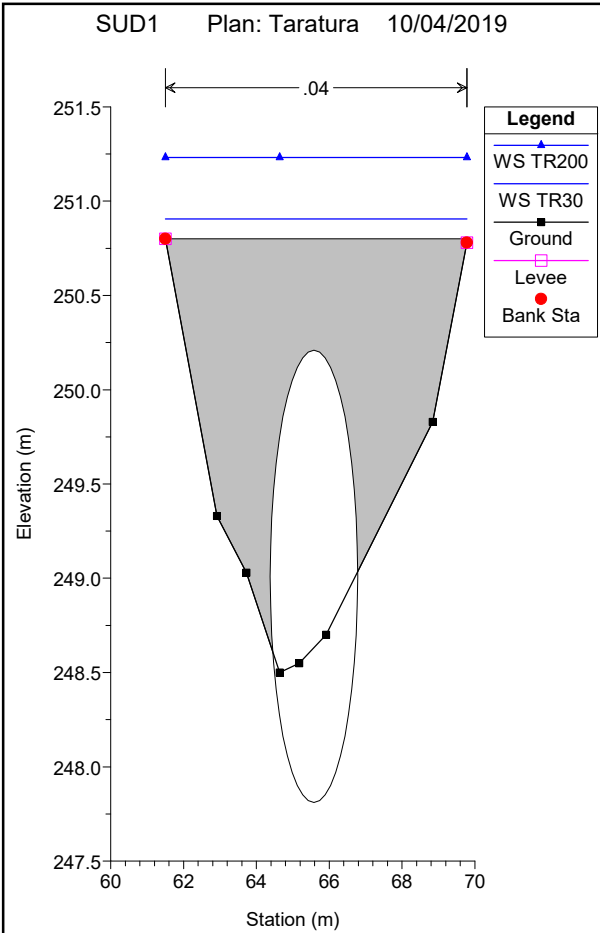


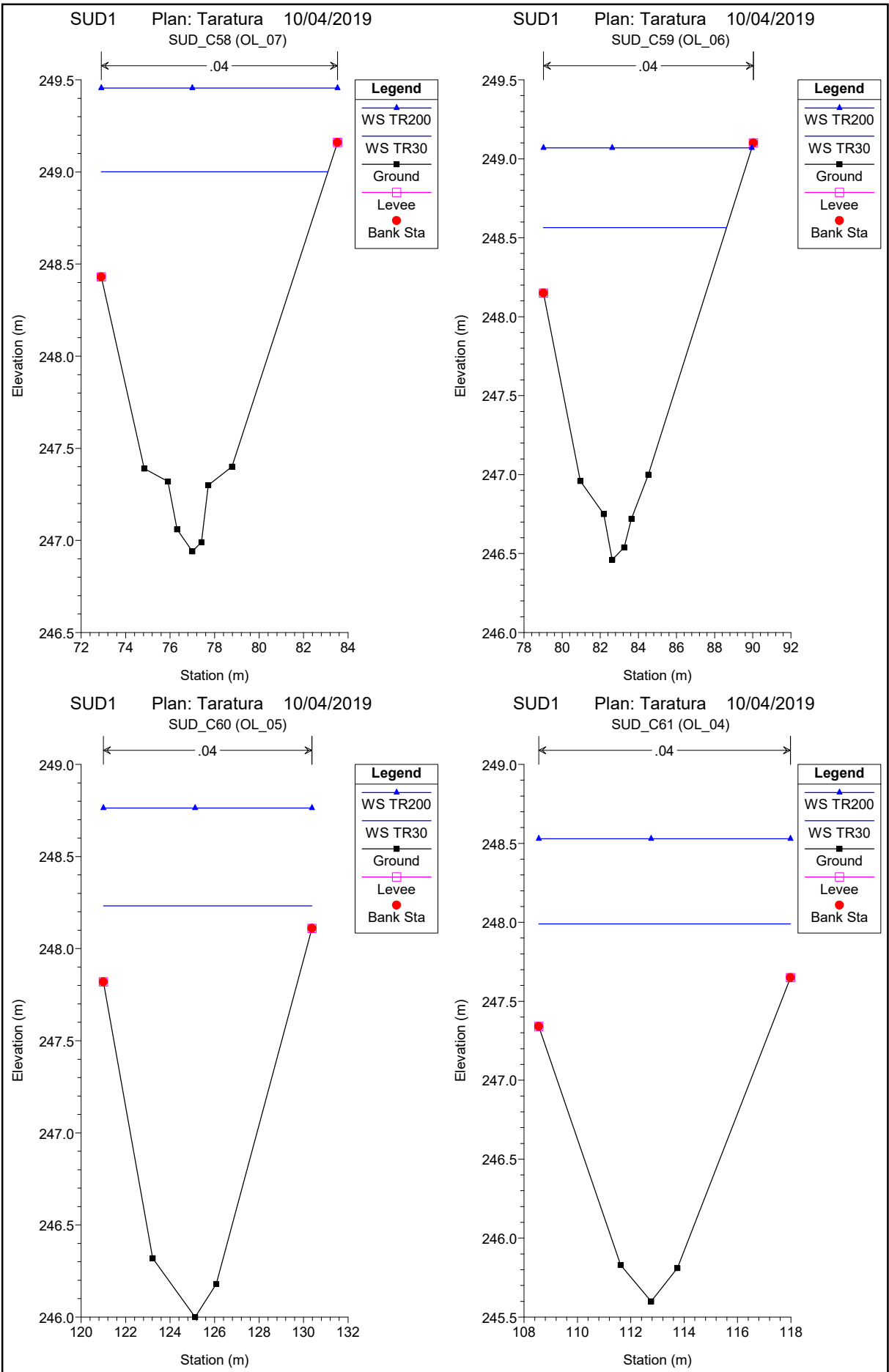


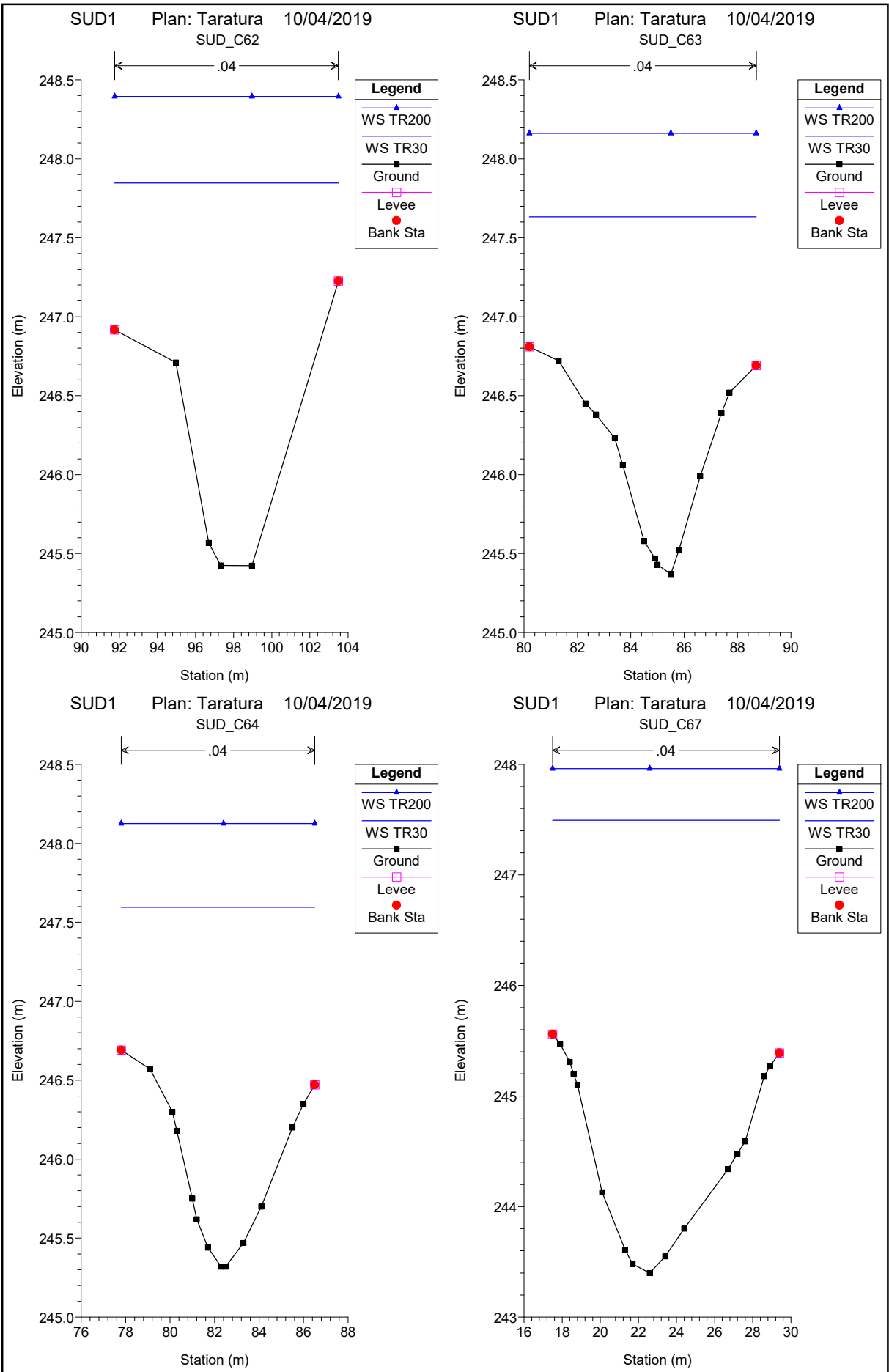


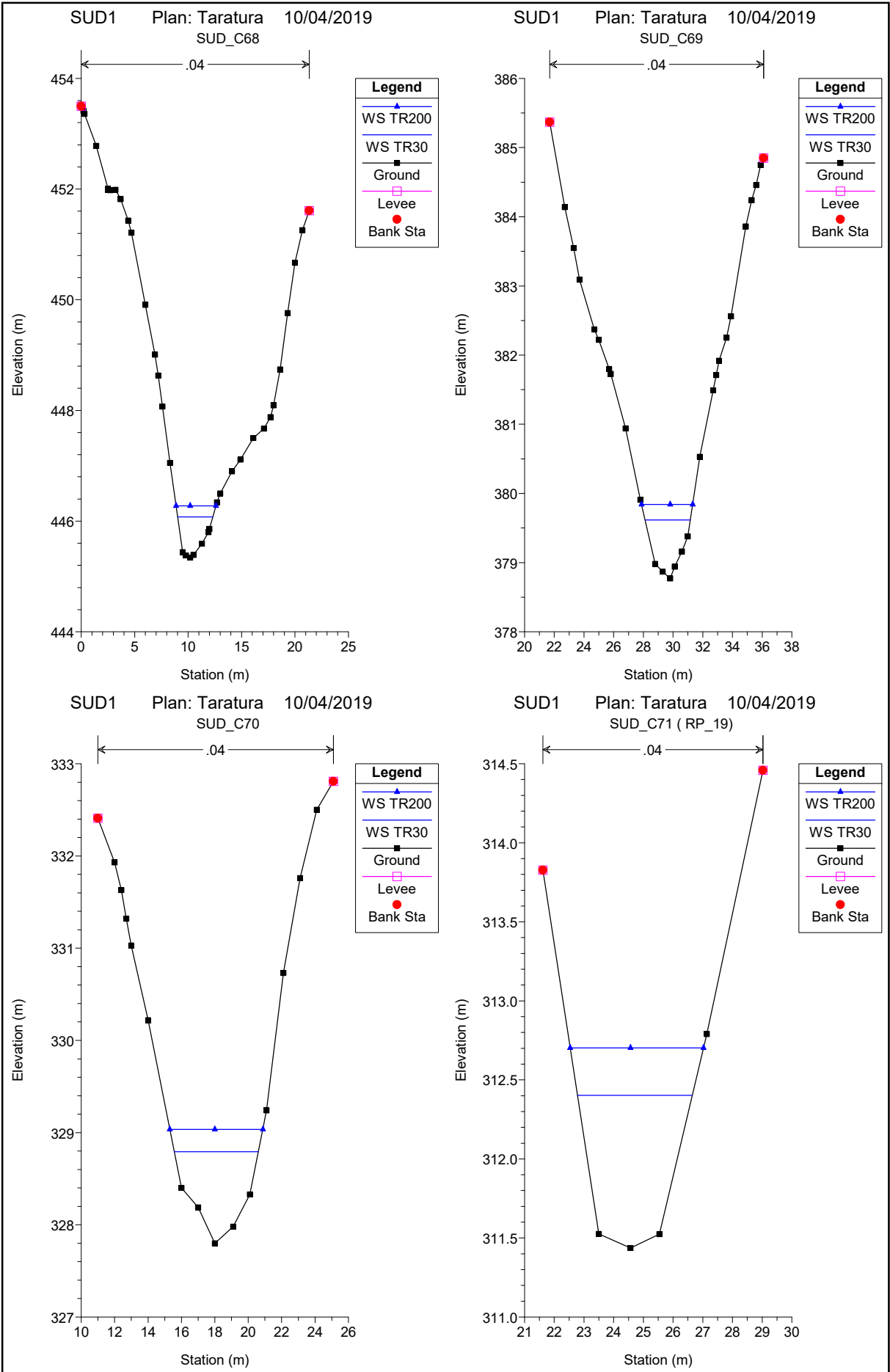


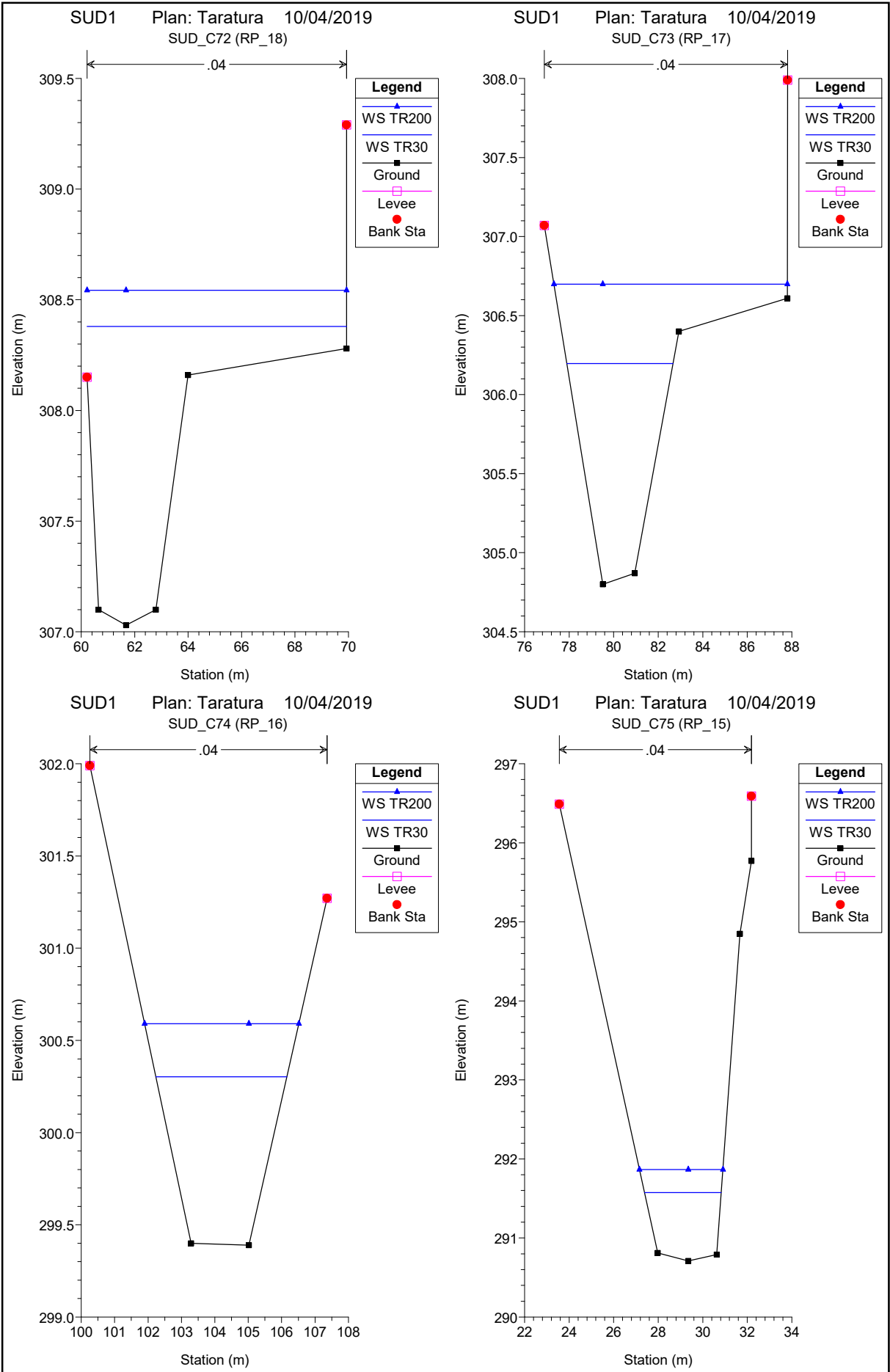


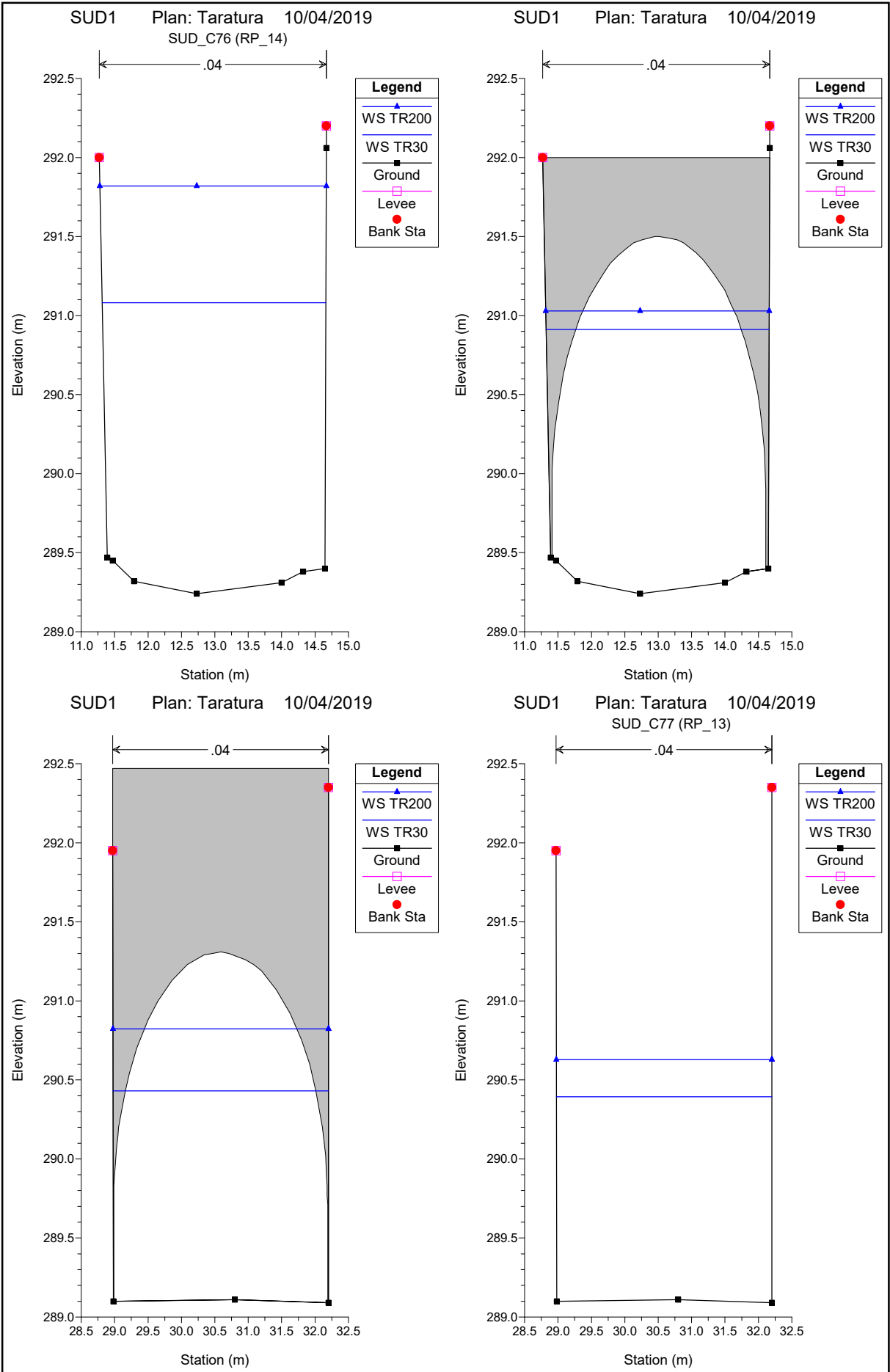


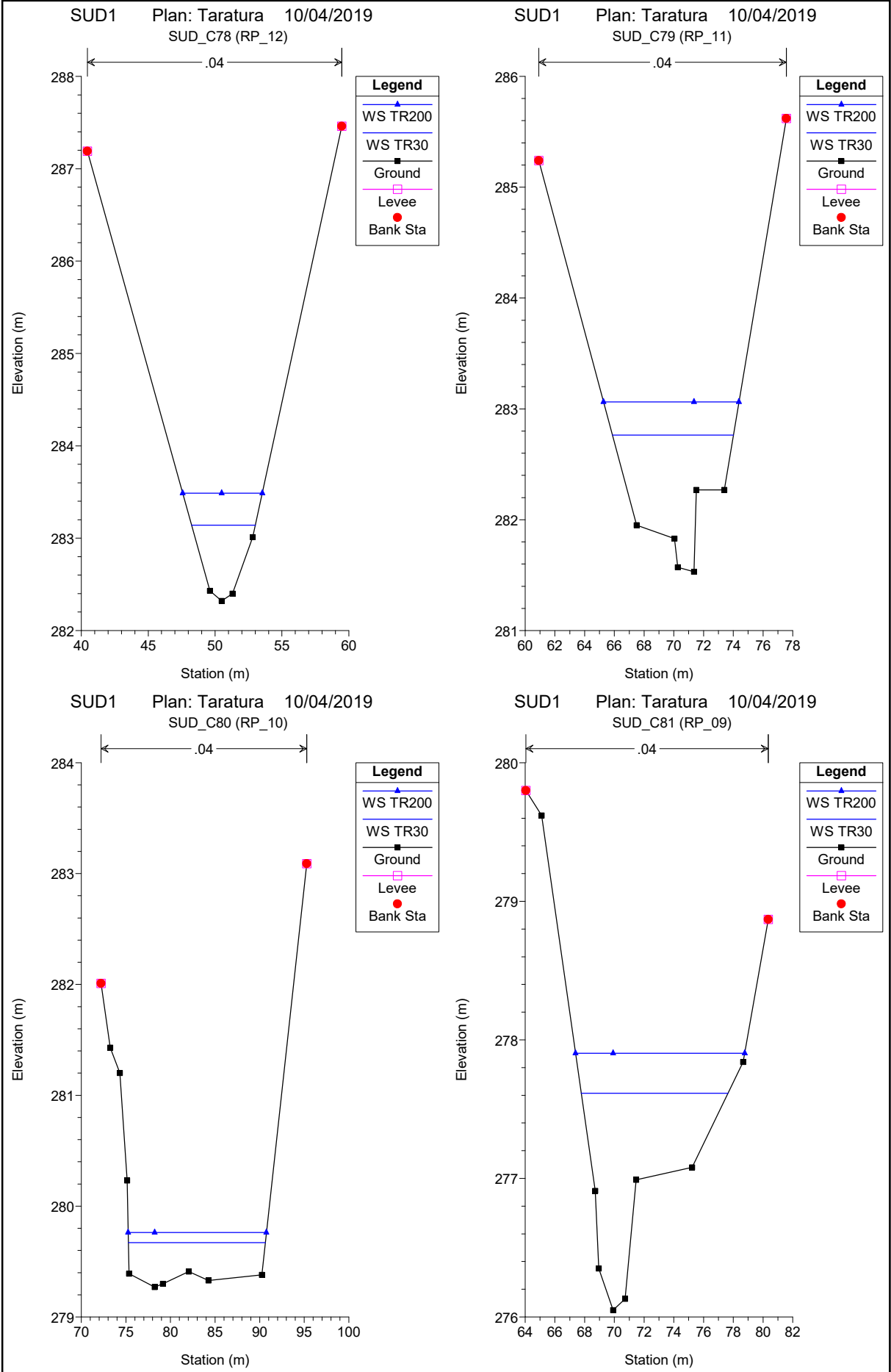


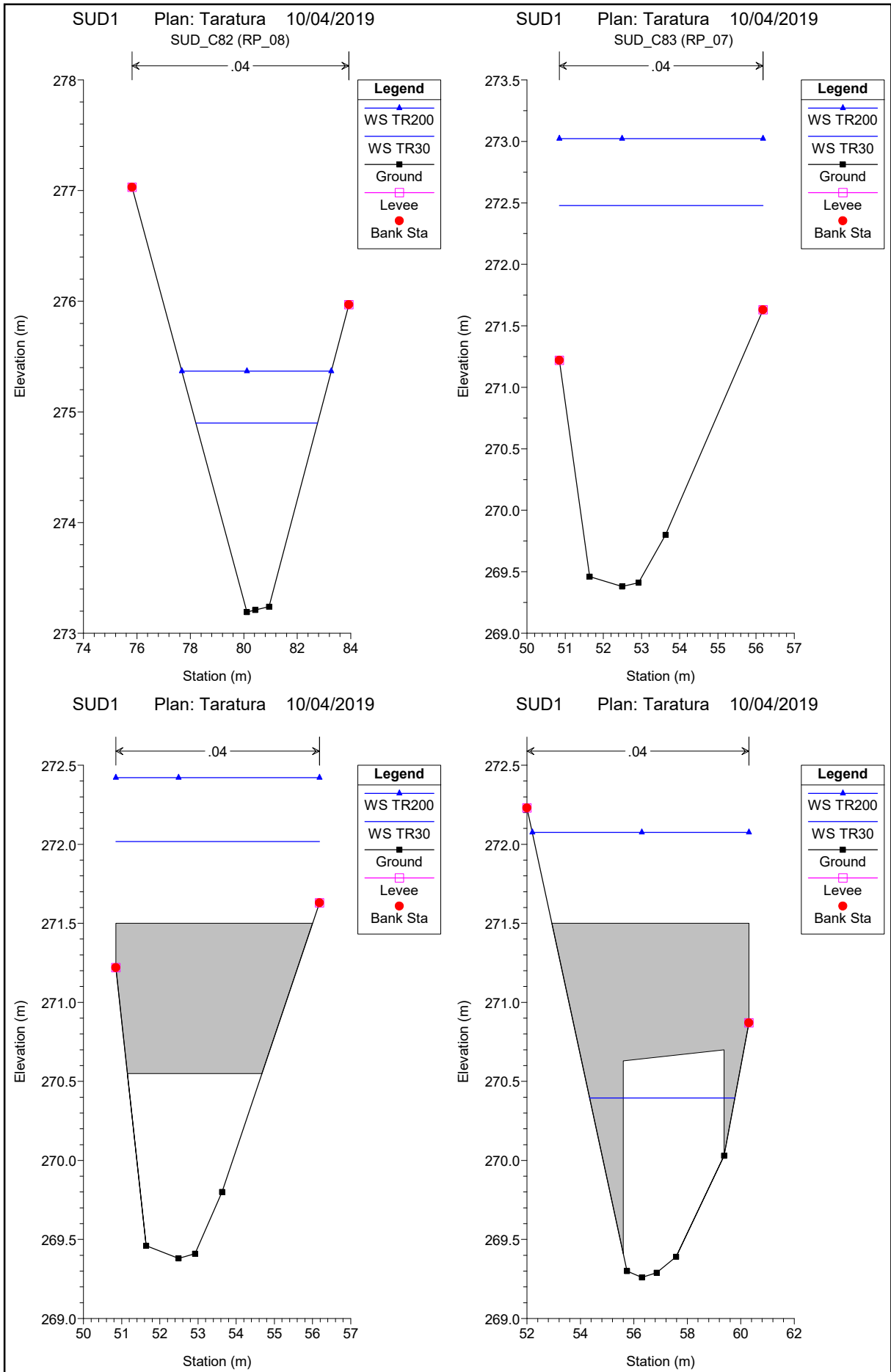


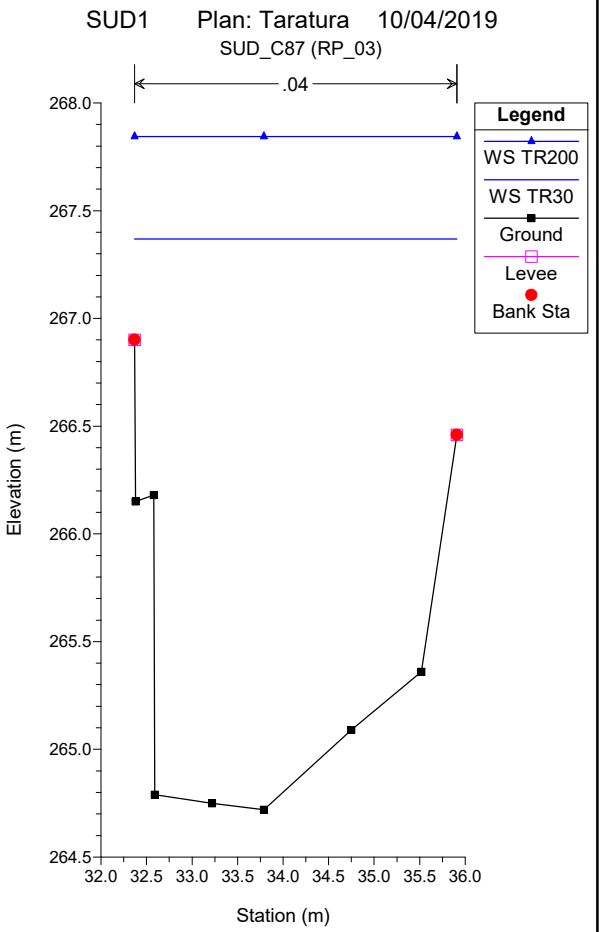
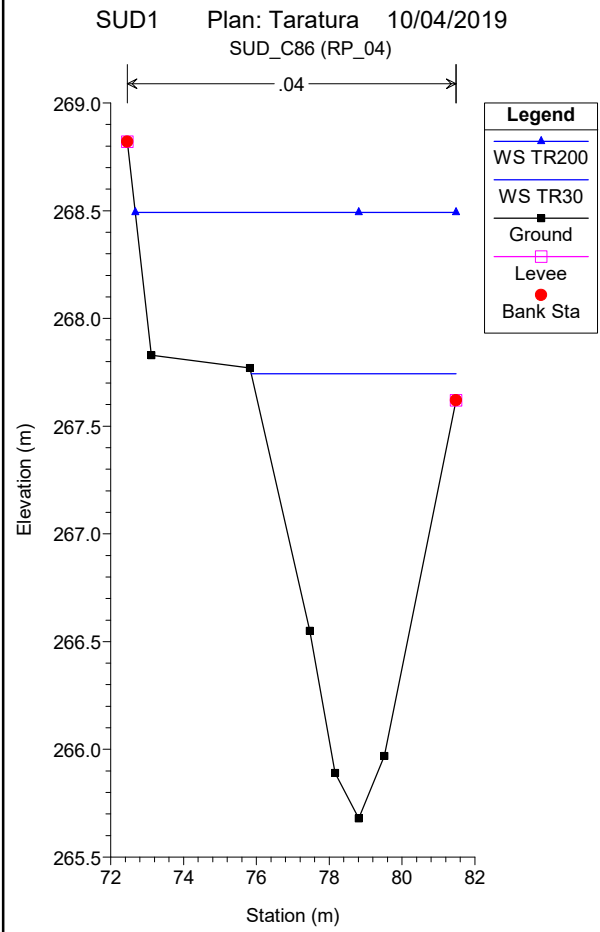
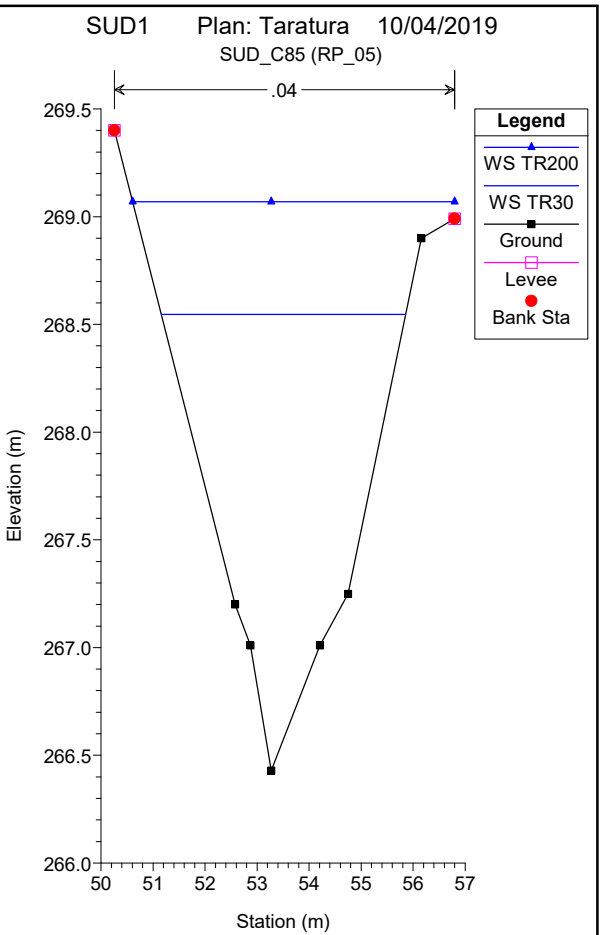
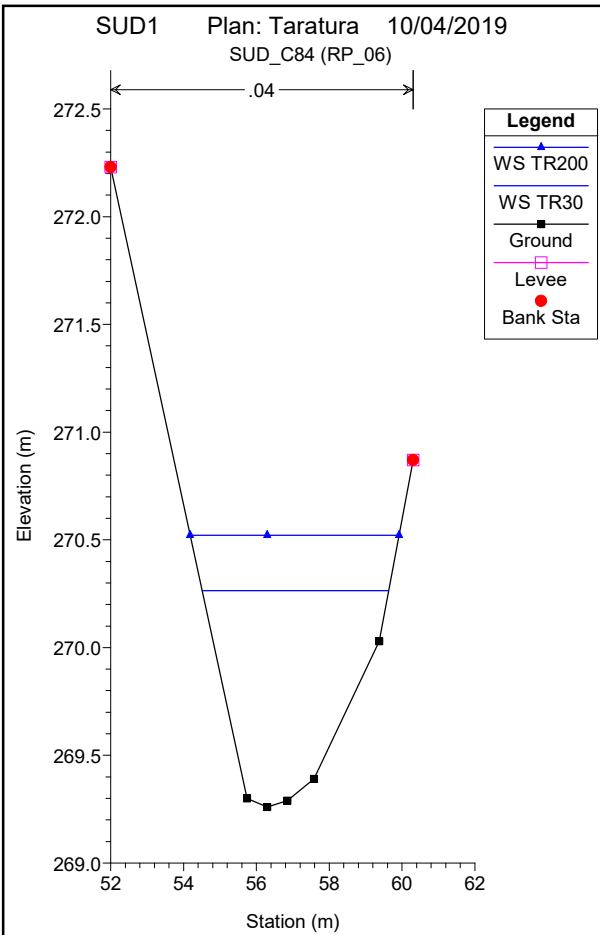




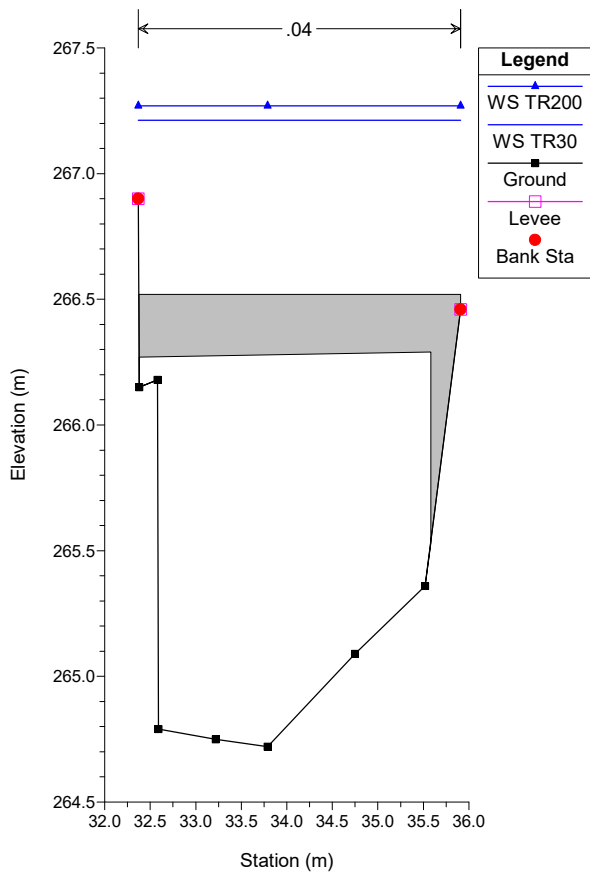




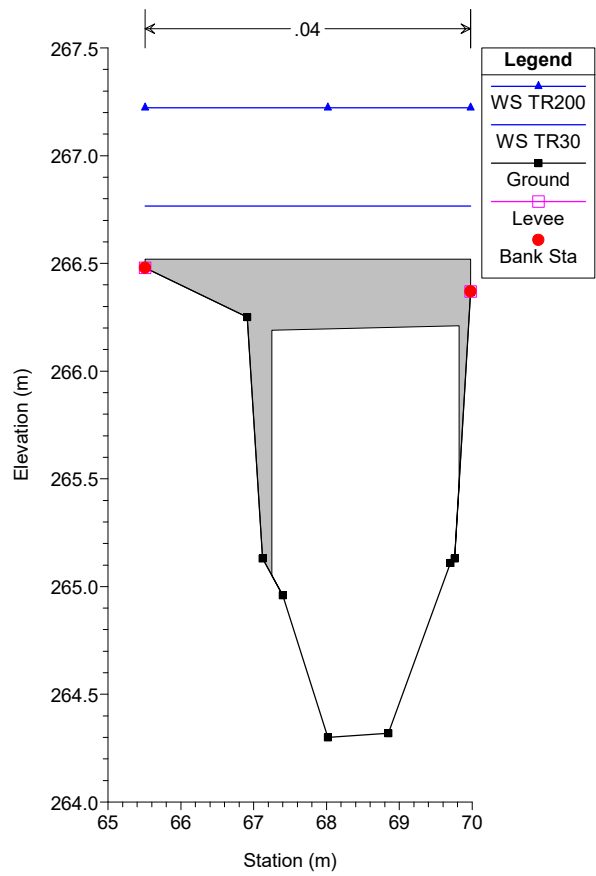




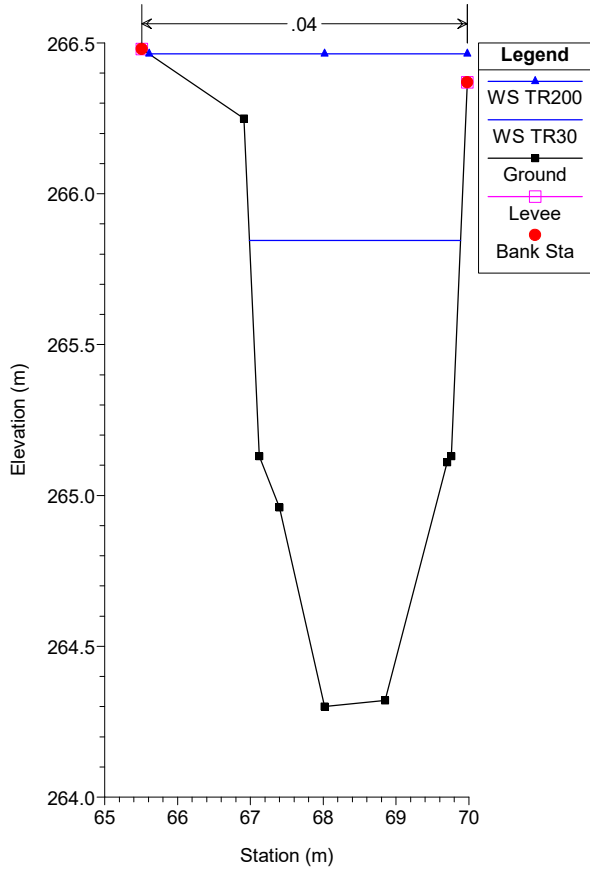
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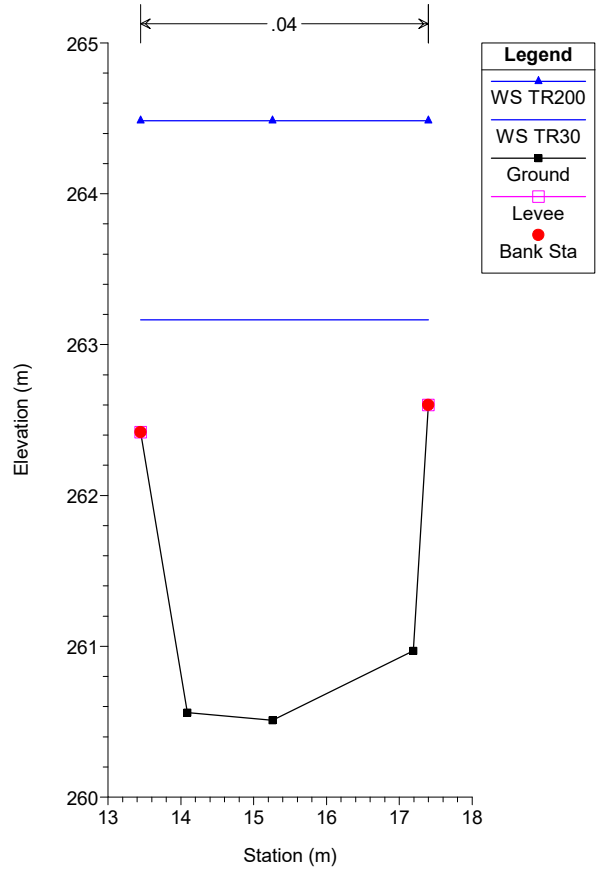
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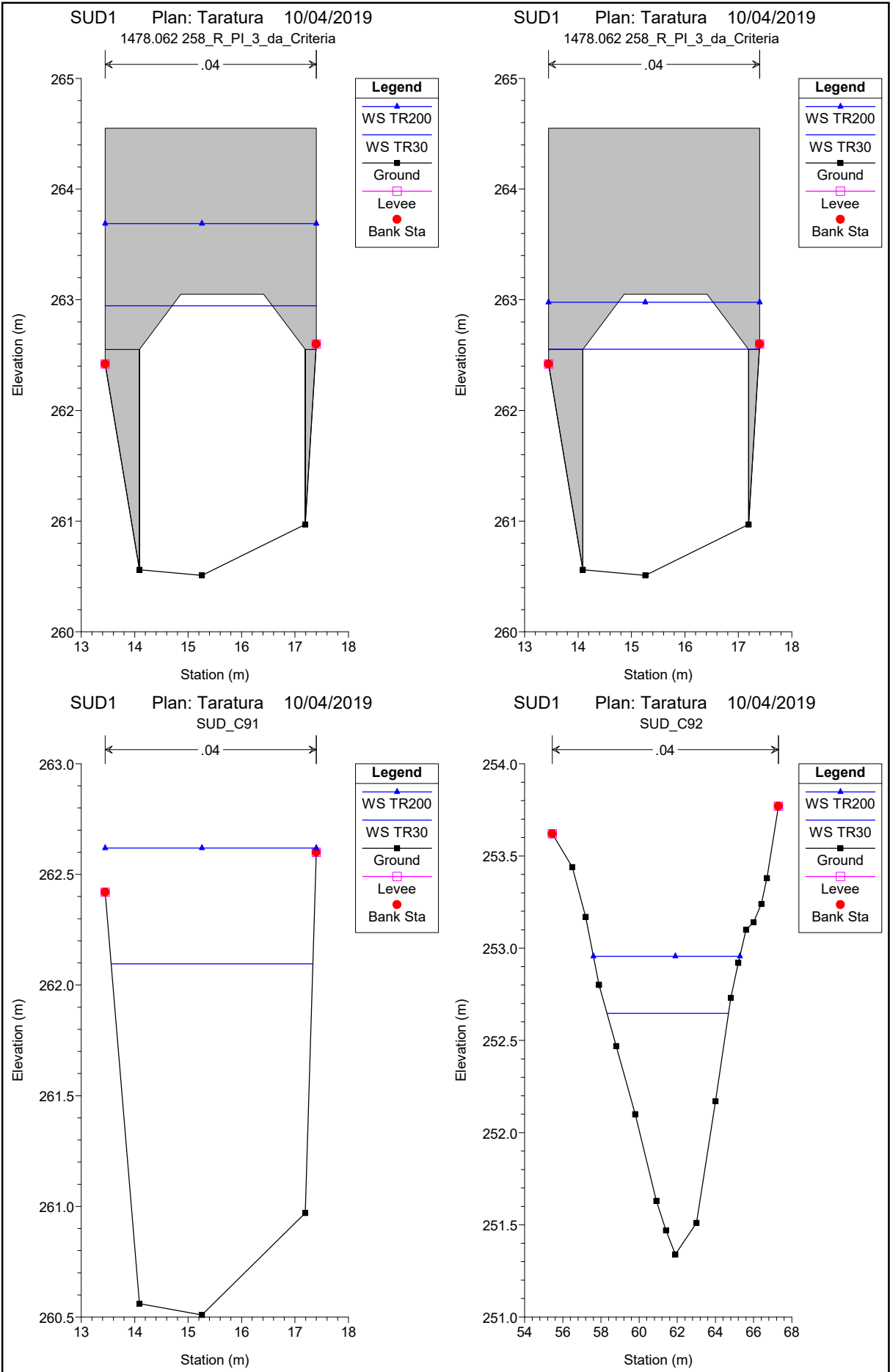


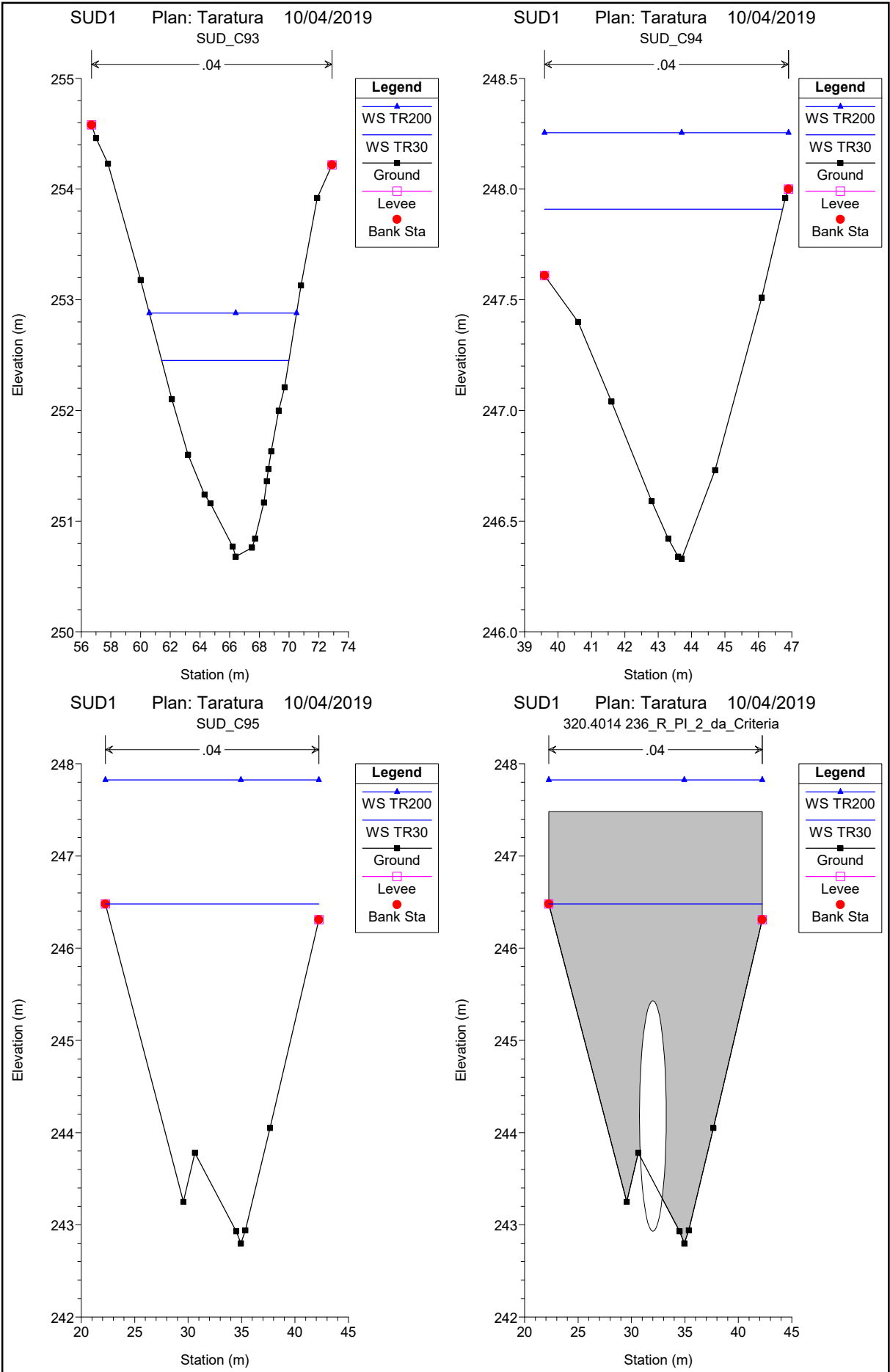
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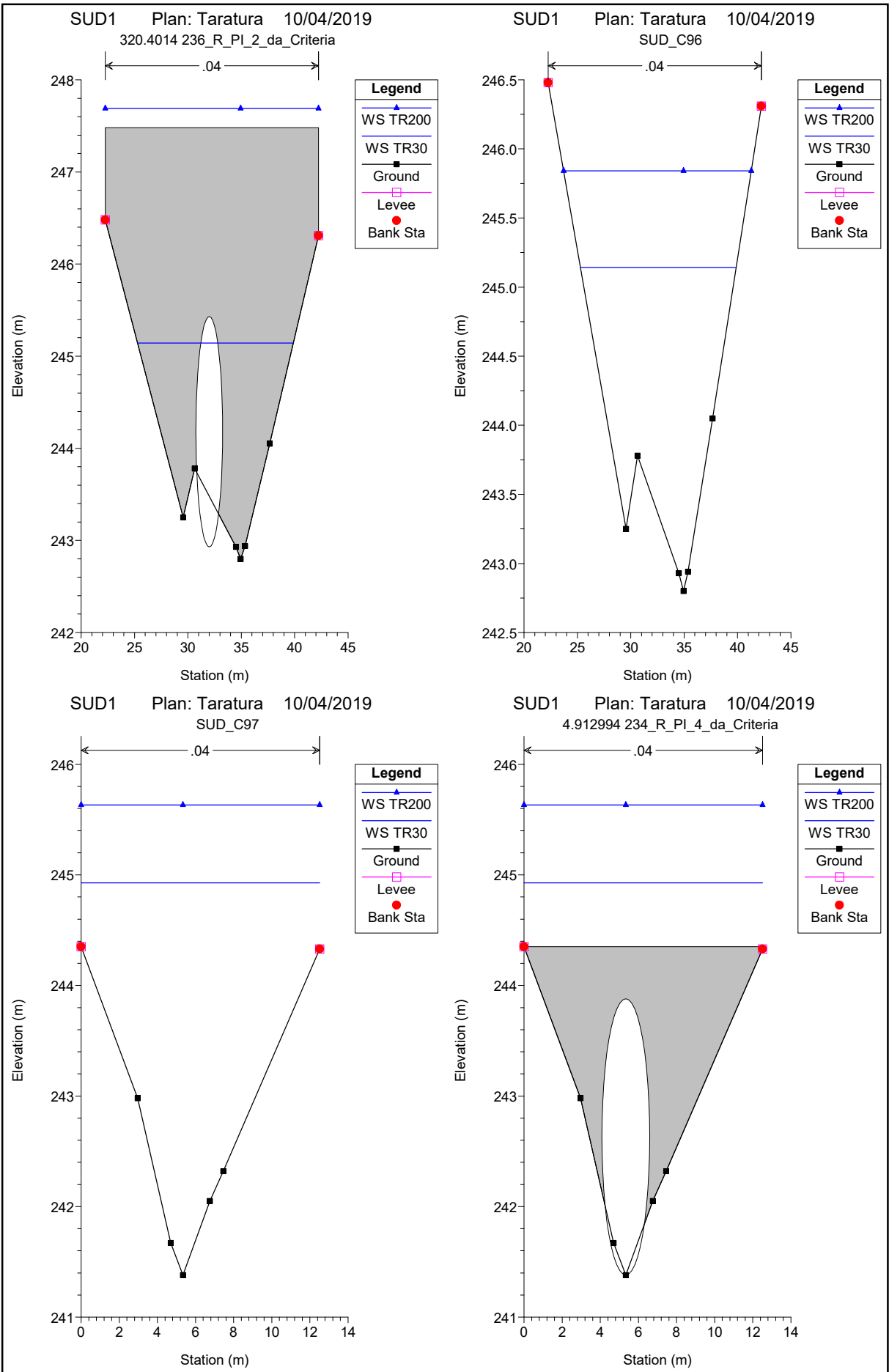


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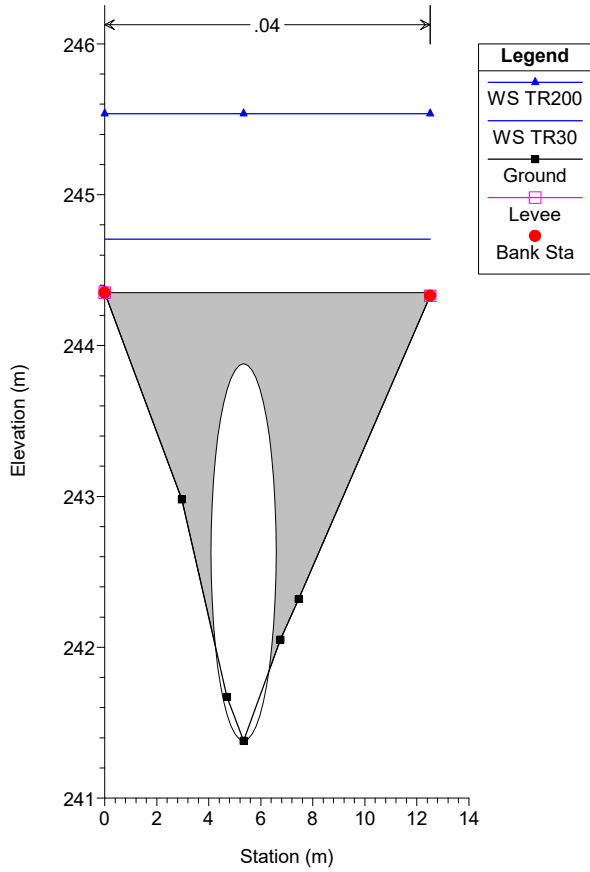




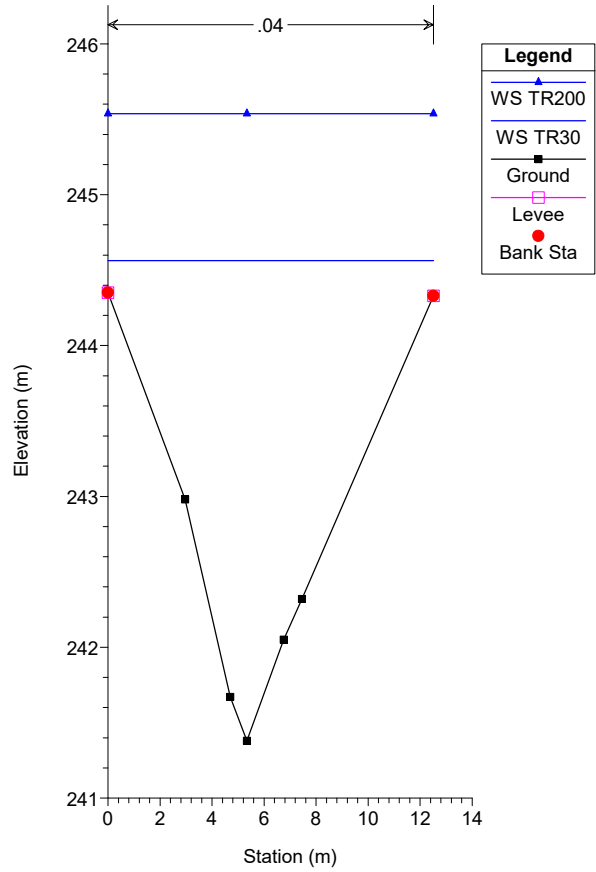




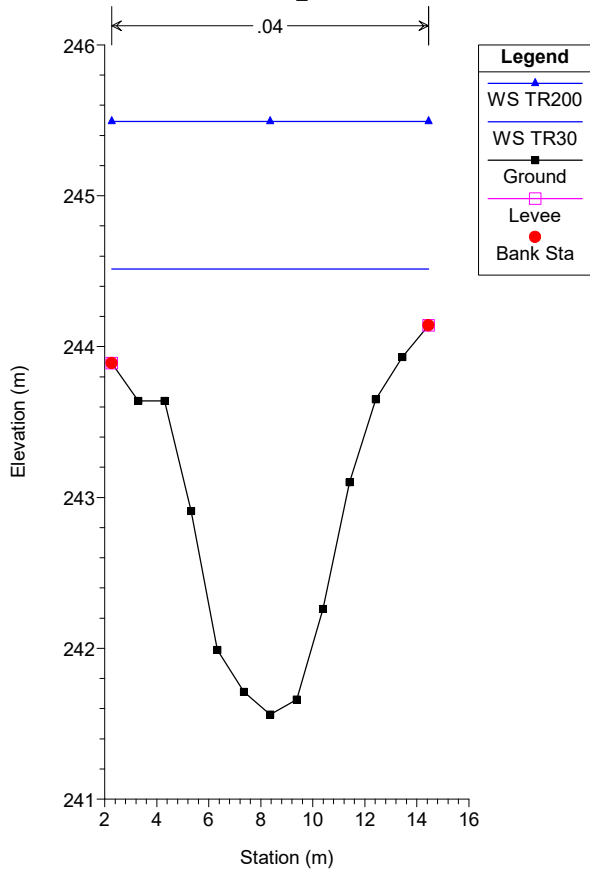
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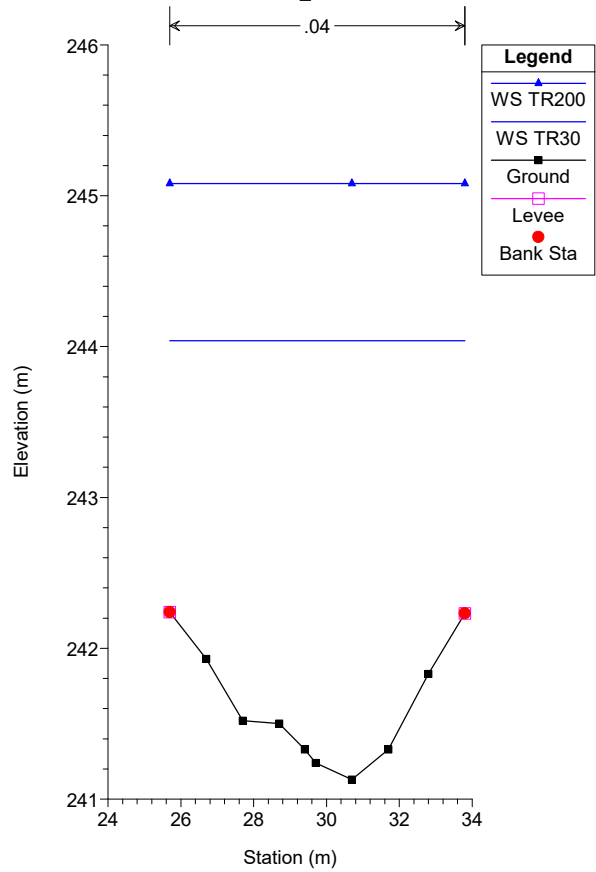
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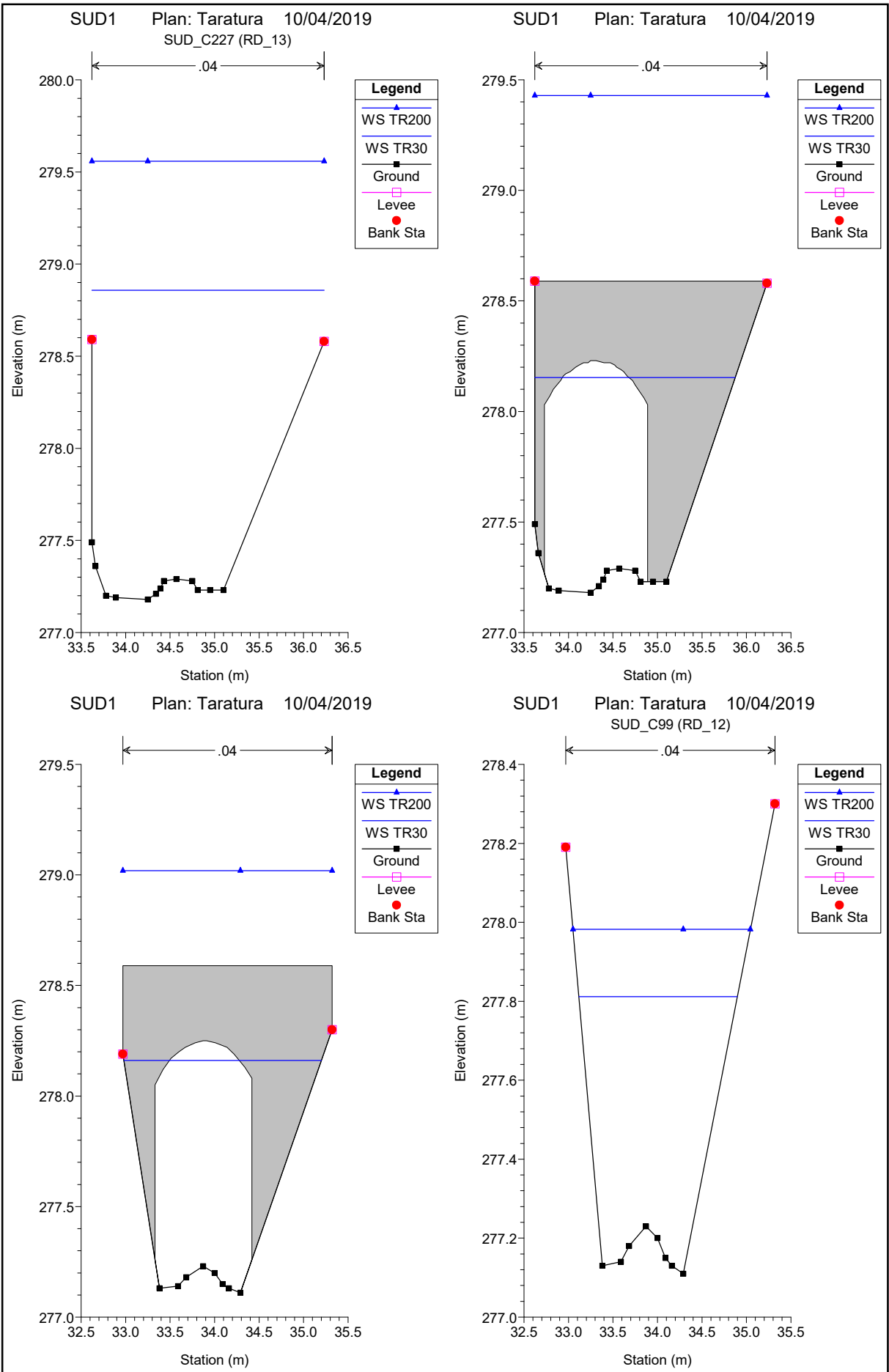


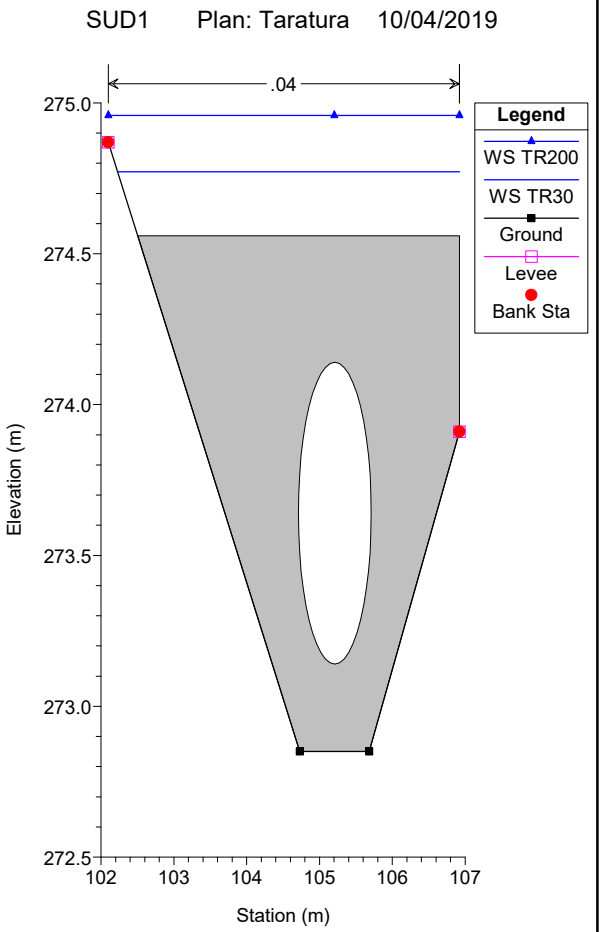
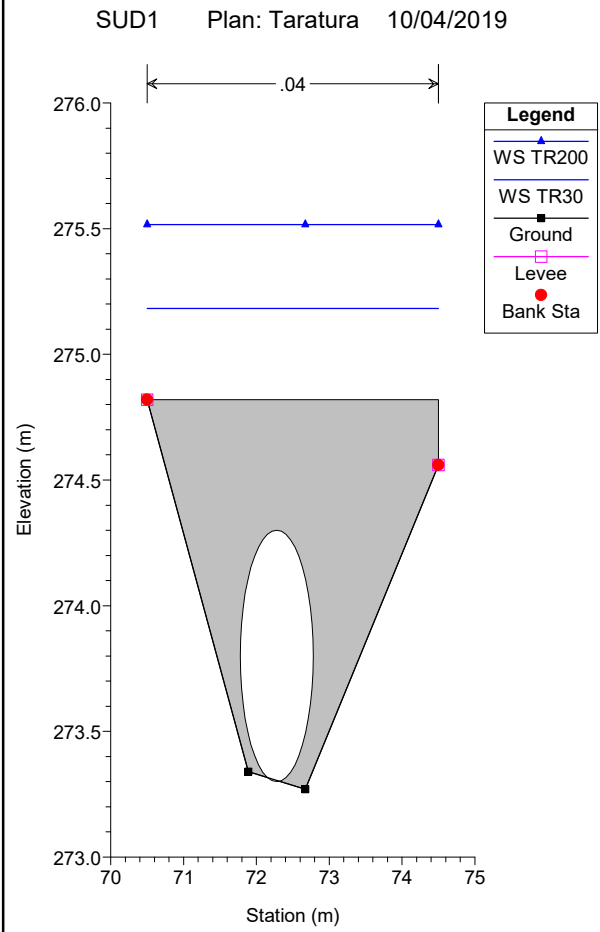
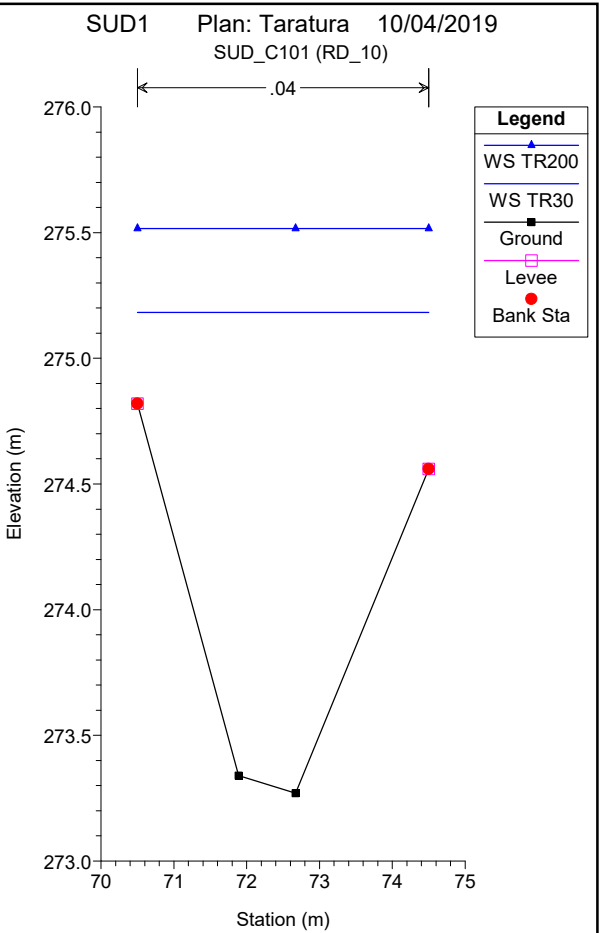
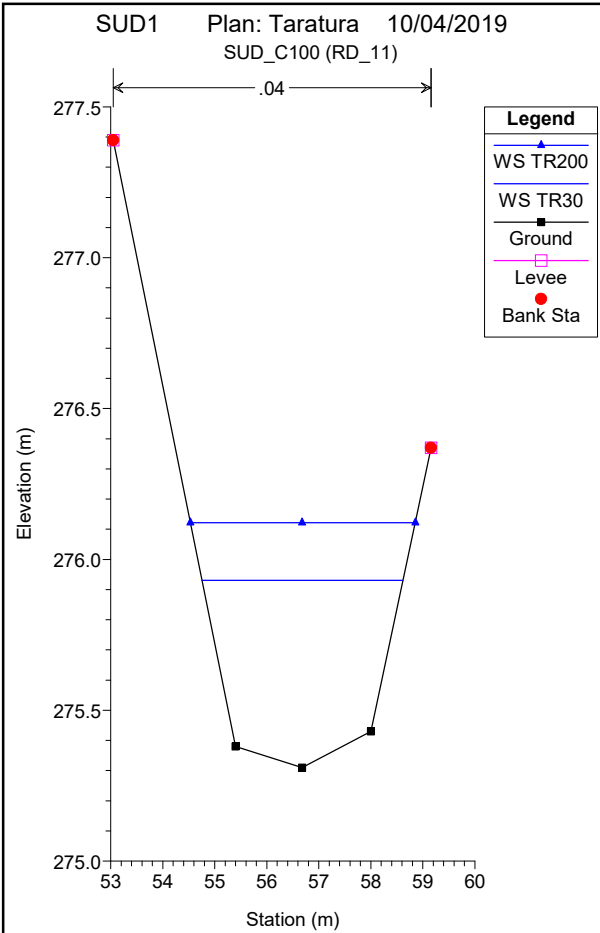
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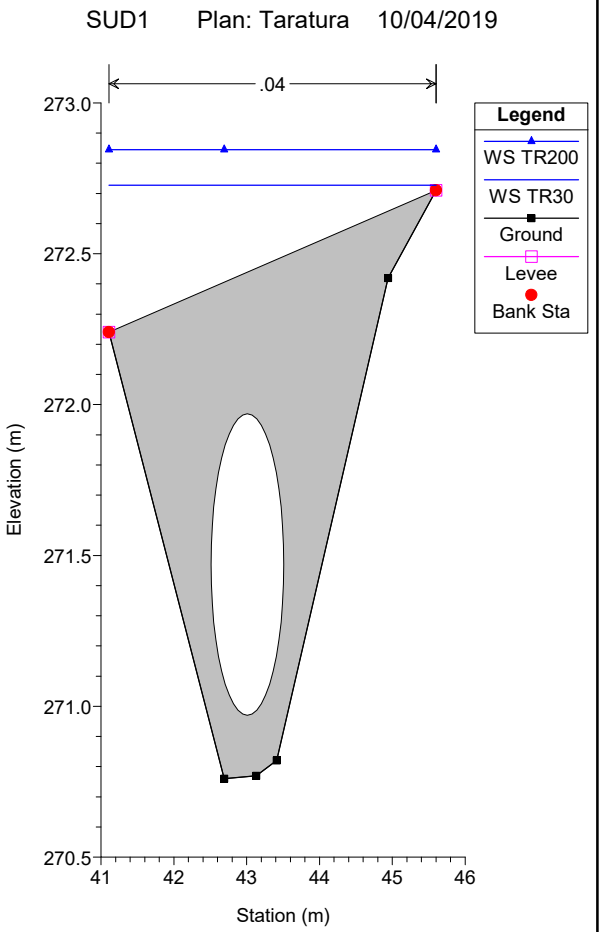
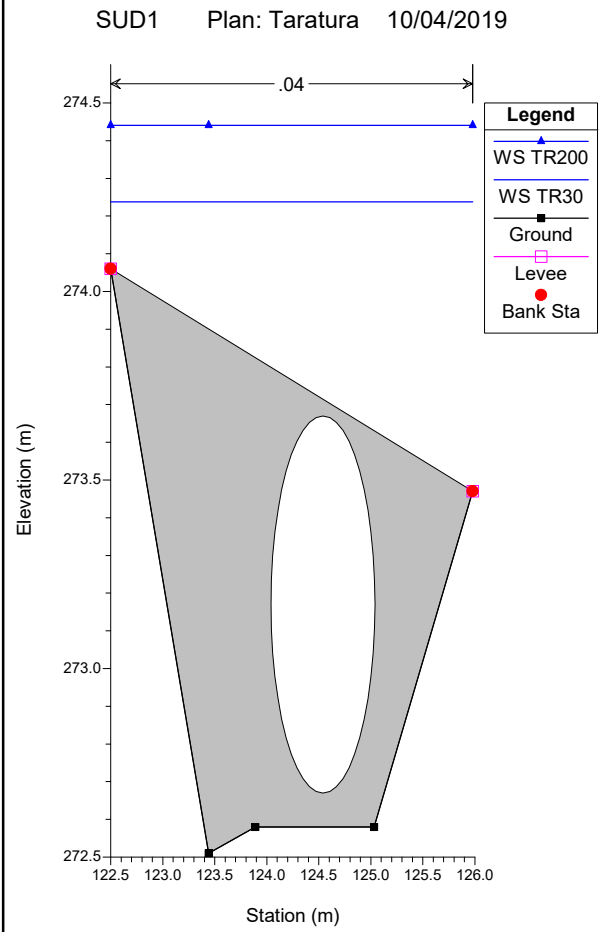
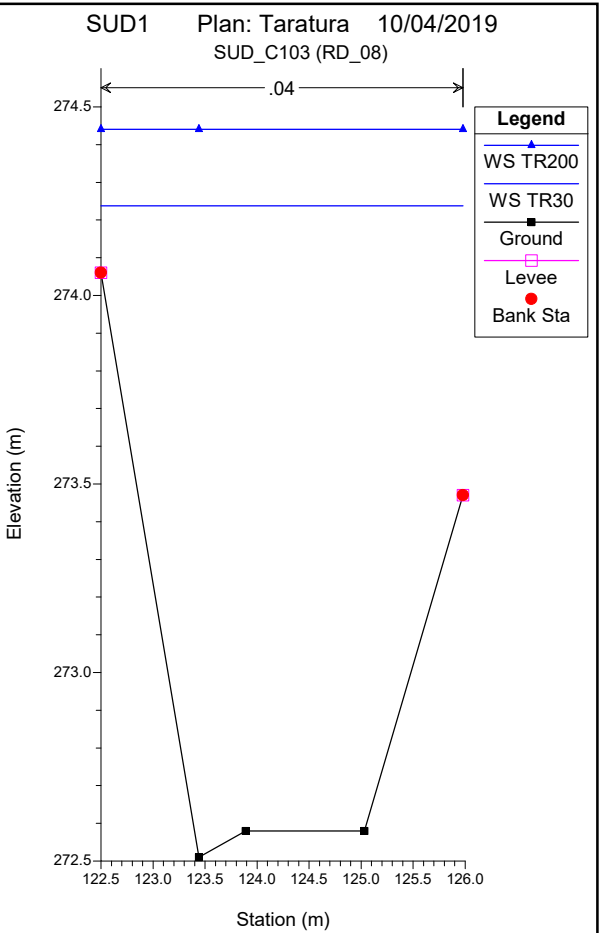
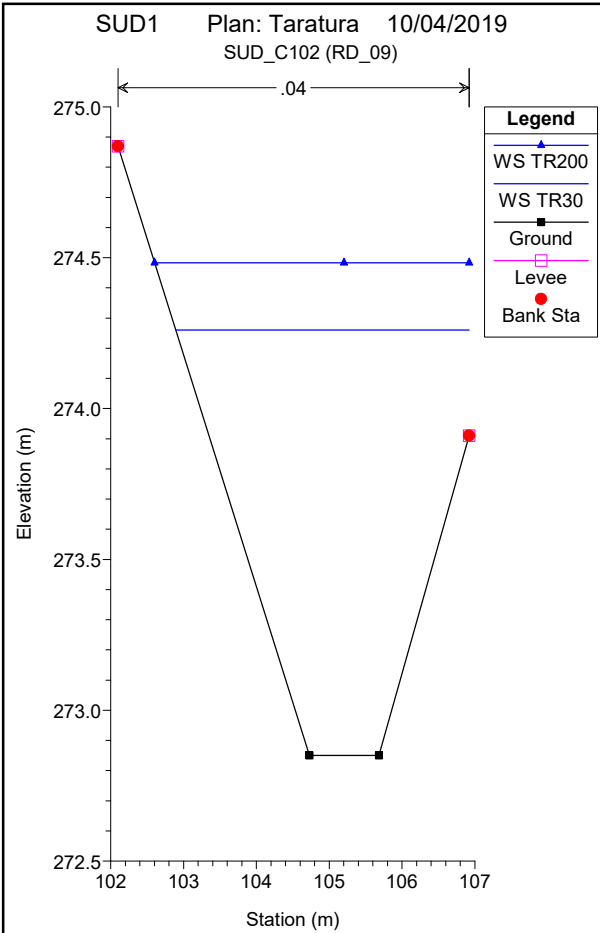


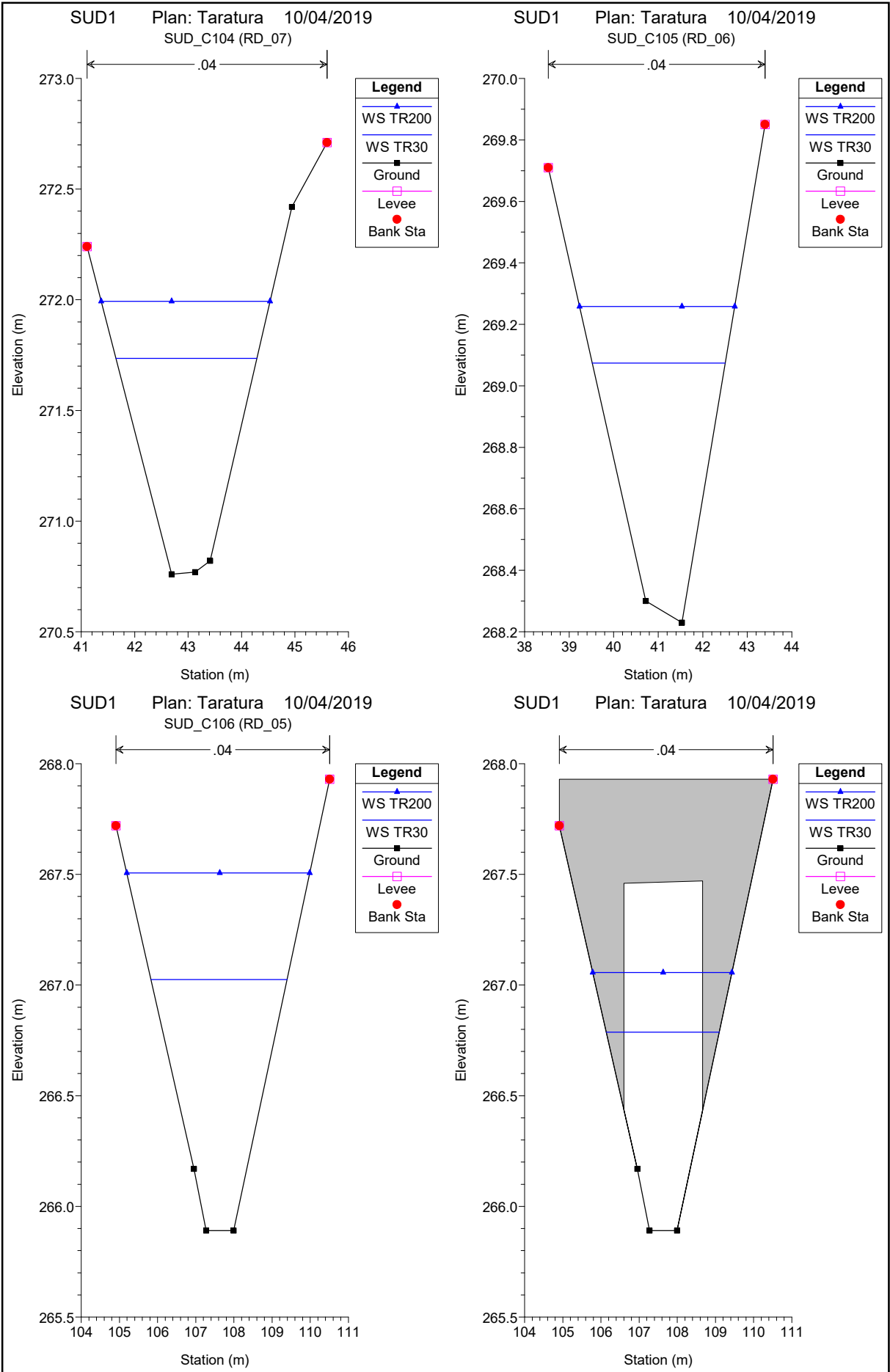
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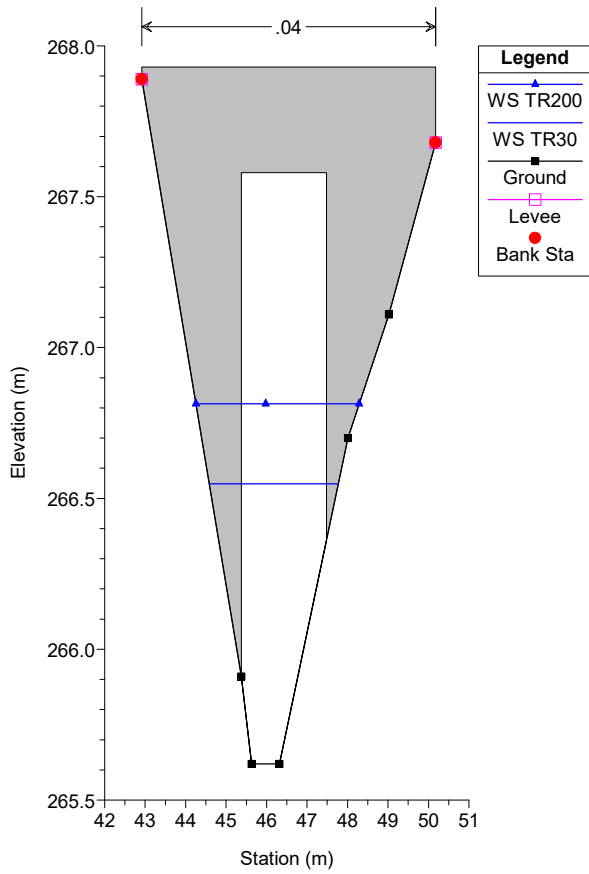




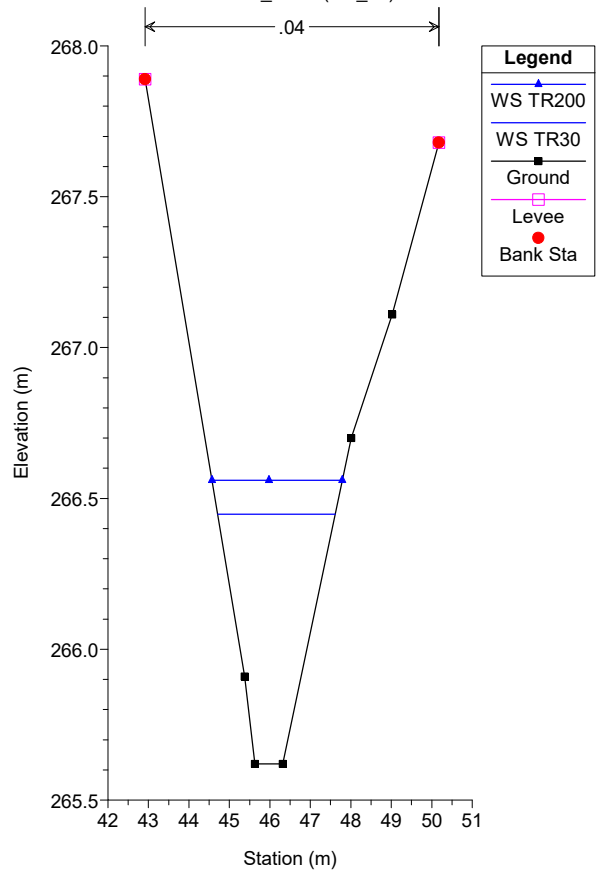




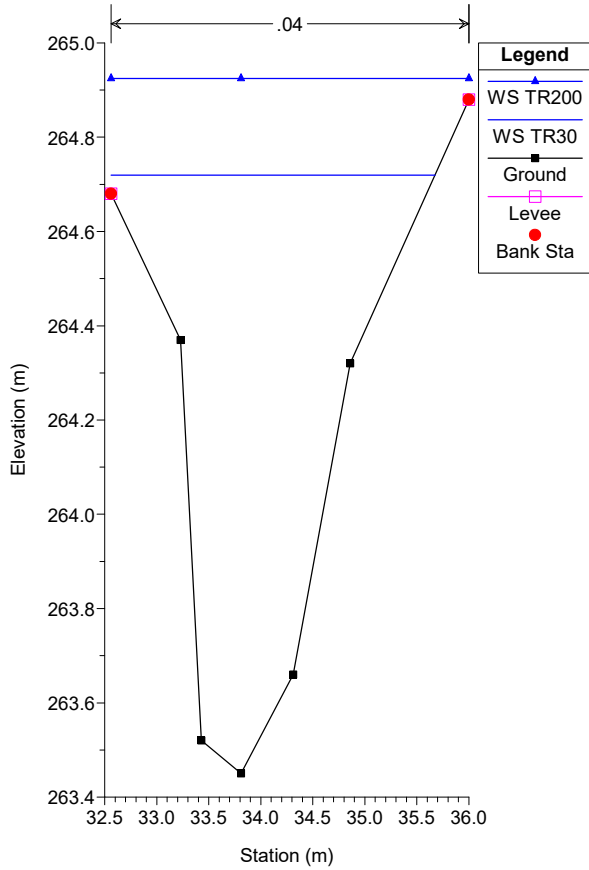
SUD1 Plan: Taratura 10/04/2019



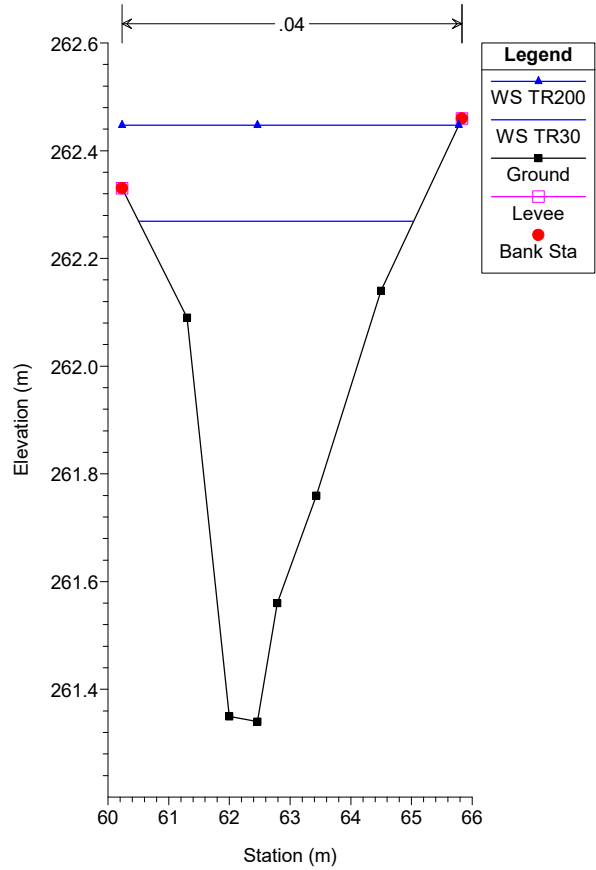
SUD1 Plan: Taratura 10/04/2019
SUD_C107 (RD_04)

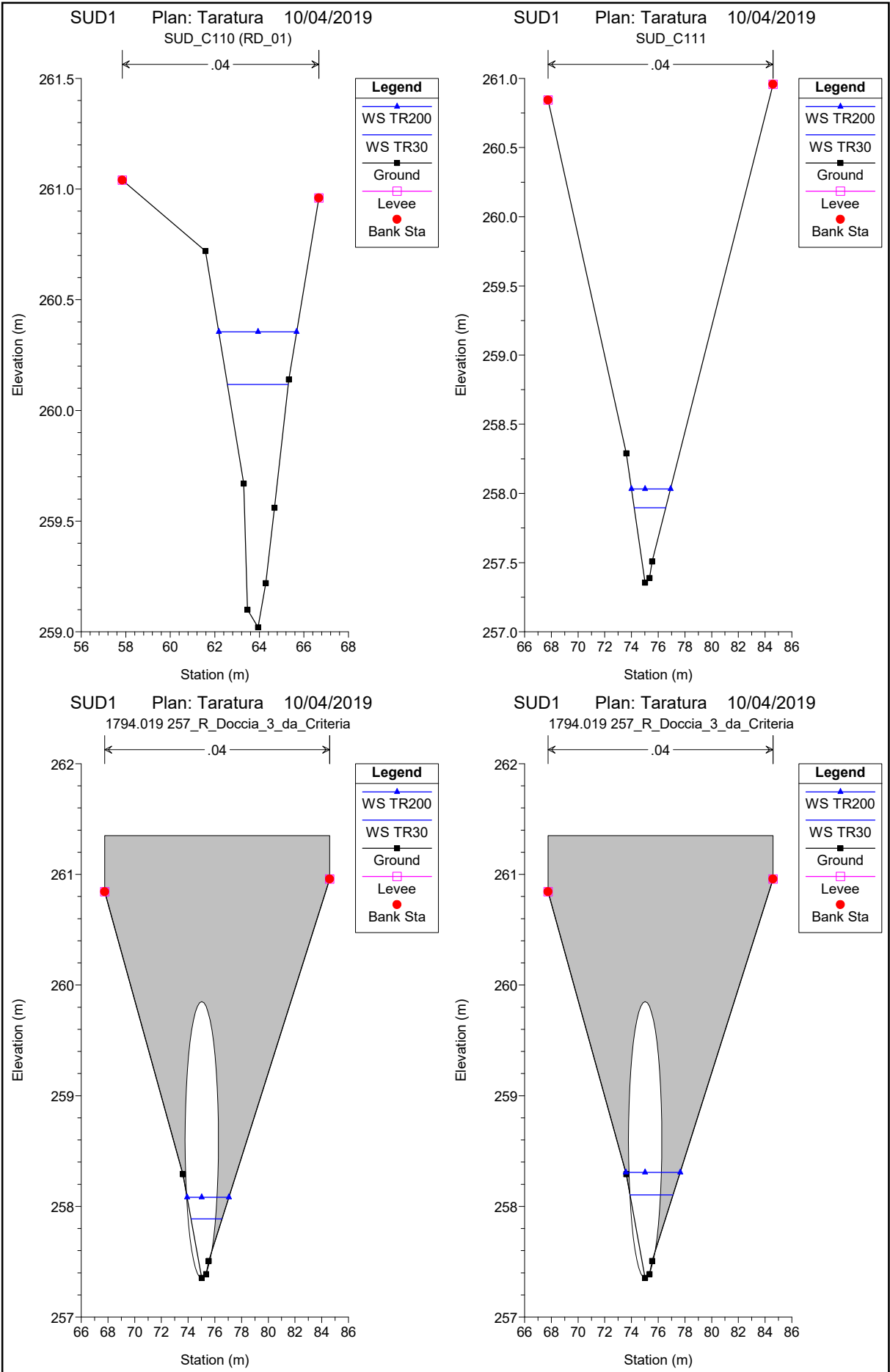


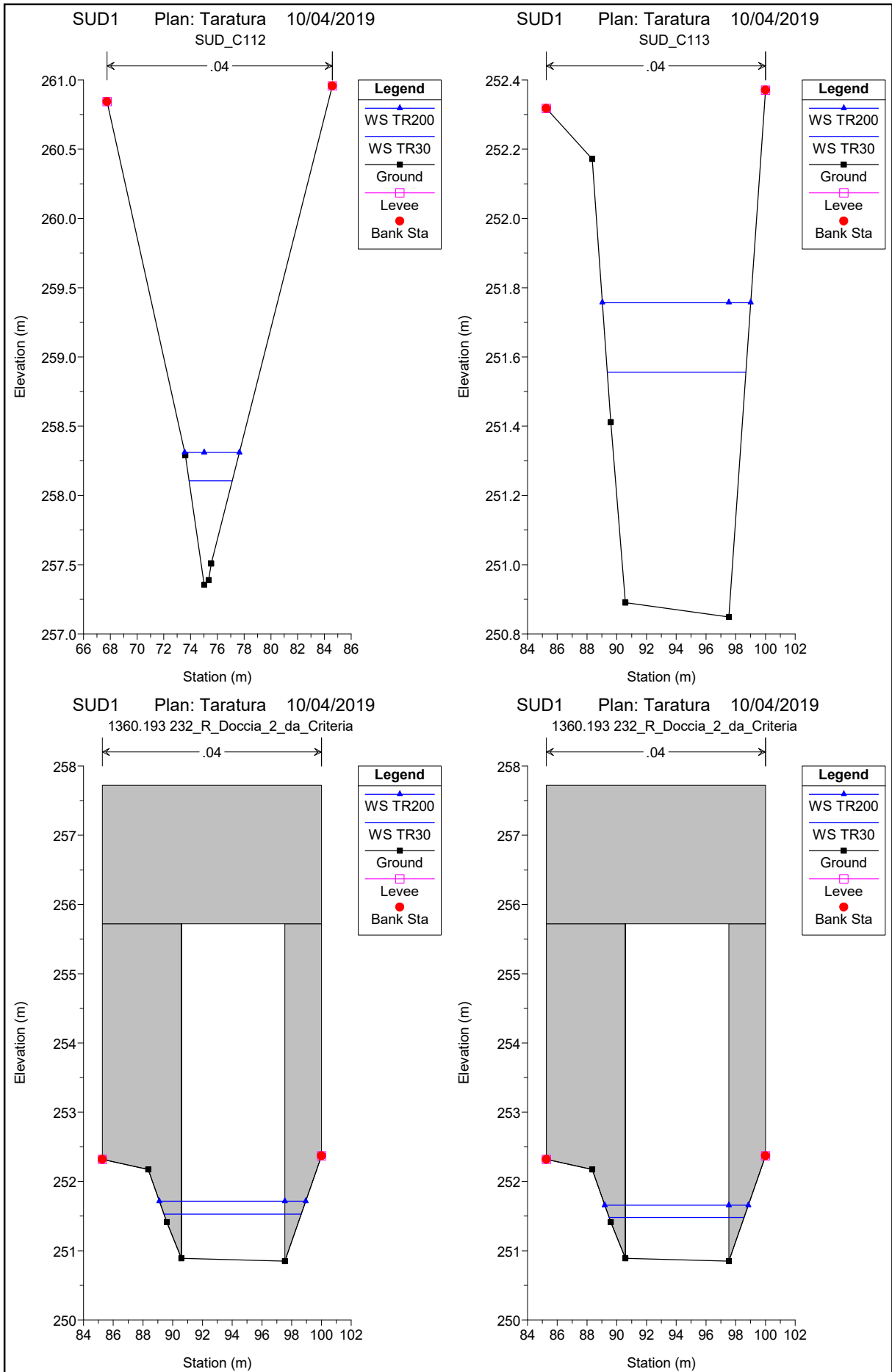
SUD1 Plan: Taratura 10/04/2019
SUD_C108 (RD_03)

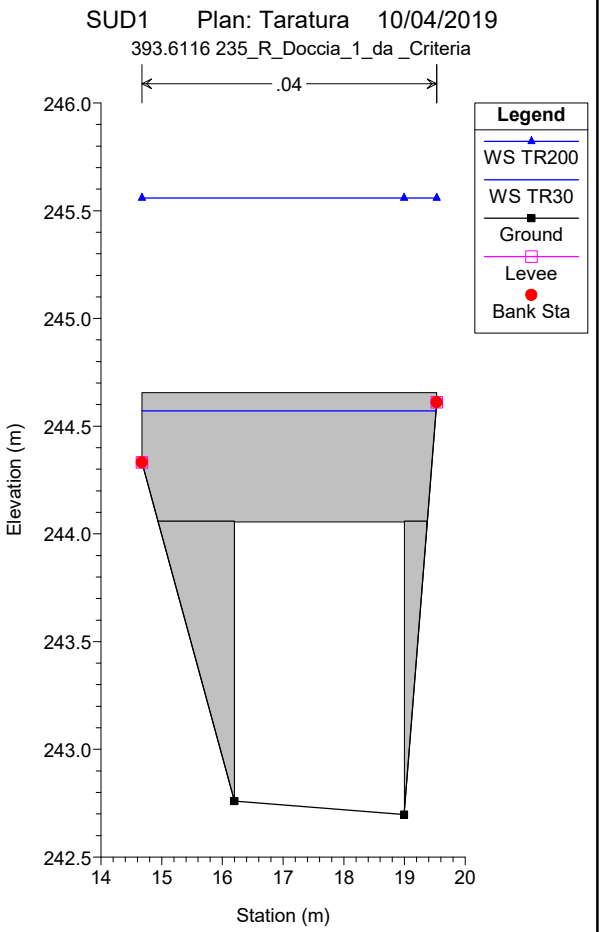
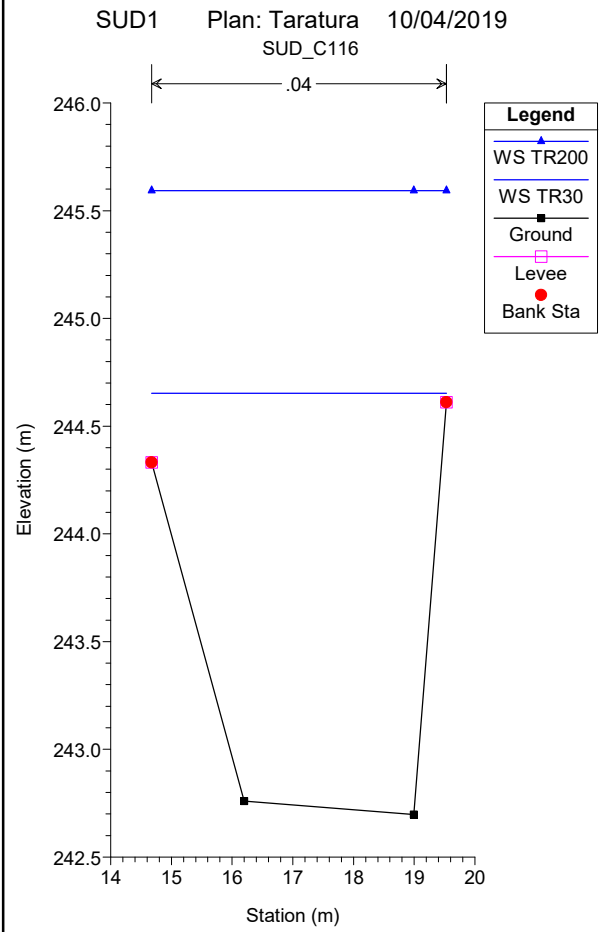
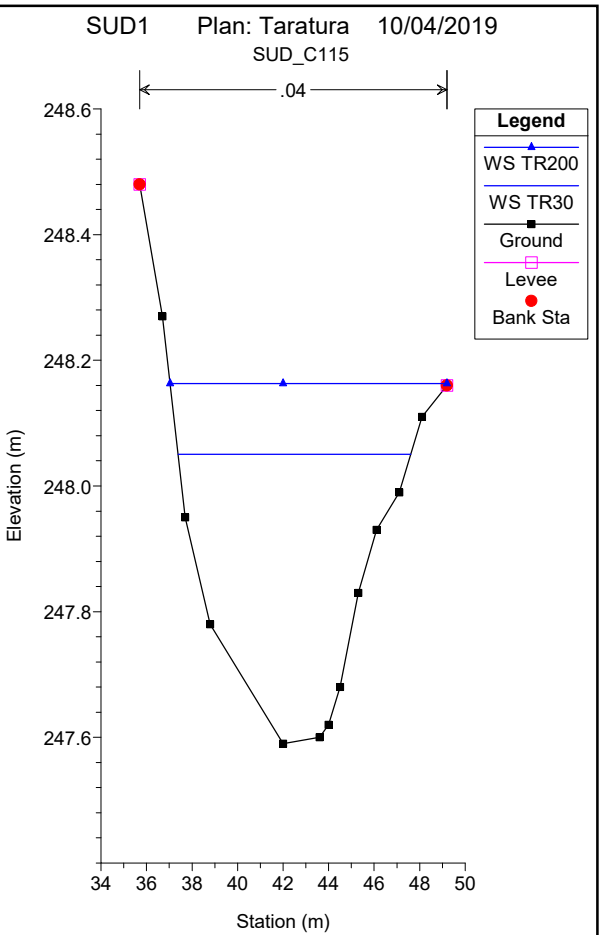
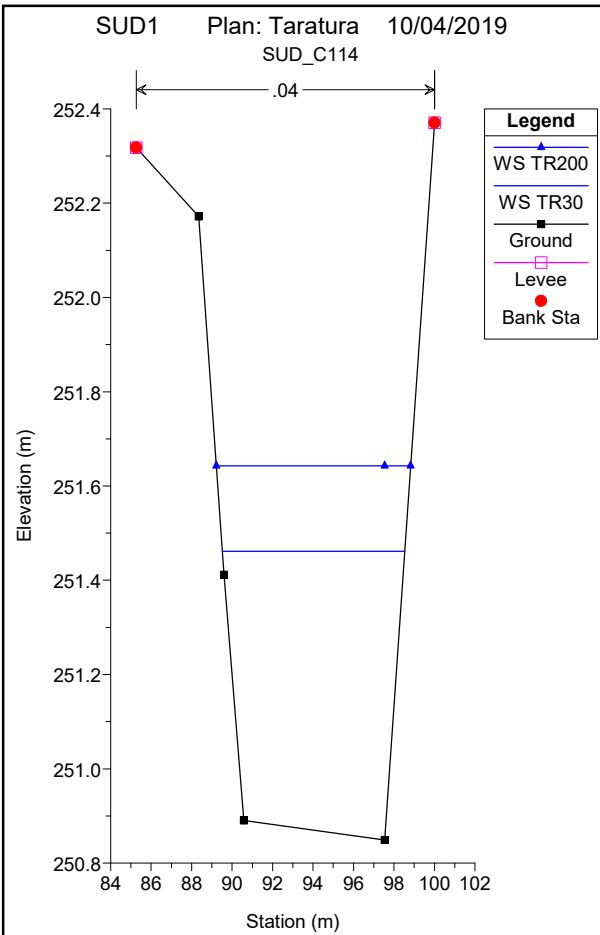


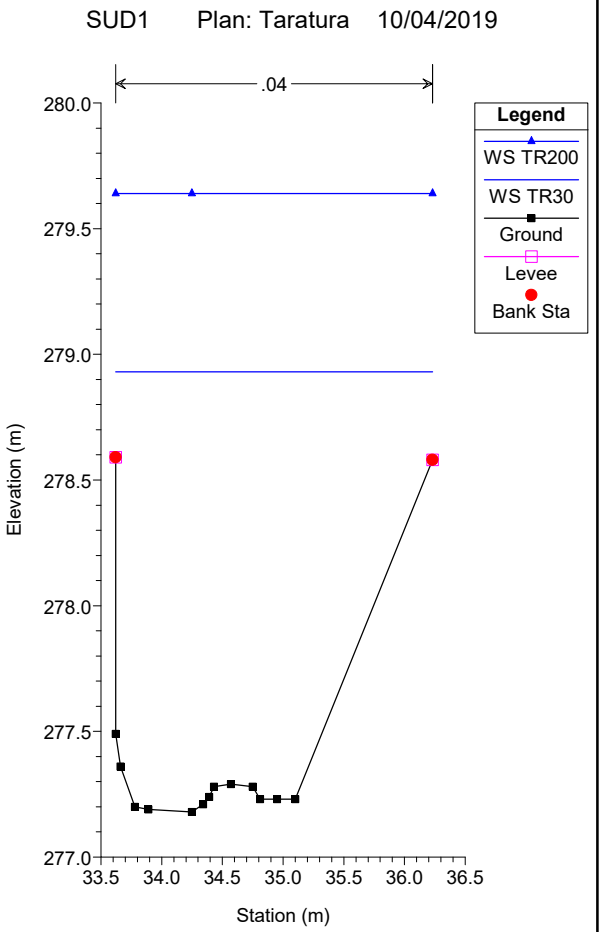
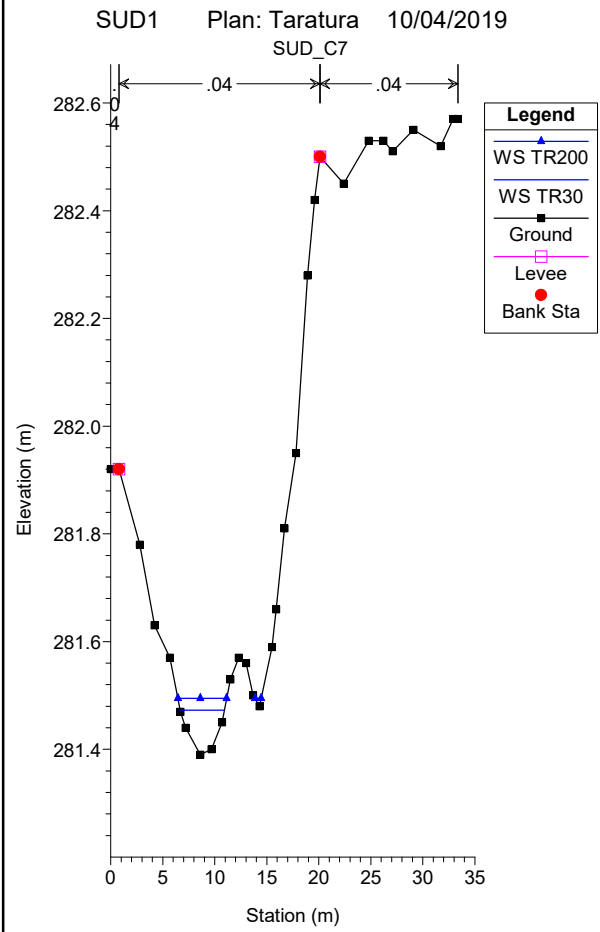
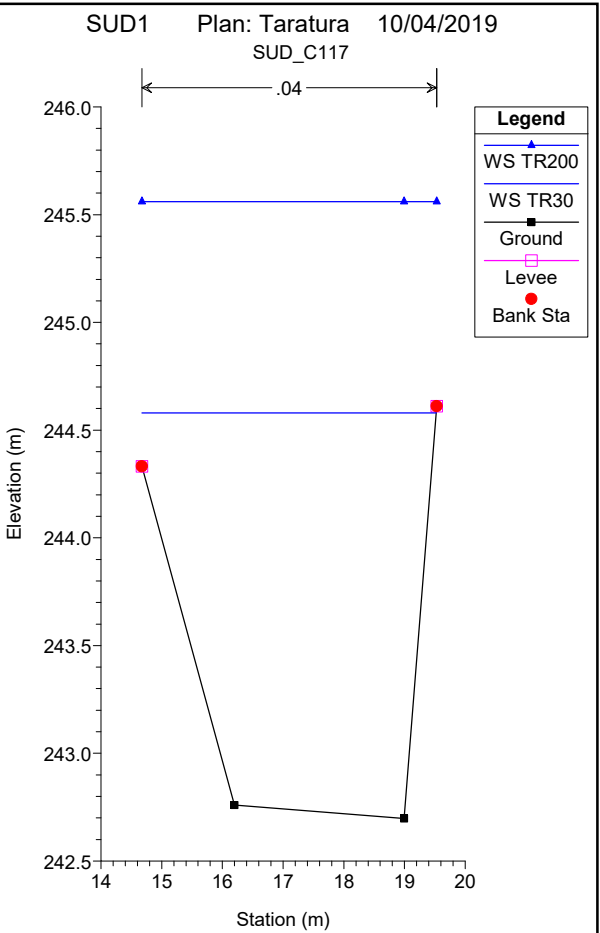
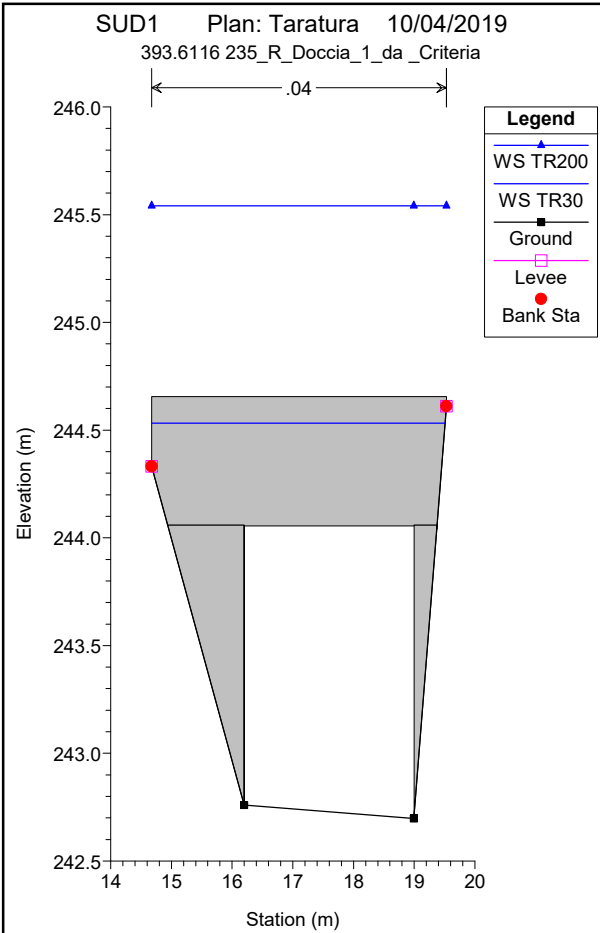
SUD1 Plan: Taratura 10/04/2019
SUD_C109 (RD_02)

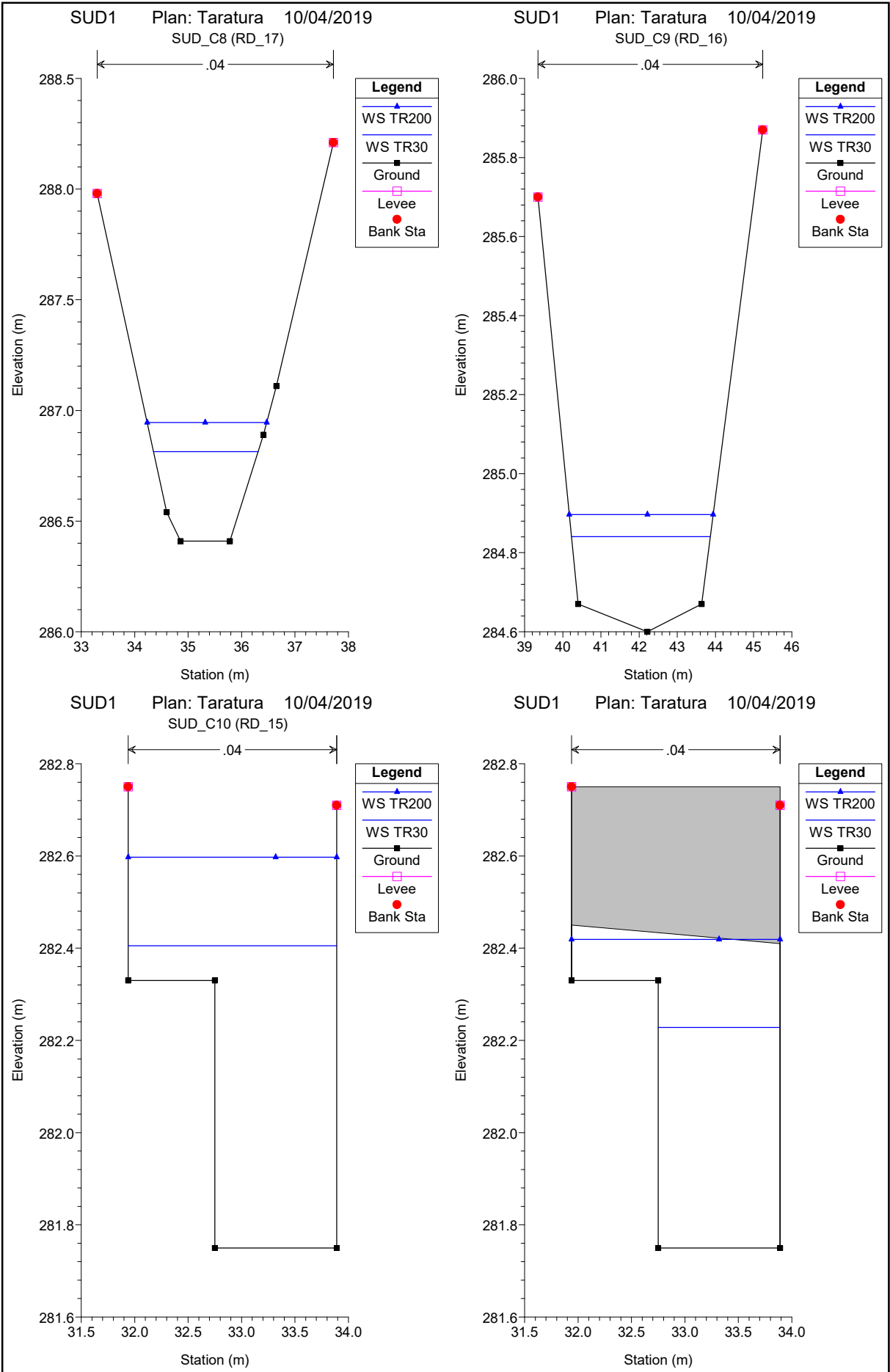


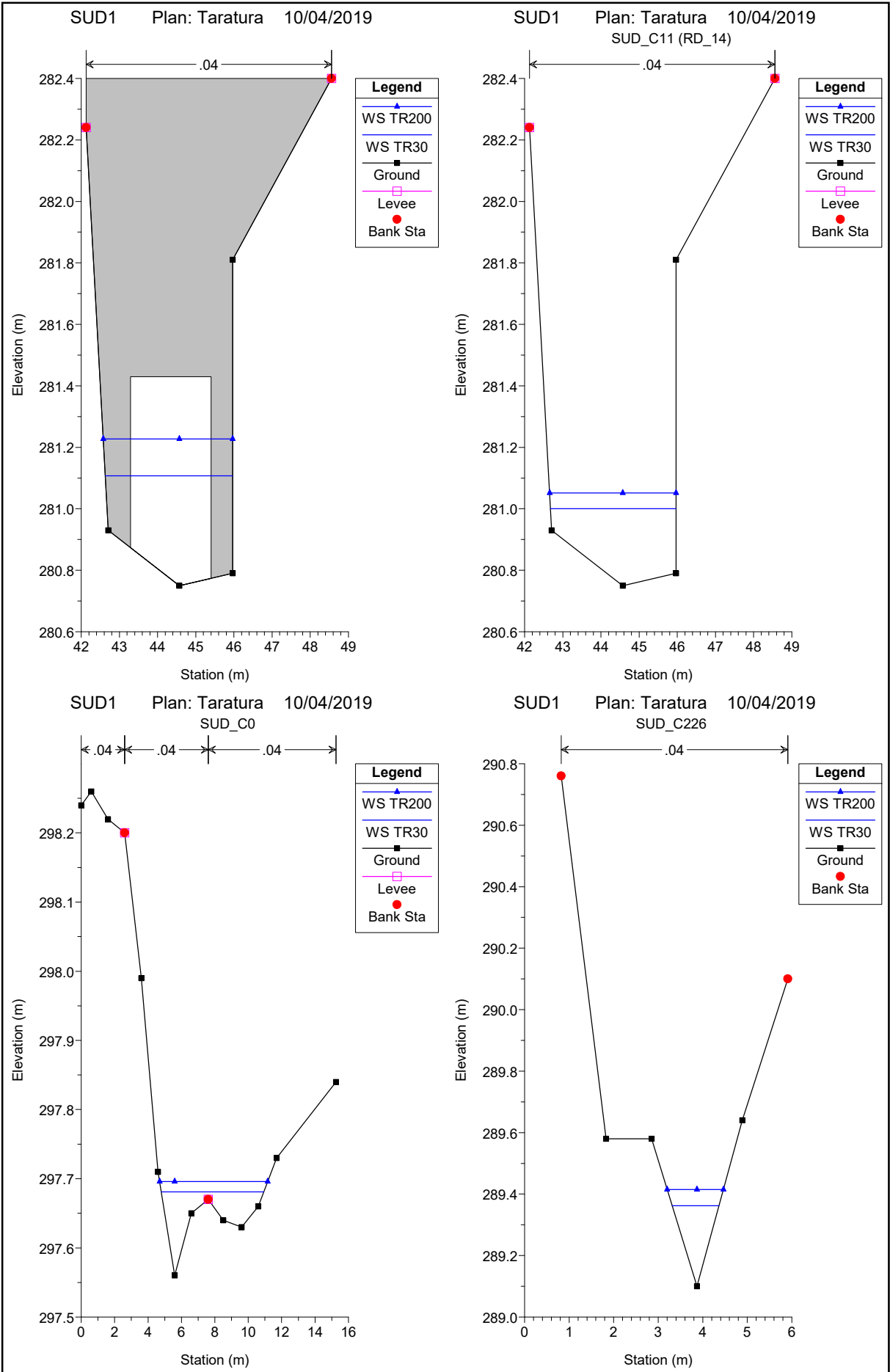


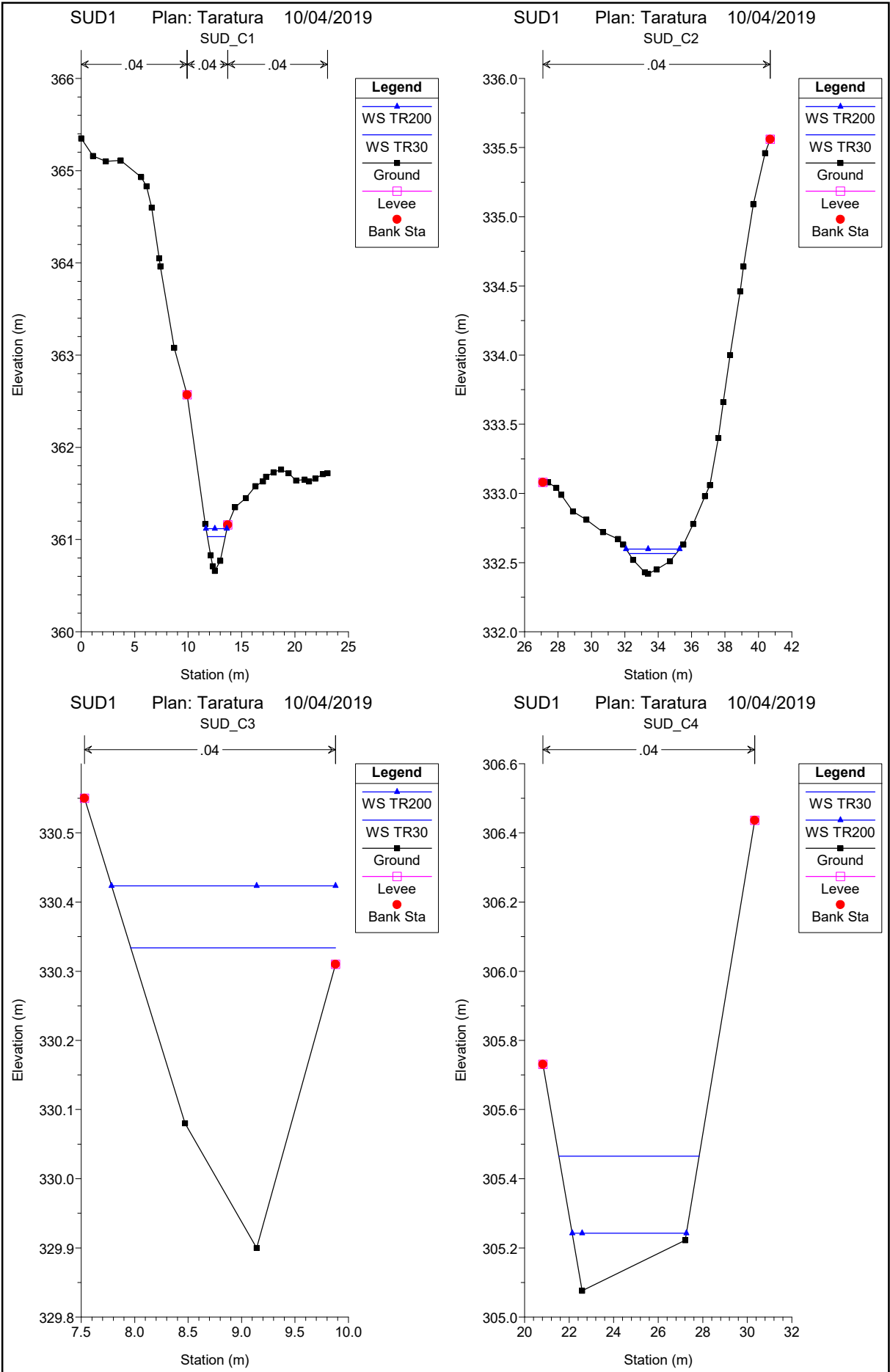


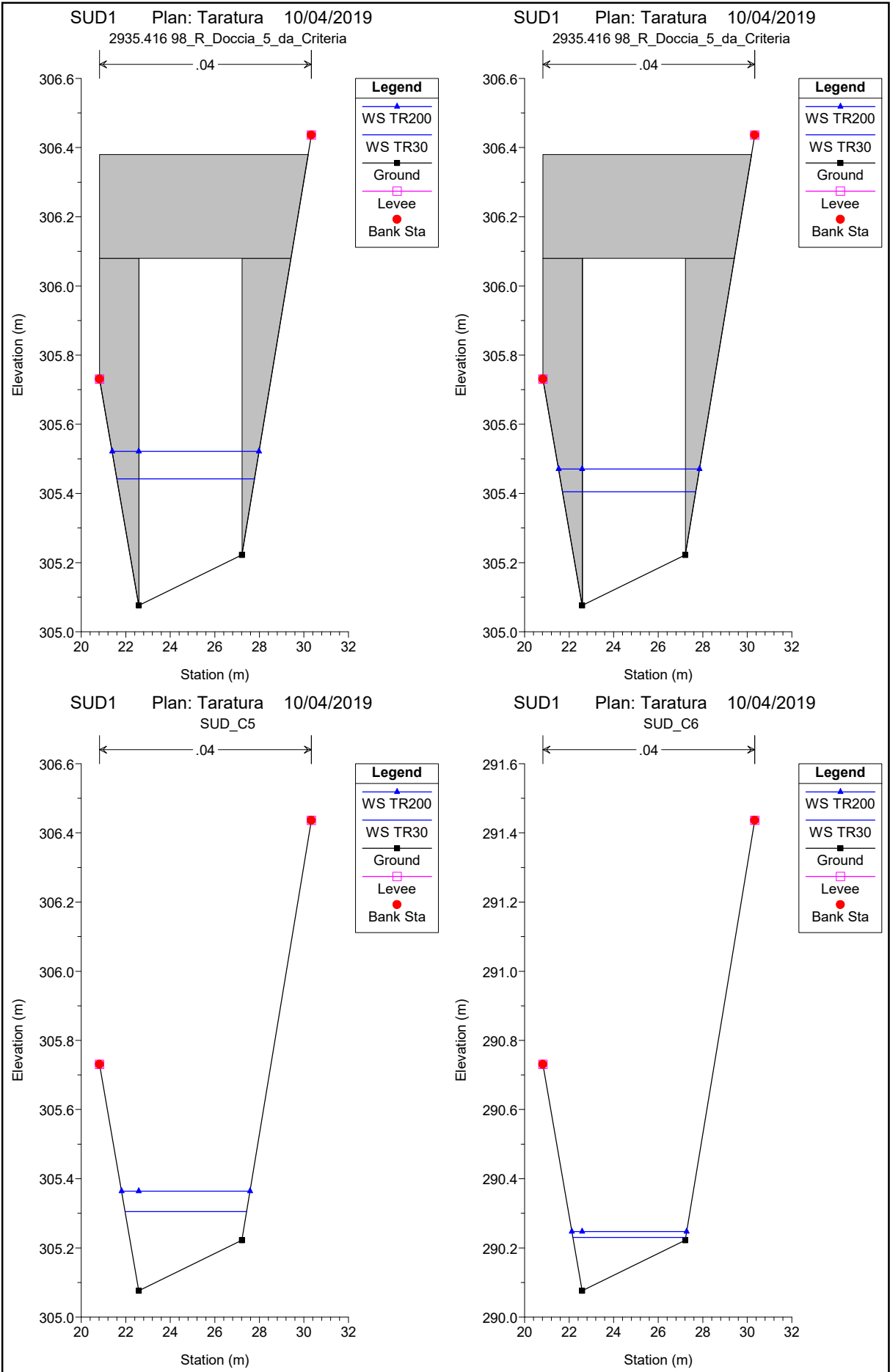




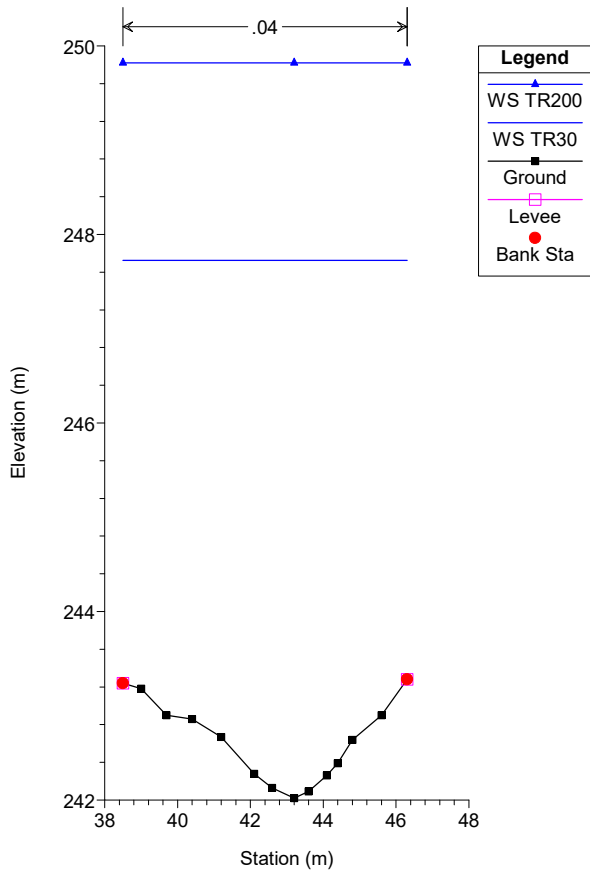




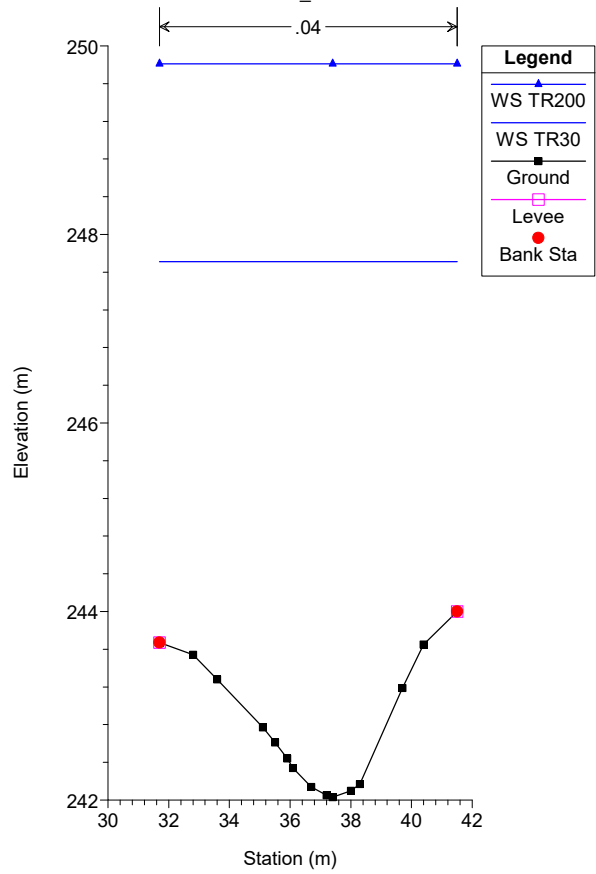




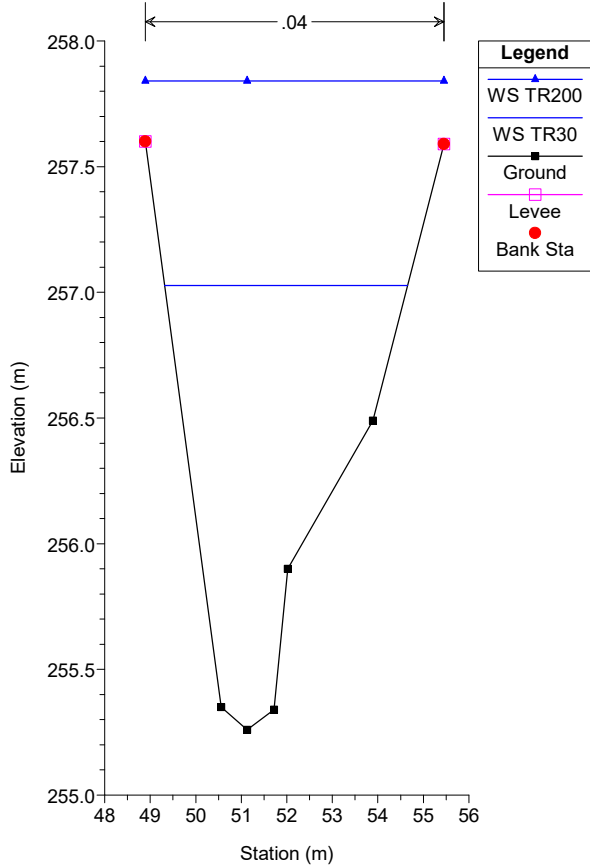
SUD1 Plan: Taratura 10/04/2019



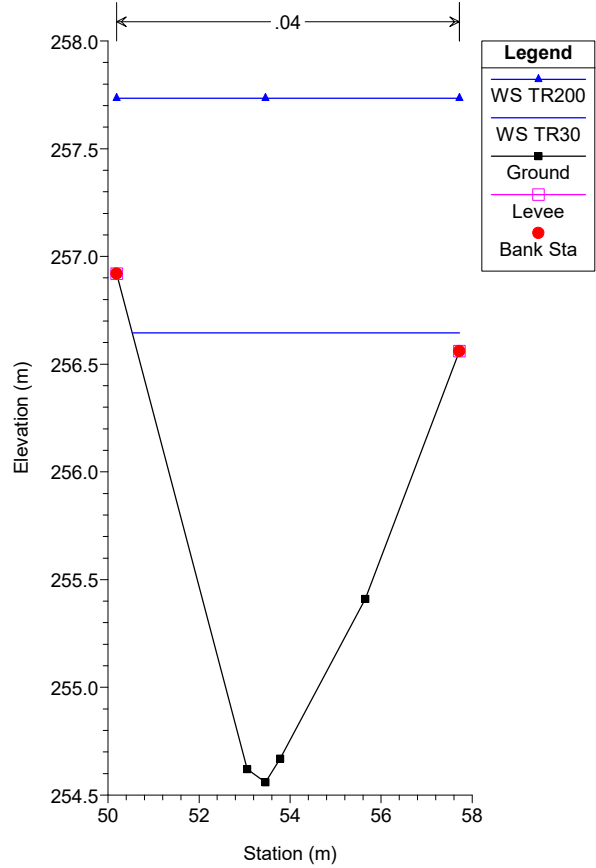
SUD1 Plan: Taratura 10/04/2019
SUD_C199

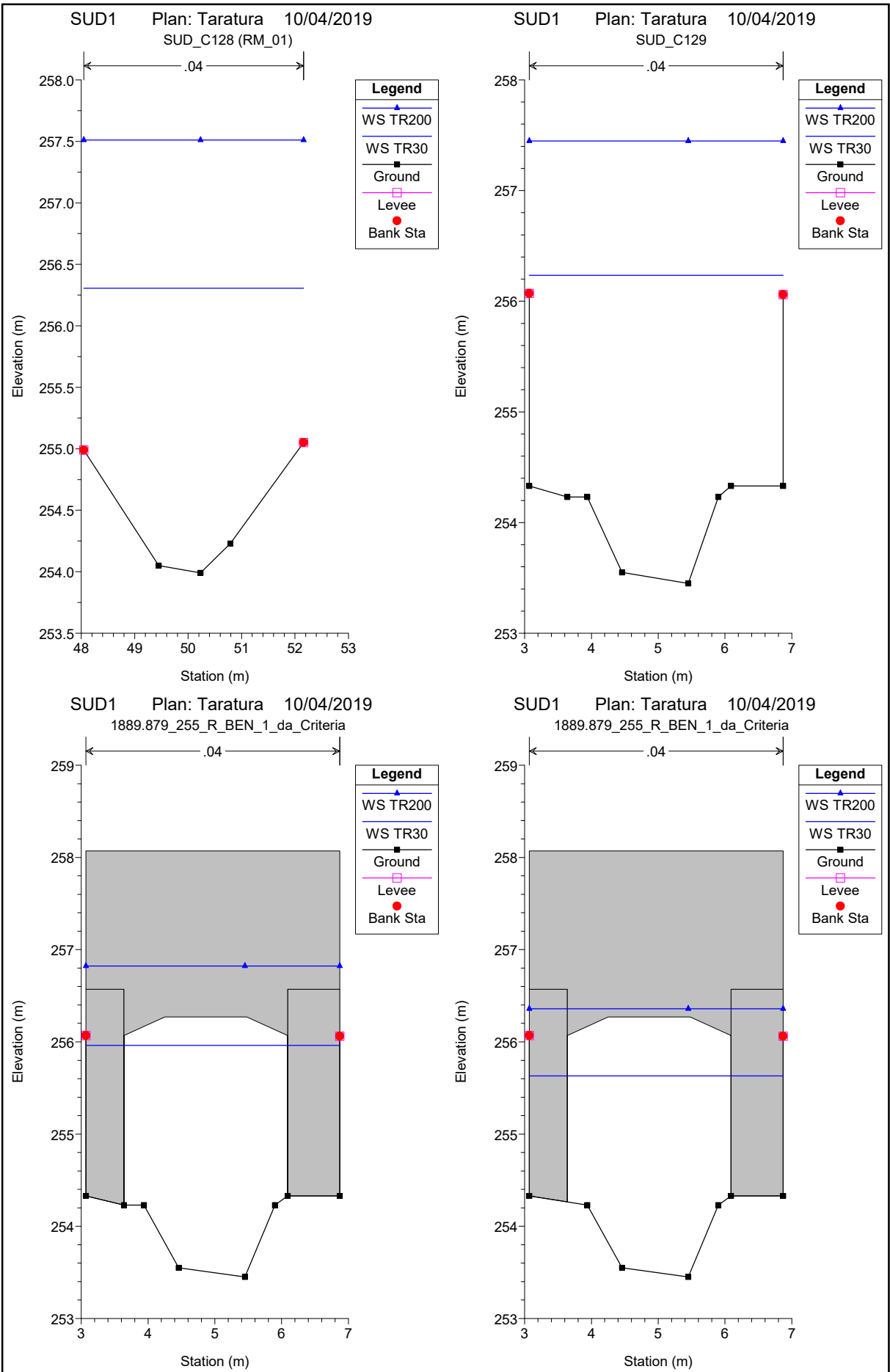


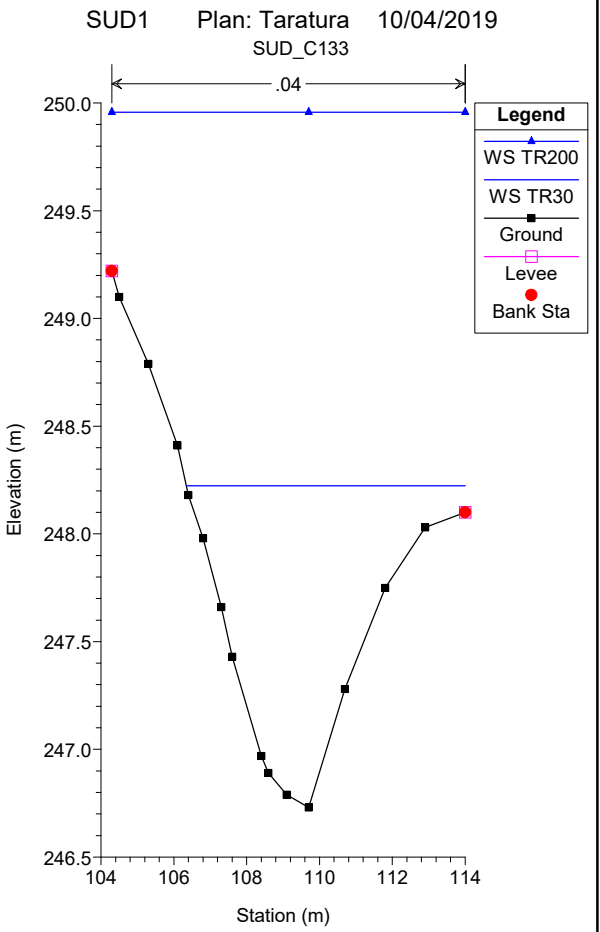
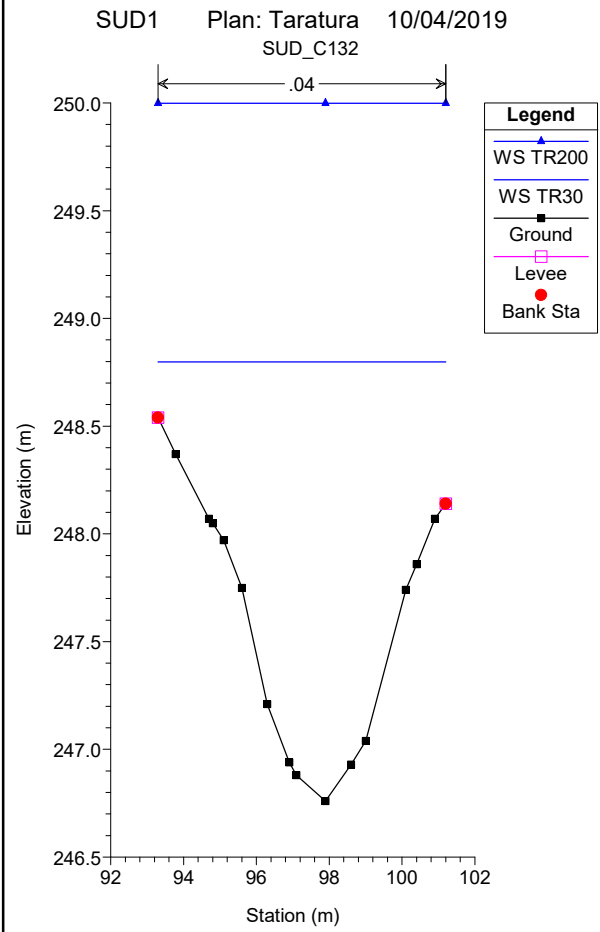
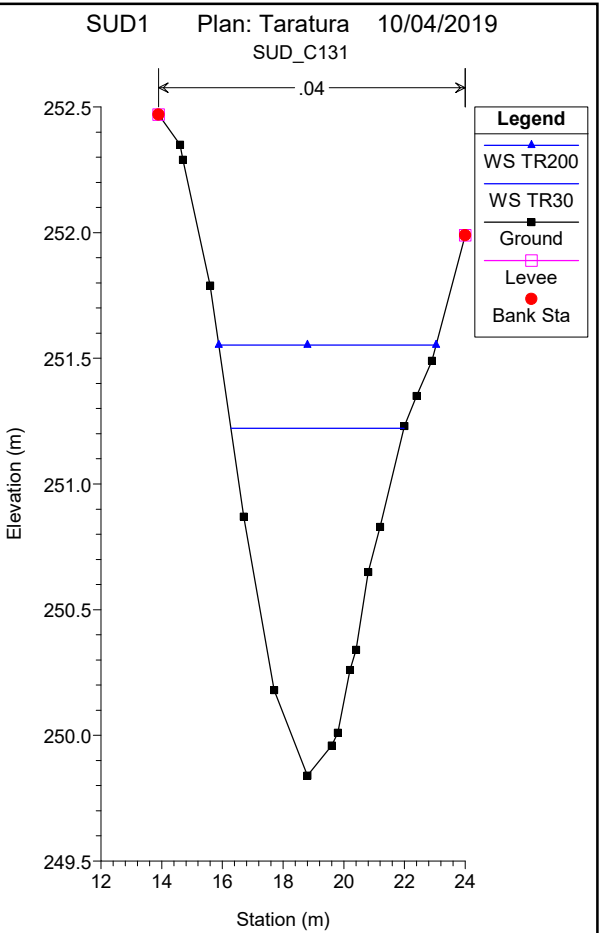
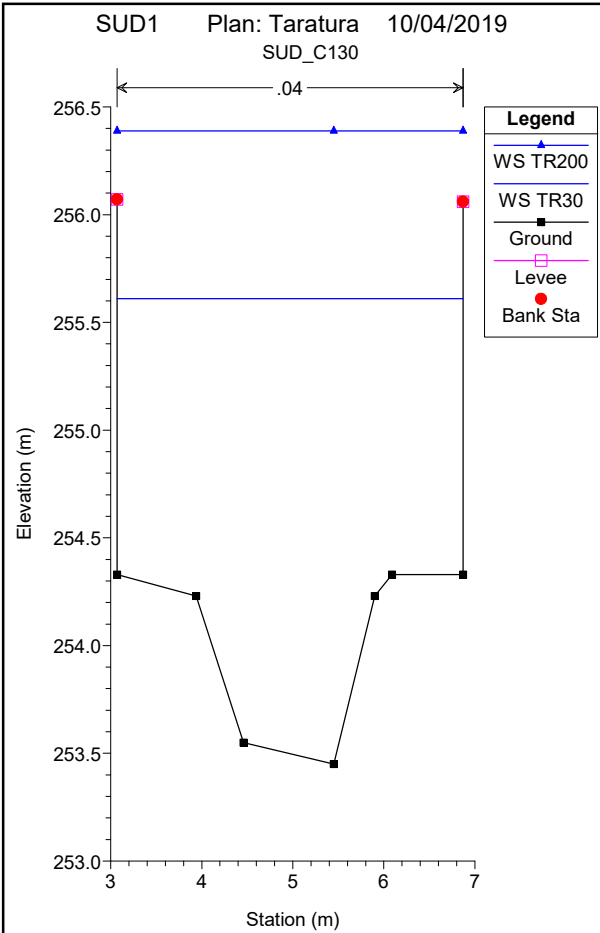
SUD1 Plan: Taratura 10/04/2019
SUD_C126 (RM_03)

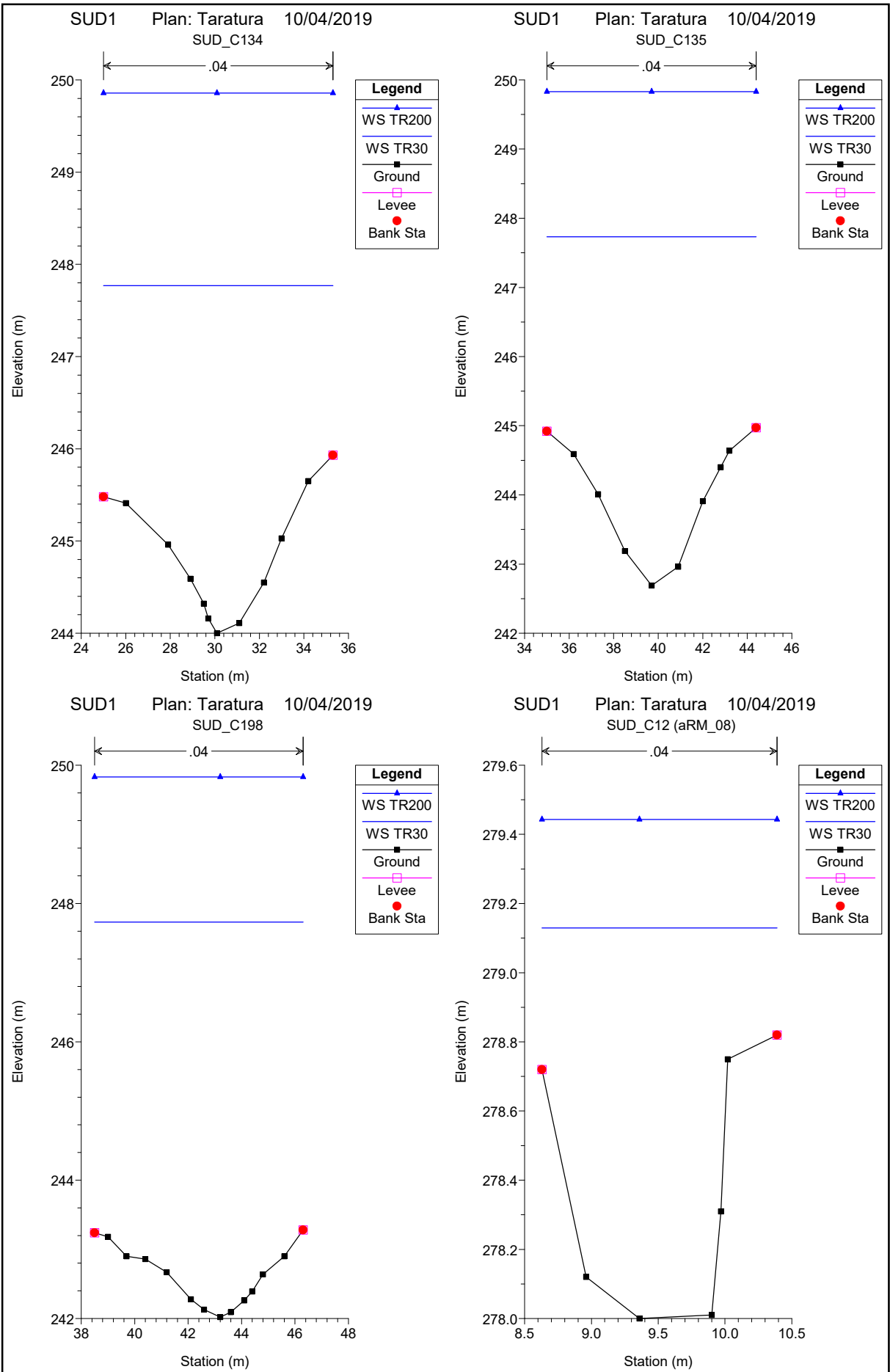


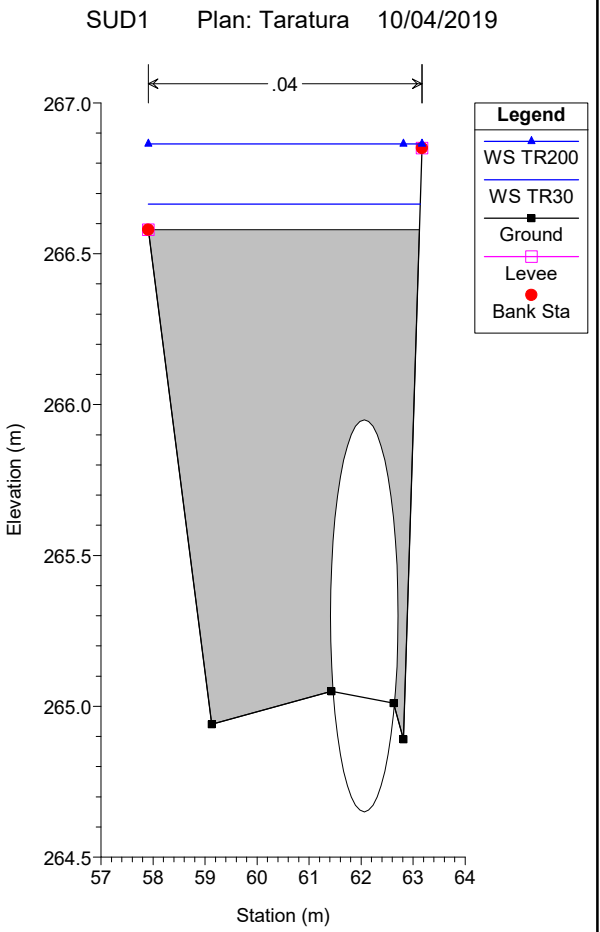
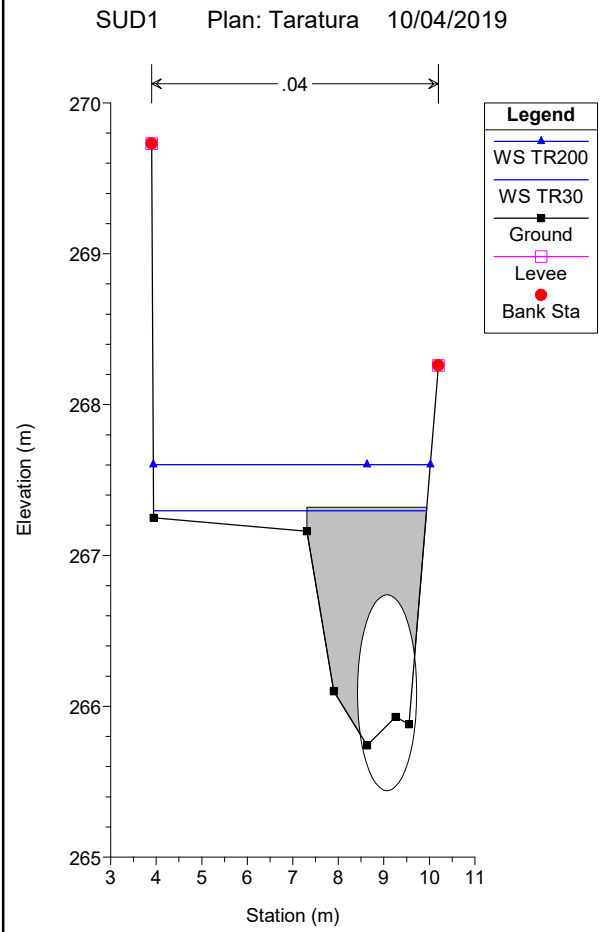
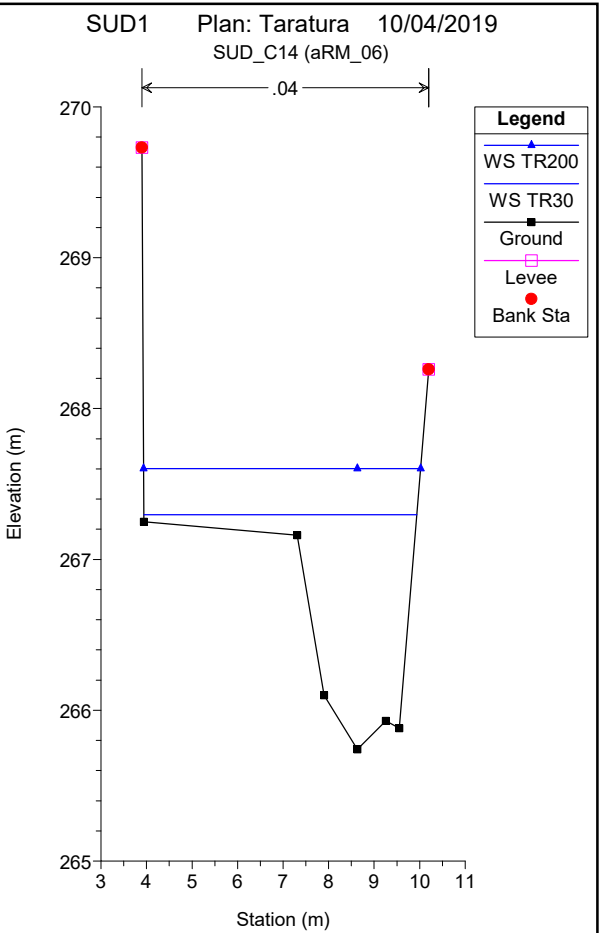
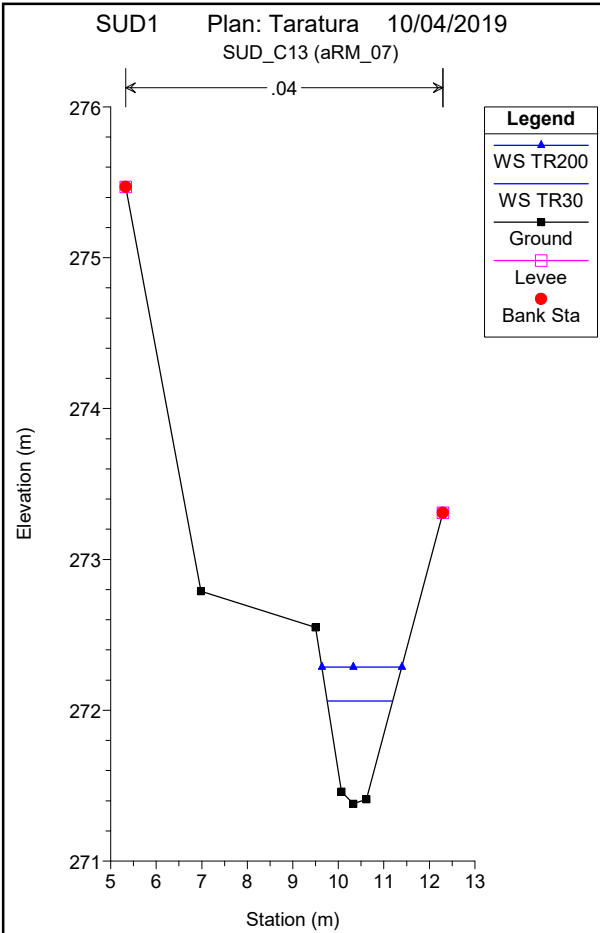
SUD1 Plan: Taratura 10/04/2019
SUD_C127 (RM_02)

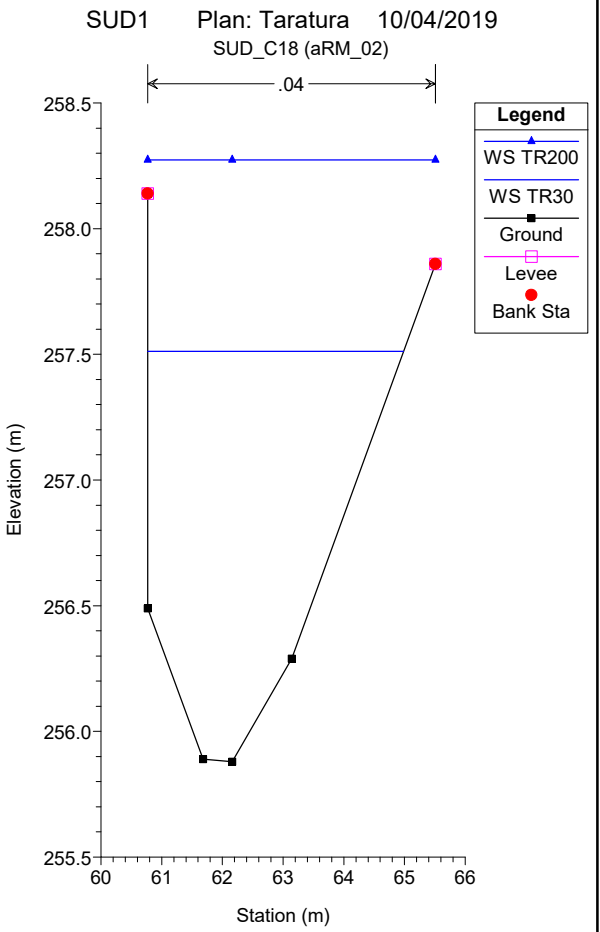
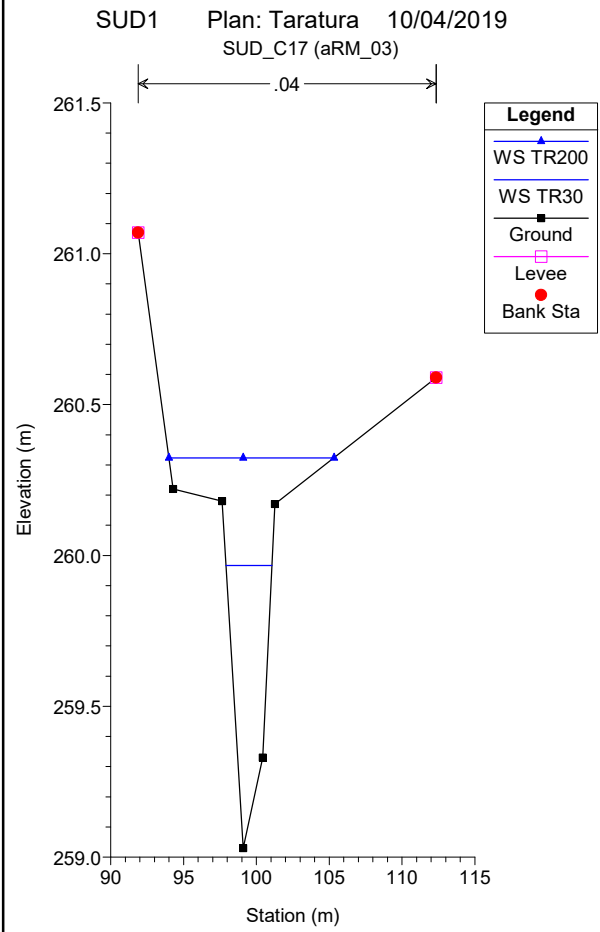
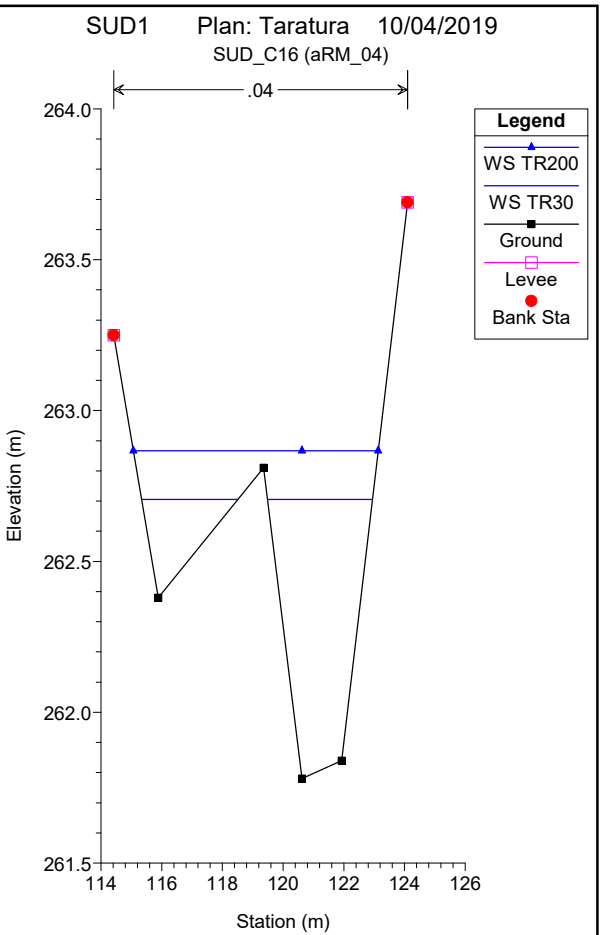
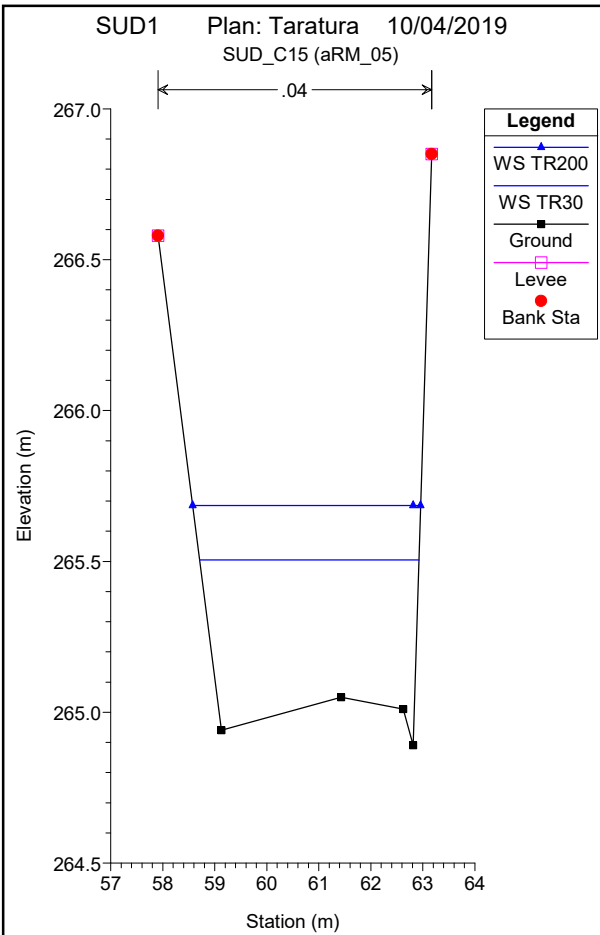




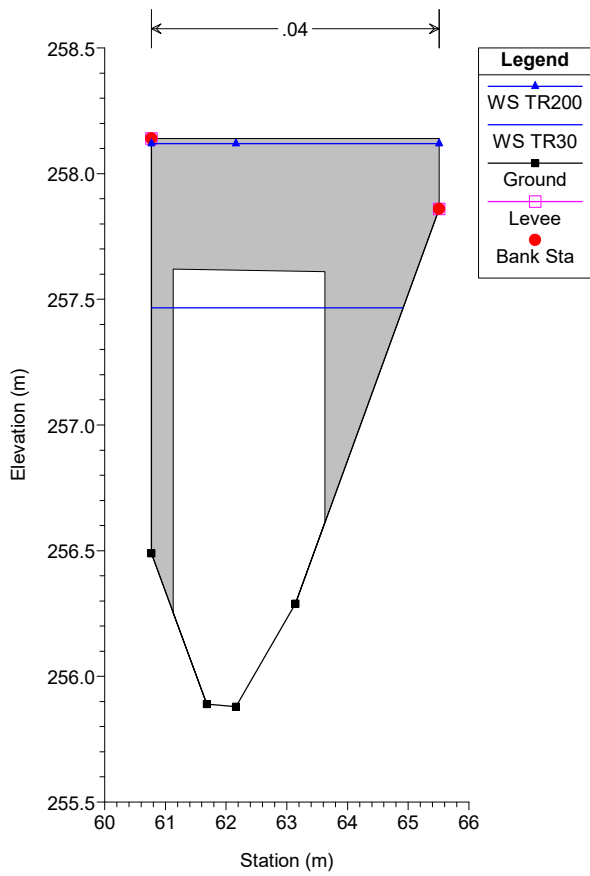




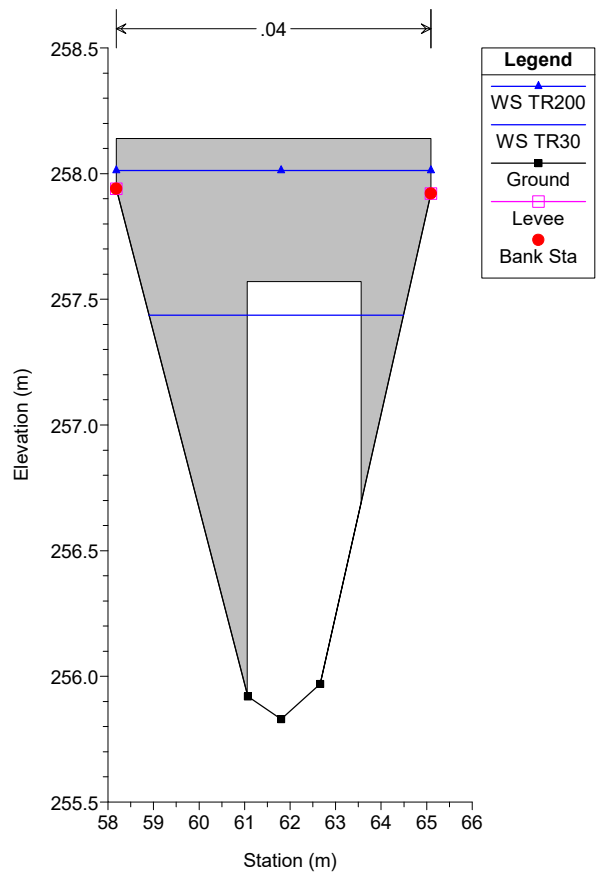




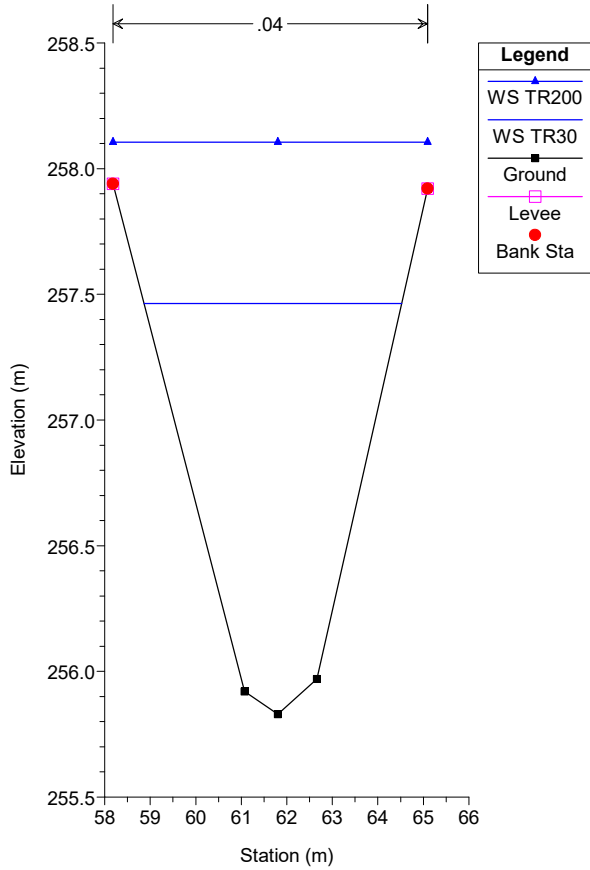
SUD1 Plan: Taratura 10/04/2019



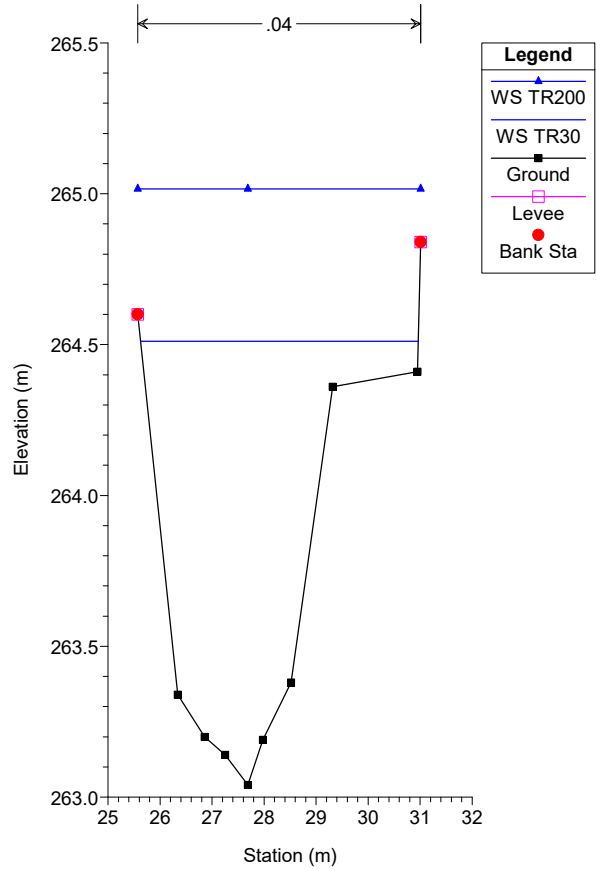
SUD1 Plan: Taratura 10/04/2019

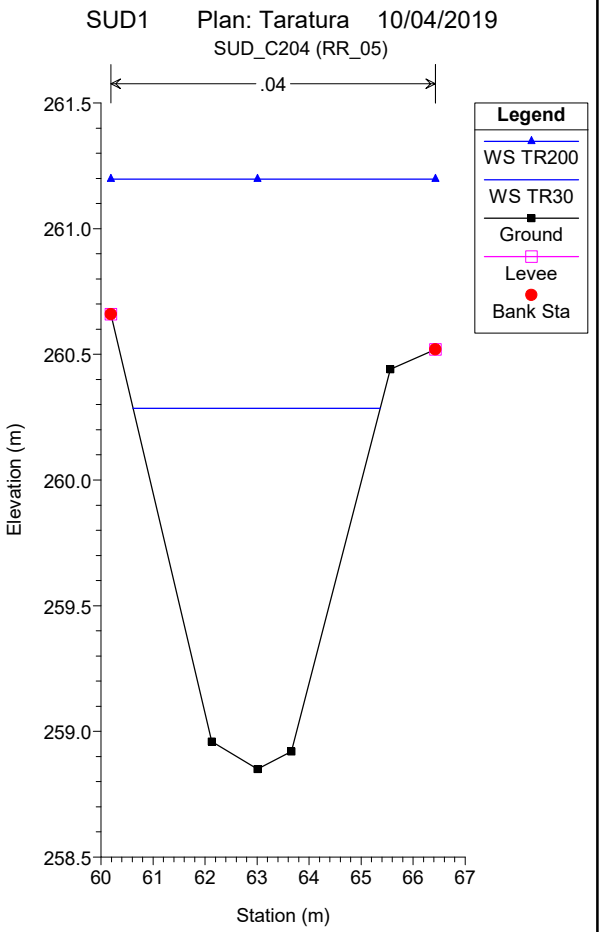
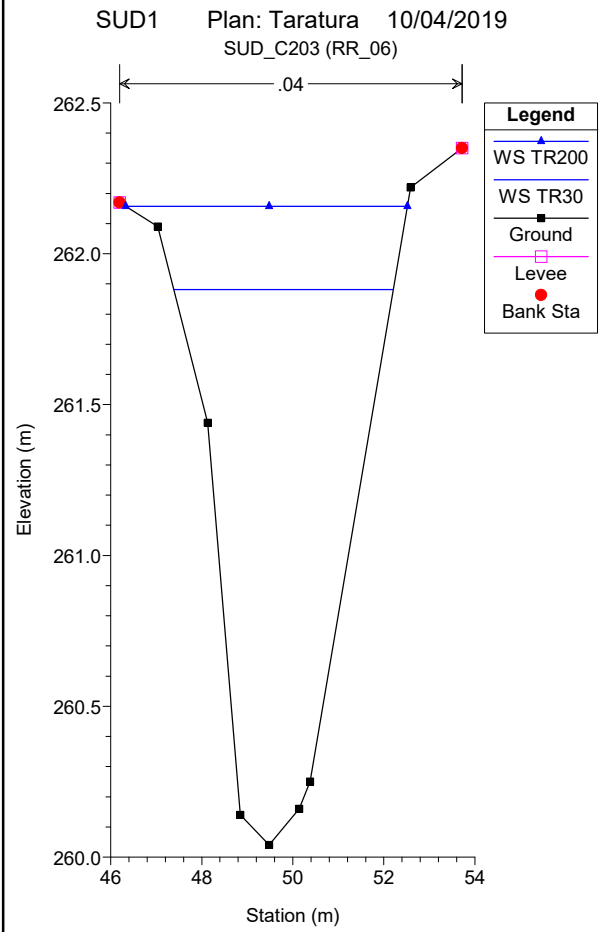
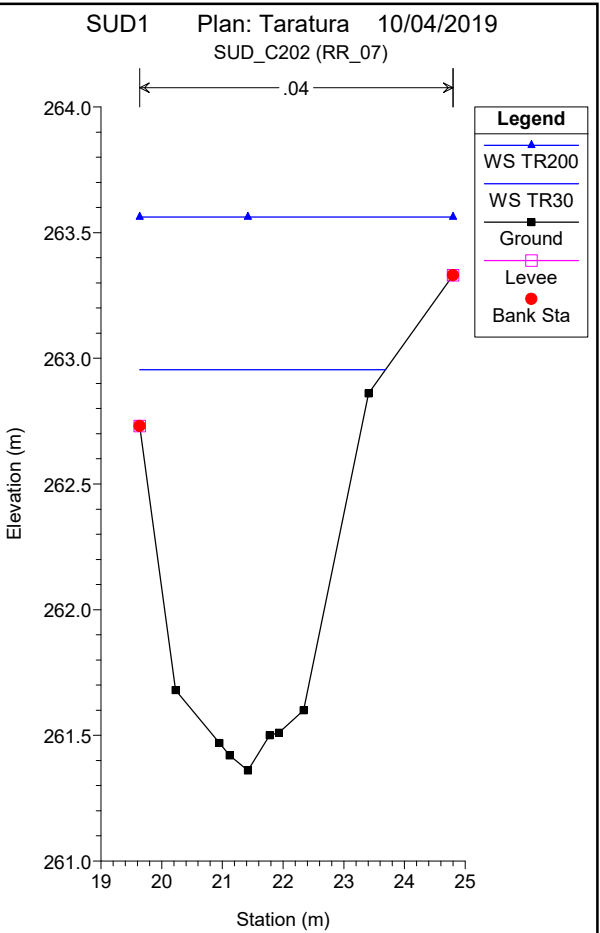
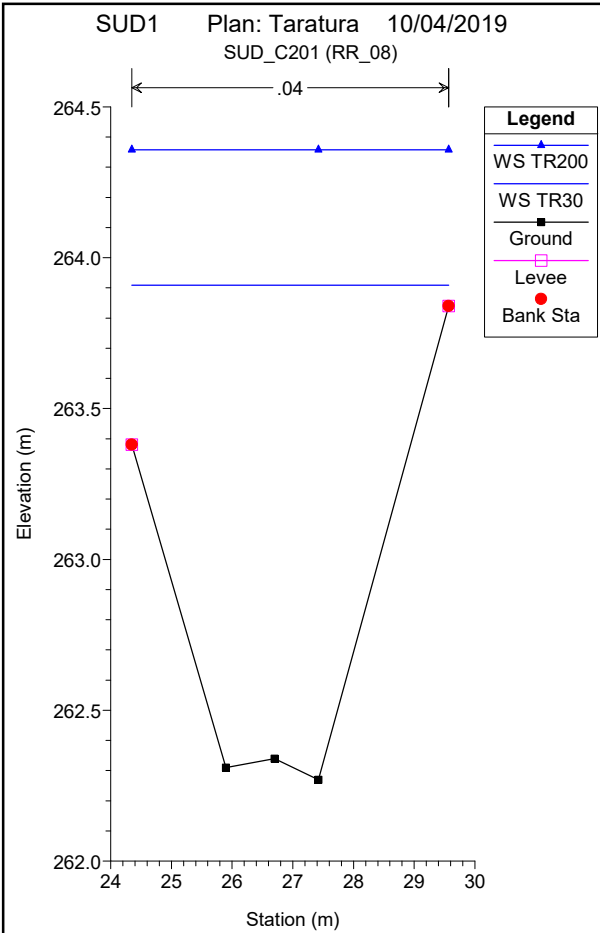


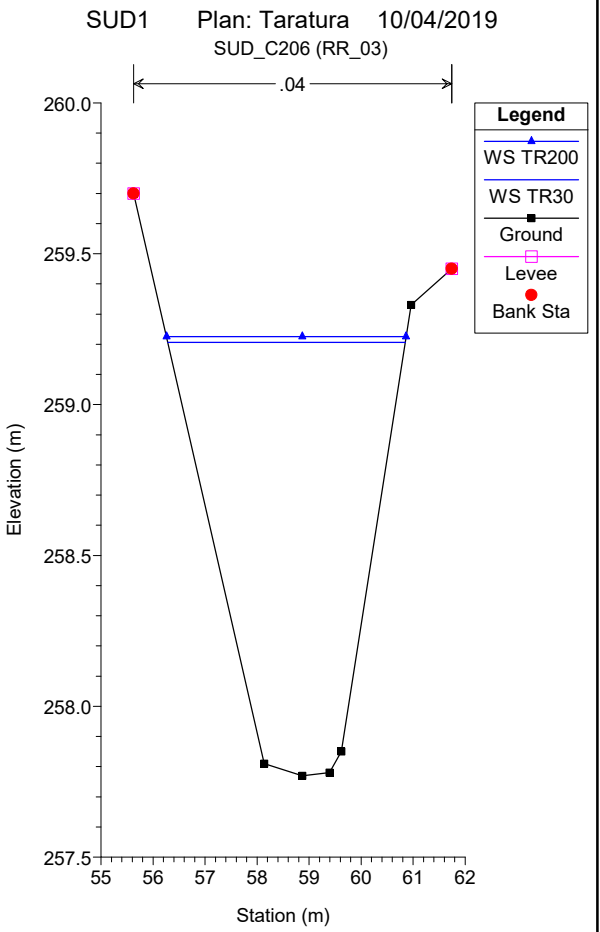
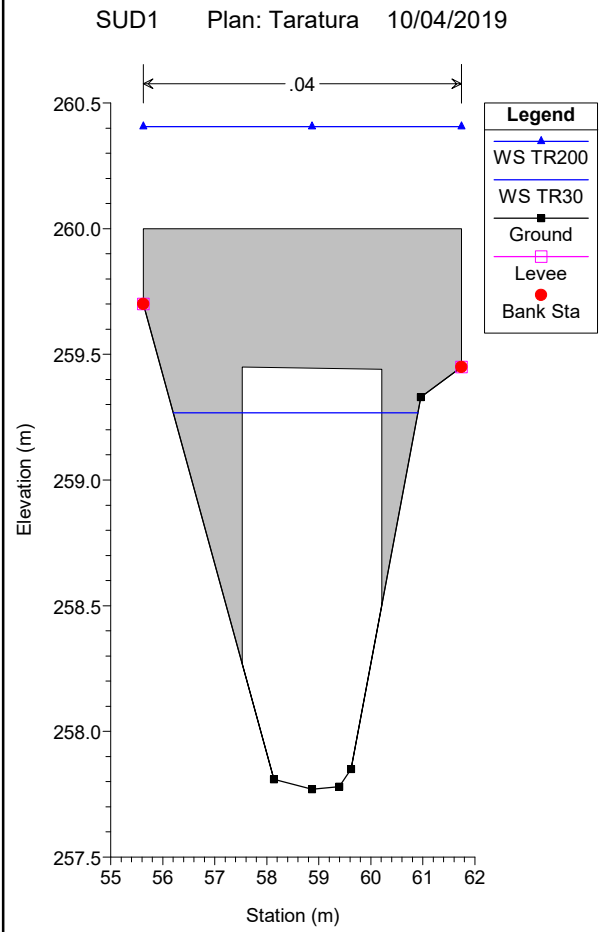
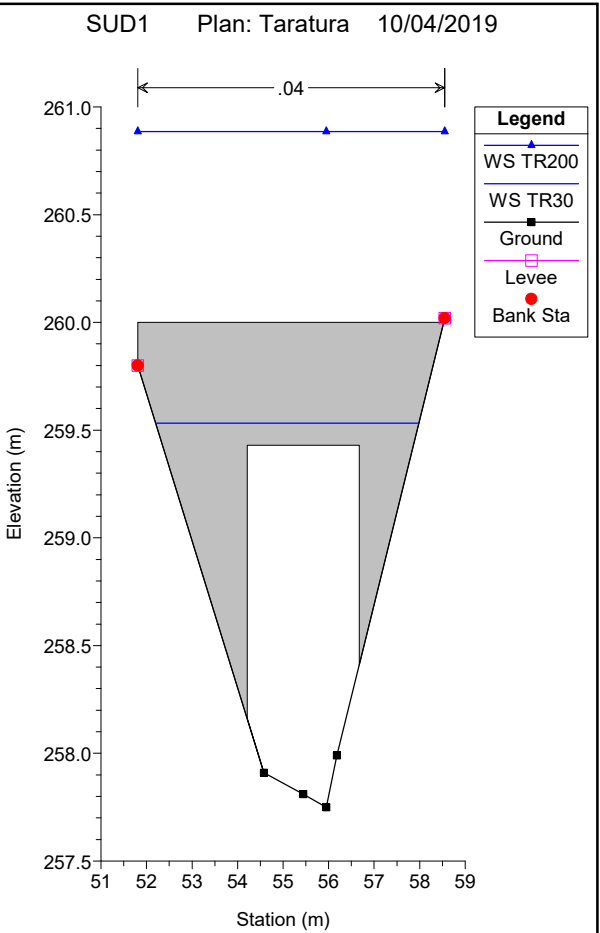
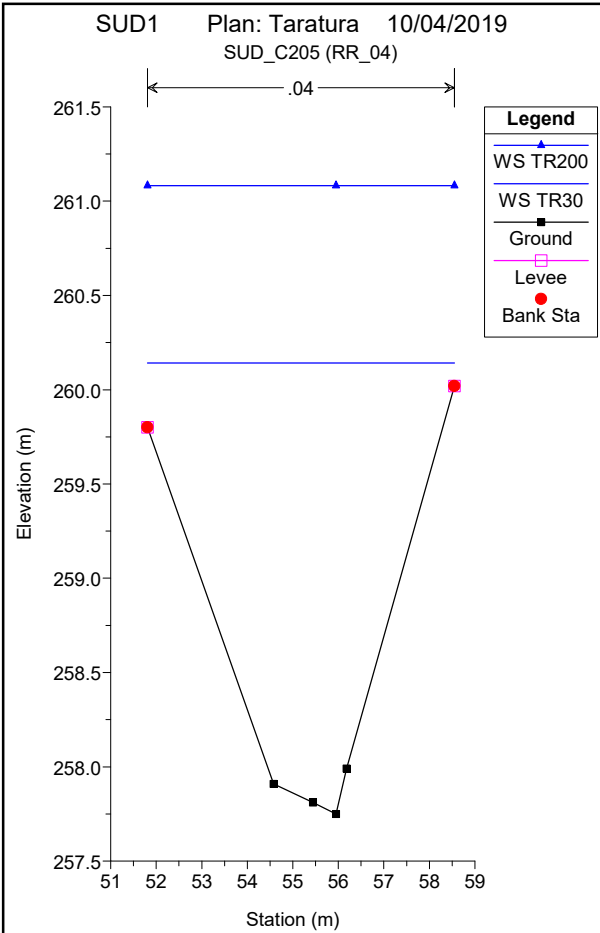
SUD1 Plan: Taratura 10/04/2019
SUD_C250 (aRM_01)

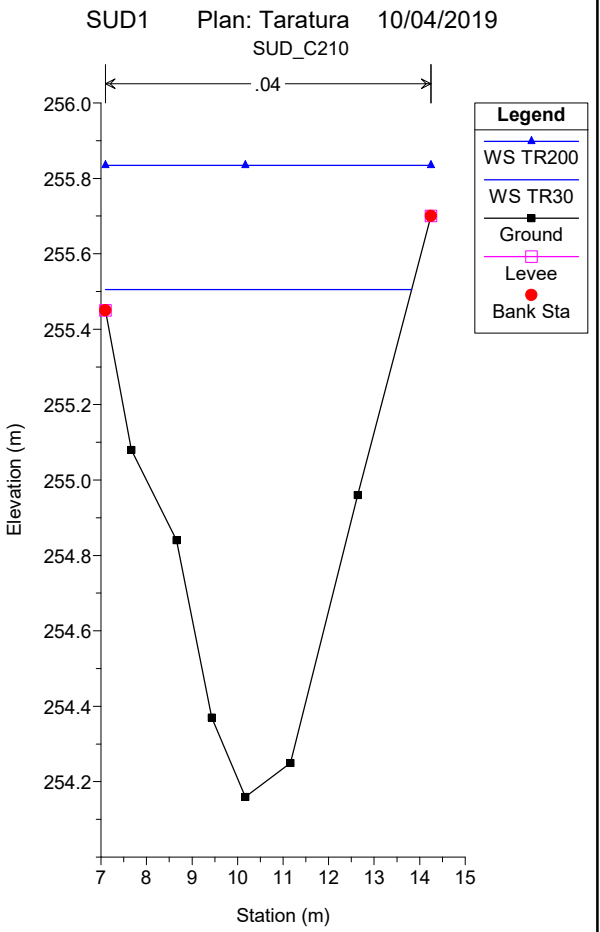
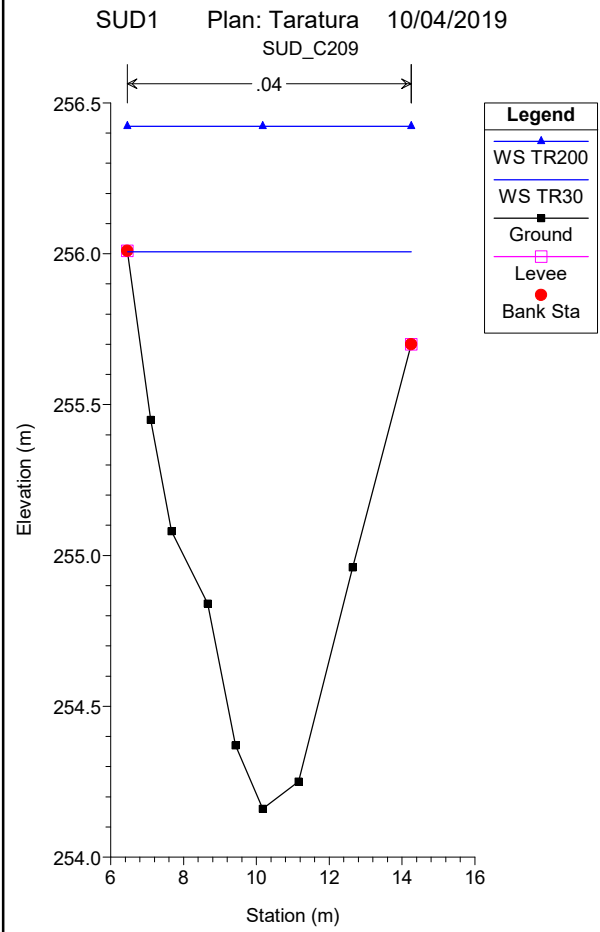
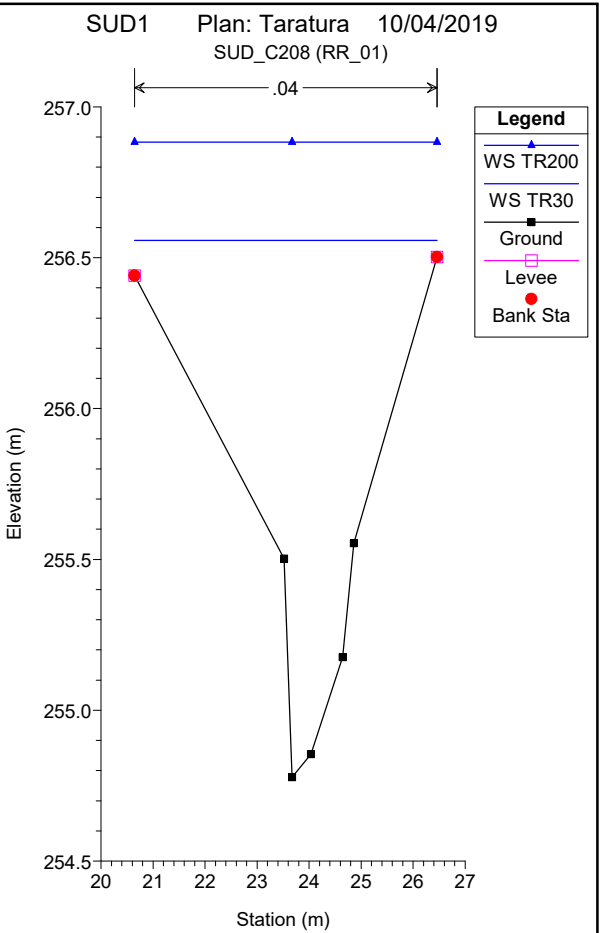
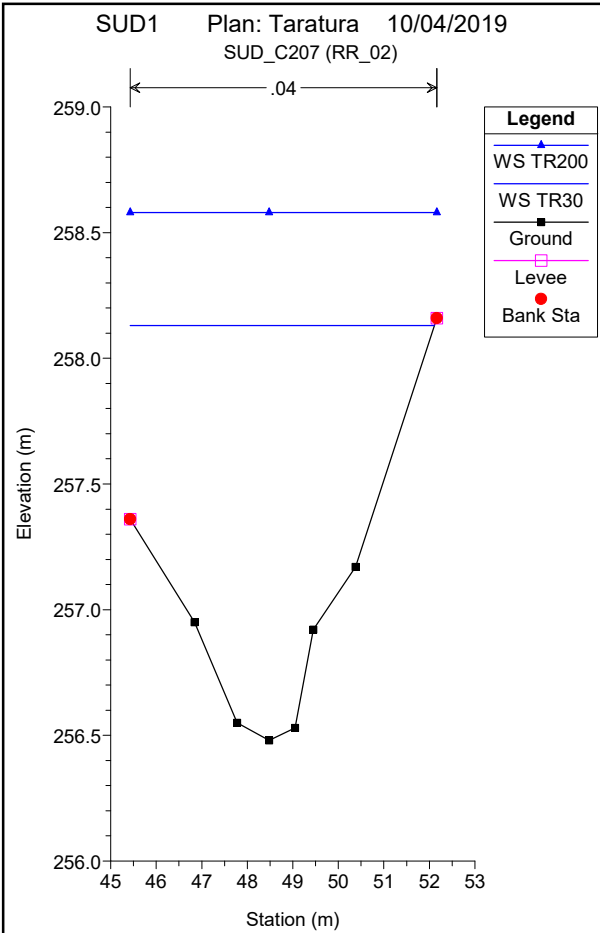


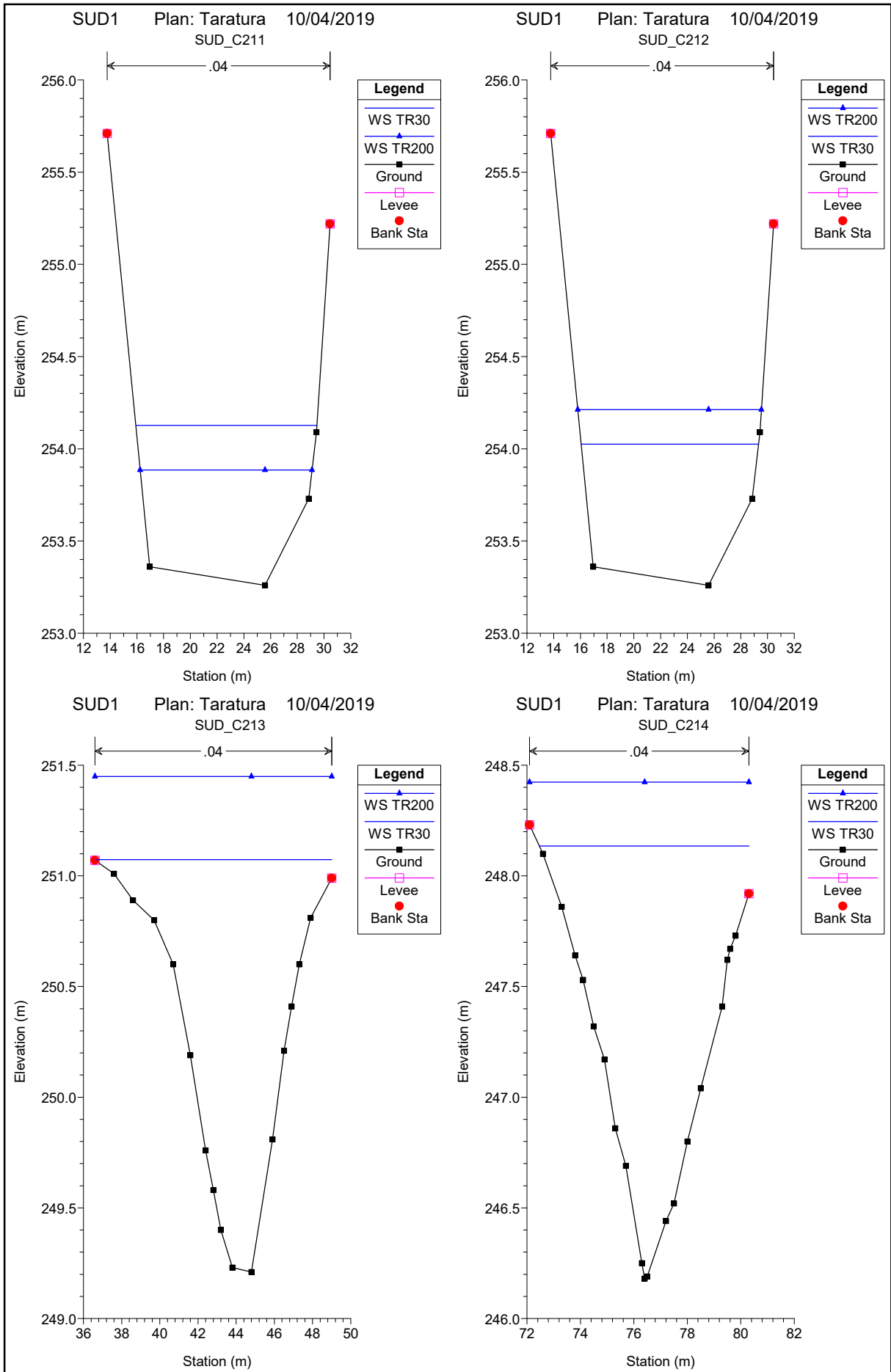
SUD1 Plan: Taratura 10/04/2019
SUD_C200 (RR_09)

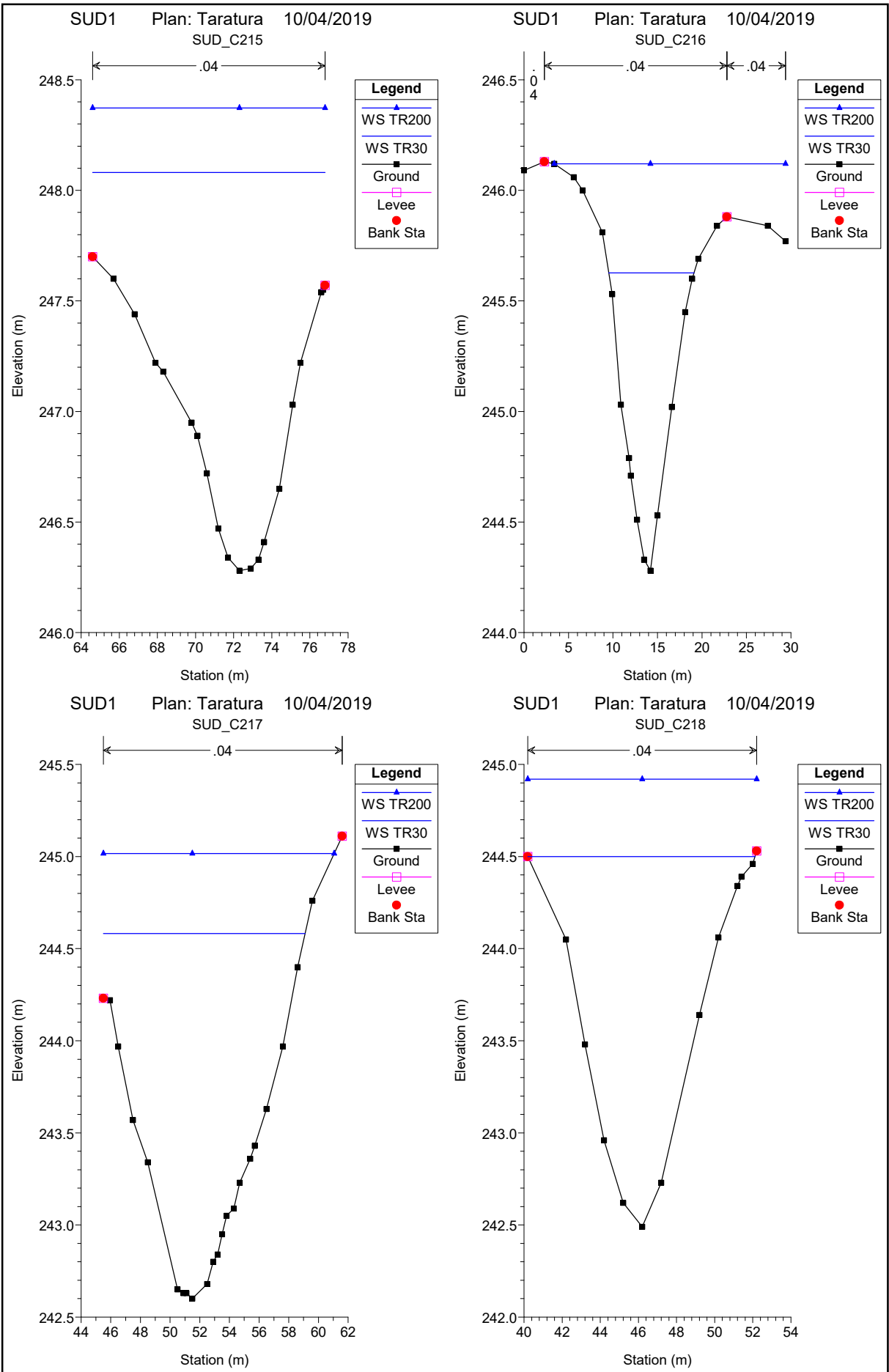


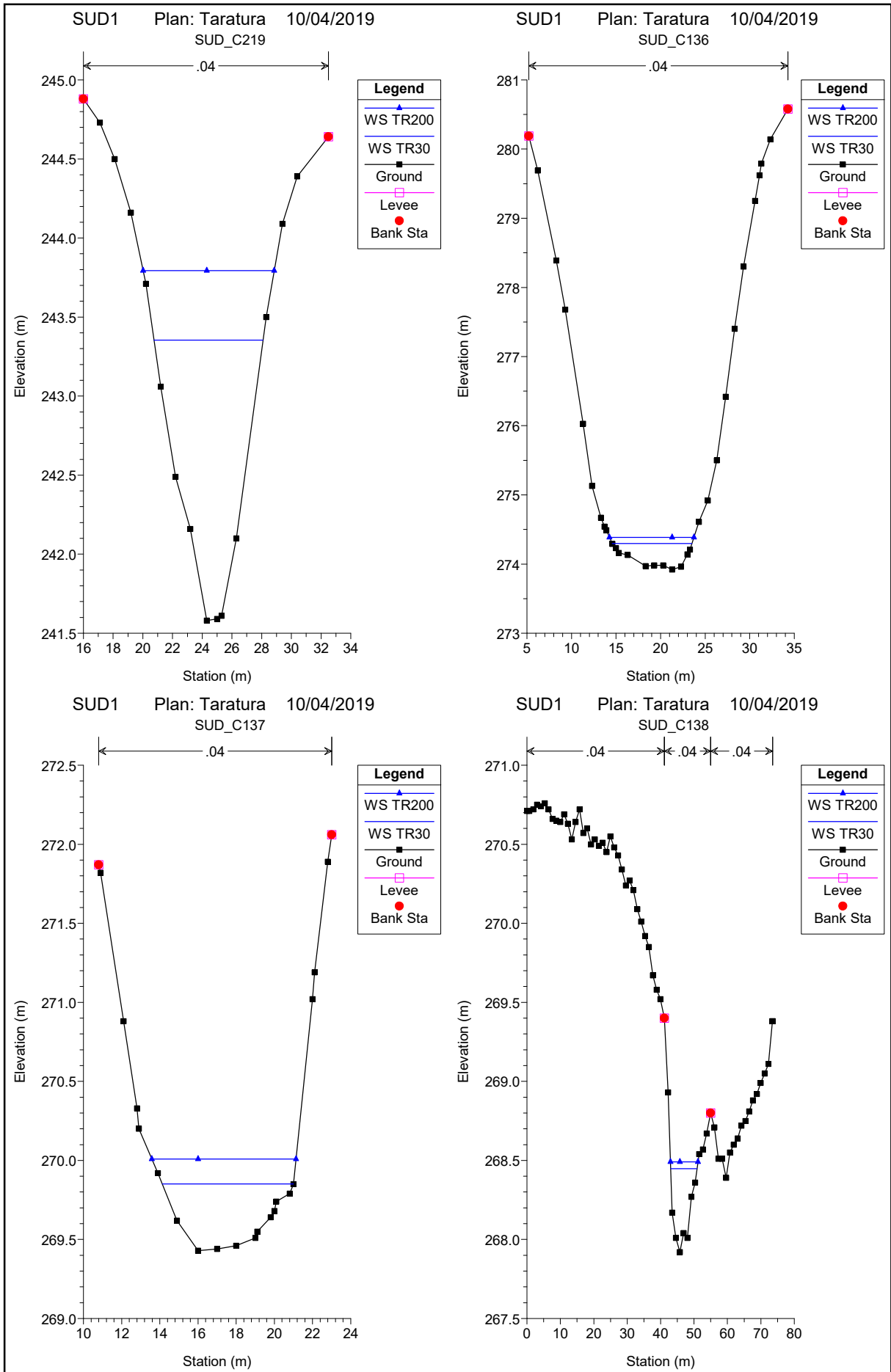


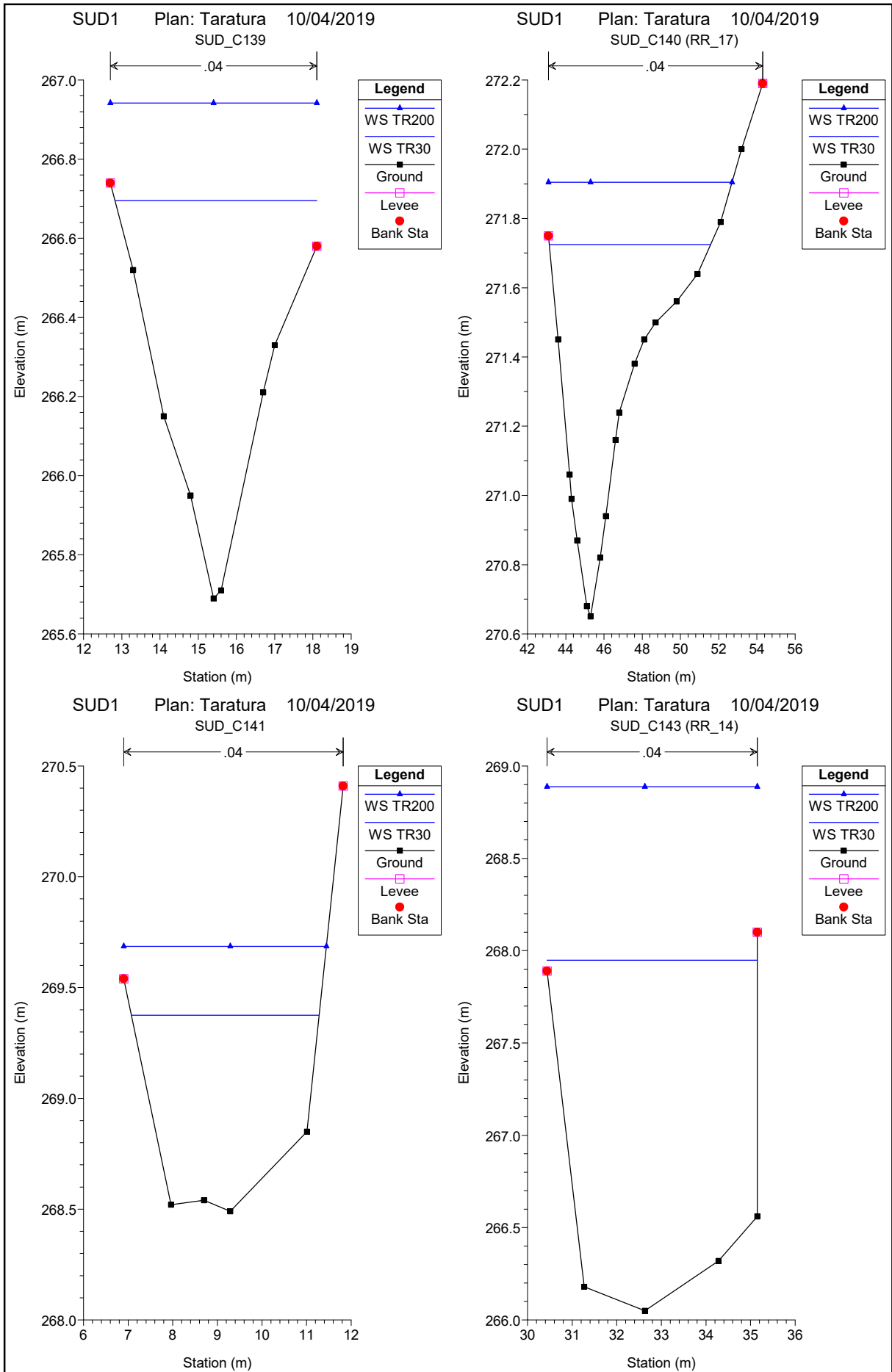




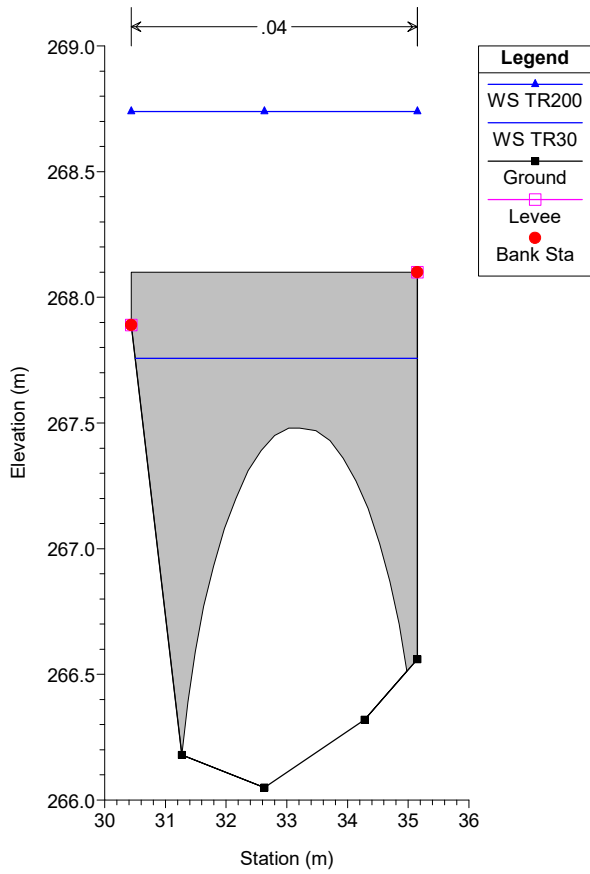




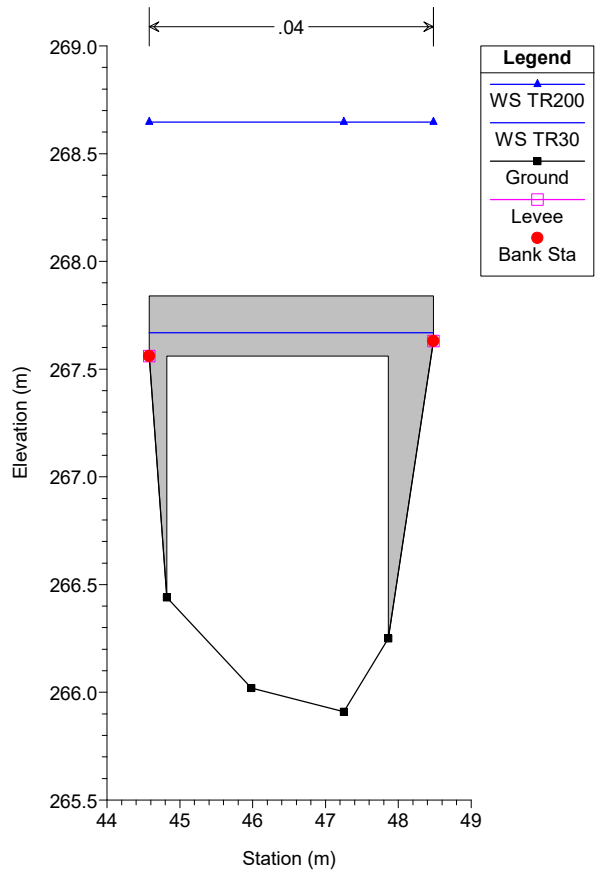




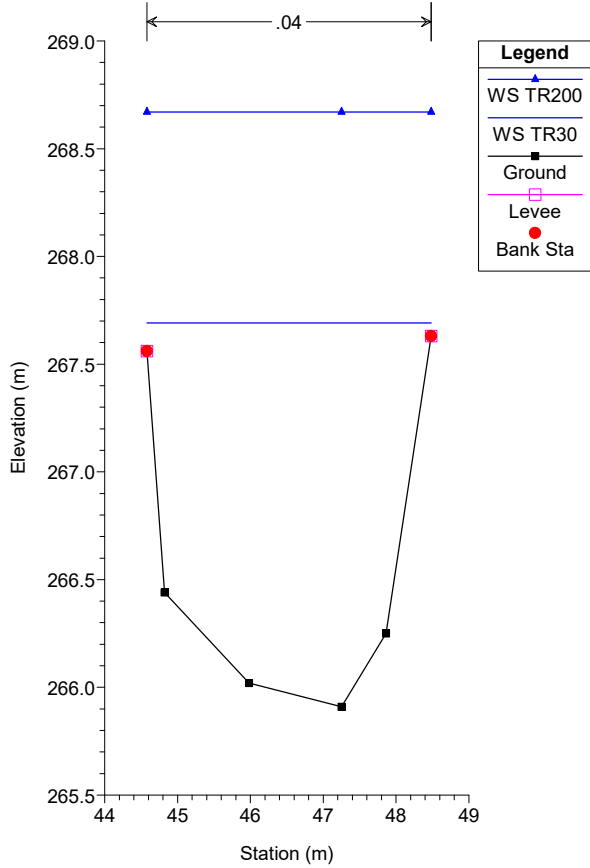
SUD1 Plan: Taratura 10/04/2019



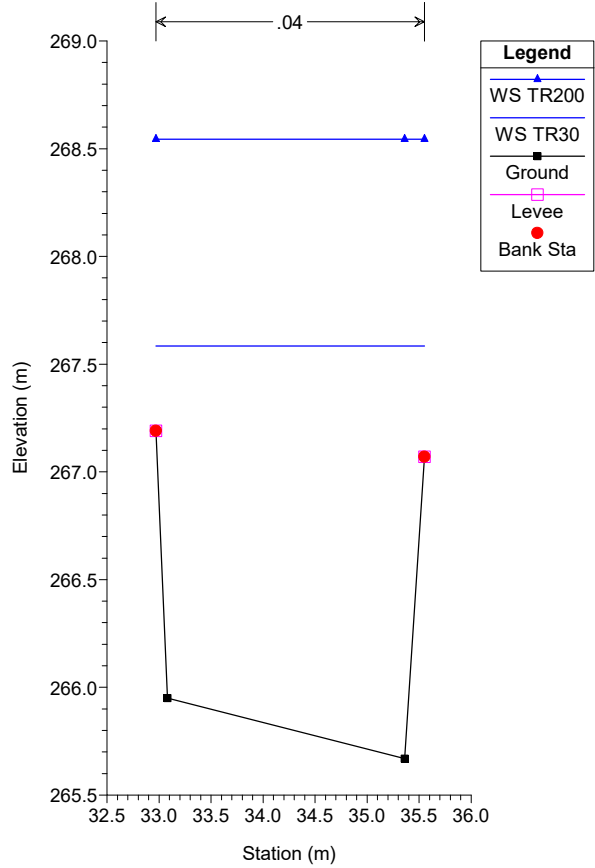
SUD1 Plan: Taratura 10/04/2019



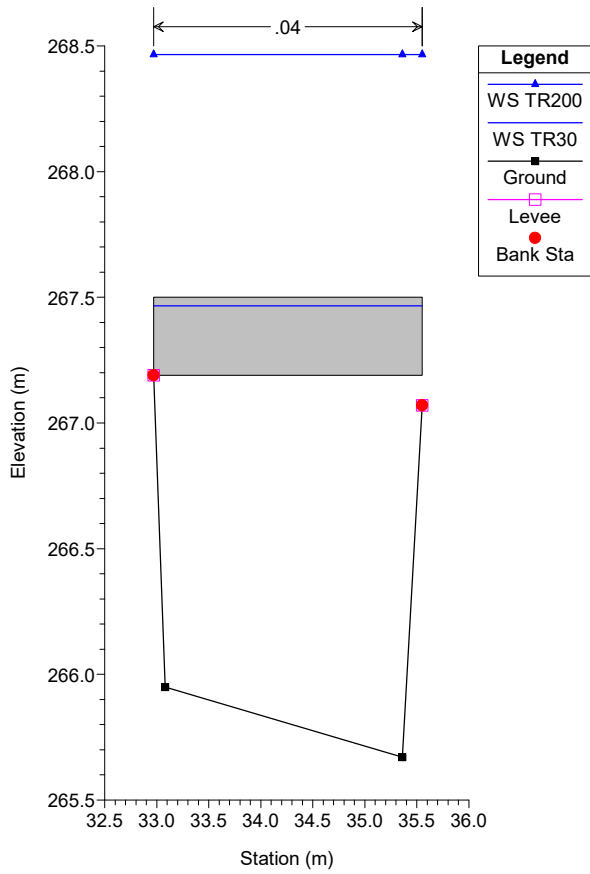
SUD1 Plan: Taratura 10/04/2019
SUD_C144 (RR_13)



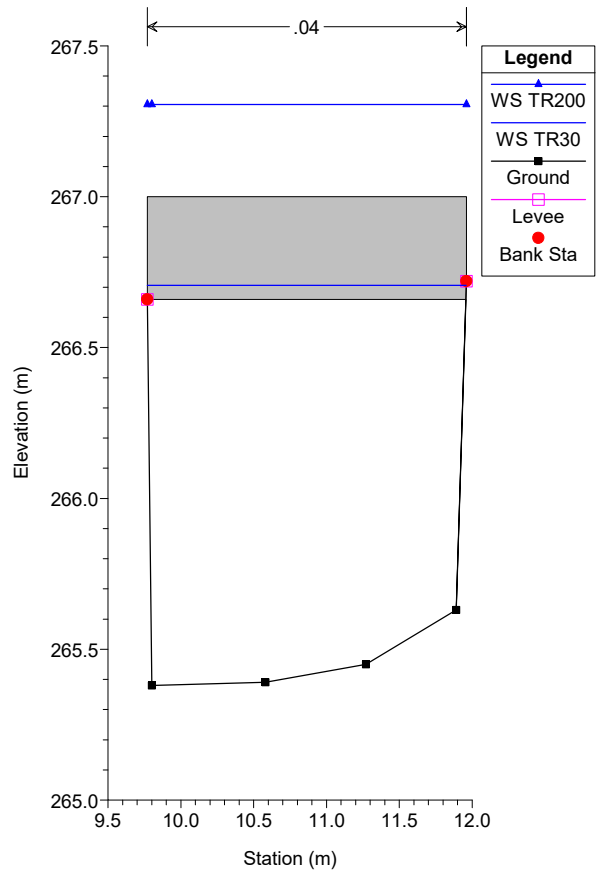
SUD1 Plan: Taratura 10/04/2019
SUD_C145 (RR_12)



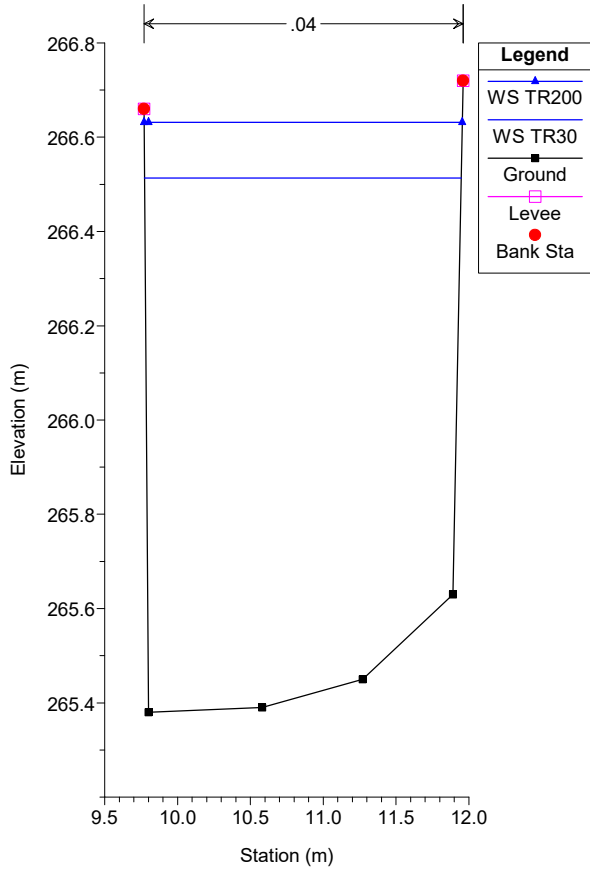
SUD1 Plan: Taratura 10/04/2019



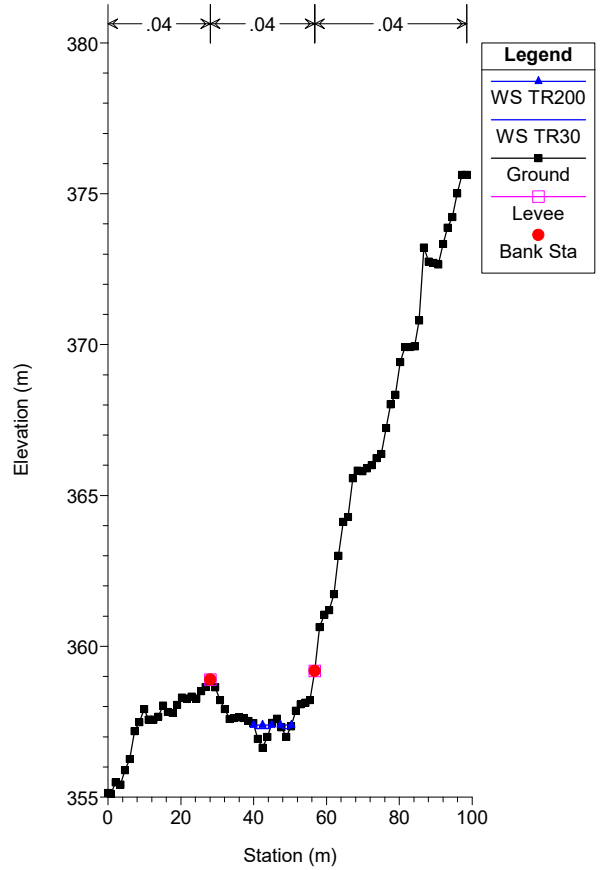
SUD1 Plan: Taratura 10/04/2019

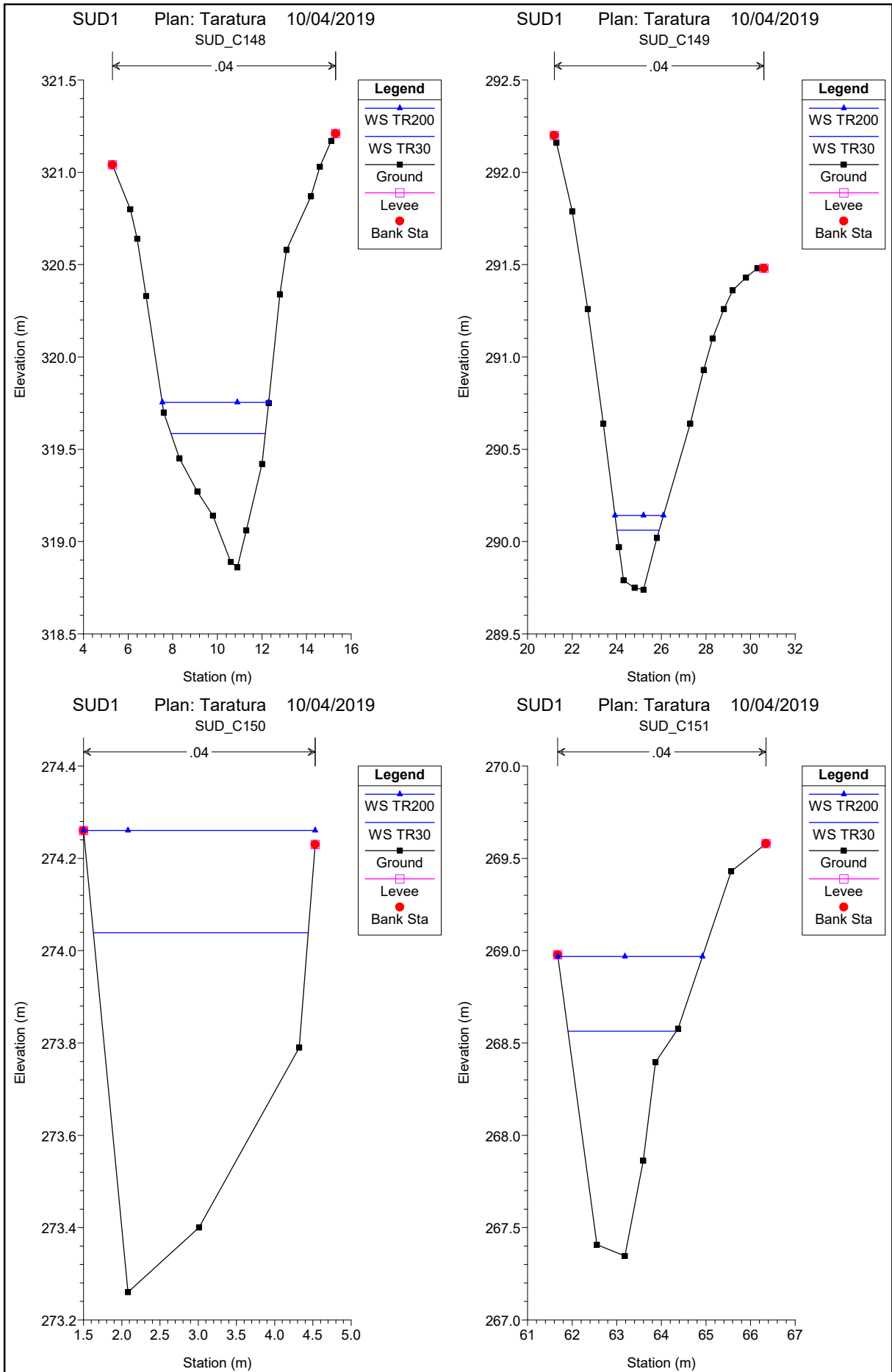


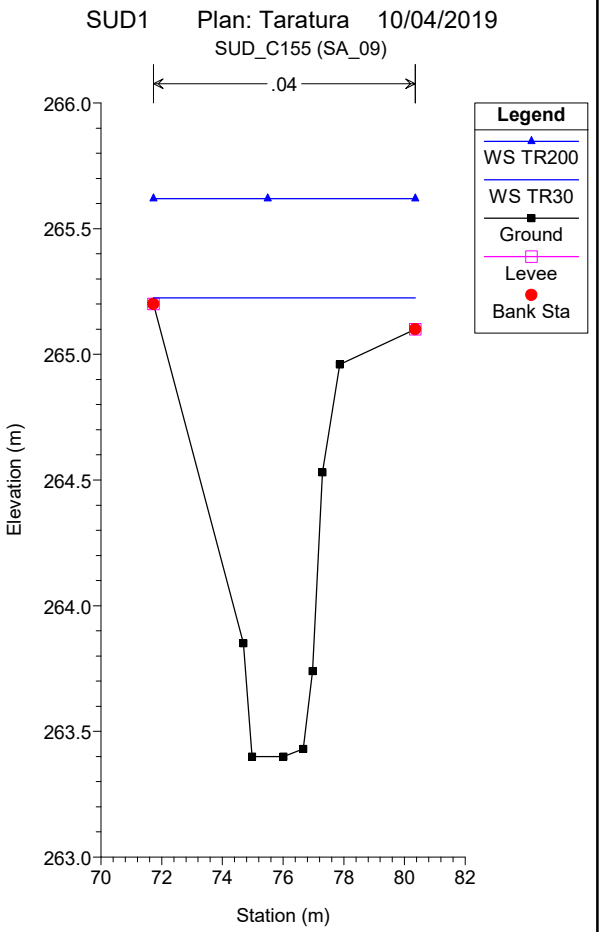
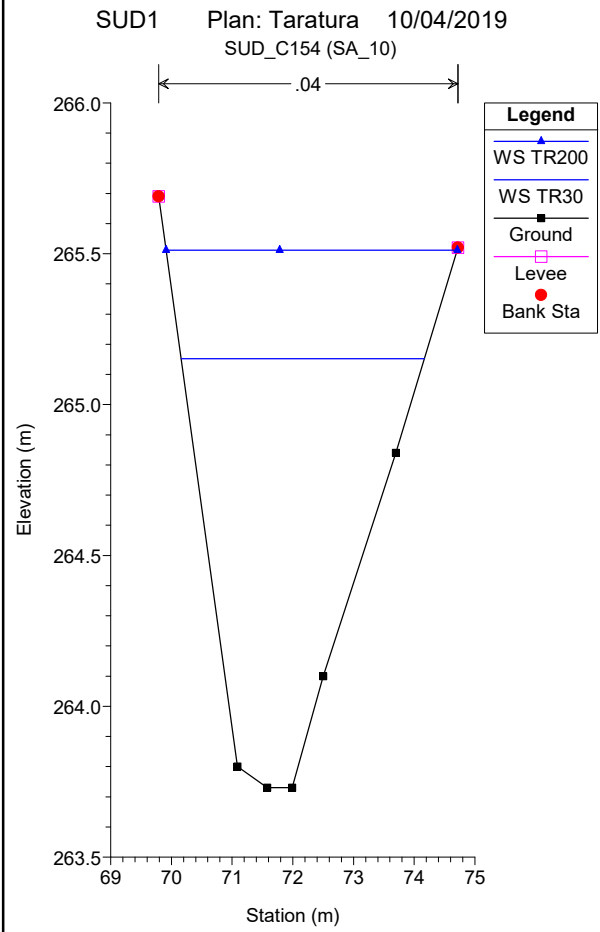
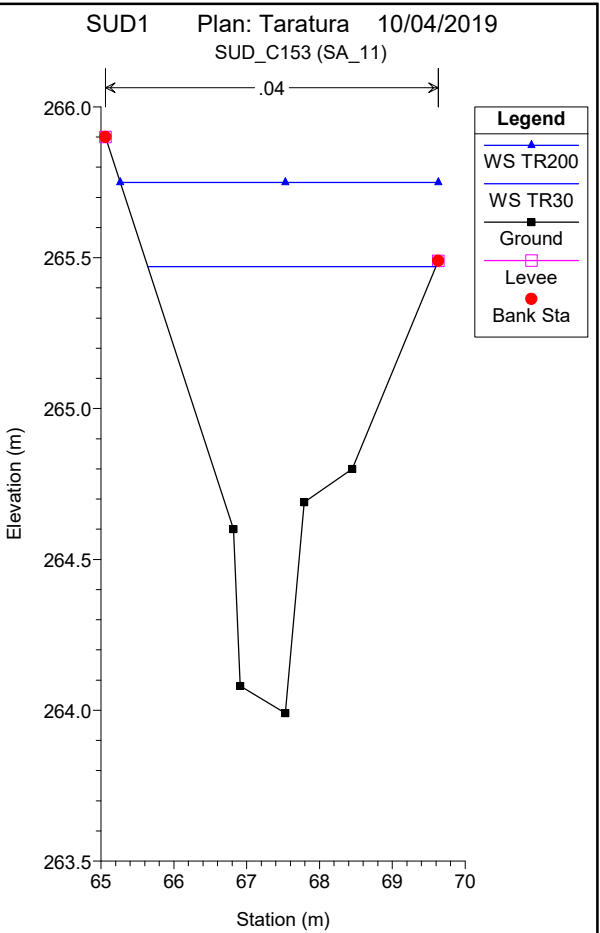
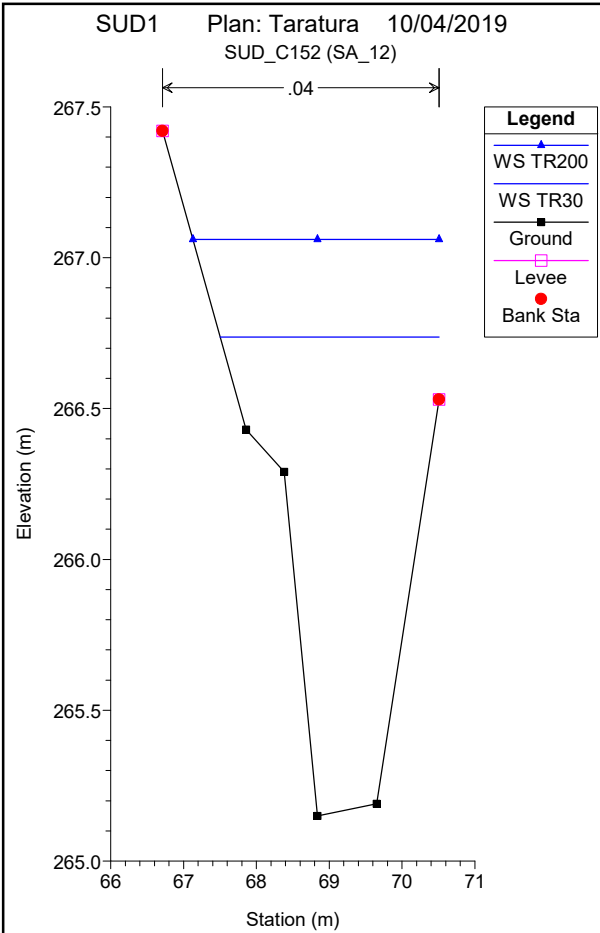
SUD1 Plan: Taratura 10/04/2019
SUD_C146 (RR_11)



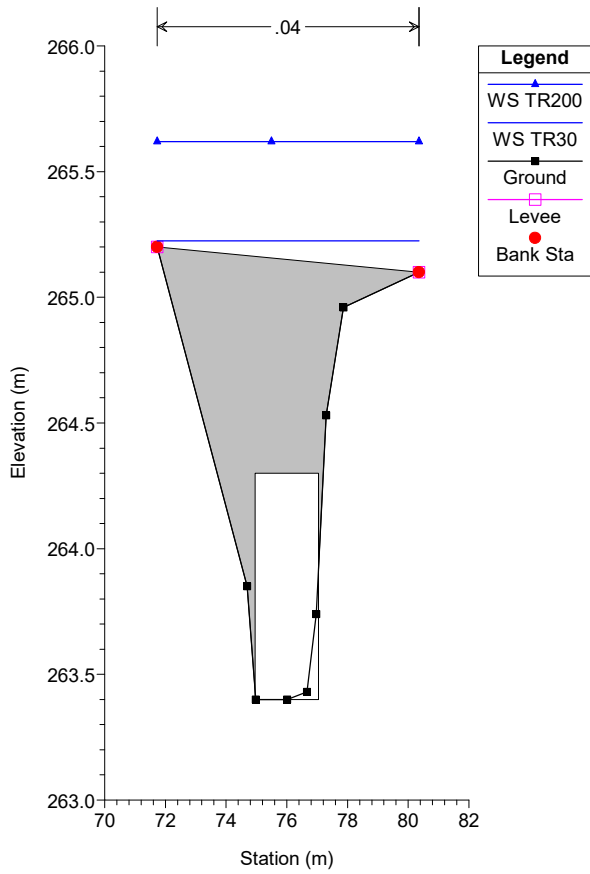
SUD1 Plan: Taratura 10/04/2019
SUD_C147



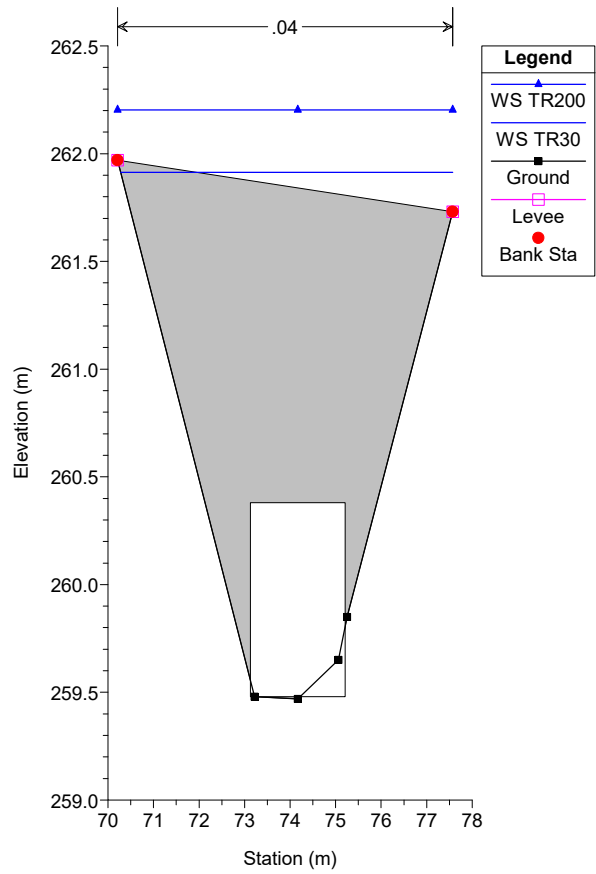




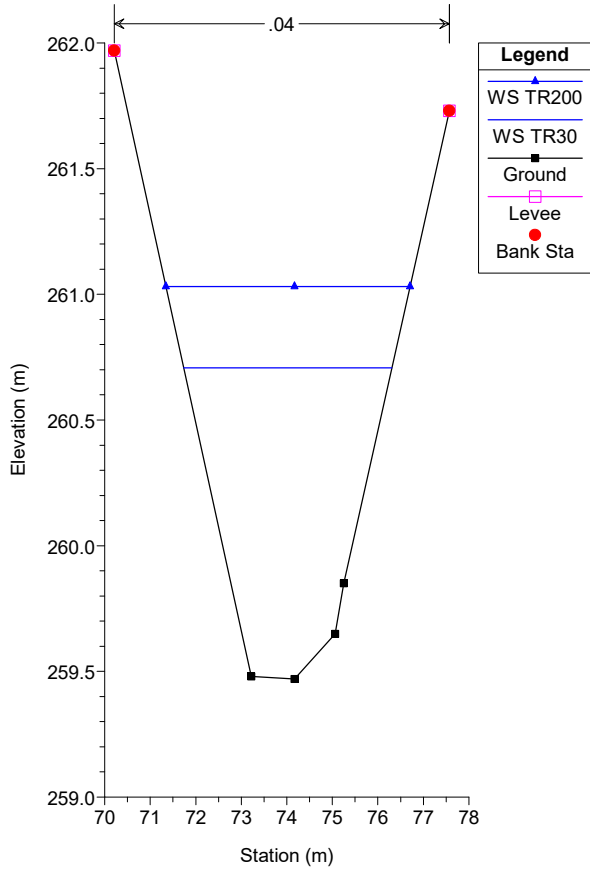
SUD1 Plan: Taratura 10/04/2019



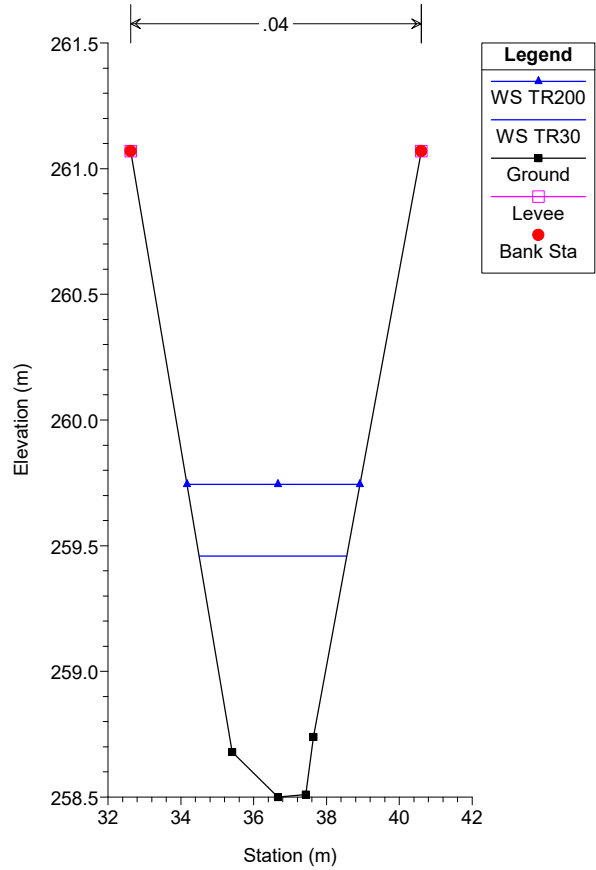
SUD1 Plan: Taratura 10/04/2019

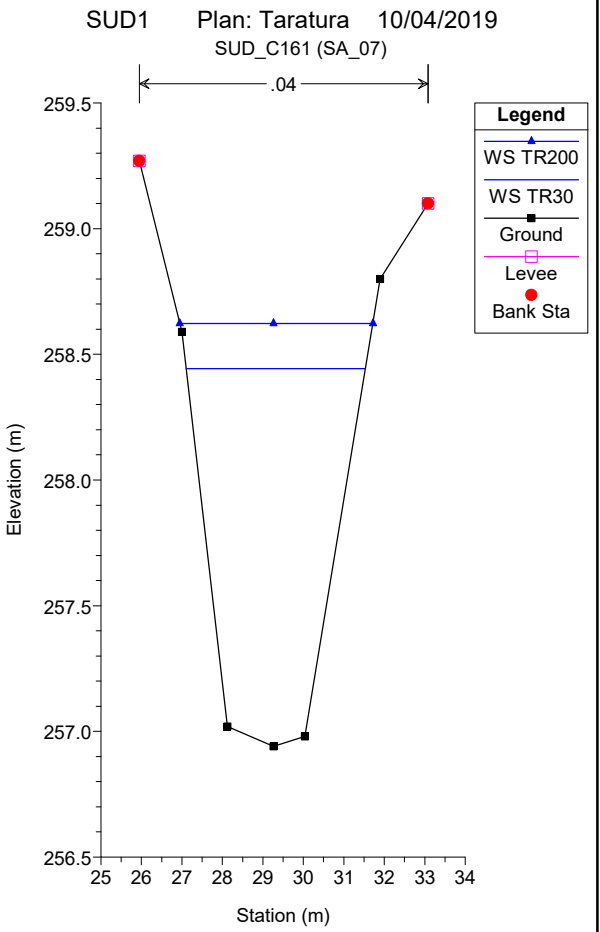
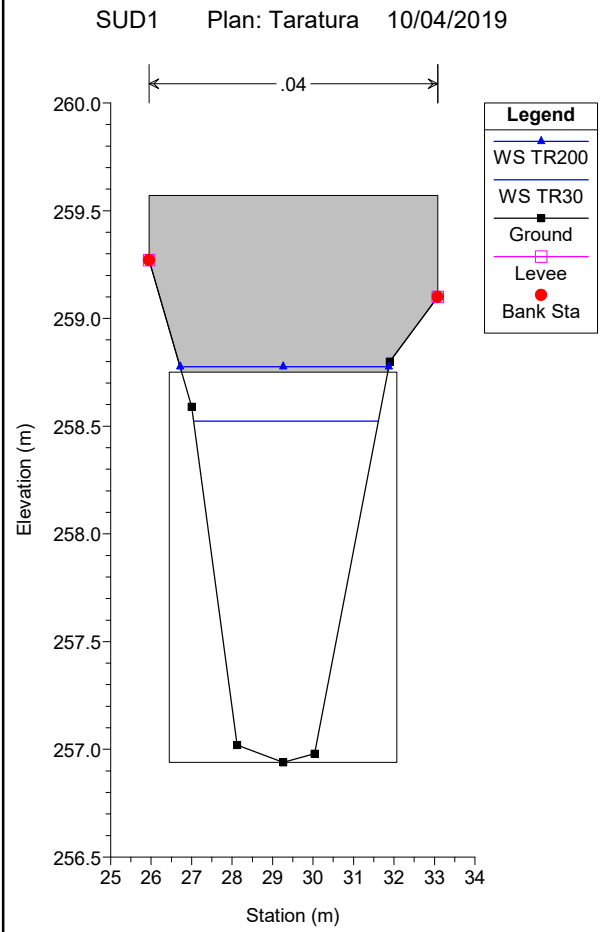
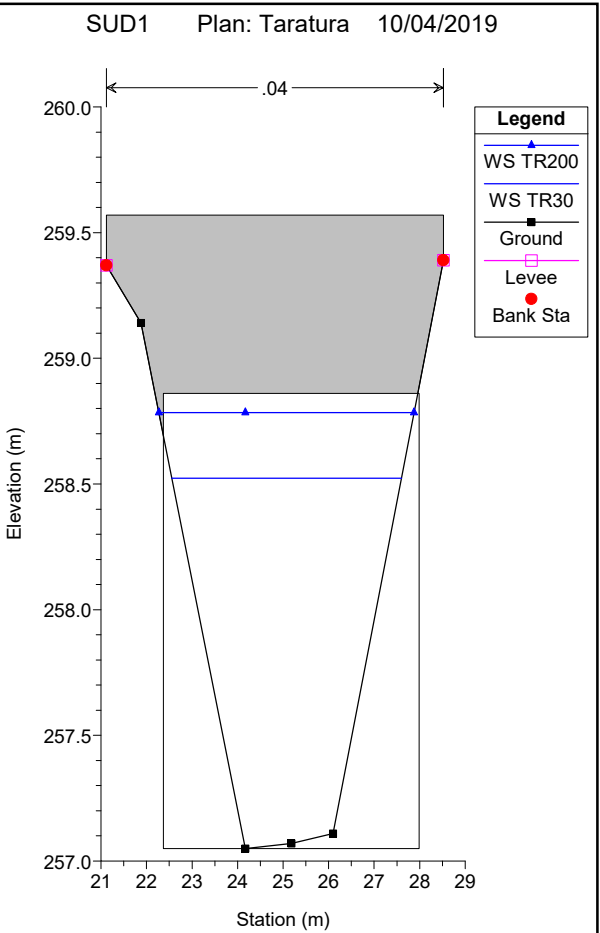
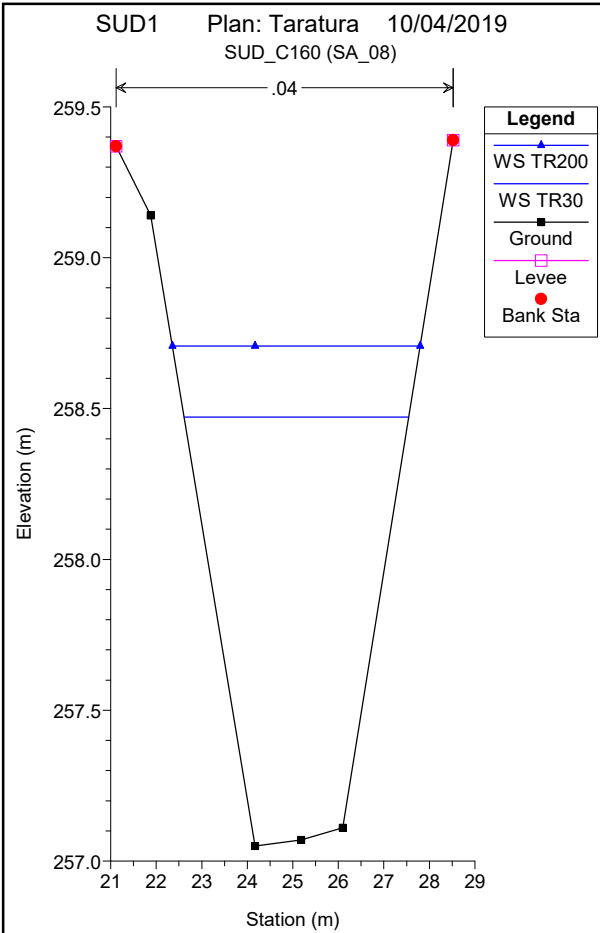


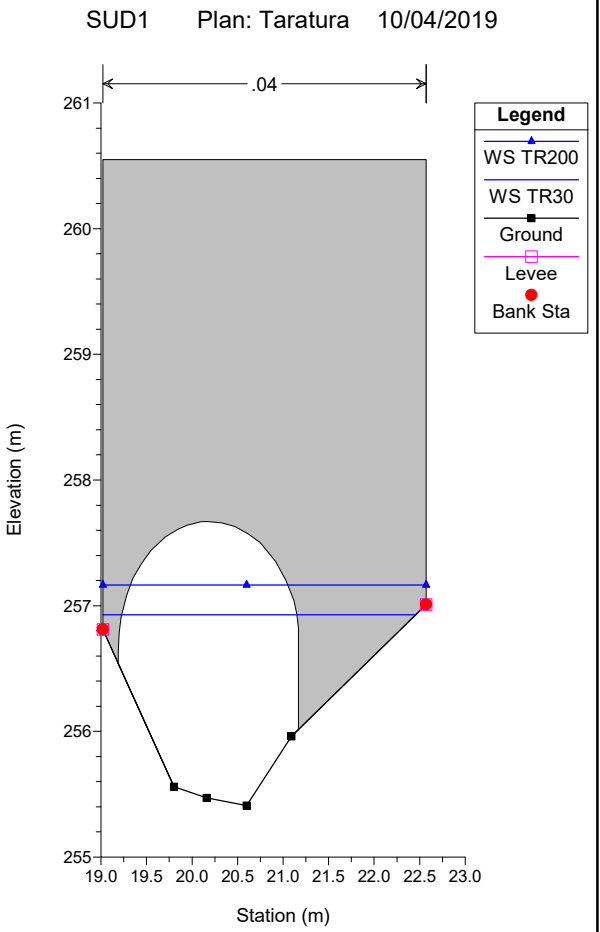
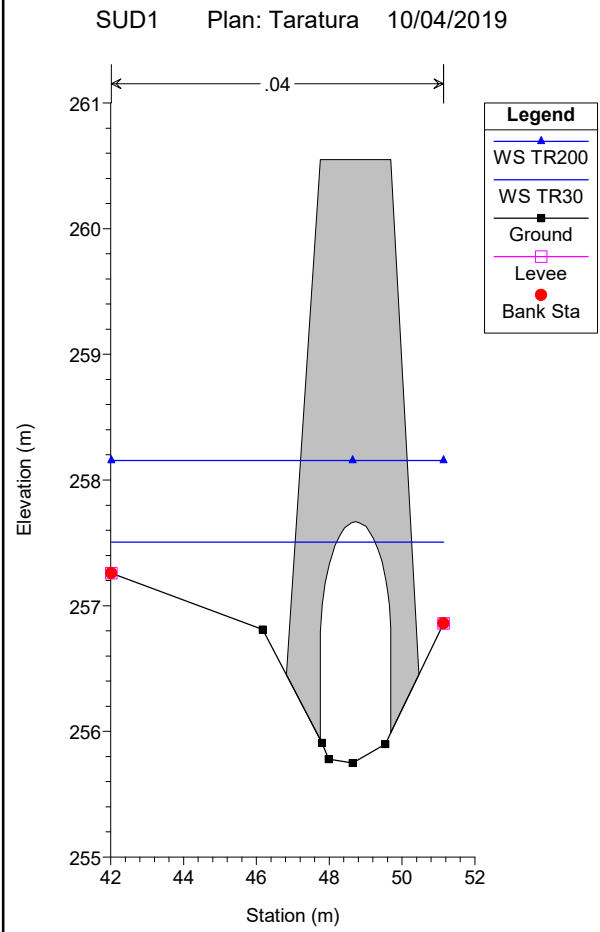
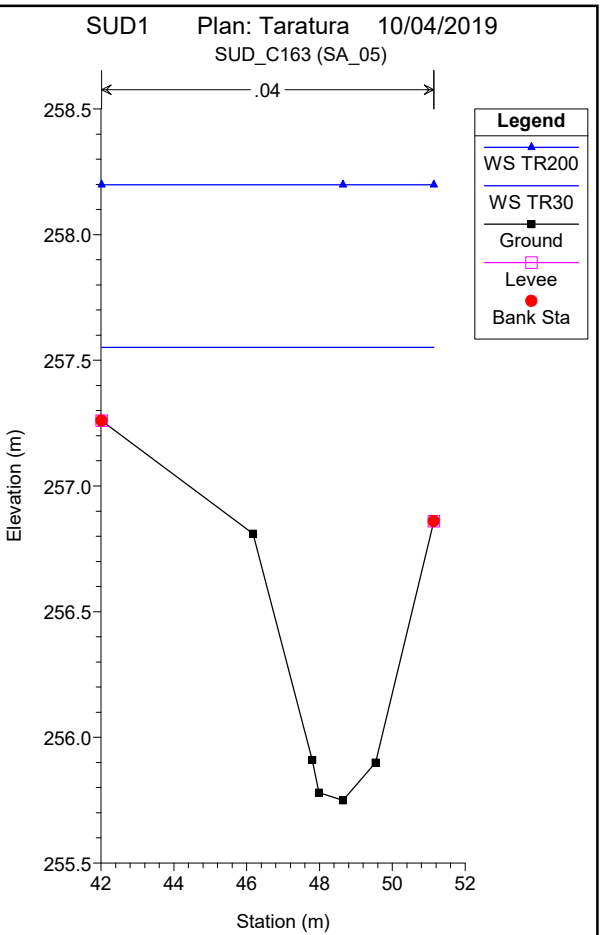
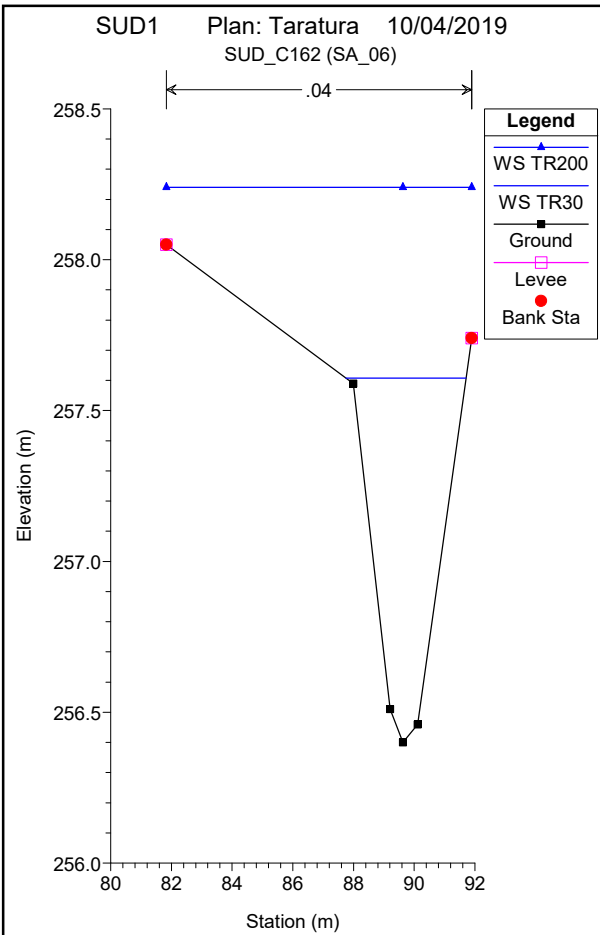
SUD1 Plan: Taratura 10/04/2019
SUD_C158 (SA_08C)

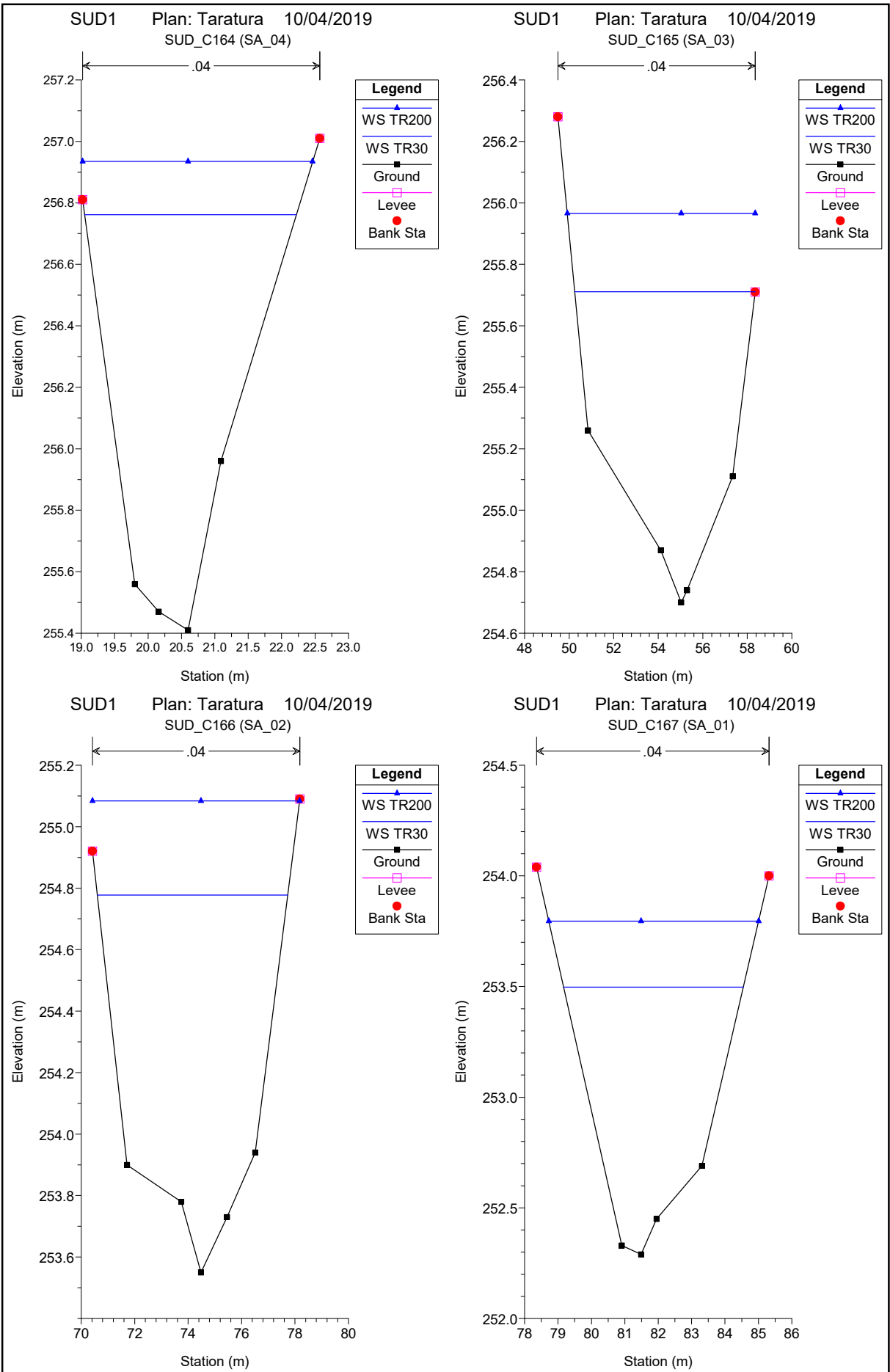


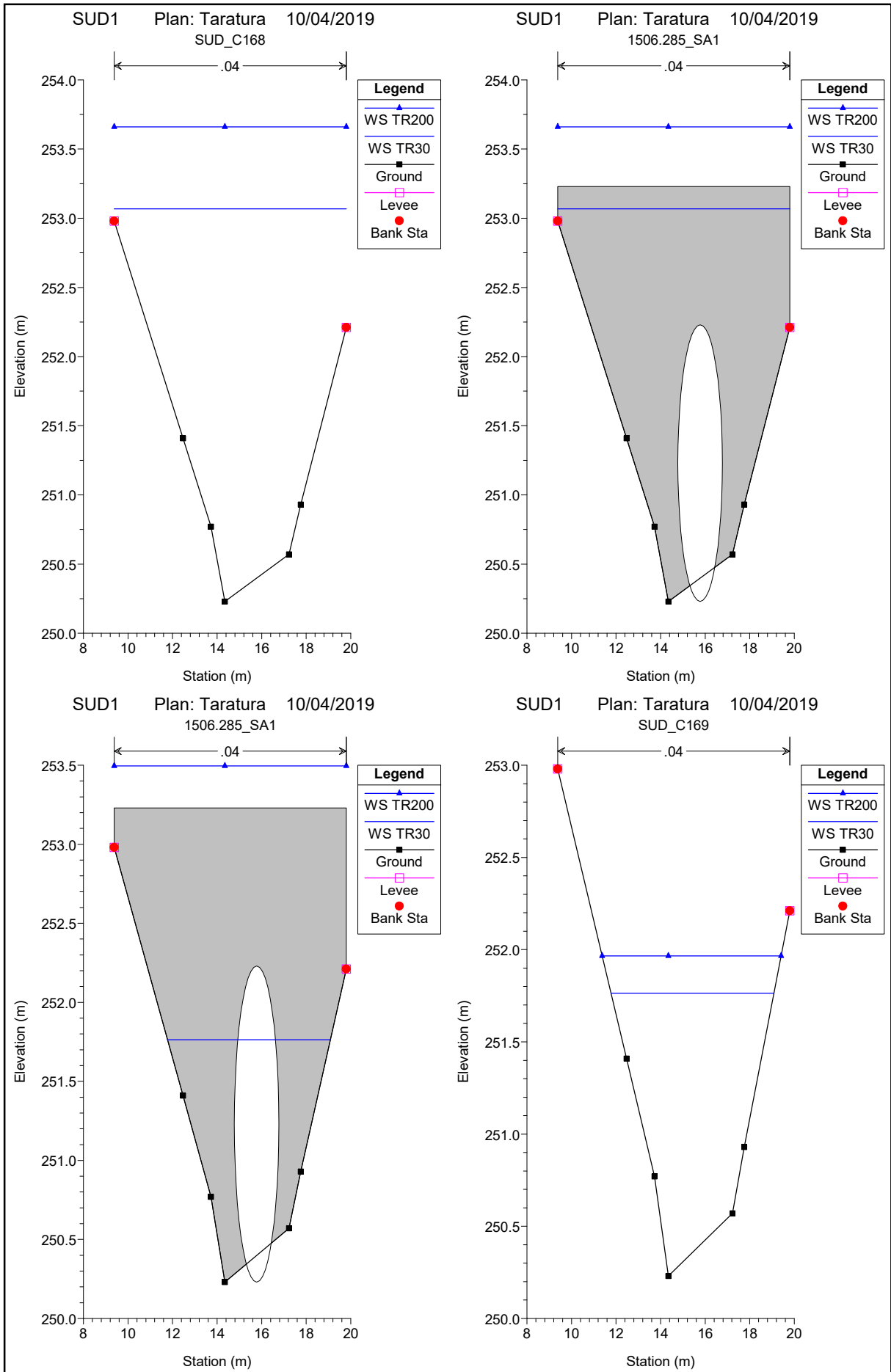
SUD1 Plan: Taratura 10/04/2019
SUD_C159 (SA_08B)

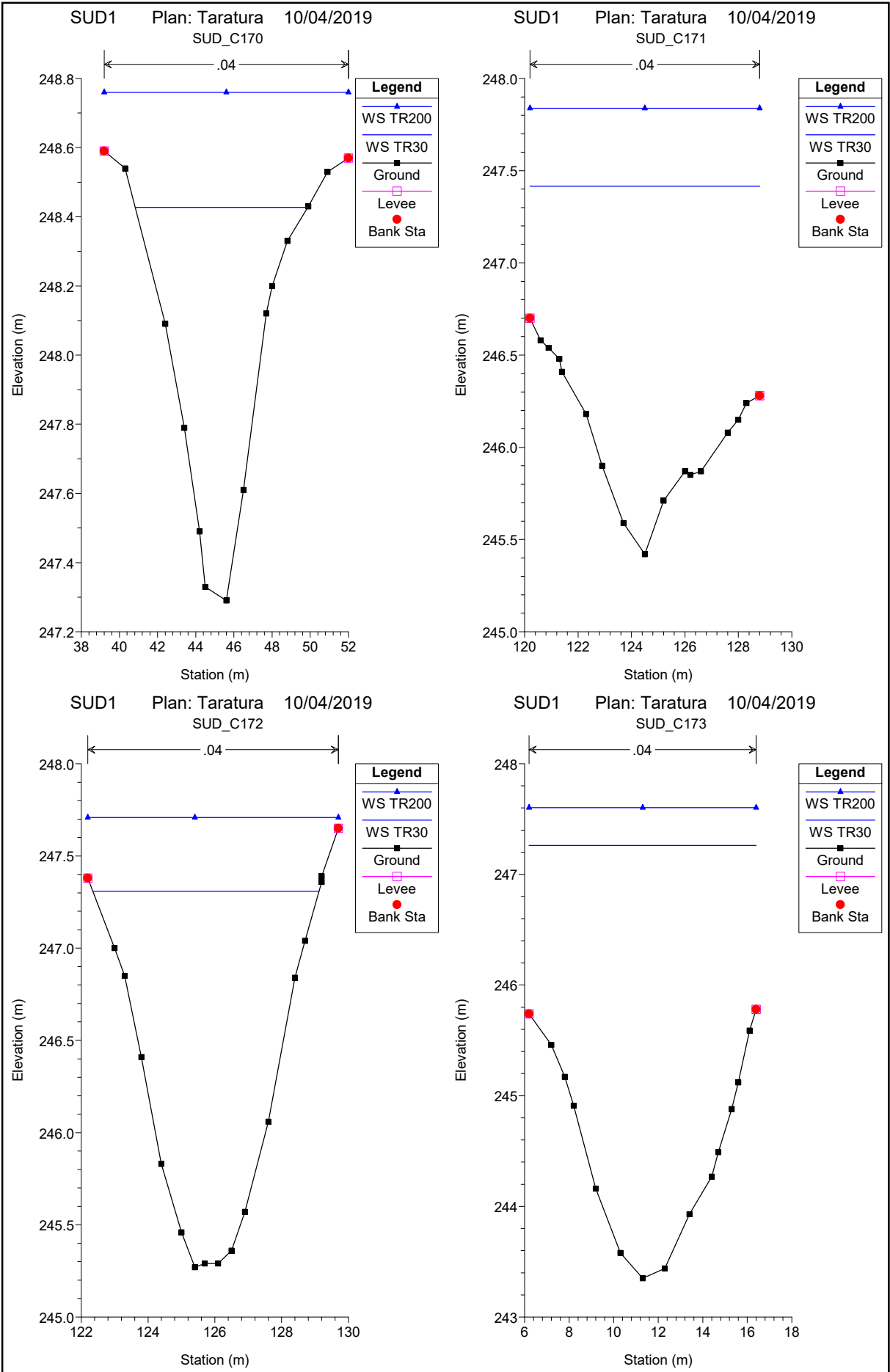


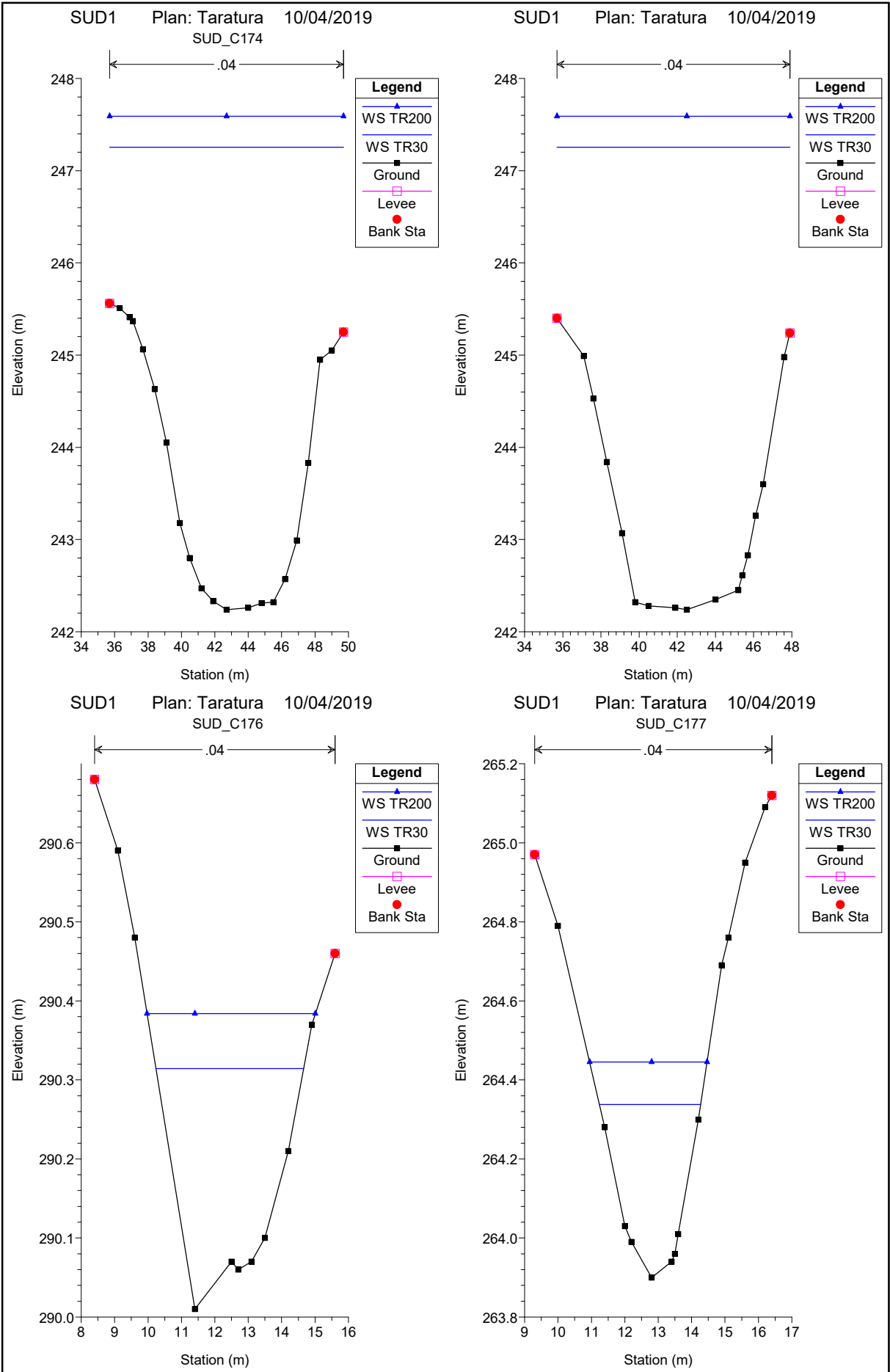


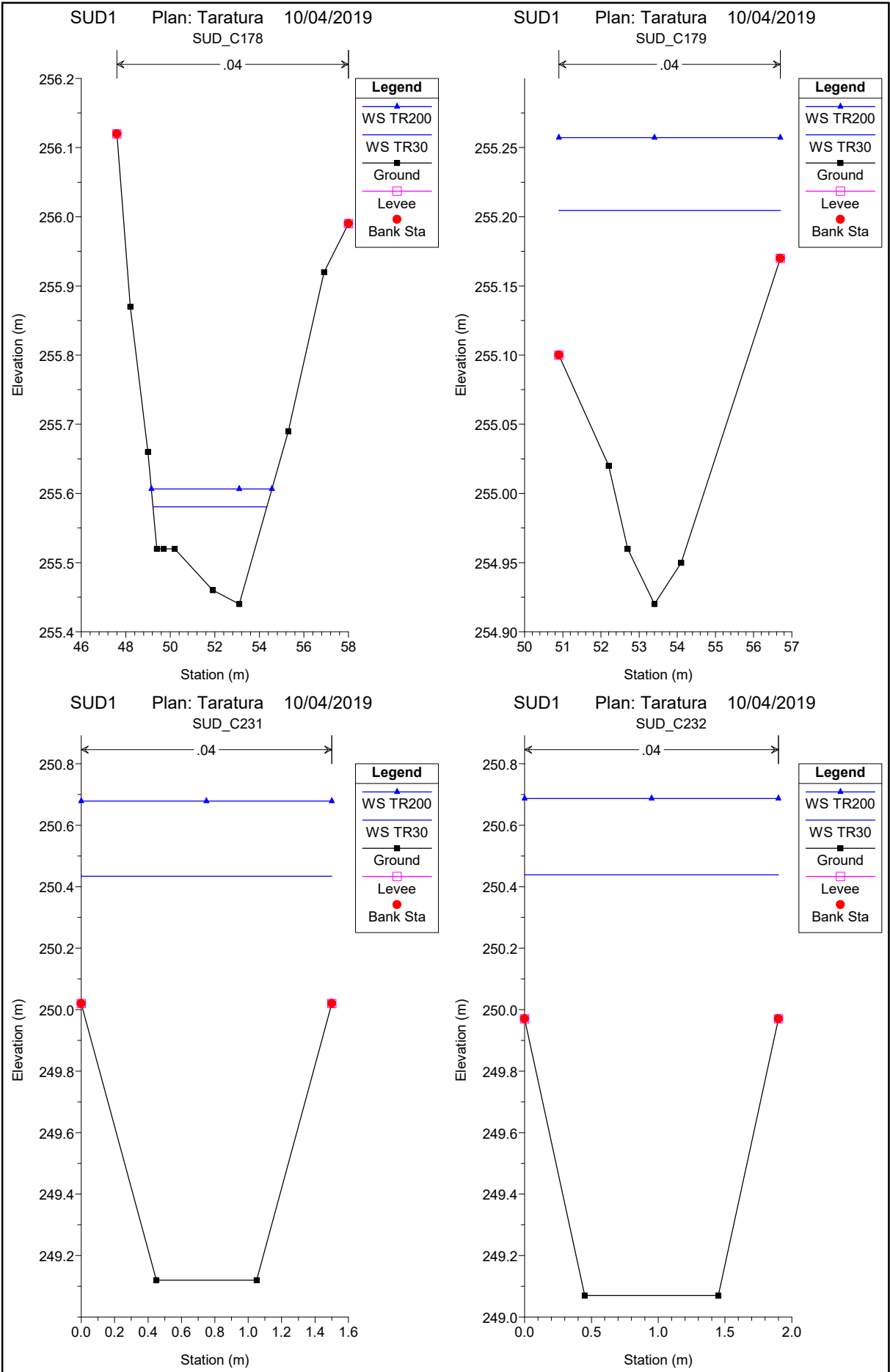




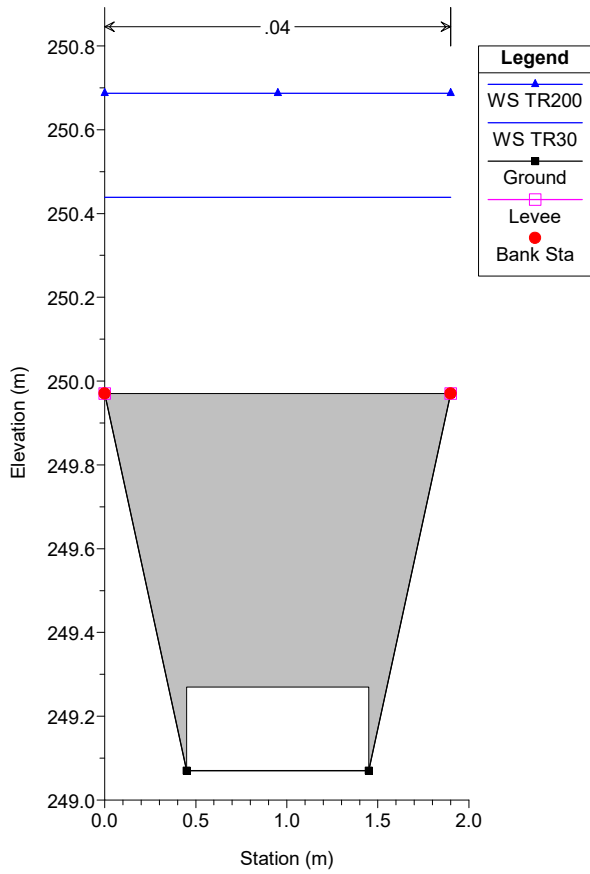




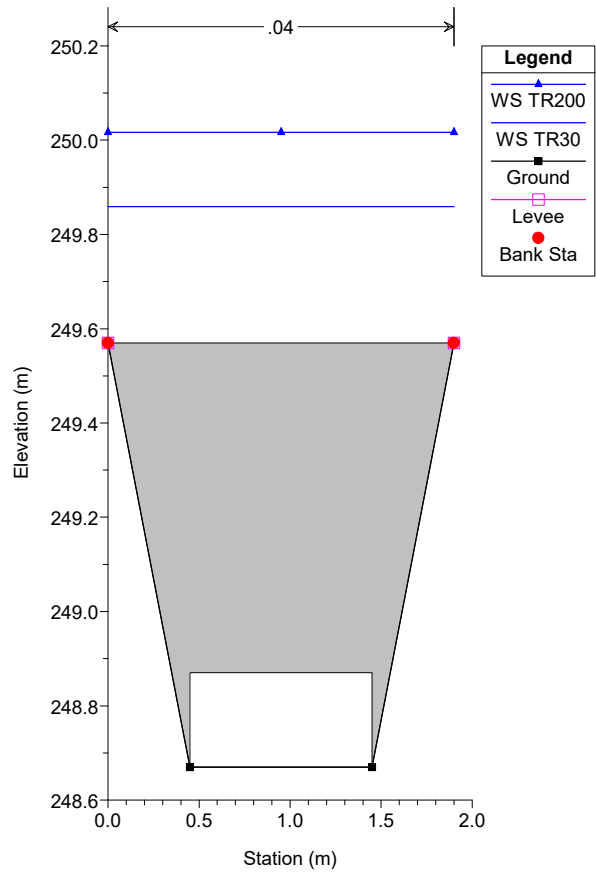




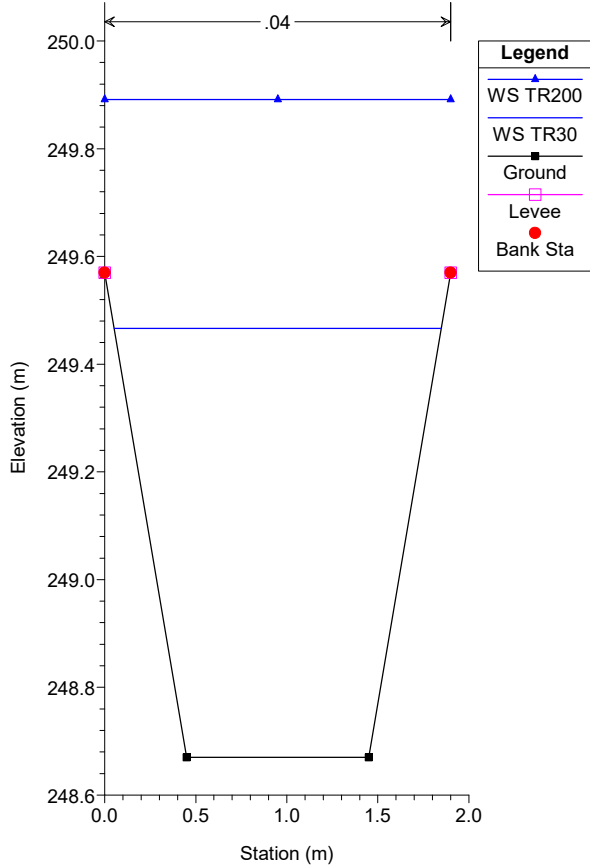
SUD1 Plan: Taratura 10/04/2019



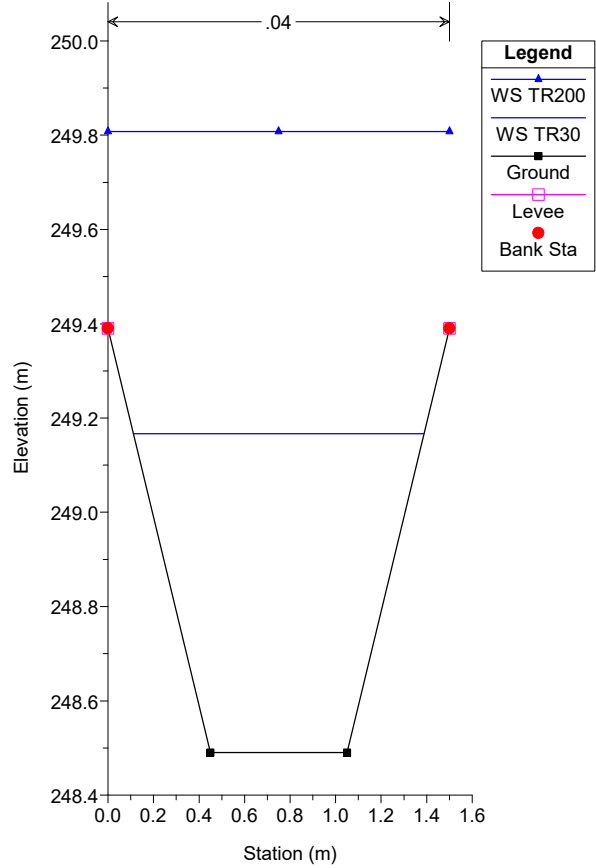
SUD1 Plan: Taratura 10/04/2019

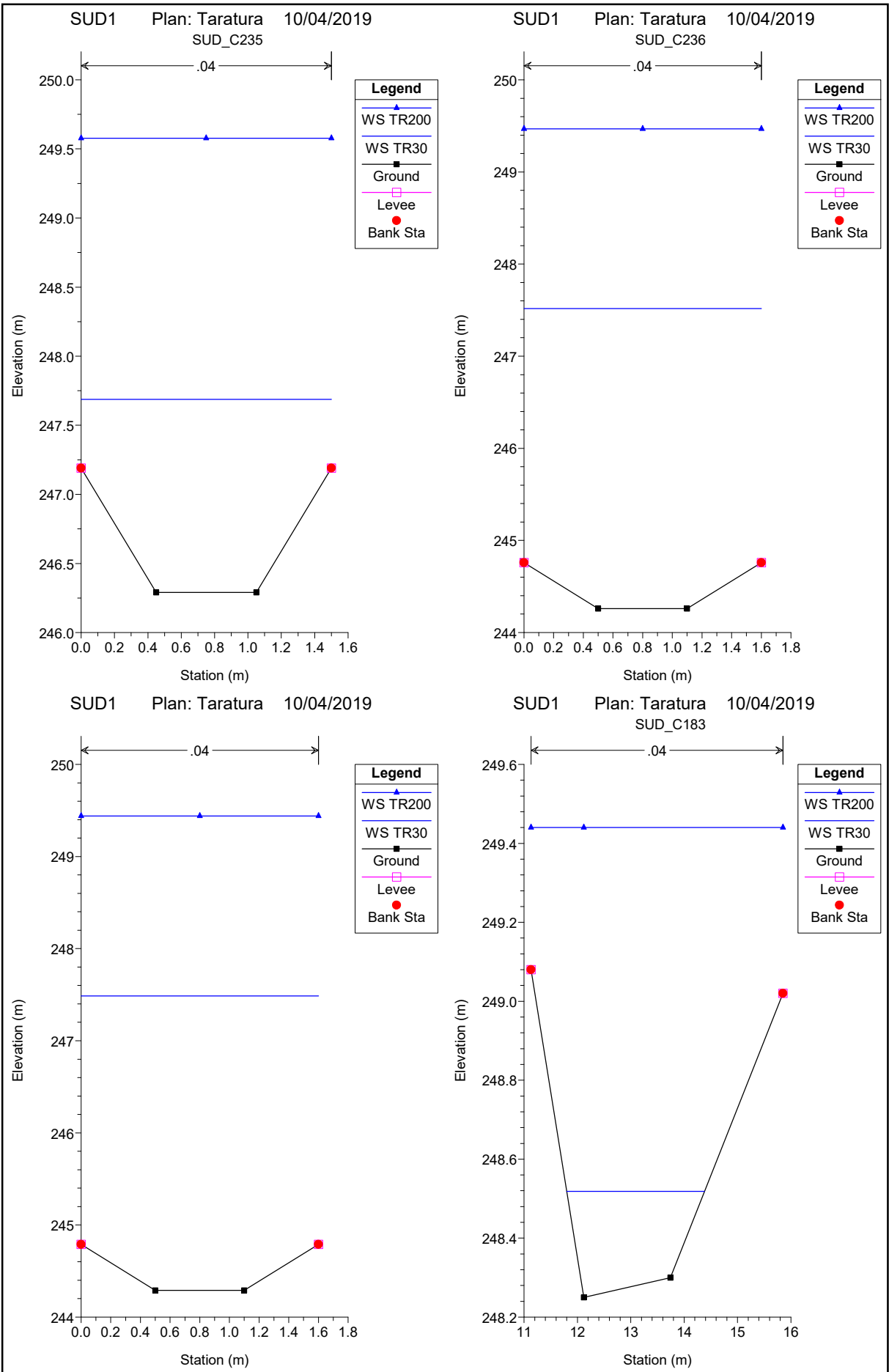


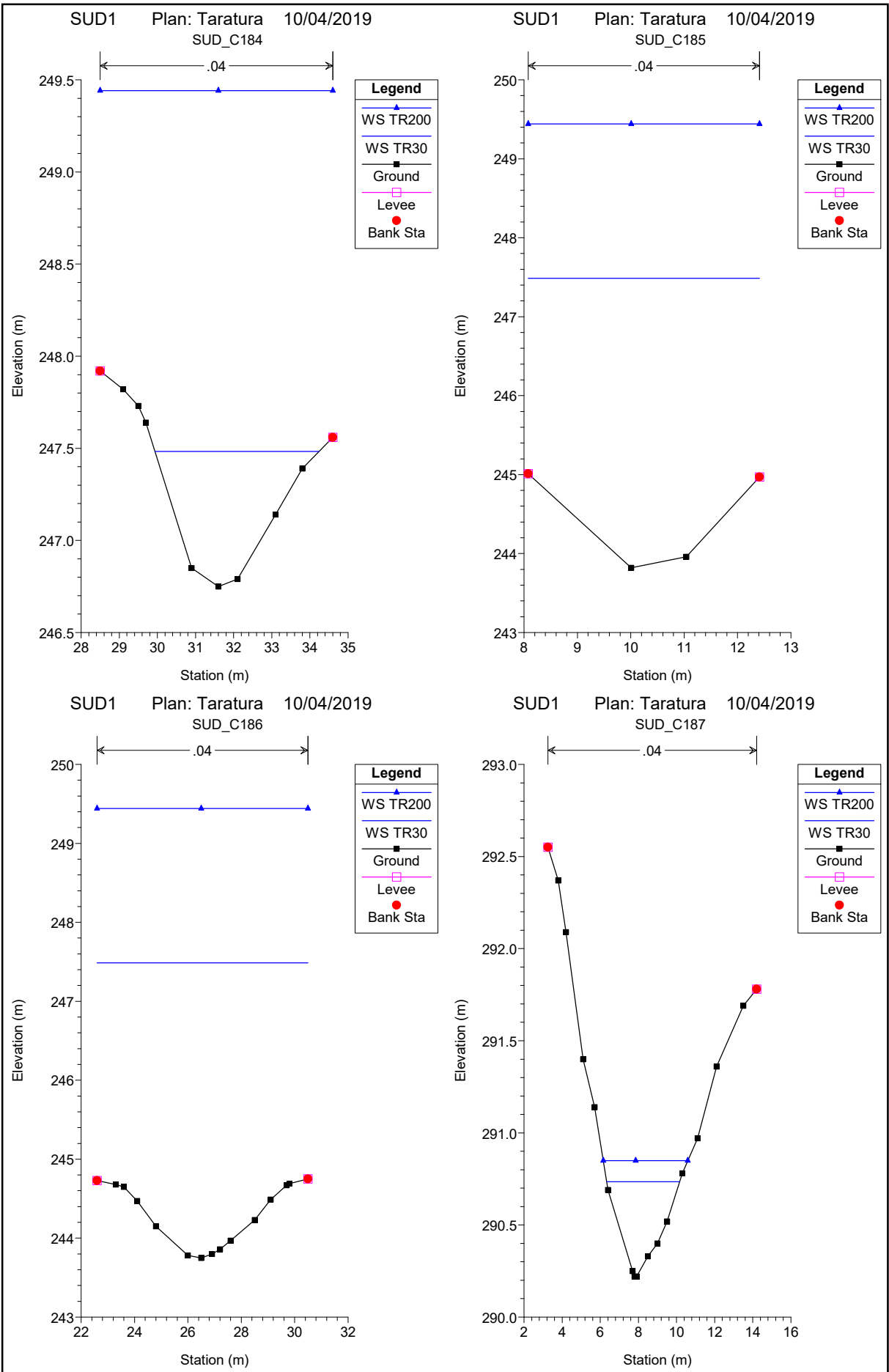
SUD1 Plan: Taratura 10/04/2019
SUD_C233

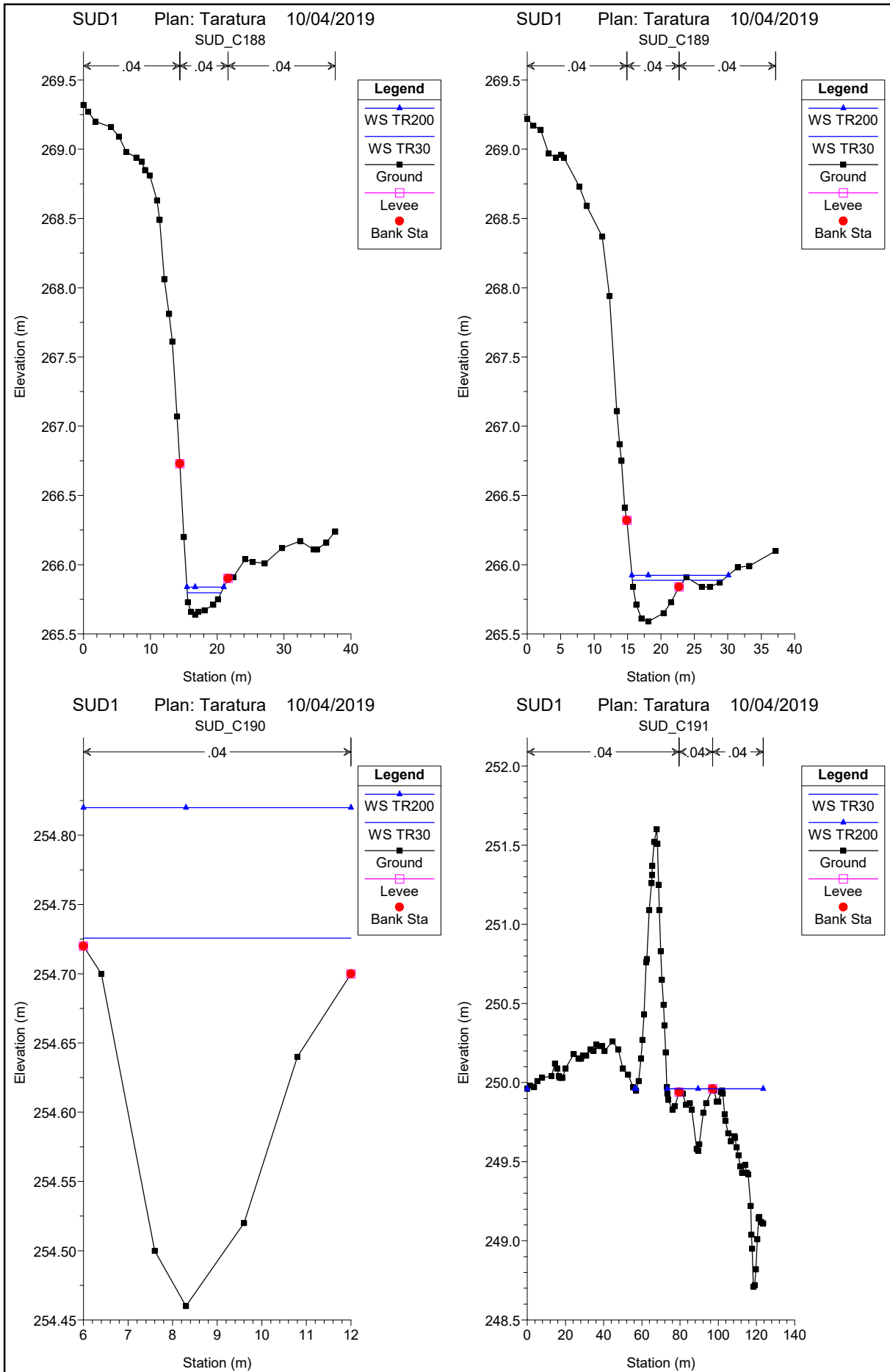


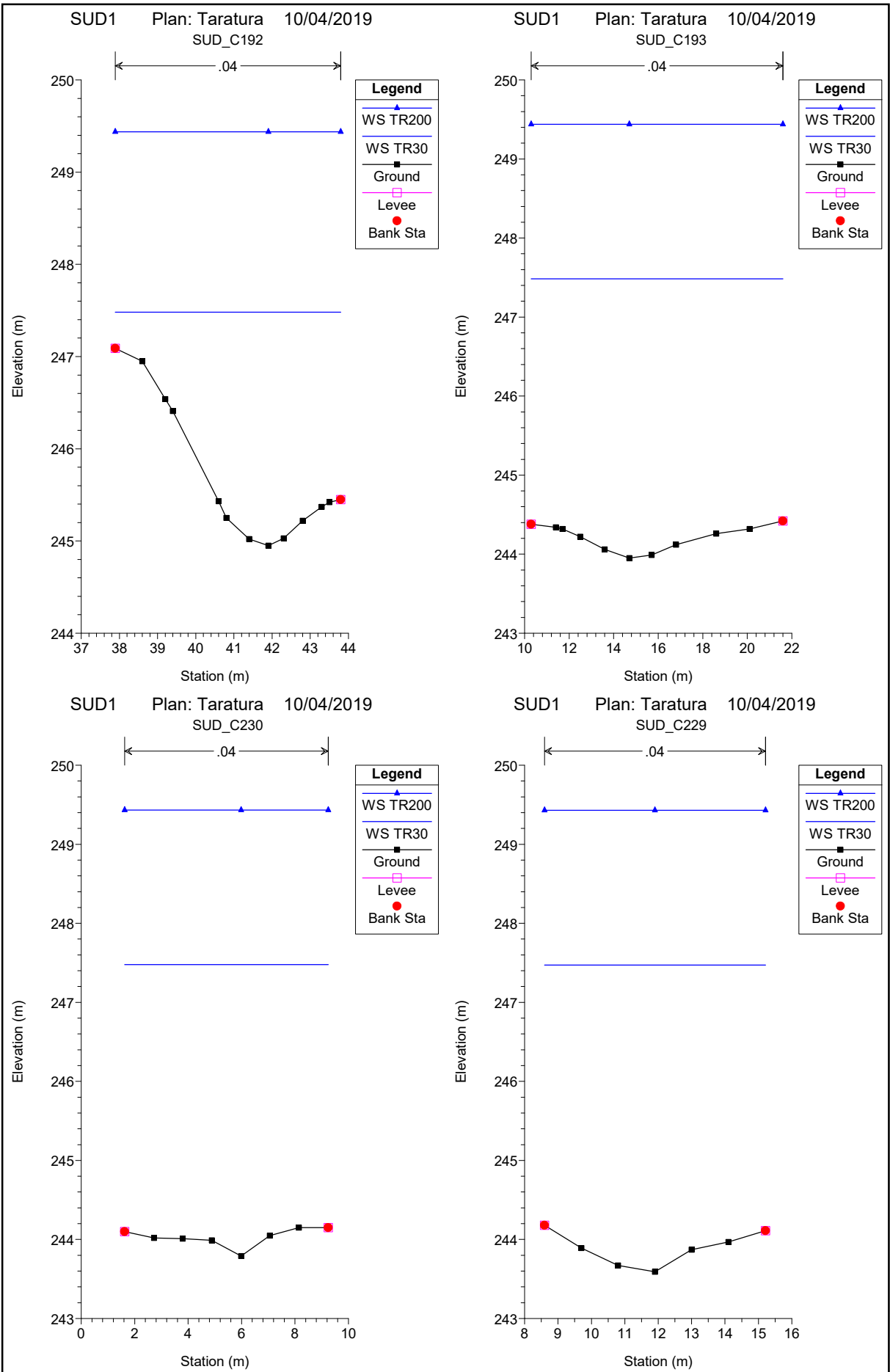
SUD1 Plan: Taratura 10/04/2019
SUD_C234

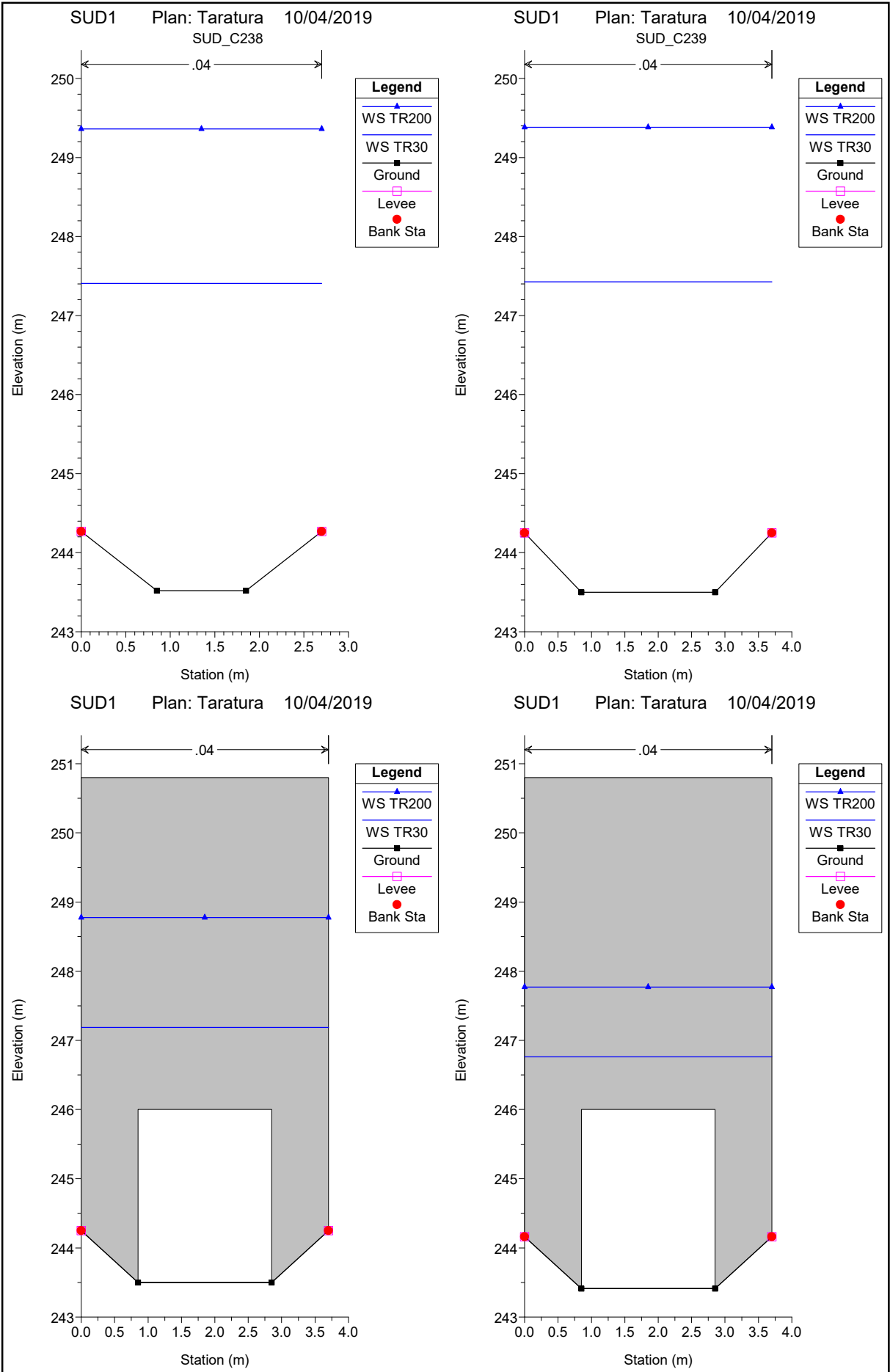


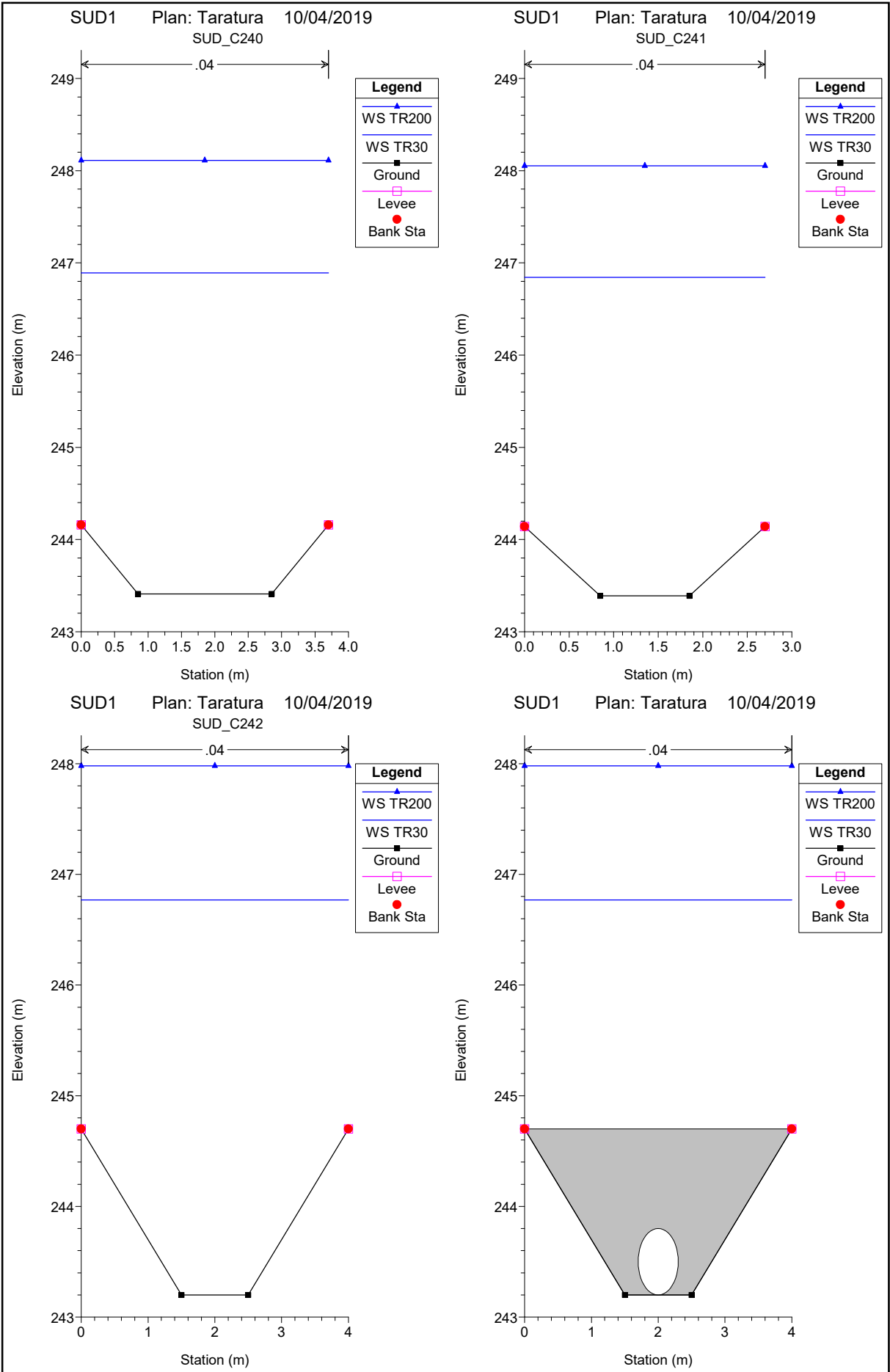




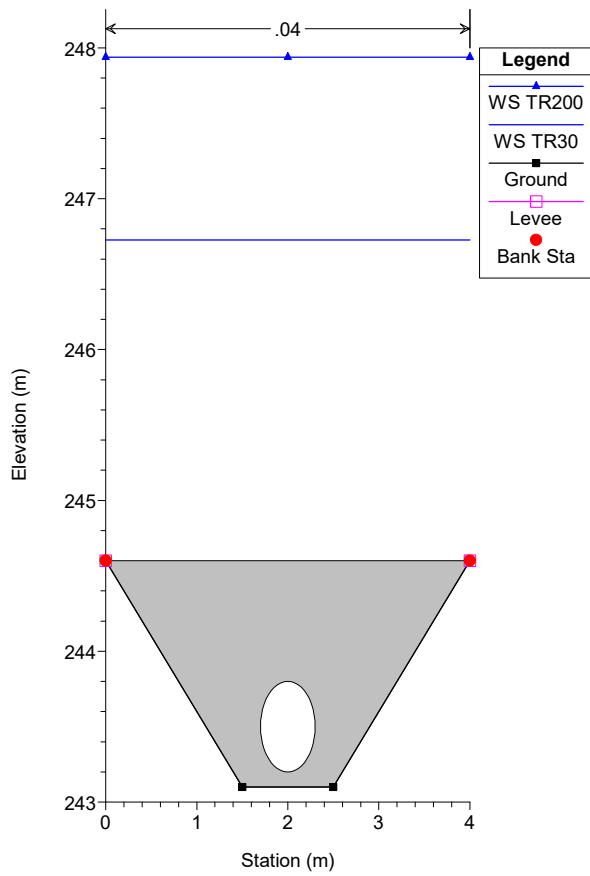




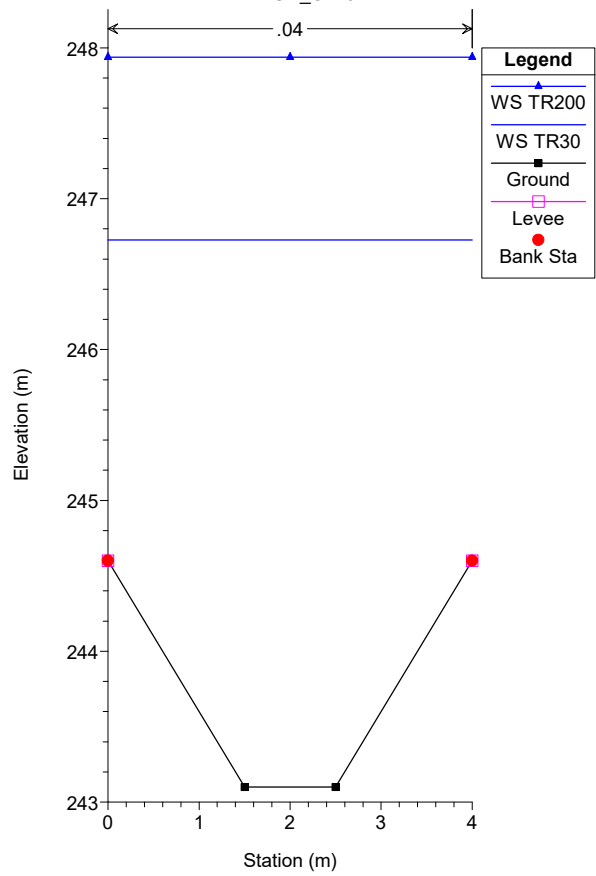




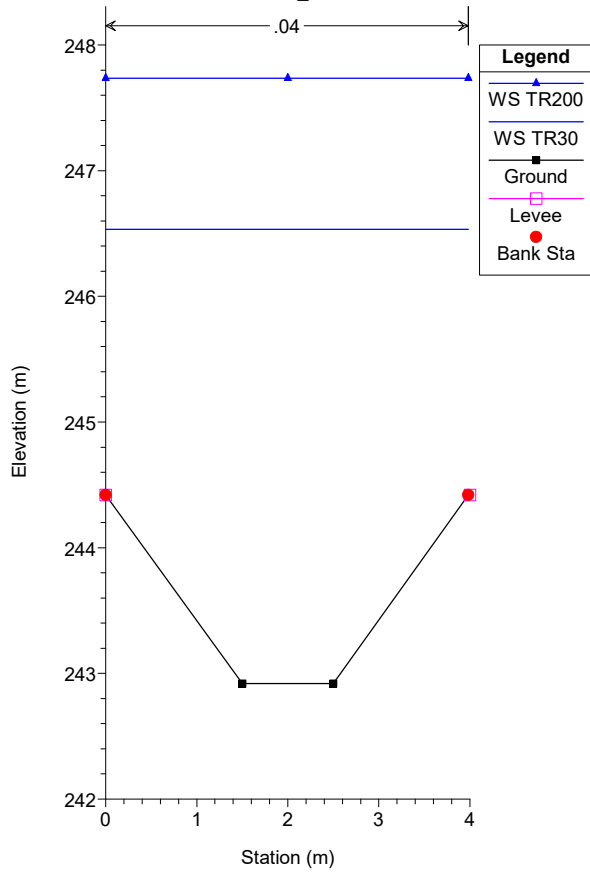
SUD1 Plan: Taratura 10/04/2019



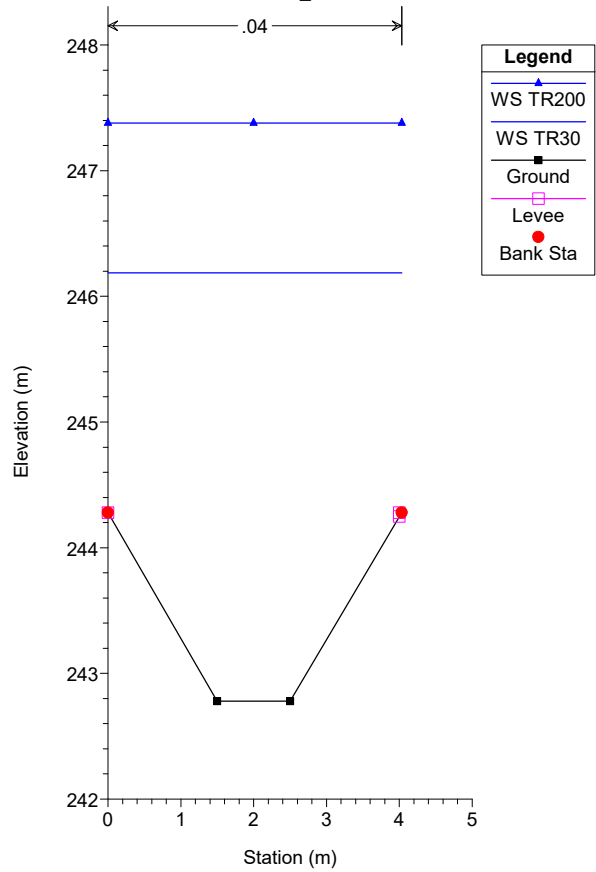
SUD1 Plan: Taratura 10/04/2019
SUD_C243



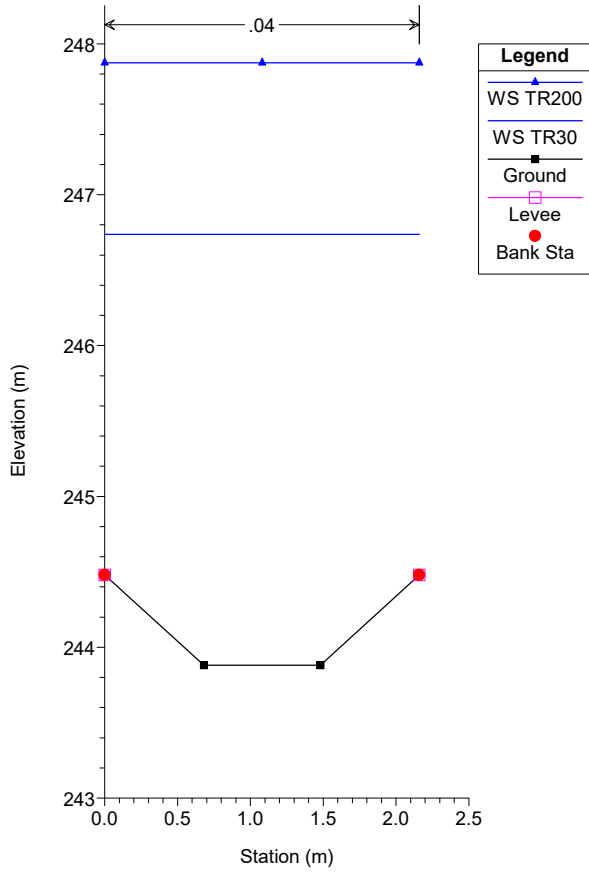
SUD1 Plan: Taratura 10/04/2019
SUD_C244



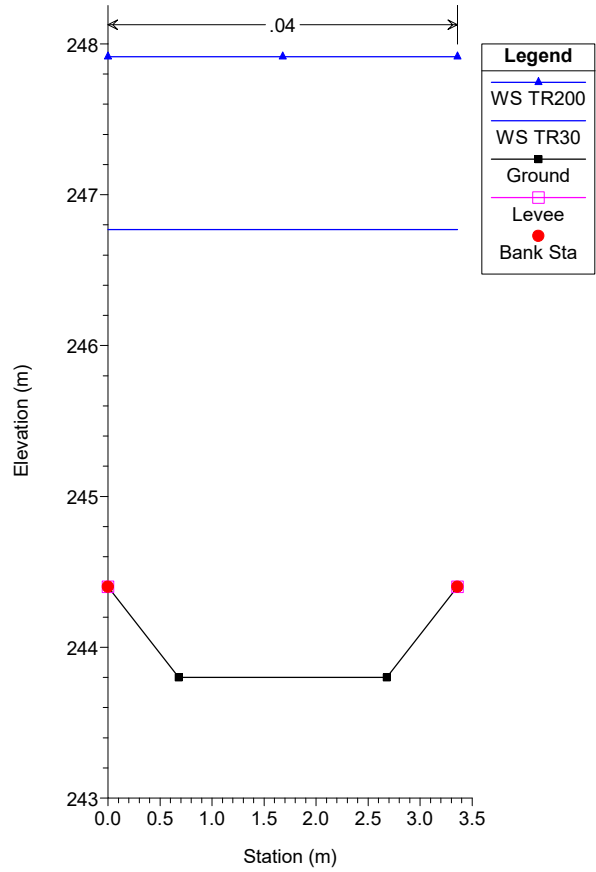
SUD1 Plan: Taratura 10/04/2019
SUD_C245



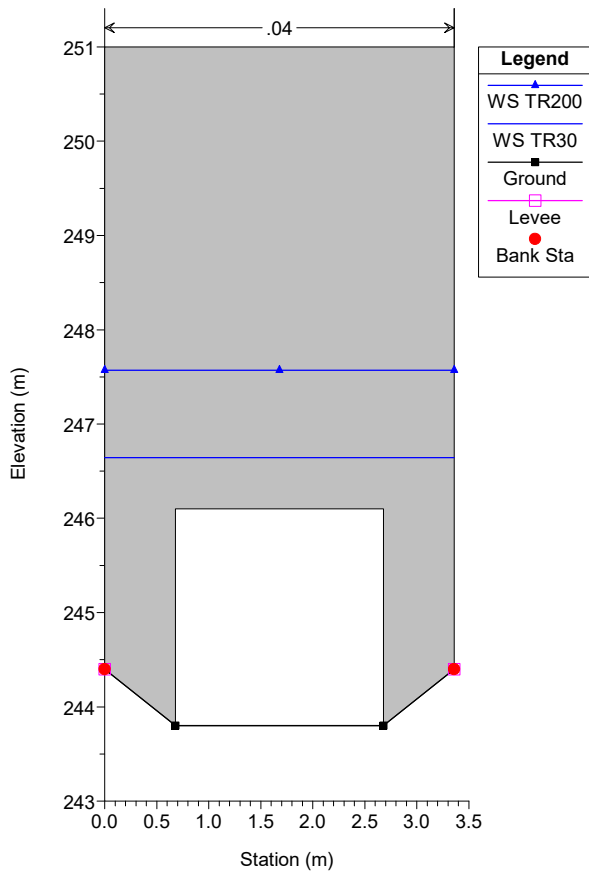
SUD1 Plan: Taratura 10/04/2019
SANZENO_C0



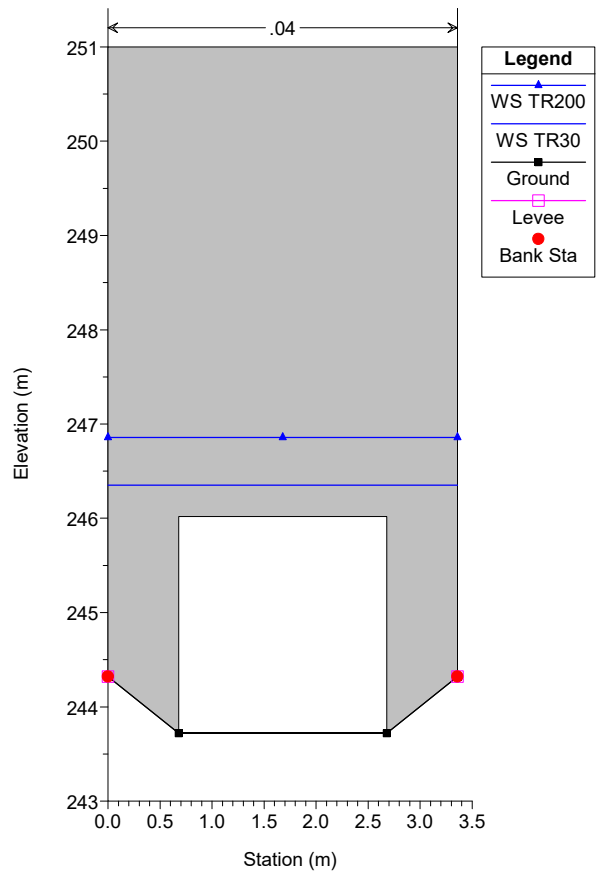
SUD1 Plan: Taratura 10/04/2019
SANZENO_C1

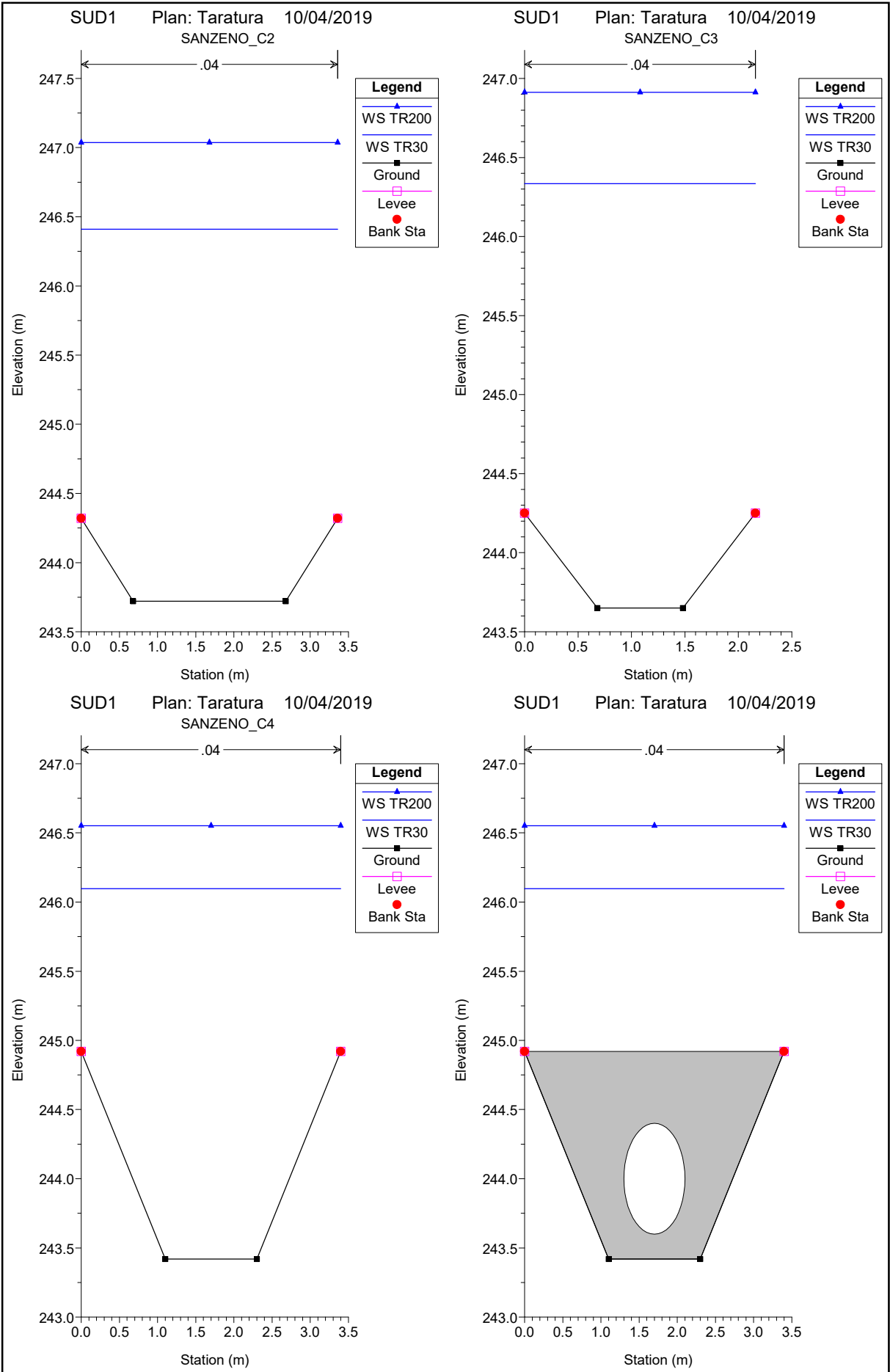


SUD1 Plan: Taratura 10/04/2019

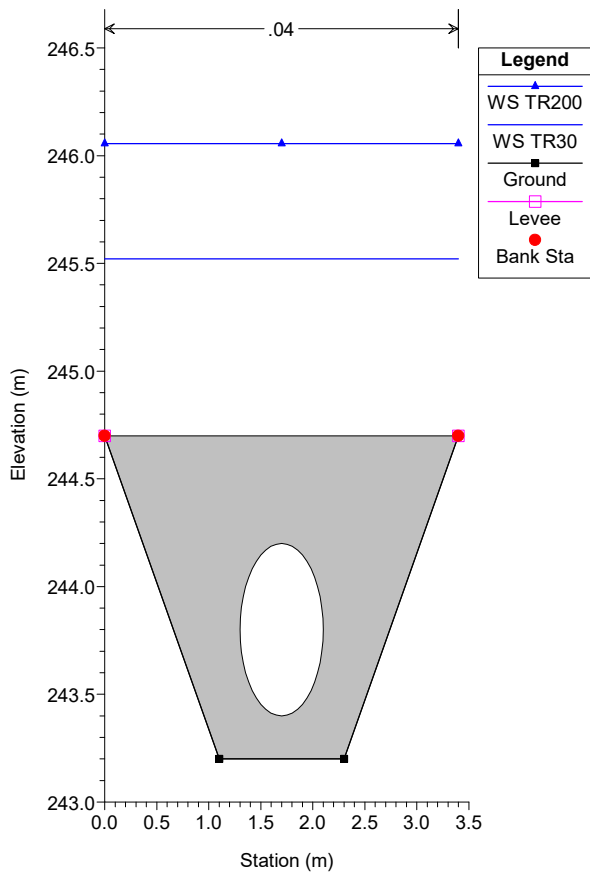


SUD1 Plan: Taratura 10/04/2019

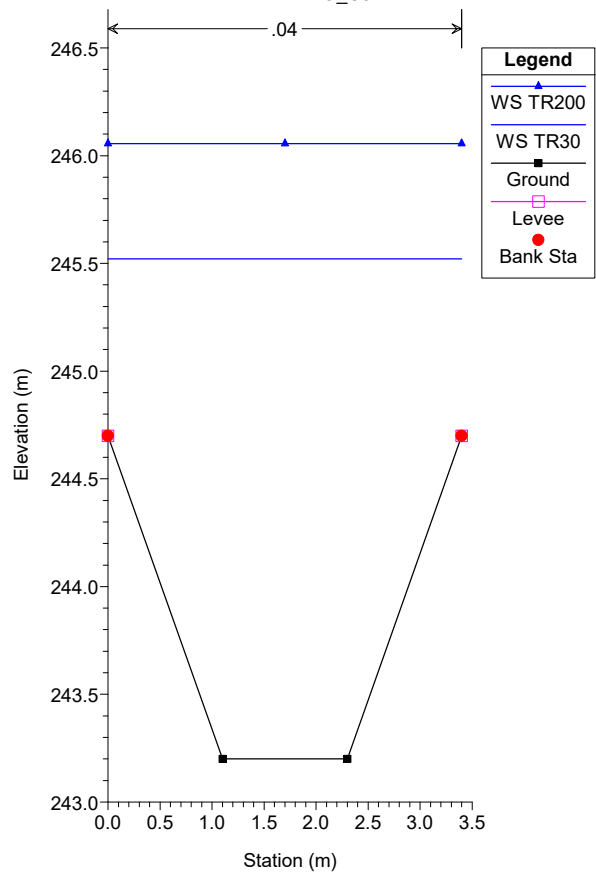




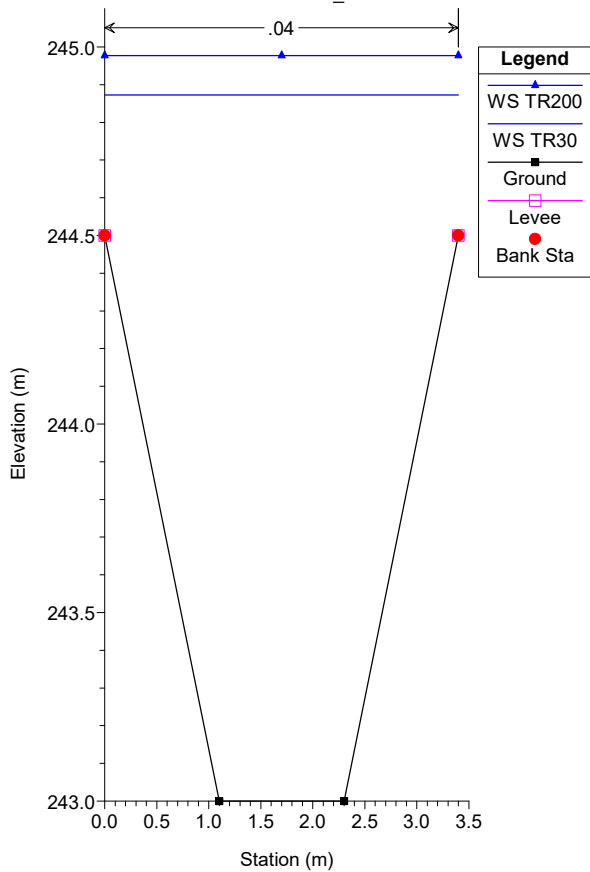
SUD1 Plan: Taratura 10/04/2019



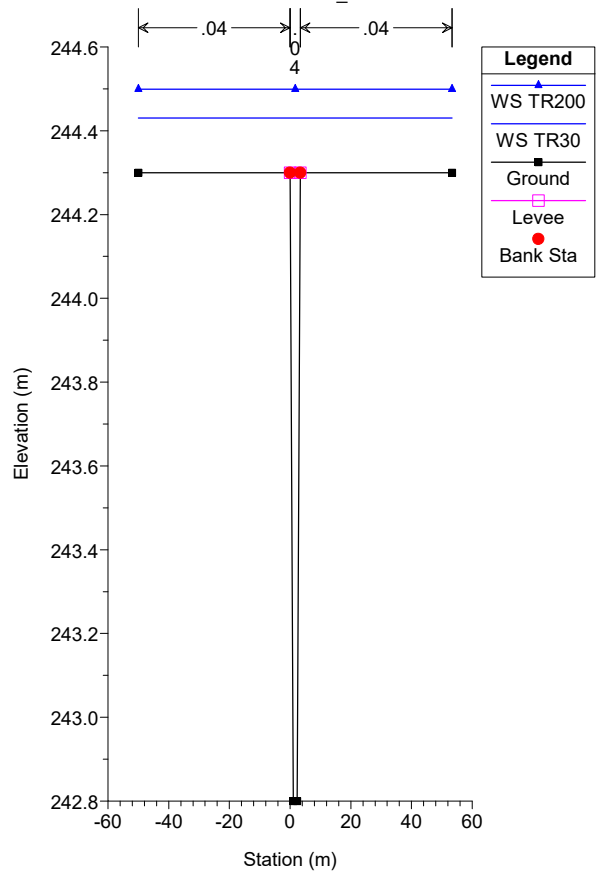
SUD1 Plan: Taratura 10/04/2019
SANZENO_C5



SUD1 Plan: Taratura 10/04/2019
SANZENO_C6

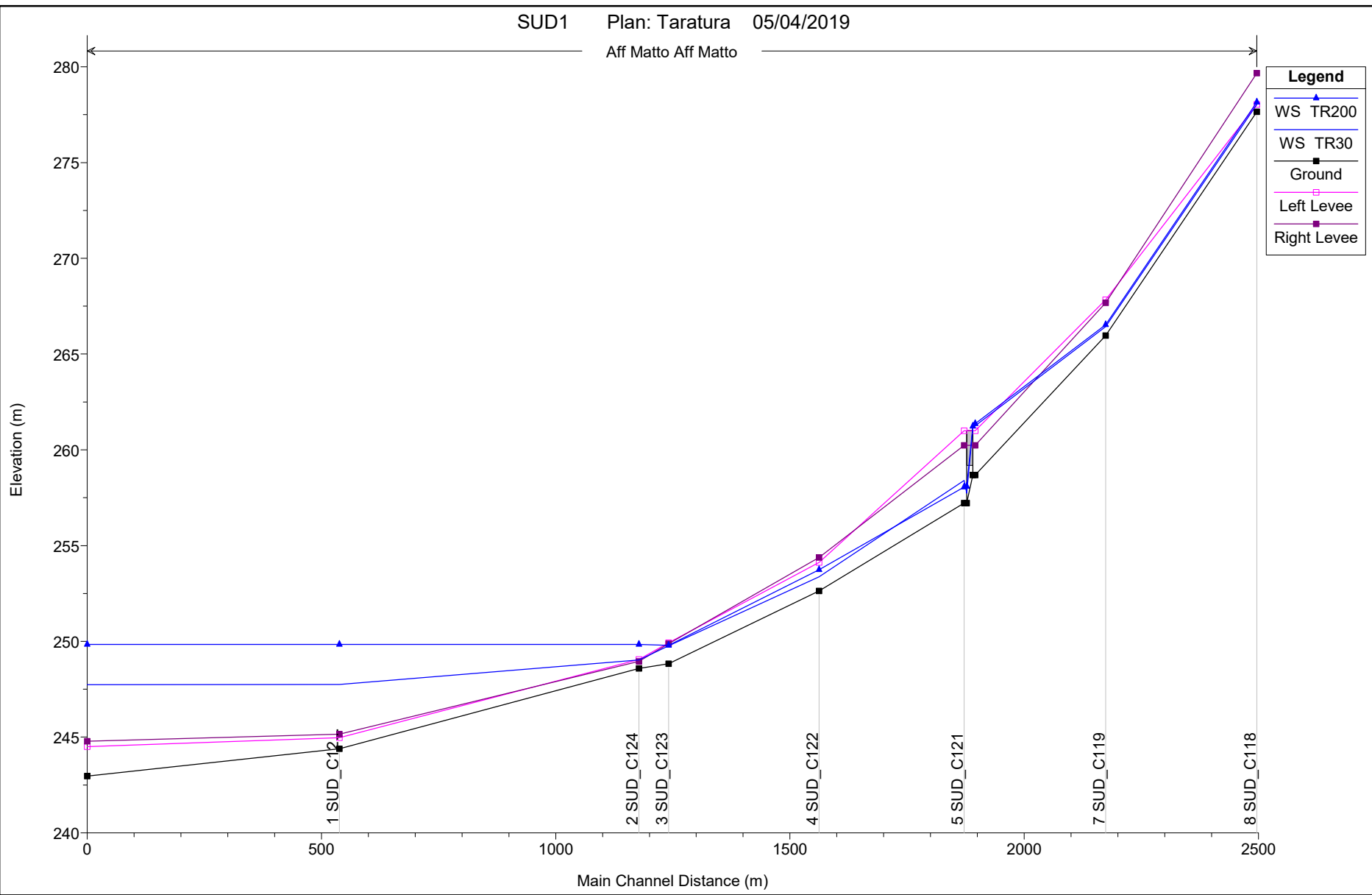


SUD1 Plan: Taratura 10/04/2019
SANZENO_C7



SUD1 Plan: Taratura 05/04/2019

Aff Matto Aff Matto



Elevation (m)

Main Channel Distance (m)

Legend

- WS TR200
- WS TR30
- Ground
- Left Levee
- Right Levee

1 SUD_C12

2 SUD_C124

3 SUD_C123

4 SUD_C122

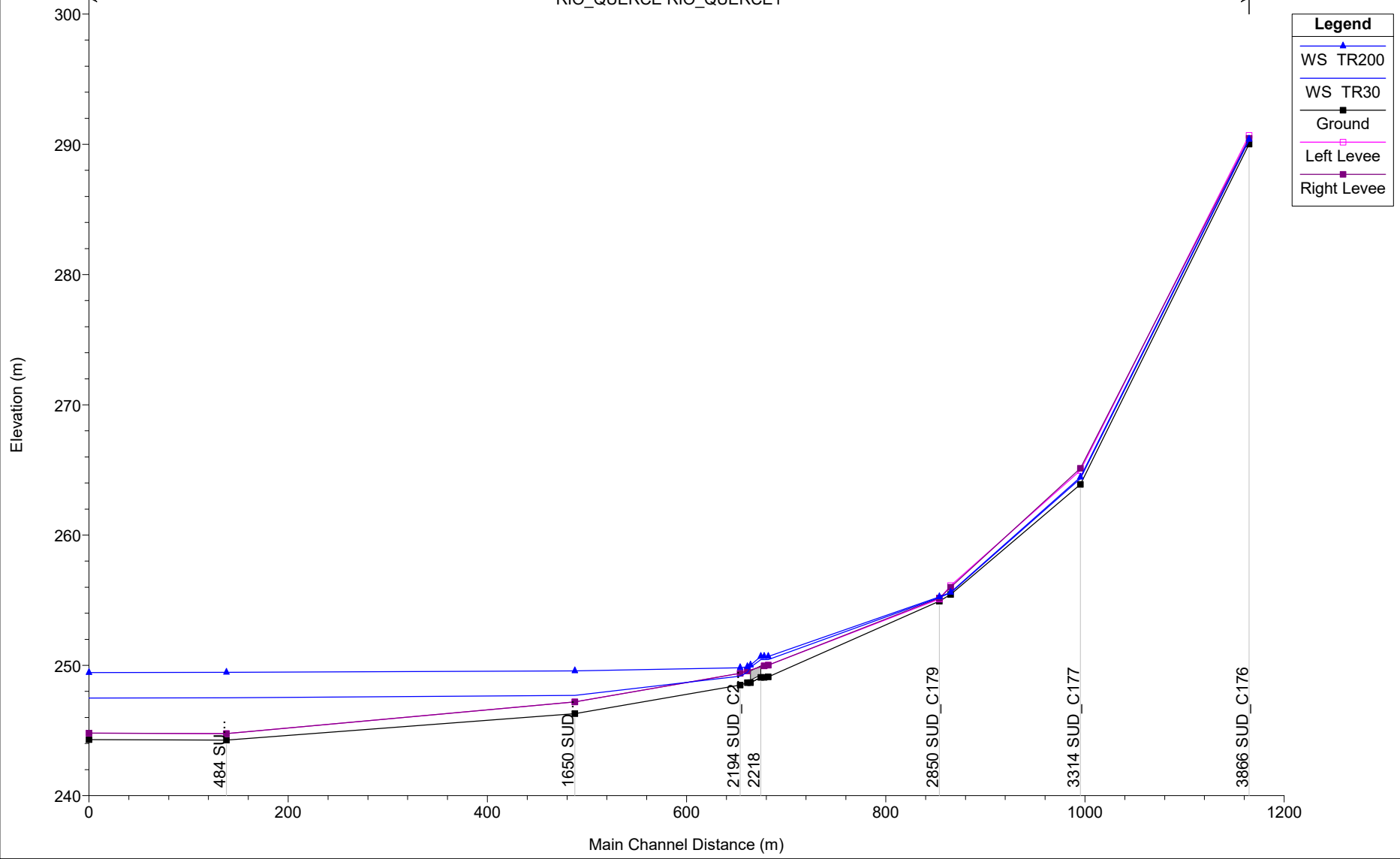
5 SUD_C121

7 SUD_C119

8 SUD_C118

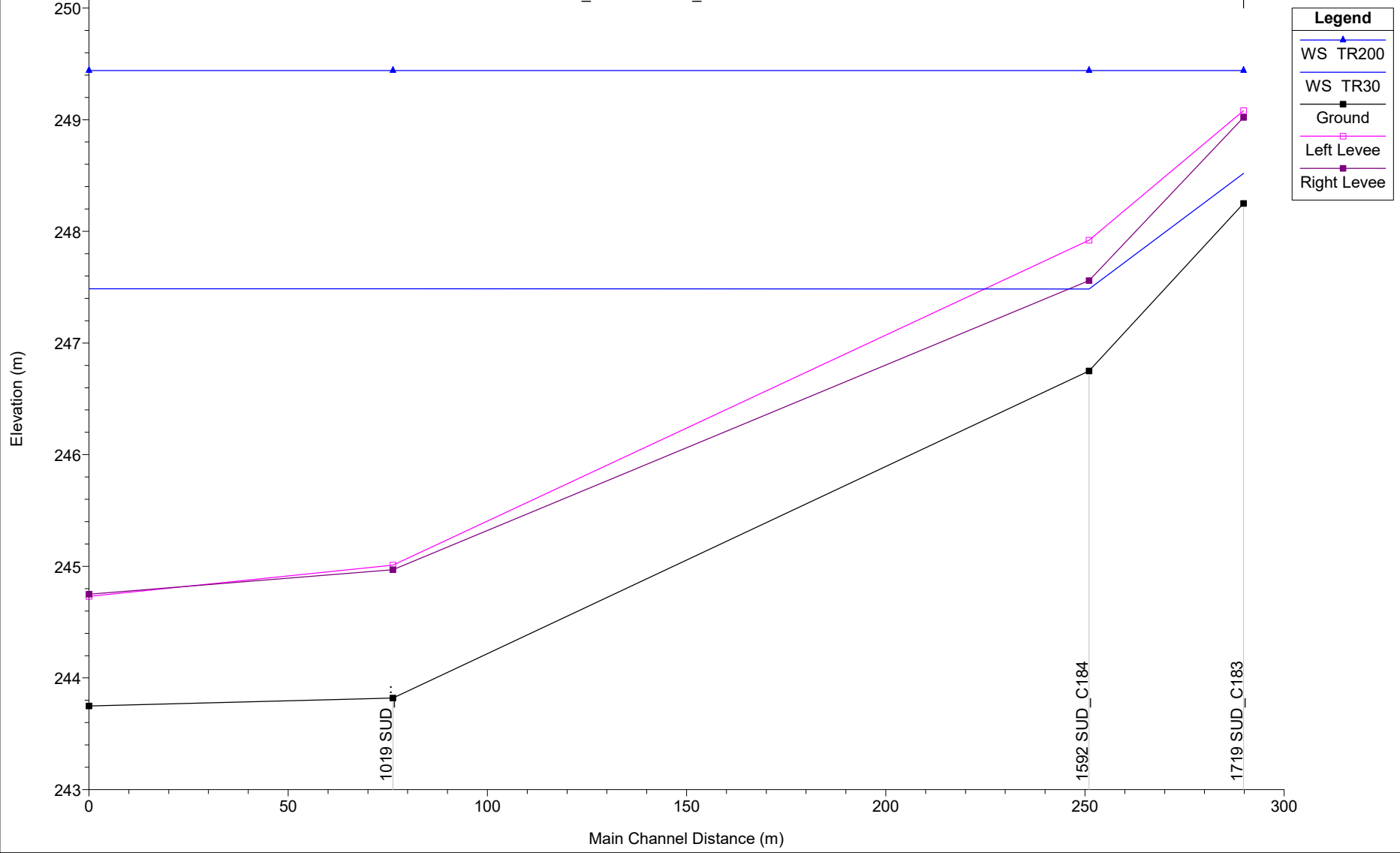
SUD1 Plan: Taratura 05/04/2019

RIO_QUERCE RIO_QUERCE1



SUD1 Plan: Taratura 05/04/2019

RIO_QUERCE RIO_QUERCE2

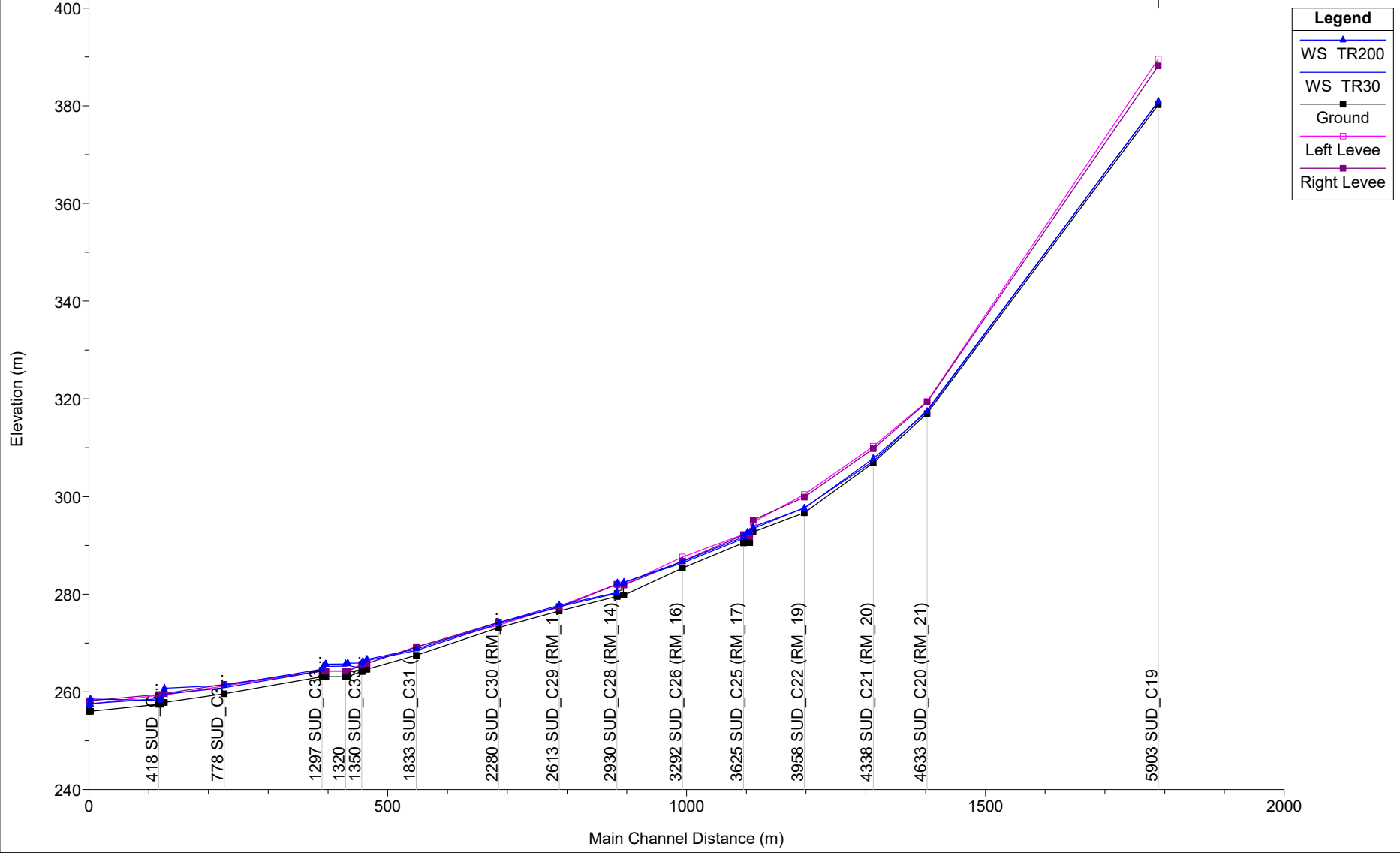


Legend

- WS TR200
- WS TR30
- Ground
- Left Levee
- Right Levee

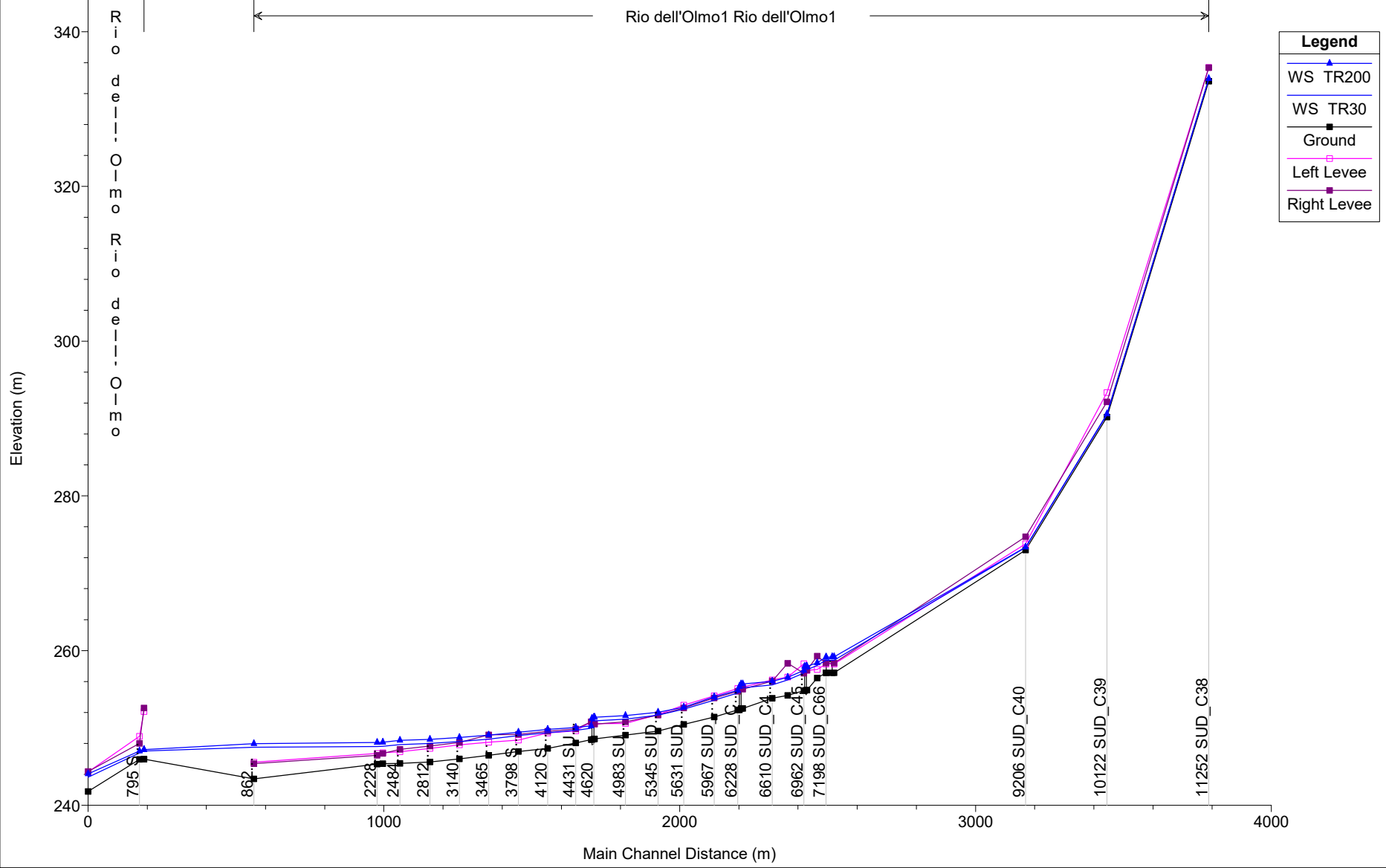
SUD1 Plan: Taratura 05/04/2019

Lama Lama

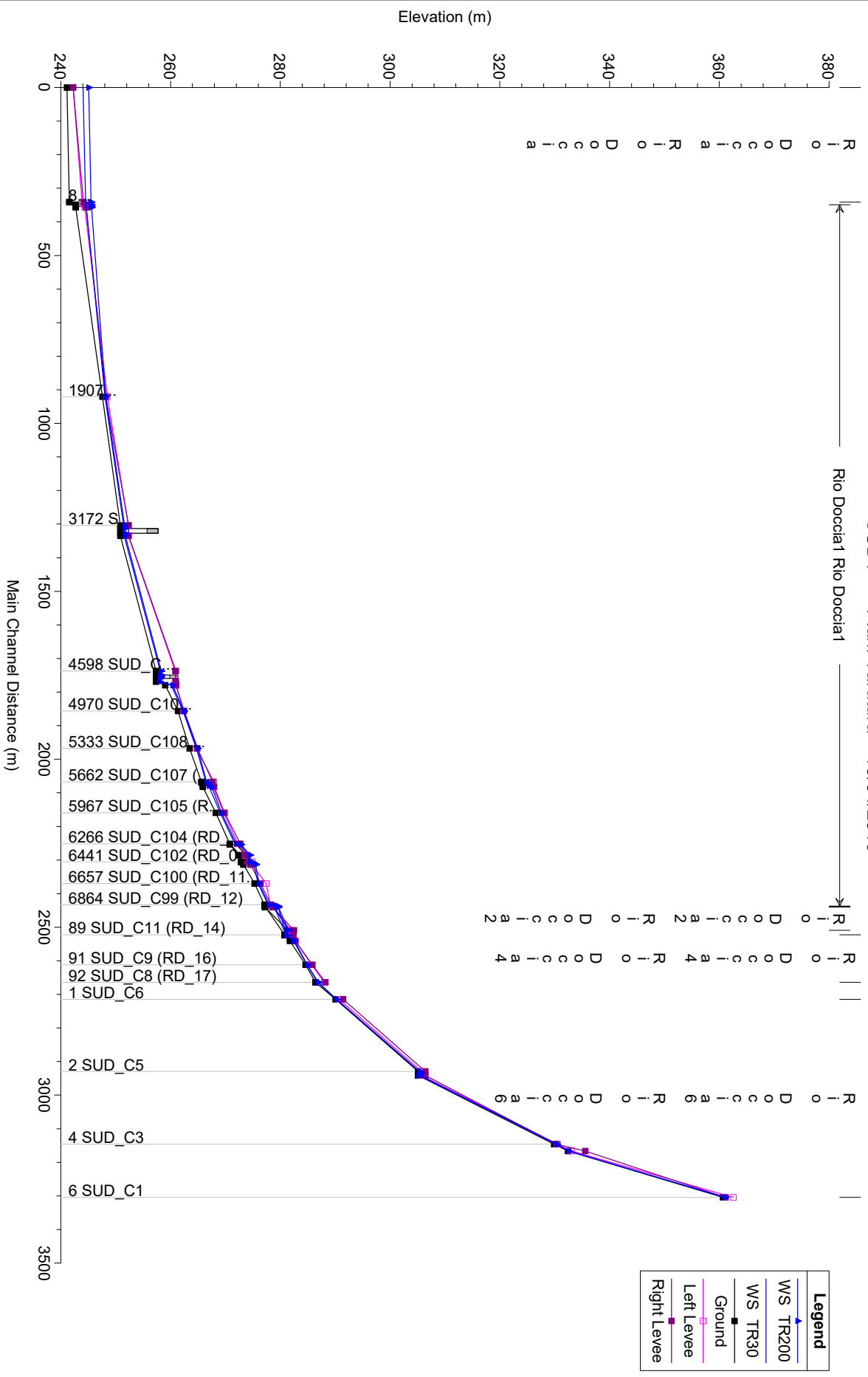


SUD1 Plan: Taratura 05/04/2019

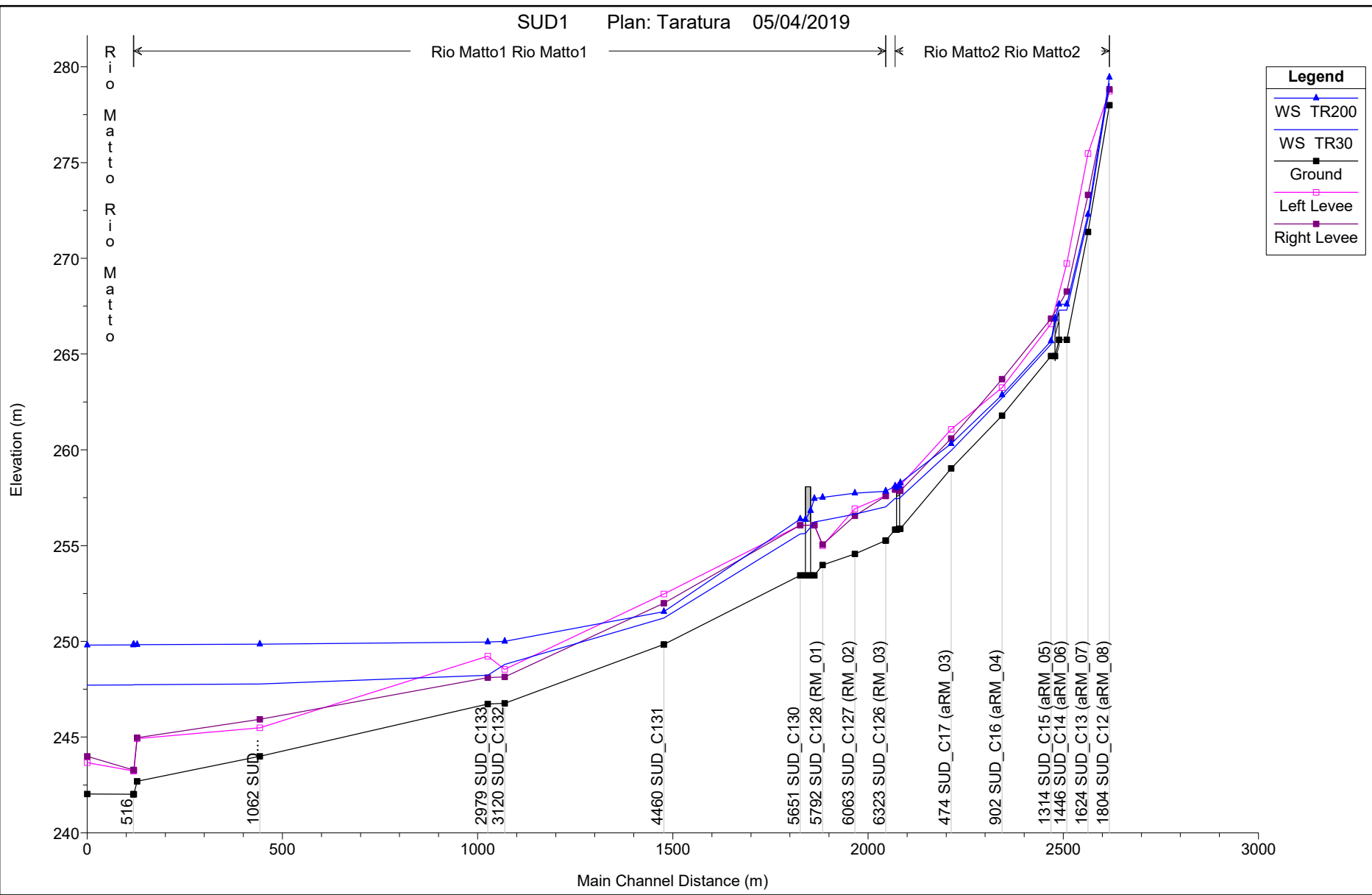
Rio dell'Olmo1 Rio dell'Olmo1



SUD1 Plan: Taratura 10/04/2019



SUD1 Plan: Taratura 05/04/2019



Legend

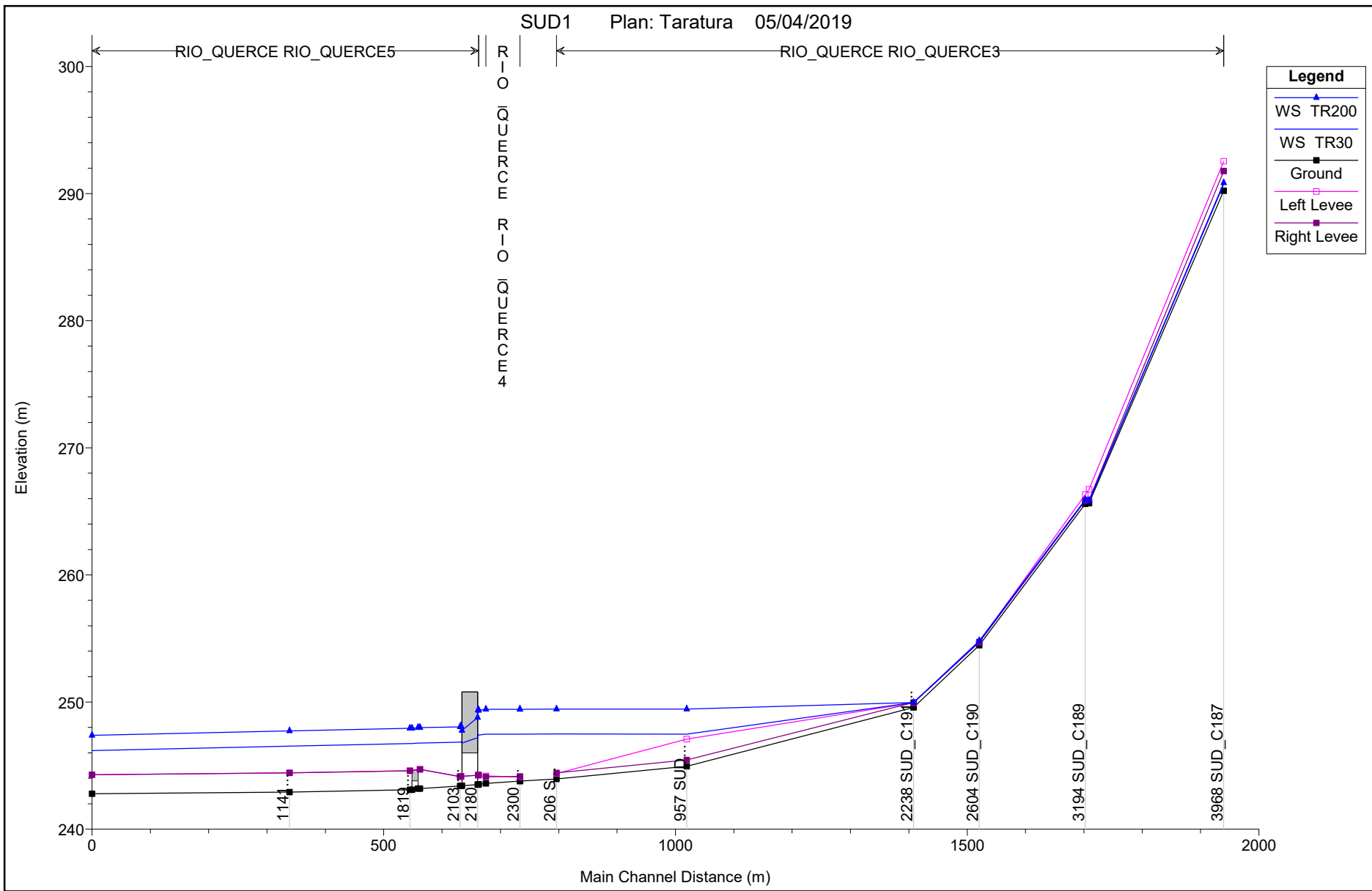
- WS TR200
- WS TR30
- Ground
- Left Levee
- Right Levee

Rio Matto1
Rio Matto1
Rio Matto2
Rio Matto2

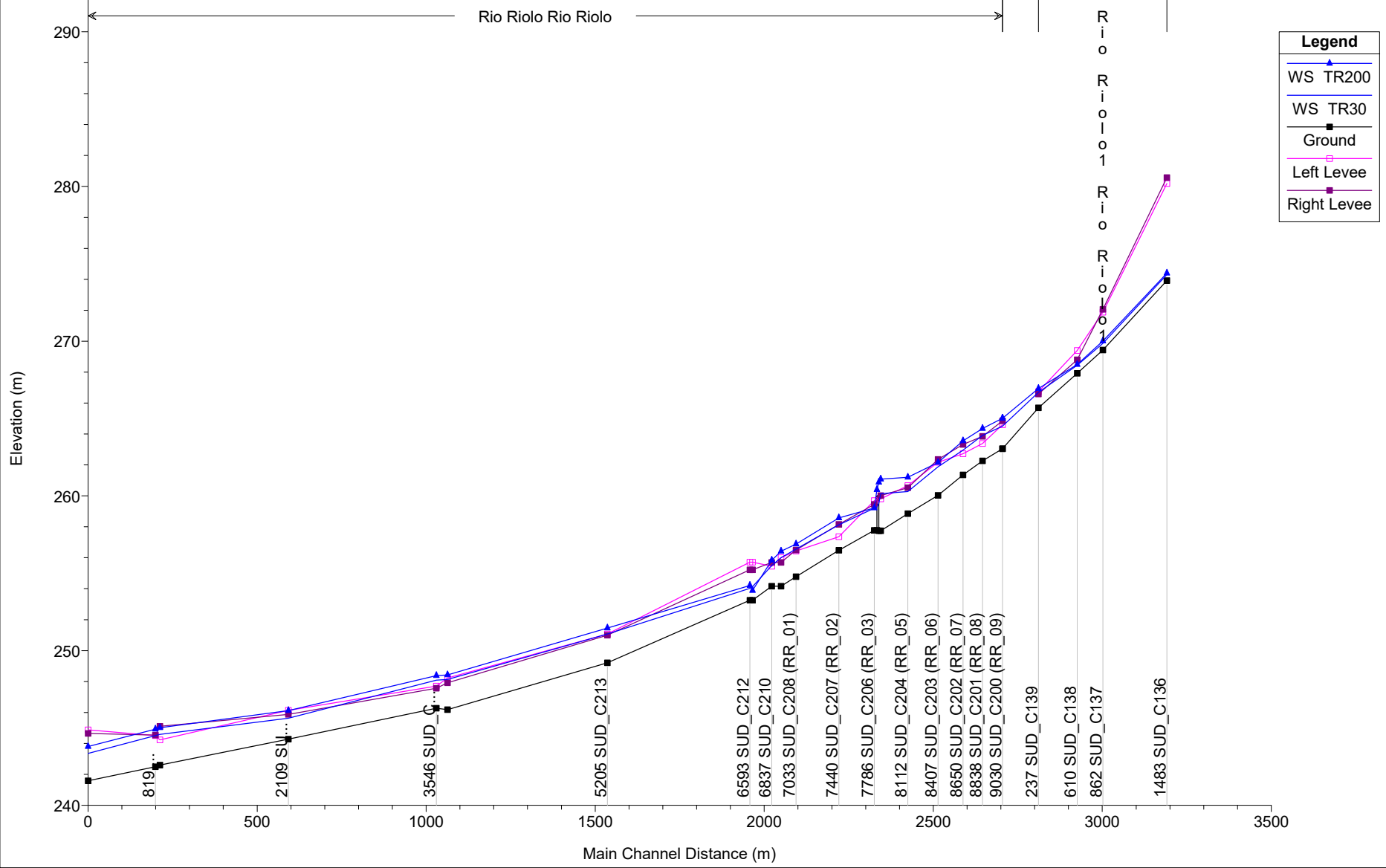
Rio Matto1 Rio Matto1

Rio Matto2 Rio Matto2

516
1062 SUD...
2979 SUD_C133
3120 SUD_C132
4460 SUD_C131
5661 SUD_C130
5792 SUD_C128 (RM_01)
6063 SUD_C127 (RM_02)
6323 SUD_C126 (RM_03)
474 SUD_C17 (aRM_03)
902 SUD_C16 (aRM_04)
1314 SUD_C15 (aRM_05)
1446 SUD_C14 (aRM_06)
1624 SUD_C13 (aRM_07)
1804 SUD_C12 (aRM_08)



SUD1 Plan: Taratura 05/04/2019



Legend

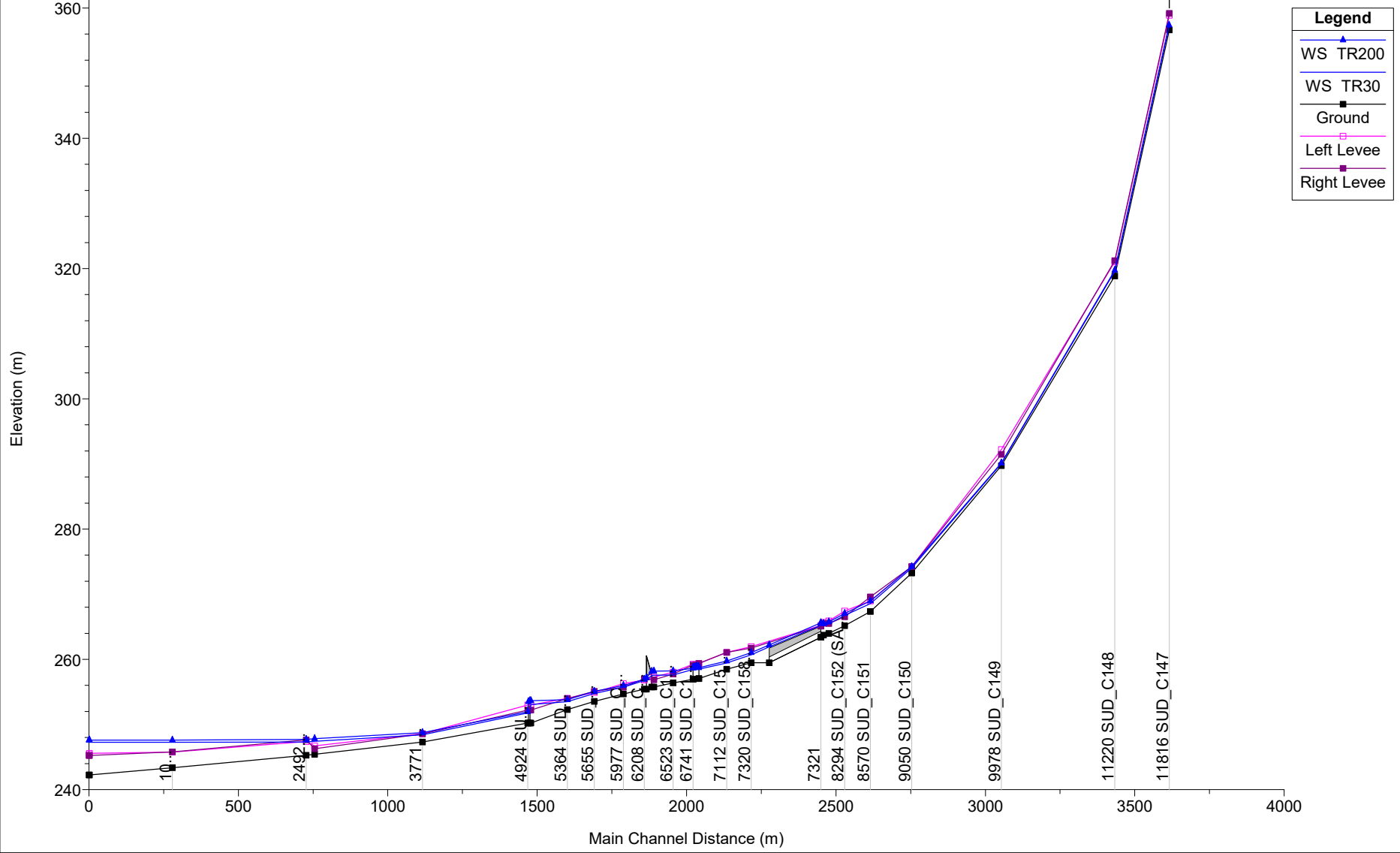
- WS TR200
- WS TR30
- Ground
- Left Levee
- Right Levee

Rio Riolo Rio Riolo

Rio Riolo

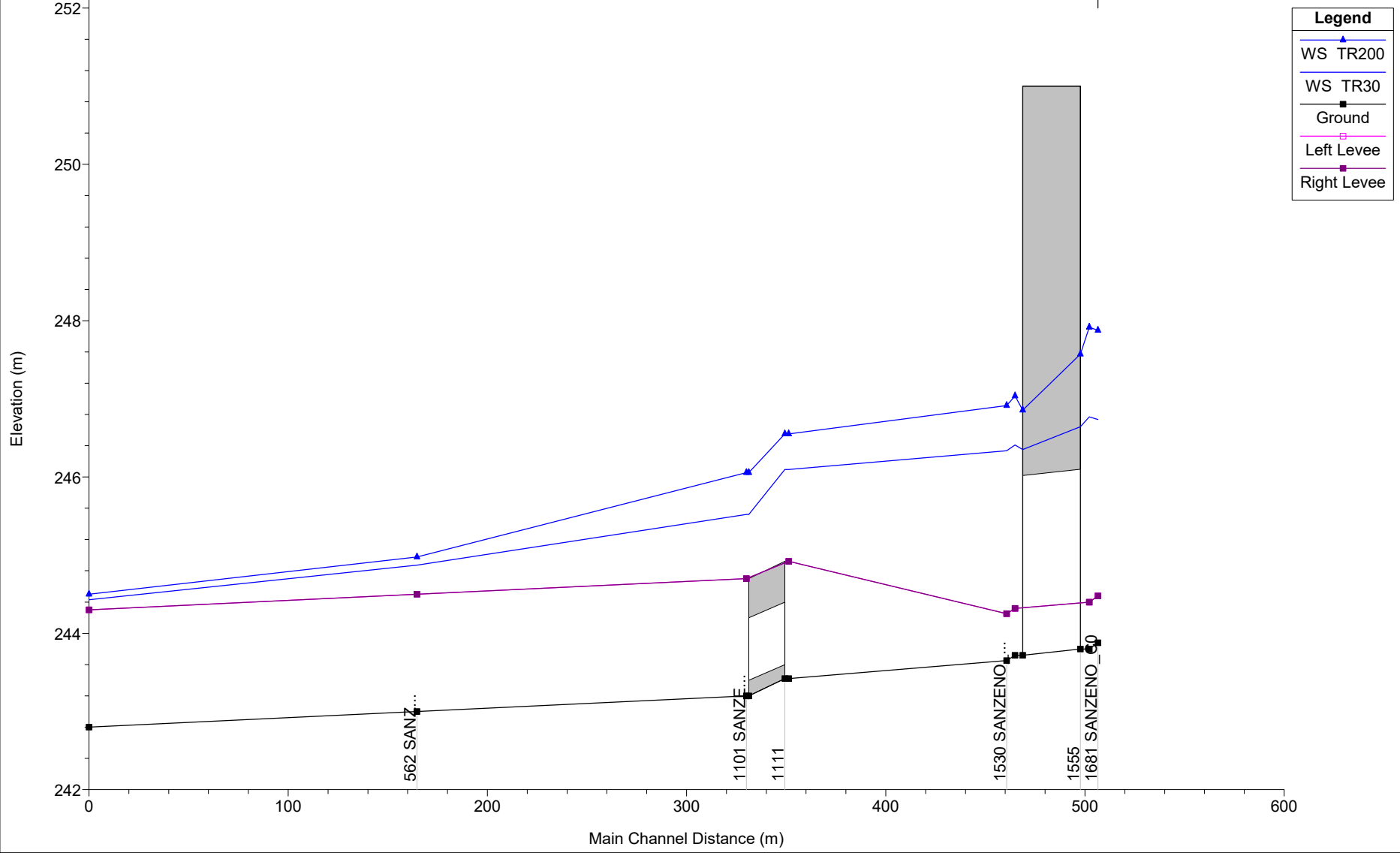
SUD1 Plan: Taratura 05/04/2019

Rio Sant'Antonio Rio Sant'Antonio



SUD1 Plan: Taratura 05/04/2019

San Zeno San Zeno



HEC-RAS Plan: Taratura (Continued)

River	Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
RIO_QUERCE	RIO_QUERCE5	2190	TR30	11.00	243.52	247.40	244.95	247.47	0.001910	1.12	9.85	2.70	0.19
RIO_QUERCE	RIO_QUERCE5	2190	TR200	16.90	243.52	249.36	245.34	249.43	0.001704	1.12	15.14	2.70	0.15
RIO_QUERCE	RIO_QUERCE5	2188	TR30	11.00	243.50	247.43	244.64	247.46	0.000702	0.79	13.89	3.70	0.13
RIO_QUERCE	RIO_QUERCE5	2188	TR200	16.90	243.50	249.38	244.96	249.42	0.000621	0.80	21.13	3.70	0.11
RIO_QUERCE	RIO_QUERCE5	2180			Bridge								
RIO_QUERCE	RIO_QUERCE5	2108	TR30	11.00	243.41	246.89	244.55	246.93	0.000951	0.90	12.24	3.70	0.16
RIO_QUERCE	RIO_QUERCE5	2108	TR200	16.90	243.41	248.11	244.87	248.16	0.001063	1.01	16.76	3.70	0.15
RIO_QUERCE	RIO_QUERCE5	2103	TR30	11.00	243.39	246.84	244.82	246.93	0.002560	1.27	8.69	2.70	0.23
RIO_QUERCE	RIO_QUERCE5	2103	TR200	16.90	243.39	248.05	245.22	248.16	0.002896	1.41	11.95	2.70	0.21
RIO_QUERCE	RIO_QUERCE5	1880	TR30	11.00	243.20	246.77	244.68	246.81	0.000961	0.91	12.03	4.00	0.17
RIO_QUERCE	RIO_QUERCE5	1880	TR200	16.90	243.20	247.98	244.98	248.03	0.000997	1.00	16.87	4.00	0.16
RIO_QUERCE	RIO_QUERCE5	1820			Culvert								
RIO_QUERCE	RIO_QUERCE5	1819	TR30	11.00	243.10	246.73	244.58	246.77	0.000917	0.90	12.25	4.00	0.16
RIO_QUERCE	RIO_QUERCE5	1819	TR200	16.90	243.10	247.94	244.88	247.99	0.000965	0.99	17.10	4.00	0.15
RIO_QUERCE	RIO_QUERCE5	1141	TR30	11.00	242.92	246.53	244.40	246.58	0.000937	0.90	12.16	3.98	0.17
RIO_QUERCE	RIO_QUERCE5	1141	TR200	16.90	242.92	247.74	244.71	247.79	0.000989	1.00	16.95	3.98	0.15
RIO_QUERCE	RIO_QUERCE5	31	TR30	11.00	242.78	246.19	244.25	246.23	0.001090	0.96	11.46	4.03	0.18
RIO_QUERCE	RIO_QUERCE5	31	TR200	16.90	242.78	247.38	244.56	247.43	0.001090	1.04	16.27	4.03	0.17
Rio Sant'Antonio	Rio Sant'Antonio	11816	TR30	3.20	356.63	357.27	357.29	357.44	0.031687	1.84	1.74	6.31	1.12
Rio Sant'Antonio	Rio Sant'Antonio	11816	TR200	5.40	356.63	357.39	357.42	357.61	0.031696	2.07	2.61	7.90	1.15
Rio Sant'Antonio	Rio Sant'Antonio	11220	TR30	3.20	318.86	319.58	319.58	319.78	0.023508	1.95	1.64	4.23	1.00
Rio Sant'Antonio	Rio Sant'Antonio	11220	TR200	5.40	318.86	319.75	319.75	320.01	0.022250	2.24	2.41	4.77	1.01
Rio Sant'Antonio	Rio Sant'Antonio	9978	TR30	3.20	289.74	290.06	290.48	292.98	0.760888	7.56	0.42	1.89	5.11
Rio Sant'Antonio	Rio Sant'Antonio	9978	TR200	5.40	289.74	290.14	290.69	294.46	0.886383	9.20	0.59	2.17	5.66
Rio Sant'Antonio	Rio Sant'Antonio	9050	TR30	3.20	273.26	274.04	274.04	274.29	0.026144	2.23	1.43	2.81	1.00
Rio Sant'Antonio	Rio Sant'Antonio	9050	TR200	5.40	273.26	274.26	274.26	274.60	0.025624	2.60	2.08	3.03	1.00
Rio Sant'Antonio	Rio Sant'Antonio	8570	TR30	3.20	267.35	268.56	268.36	268.75	0.016988	1.91	1.67	2.43	0.74
Rio Sant'Antonio	Rio Sant'Antonio	8570	TR200	5.40	267.35	268.97	268.69	269.16	0.012170	1.91	2.82	3.24	0.65
Rio Sant'Antonio	Rio Sant'Antonio	8294	TR30	6.80	265.15	266.74	266.61	267.05	0.021032	2.48	2.74	3.01	0.83
Rio Sant'Antonio	Rio Sant'Antonio	8294	TR200	11.20	265.15	267.06	266.97	267.51	0.024224	2.97	3.77	3.38	0.90
Rio Sant'Antonio	Rio Sant'Antonio	8115	TR30	6.80	263.99	265.47	265.47	265.80	0.026626	2.56	2.66	3.95	1.00
Rio Sant'Antonio	Rio Sant'Antonio	8115	TR200	11.20	263.99	265.75	265.75	266.19	0.025707	2.93	3.83	4.37	1.00
Rio Sant'Antonio	Rio Sant'Antonio	8060	TR30	6.80	263.73	265.15	264.92	265.35	0.010970	1.99	3.41	4.01	0.69
Rio Sant'Antonio	Rio Sant'Antonio	8060	TR200	11.20	263.73	265.51	265.24	265.77	0.010778	2.24	5.00	4.80	0.70
Rio Sant'Antonio	Rio Sant'Antonio	8029	TR30	6.80	263.40	265.22	264.41	265.27	0.002231	0.94	7.21	8.62	0.33
Rio Sant'Antonio	Rio Sant'Antonio	8029	TR200	11.20	263.40	265.62	264.72	265.68	0.001847	1.06	10.61	8.62	0.30
Rio Sant'Antonio	Rio Sant'Antonio	7321			Culvert								
Rio Sant'Antonio	Rio Sant'Antonio	7320	TR30	6.80	259.47	260.71	260.45	260.88	0.008675	1.82	3.74	4.57	0.64
Rio Sant'Antonio	Rio Sant'Antonio	7320	TR200	11.20	259.47	261.03	260.74	261.26	0.008999	2.09	5.35	5.36	0.67
Rio Sant'Antonio	Rio Sant'Antonio	7112	TR30	6.80	258.50	259.46	259.46	259.79	0.021871	2.54	2.68	4.05	1.00
Rio Sant'Antonio	Rio Sant'Antonio	7112	TR200	11.20	258.50	259.74	259.74	260.16	0.020834	2.85	3.93	4.75	1.00
Rio Sant'Antonio	Rio Sant'Antonio	6805	TR30	6.80	257.05	258.47	257.99	258.57	0.004380	1.42	4.79	4.93	0.46
Rio Sant'Antonio	Rio Sant'Antonio	6805	TR200	11.20	257.05	258.71	258.28	258.88	0.006443	1.86	6.01	5.44	0.57
Rio Sant'Antonio	Rio Sant'Antonio	6750			Culvert								
Rio Sant'Antonio	Rio Sant'Antonio	6741	TR30	6.80	256.94	258.44	257.92	258.55	0.004580	1.46	4.64	4.43	0.46
Rio Sant'Antonio	Rio Sant'Antonio	6741	TR200	11.20	256.94	258.62	258.23	258.84	0.008045	2.05	5.47	4.77	0.61
Rio Sant'Antonio	Rio Sant'Antonio	6523	TR30	6.80	256.40	257.61	257.61	257.94	0.022993	2.57	2.65	3.96	1.00
Rio Sant'Antonio	Rio Sant'Antonio	6523	TR200	11.20	256.40	258.24	257.95	258.35	0.005898	1.46	7.68	10.05	0.53
Rio Sant'Antonio	Rio Sant'Antonio	6311	TR30	6.80	255.75	257.55	256.73	257.58	0.001147	0.76	9.00	9.12	0.24
Rio Sant'Antonio	Rio Sant'Antonio	6311	TR200	11.20	255.75	258.20	257.03	258.23	0.000676	0.75	14.90	9.12	0.19
Rio Sant'Antonio	Rio Sant'Antonio	6300			Bridge								
Rio Sant'Antonio	Rio Sant'Antonio	6208	TR30	6.80	255.41	256.76	256.76	257.15	0.026176	2.76	2.46	3.17	1.00
Rio Sant'Antonio	Rio Sant'Antonio	6208	TR200	11.20	255.41	256.93	257.09	257.63	0.040539	3.69	3.03	3.44	1.26
Rio Sant'Antonio	Rio Sant'Antonio	5977	TR30	10.70	254.70	255.71	255.61	255.92	0.012517	2.03	5.26	8.11	0.81
Rio Sant'Antonio	Rio Sant'Antonio	5977	TR200	17.10	254.70	255.97	255.83	256.24	0.011490	2.32	7.38	8.44	0.79
Rio Sant'Antonio	Rio Sant'Antonio	5655	TR30	10.70	253.55	254.78	254.54	254.95	0.007912	1.84	5.83	7.13	0.65
Rio Sant'Antonio	Rio Sant'Antonio	5655	TR200	17.10	253.55	255.08	254.79	255.31	0.007781	2.11	8.12	7.75	0.66
Rio Sant'Antonio	Rio Sant'Antonio	5364	TR30	10.70	252.29	253.50	253.50	253.87	0.020012	2.69	3.99	5.38	1.00
Rio Sant'Antonio	Rio Sant'Antonio	5364	TR200	17.10	252.29	253.80	253.80	254.25	0.019083	2.99	5.72	6.28	1.00
Rio Sant'Antonio	Rio Sant'Antonio	4965	TR30	10.70	250.23	253.07	251.36	253.08	0.000307	0.57	18.75	10.42	0.14
Rio Sant'Antonio	Rio Sant'Antonio	4965	TR200	17.10	250.23	253.66	251.64	253.68	0.000342	0.69	24.92	10.42	0.14
Rio Sant'Antonio	Rio Sant'Antonio	4945			Culvert								
Rio Sant'Antonio	Rio Sant'Antonio	4924	TR30	10.70	250.23	251.76	251.36	251.89	0.005096	1.58	6.77	7.31	0.52
Rio Sant'Antonio	Rio Sant'Antonio	4924	TR200	17.10	250.23	251.97	251.64	252.18	0.007439	2.05	8.32	8.03	0.64
Rio Sant'Antonio	Rio Sant'Antonio	3771	TR30	10.70	247.29	248.43	248.43	248.69	0.020411	2.26	4.73	9.05	1.00

HEC-RAS Plan: Taratura (Continued)

River	Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W. S. Elev (m)	Crit W. S. (m)	E. G. Elev (m)	E. G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Rio Riolo	Rio Riolo	2109	TR30	16.30	244.28	245.63	245.57	245.92	0.015369	2.40	6.80	9.59	0.91
Rio Riolo	Rio Riolo	2109	TR200	27.00	244.28	246.12	245.97	246.28	0.008898	1.84	15.54	26.03	0.70
Rio Riolo	Rio Riolo	863	TR30	16.30	242.60	244.58	243.75	244.63	0.001342	0.99	16.41	13.61	0.29
Rio Riolo	Rio Riolo	863	TR200	27.00	242.60	245.02	244.04	245.09	0.001543	1.19	22.67	15.56	0.32
Rio Riolo	Rio Riolo	819	TR30	16.30	242.49	244.50	243.86	244.60	0.003488	1.40	11.67	11.91	0.45
Rio Riolo	Rio Riolo	819	TR200	27.00	242.49	244.92	244.24	245.05	0.003172	1.62	16.70	12.00	0.44
Rio Riolo	Rio Riolo	167	TR30	16.30	241.58	243.35	243.04	243.58	0.007941	2.12	7.69	7.34	0.66
Rio Riolo	Rio Riolo	167	TR200	27.00	241.58	243.79	243.43	244.09	0.007946	2.40	11.23	8.83	0.68
Rio Matto2	Rio Matto2	1804	TR30	4.30	278.00	279.13	279.13	279.55	0.041078	2.88	1.49	1.76	1.00
Rio Matto2	Rio Matto2	1804	TR200	6.90	278.00	279.44	279.44	280.02	0.046156	3.37	2.05	1.76	1.00
Rio Matto2	Rio Matto2	1624	TR30	4.30	271.38	272.06	272.68	274.36	0.353394	6.71	0.64	1.44	3.21
Rio Matto2	Rio Matto2	1624	TR200	6.90	271.38	272.29	272.90	274.71	0.281349	6.90	1.00	1.76	2.92
Rio Matto2	Rio Matto2	1446	TR30	4.30	265.74	267.30	266.74	267.38	0.008629	1.30	3.30	6.00	0.56
Rio Matto2	Rio Matto2	1446	TR200	6.90	265.74	267.60	267.02	267.69	0.005572	1.34	5.16	6.09	0.46
Rio Matto2	Rio Matto2	1320		Culvert									
Rio Matto2	Rio Matto2	1314	TR30	4.30	264.89	265.50	265.50	265.74	0.025628	2.16	1.99	4.21	1.00
Rio Matto2	Rio Matto2	1314	TR200	6.90	264.89	265.68	265.68	266.00	0.024514	2.49	2.77	4.38	1.00
Rio Matto2	Rio Matto2	902	TR30	4.30	261.78	262.71	262.63	262.84	0.016503	1.62	2.65	6.63	0.82
Rio Matto2	Rio Matto2	902	TR200	6.90	261.78	262.87	262.81	263.03	0.015693	1.79	3.86	8.07	0.82
Rio Matto2	Rio Matto2	474	TR30	4.30	259.03	259.97	259.97	260.25	0.023900	2.37	1.82	3.16	1.00
Rio Matto2	Rio Matto2	474	TR200	6.90	259.03	260.32	260.32	260.49	0.024747	1.81	3.80	11.34	1.00
Rio Matto2	Rio Matto2	48	TR30	4.30	255.88	257.51	256.77	257.56	0.002068	0.95	4.51	4.21	0.29
Rio Matto2	Rio Matto2	48	TR200	6.90	255.88	258.27	257.00	258.31	0.001113	0.86	8.03	4.74	0.21
Rio Matto2	Rio Matto2	5		Bridge									
Rio Matto2	Rio Matto2	1	TR30	4.30	255.83	257.46	256.65	257.49	0.001198	0.77	5.60	5.66	0.25
Rio Matto2	Rio Matto2	1	TR200	6.90	255.83	258.11	256.87	258.13	0.000680	0.71	9.74	6.91	0.19
Rio Matto1	Rio Matto1	6323	TR30	12.85	255.26	257.03	256.86	257.34	0.013684	2.46	5.23	5.34	0.79
Rio Matto1	Rio Matto1	6323	TR200	20.70	255.26	257.84	257.22	258.05	0.005520	2.03	10.22	6.56	0.52
Rio Matto1	Rio Matto1	6063	TR30	12.85	254.56	256.65	256.04	256.76	0.003773	1.53	8.40	7.19	0.45
Rio Matto1	Rio Matto1	6063	TR200	20.70	254.56	257.73	256.38	257.81	0.001415	1.25	16.55	7.53	0.27
Rio Matto1	Rio Matto1	5792	TR30	12.85	253.99	256.31	255.41	256.44	0.003946	1.65	7.79	4.11	0.38
Rio Matto1	Rio Matto1	5792	TR200	20.70	253.99	257.51	255.79	257.65	0.002912	1.62	12.75	4.11	0.29
Rio Matto1	Rio Matto1	5709	TR30	12.85	253.45	256.23	255.03	256.35	0.004506	1.50	8.58	3.80	0.32
Rio Matto1	Rio Matto1	5709	TR200	20.70	253.45	257.45	255.42	257.57	0.003703	1.57	13.19	3.80	0.27
Rio Matto1	Rio Matto1	5680		Bridge									
Rio Matto1	Rio Matto1	5651	TR30	12.85	253.45	255.61	255.04	255.83	0.008411	2.08	6.19	3.80	0.52
Rio Matto1	Rio Matto1	5651	TR200	20.70	253.45	256.39	255.43	256.65	0.009818	2.26	9.14	3.80	0.47
Rio Matto1	Rio Matto1	4460	TR30	12.85	249.84	251.22	251.20	251.61	0.018633	2.75	4.67	5.71	0.97
Rio Matto1	Rio Matto1	4460	TR200	20.70	249.84	251.55	251.55	252.03	0.018626	3.05	6.80	7.15	1.00
Rio Matto1	Rio Matto1	3120	TR30	15.20	246.76	248.80	248.21	248.92	0.003508	1.53	9.96	7.90	0.43
Rio Matto1	Rio Matto1	3120	TR200	24.30	246.76	250.00	248.53	250.08	0.001302	1.25	19.44	7.90	0.25
Rio Matto1	Rio Matto1	2979	TR30	15.20	246.73	248.22	248.22	248.59	0.019797	2.69	5.65	7.66	1.00
Rio Matto1	Rio Matto1	2979	TR200	24.30	246.73	249.96	248.51	250.02	0.001086	1.14	21.38	9.70	0.24
Rio Matto1	Rio Matto1	1062	TR30	15.20	244.00	247.77	245.44	247.78	0.000177	0.52	29.36	10.30	0.10
Rio Matto1	Rio Matto1	1062	TR200	24.30	244.00	249.86	245.71	249.87	0.000100	0.48	50.88	10.30	0.07
Rio Matto1	Rio Matto1	31	TR30	15.20	242.69	247.73	244.25	247.74	0.000095	0.42	36.33	9.40	0.07
Rio Matto1	Rio Matto1	31	TR200	24.30	242.69	249.83	244.63	249.84	0.000078	0.43	56.07	9.40	0.06
Rio Matto1	Rio Matto1	30	TR30	15.20	242.02	247.73	243.36	247.74	0.000076	0.38	39.79	7.80	0.05
Rio Matto1	Rio Matto1	30	TR200	24.30	242.02	249.83	243.63	249.84	0.000083	0.43	56.15	7.80	0.05
Rio Matto	Rio Matto	516	TR30	21.80	242.02	247.72	243.56	247.74	0.000158	0.55	39.72	7.80	0.08
Rio Matto	Rio Matto	516	TR200	34.90	242.02	249.82	243.90	249.84	0.000171	0.62	56.06	7.80	0.07
Rio Matto	Rio Matto	130	TR30	21.80	242.03	247.71	243.70	247.72	0.000100	0.47	46.75	9.80	0.07
Rio Matto	Rio Matto	130	TR200	34.90	242.03	249.81	244.03	249.82	0.000100	0.52	67.30	9.80	0.06
Rio Doccia6	Rio Doccia6	6	TR30	0.98	360.66	361.03	361.15	361.38	0.094065	2.63	0.37	1.67	1.78
Rio Doccia6	Rio Doccia6	6	TR200	1.58	360.66	361.12	361.27	361.57	0.094102	2.98	0.53	1.95	1.83
Rio Doccia6	Rio Doccia6	5	TR30	0.98	332.42	332.57	332.71	333.41	0.711649	4.07	0.24	2.81	4.45
Rio Doccia6	Rio Doccia6	5	TR200	1.58	332.42	332.60	332.78	333.70	0.699710	4.65	0.34	3.21	4.57
Rio Doccia6	Rio Doccia6	4	TR30	0.98	329.90	330.33	330.39	330.56	0.053888	2.10	0.46	1.92	1.36
Rio Doccia6	Rio Doccia6	4	TR200	1.58	329.90	330.42	330.51	330.73	0.055881	2.44	0.64	2.10	1.41
Rio Doccia6	Rio Doccia6	3	TR30	0.98	305.08	305.47	305.30	305.48	0.002847	0.56	1.74	6.30	0.34
Rio Doccia6	Rio Doccia6	3	TR200	1.58	305.08	305.24	305.36	305.82	0.439573	3.35	0.47	5.13	3.54
Rio Doccia6	Rio Doccia6	2.5		Bridge									
Rio Doccia6	Rio Doccia6	2	TR30	0.98	305.08	305.30	305.30	305.38	0.030949	1.22	0.80	5.46	1.01
Rio Doccia6	Rio Doccia6	2	TR200	1.58	305.08	305.36	305.36	305.46	0.027541	1.39	1.13	5.77	1.00
Rio Doccia6	Rio Doccia6	1	TR30	0.98	290.08	290.23	290.31	290.52	0.267990	2.40	0.41	5.06	2.70
Rio Doccia6	Rio Doccia6	1	TR200	1.58	290.08	290.25	290.36	290.76	0.373353	3.19	0.49	5.15	3.28

HEC-RAS Plan: Taratura (Continued)

River	Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Rio Doccia5	Rio Doccia5	16	TR30	0.20	297.56	297.68	297.69	297.71	0.059244	0.84	0.26	6.13	1.18
Rio Doccia5	Rio Doccia5	16	TR200	0.32	297.56	297.70	297.71	297.74	0.059383	0.98	0.35	6.47	1.23
Rio Doccia5	Rio Doccia5	8	TR30	0.20	289.10	289.36	289.38	289.46	0.055753	1.41	0.14	1.05	1.25
Rio Doccia5	Rio Doccia5	8	TR200	0.32	289.10	289.41	289.44	289.54	0.054916	1.59	0.20	1.26	1.28
Rio Doccia4	Rio Doccia4	92	TR30	1.17	286.41	286.81	286.84	287.01	0.035062	1.94	0.60	1.96	1.12
Rio Doccia4	Rio Doccia4	92	TR200	1.89	286.41	286.95	286.97	287.18	0.032186	2.16	0.88	2.24	1.10
Rio Doccia4	Rio Doccia4	91	TR30	1.17	284.60	284.84	284.87	284.98	0.042120	1.67	0.70	3.64	1.22
Rio Doccia4	Rio Doccia4	91	TR200	1.89	284.60	284.90	284.95	285.12	0.049078	2.08	0.91	3.77	1.35
Rio Doccia4	Rio Doccia4	90	TR30	1.17	281.75	282.41	282.23	282.51	0.021552	1.45	0.81	1.95	0.72
Rio Doccia4	Rio Doccia4	90	TR200	1.89	281.75	282.60	282.45	282.73	0.018318	1.60	1.18	1.95	0.66
Rio Doccia4	Rio Doccia4	89.5		Bridge									
Rio Doccia4	Rio Doccia4	89	TR30	1.17	280.75	281.00	281.04	281.18	0.057879	1.88	0.62	3.29	1.38
Rio Doccia4	Rio Doccia4	89	TR200	1.89	280.75	281.05	281.14	281.34	0.070935	2.39	0.79	3.31	1.57
Rio Doccia2	Rio Doccia2	231	TR30	0.20	281.39	281.47	281.48	281.51	0.060106	0.86	0.23	4.26	1.20
Rio Doccia2	Rio Doccia2	231	TR200	0.32	281.39	281.49	281.51	281.54	0.060115	0.96	0.33	5.30	1.23
Rio Doccia2	Rio Doccia2	1	TR30	0.20	277.18	278.93	277.35	278.93	0.000007	0.05	3.66	2.61	0.01
Rio Doccia2	Rio Doccia2	1	TR200	0.32	277.18	279.64	277.40	279.64	0.000007	0.06	5.51	2.61	0.01
Rio Doccia1	Rio Doccia1	6870	TR30	3.90	277.18	278.86	278.06	278.92	0.003371	1.12	3.47	2.61	0.31
Rio Doccia1	Rio Doccia1	6870	TR200	6.30	277.18	279.56	278.33	279.63	0.002969	1.19	5.30	2.61	0.27
Rio Doccia1	Rio Doccia1	6865		Bridge									
Rio Doccia1	Rio Doccia1	6864	TR30	3.90	277.11	277.81	278.11	278.79	0.128245	4.38	0.89	1.78	1.98
Rio Doccia1	Rio Doccia1	6864	TR200	6.30	277.11	277.98	278.39	279.36	0.145313	5.20	1.21	1.99	2.13
Rio Doccia1	Rio Doccia1	6657	TR30	3.90	275.31	275.93	275.93	276.16	0.022670	2.14	1.82	3.86	0.99
Rio Doccia1	Rio Doccia1	6657	TR200	6.30	275.31	276.12	276.12	276.42	0.021514	2.42	2.60	4.32	1.00
Rio Doccia1	Rio Doccia1	6469	TR30	3.90	273.27	275.18	274.20	275.21	0.001021	0.73	5.31	4.00	0.20
Rio Doccia1	Rio Doccia1	6469	TR200	6.30	273.27	275.52	274.44	275.56	0.001450	0.95	6.65	4.00	0.23
Rio Doccia1	Rio Doccia1	6450		Culvert									
Rio Doccia1	Rio Doccia1	6441	TR30	3.90	272.85	274.26	273.69	274.32	0.002765	1.05	3.73	4.03	0.35
Rio Doccia1	Rio Doccia1	6441	TR200	6.30	272.85	274.48	273.92	274.58	0.003953	1.35	4.66	4.32	0.42
Rio Doccia1	Rio Doccia1	6379	TR30	3.90	272.51	274.24	273.31	274.27	0.001410	0.83	4.70	3.48	0.23
Rio Doccia1	Rio Doccia1	6379	TR200	6.30	272.51	274.44	273.54	274.51	0.002532	1.17	5.41	3.48	0.30
Rio Doccia1	Rio Doccia1	6300		Culvert									
Rio Doccia1	Rio Doccia1	6266	TR30	3.90	270.76	271.74	271.74	272.04	0.026243	2.44	1.60	2.64	1.00
Rio Doccia1	Rio Doccia1	6266	TR200	6.30	270.76	271.99	271.99	272.36	0.024735	2.69	2.34	3.16	1.00
Rio Doccia1	Rio Doccia1	5967	TR30	3.90	268.23	269.07	269.13	269.40	0.031589	2.55	1.53	2.99	1.14
Rio Doccia1	Rio Doccia1	5967	TR200	6.30	268.23	269.26	269.35	269.71	0.034283	2.96	2.13	3.48	1.21
Rio Doccia1	Rio Doccia1	5711	TR30	3.90	265.89	267.03	266.80	267.16	0.009209	1.62	2.41	3.57	0.63
Rio Doccia1	Rio Doccia1	5711	TR200	6.30	265.89	267.51	267.03	267.61	0.004784	1.42	4.43	4.80	0.47
Rio Doccia1	Rio Doccia1	5700		Bridge									
Rio Doccia1	Rio Doccia1	5662	TR30	3.90	265.62	266.45	266.53	266.81	0.036528	2.68	1.46	2.90	1.21
Rio Doccia1	Rio Doccia1	5662	TR200	6.30	265.62	266.56	266.76	267.18	0.053997	3.50	1.80	3.22	1.49
Rio Doccia1	Rio Doccia1	5333	TR30	3.90	263.45	264.72	264.63	264.93	0.020321	2.05	1.90	3.11	0.84
Rio Doccia1	Rio Doccia1	5333	TR200	6.30	263.45	264.92	264.88	265.23	0.022781	2.44	2.58	3.44	0.90
Rio Doccia1	Rio Doccia1	4970	TR30	3.90	261.34	262.27	262.27	262.48	0.024108	2.03	1.92	4.53	1.00
Rio Doccia1	Rio Doccia1	4970	TR200	6.30	261.34	262.45	262.45	262.70	0.022568	2.23	2.83	5.55	0.99
Rio Doccia1	Rio Doccia1	4718	TR30	3.90	259.02	260.12	260.13	260.42	0.029521	2.45	1.59	2.73	1.03
Rio Doccia1	Rio Doccia1	4718	TR200	6.30	259.02	260.35	260.38	260.73	0.028992	2.71	2.33	3.49	1.06
Rio Doccia1	Rio Doccia1	4670	TR30	3.90	257.35	257.90	258.26	259.56	0.316573	5.71	0.68	2.37	3.40
Rio Doccia1	Rio Doccia1	4670	TR200	6.30	257.35	258.03	258.46	259.89	0.266917	6.04	1.04	2.93	3.23
Rio Doccia1	Rio Doccia1	4634		Culvert									
Rio Doccia1	Rio Doccia1	4598	TR30	3.90	257.35	258.11	258.26	258.59	0.061005	3.08	1.27	3.23	1.57
Rio Doccia1	Rio Doccia1	4598	TR200	6.30	257.35	258.31	258.46	258.81	0.046486	3.13	2.01	4.09	1.42
Rio Doccia1	Rio Doccia1	3257	TR30	3.90	250.85	251.56	251.18	251.58	0.001617	0.70	5.60	9.33	0.29
Rio Doccia1	Rio Doccia1	3257	TR200	6.30	250.85	251.76	251.29	251.79	0.001726	0.84	7.54	9.96	0.31
Rio Doccia1	Rio Doccia1	3215		Bridge									
Rio Doccia1	Rio Doccia1	3172	TR30	5.00	250.85	251.46	251.23	251.52	0.004434	1.06	4.73	9.02	0.47
Rio Doccia1	Rio Doccia1	3172	TR200	8.00	250.85	251.64	251.36	251.72	0.004506	1.25	6.42	9.61	0.49
Rio Doccia1	Rio Doccia1	1907	TR30	5.00	247.59	248.05	248.05	248.19	0.023643	1.68	2.97	10.22	1.00
Rio Doccia1	Rio Doccia1	1907	TR200	8.00	247.59	248.16	248.16	248.35	0.023950	1.90	4.21	12.17	1.03
Rio Doccia1	Rio Doccia1	61	TR30	5.00	242.70	244.65	243.39	244.67	0.000661	0.66	7.60	4.86	0.17
Rio Doccia1	Rio Doccia1	61	TR200	8.00	242.70	245.59	243.61	245.61	0.000478	0.66	12.16	4.86	0.13
Rio Doccia1	Rio Doccia1	45		Bridge									
Rio Doccia1	Rio Doccia1	28	TR30	5.00	242.70	244.58	243.39	244.60	0.000754	0.69	7.24	4.85	0.18
Rio Doccia1	Rio Doccia1	28	TR200	8.00	242.70	245.56	243.61	245.58	0.000494	0.67	12.01	4.86	0.14
Rio Doccia	Rio Doccia	84	TR30	24.70	241.56	244.51	243.25	244.59	0.001489	1.21	20.41	12.18	0.30

HEC-RAS Plan: Taratura (Continued)

River	Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Rio dell'Olmo	Rio dell'Olmo	795	TR30	31.20	245.93	246.78	246.74	247.03	0.015542	2.23	13.99	22.92	0.91
Rio dell'Olmo	Rio dell'Olmo	795	TR200	48.90	245.93	247.02	246.96	247.33	0.013893	2.46	19.91	25.90	0.89
Rio dell'Olmo	Rio dell'Olmo	225	TR30	31.20	241.78	243.63	243.63	244.16	0.017195	3.24	9.64	8.98	1.00
Rio dell'Olmo	Rio dell'Olmo	225	TR200	48.90	241.78	244.06	244.06	244.69	0.016301	3.51	13.95	11.09	1.00
Lama	Lama	5903	TR30	3.10	380.22	380.79	380.94	381.25	0.069379	3.01	1.03	3.03	1.65
Lama	Lama	5903	TR200	5.10	380.22	380.93	381.12	381.53	0.069341	3.45	1.48	3.51	1.70
Lama	Lama	4633	TR30	3.10	317.02	317.65	317.65	317.86	0.023604	2.06	1.51	3.45	1.00
Lama	Lama	4633	TR200	5.10	317.02	317.38	317.83	320.27	0.651767	7.53	0.68	2.77	4.86
Lama	Lama	4338	TR30	3.10	306.91	307.25	307.74	311.11	0.999143	8.70	0.36	1.52	5.74
Lama	Lama	4338	TR200	5.10	306.91	307.80	307.96	308.35	0.051028	3.31	1.54	2.83	1.43
Lama	Lama	3958	TR30	3.10	296.68	297.69	297.72	298.02	0.036997	2.57	1.21	2.13	1.09
Lama	Lama	3958	TR200	5.10	296.68	297.60	297.99	298.85	0.151126	4.94	1.03	1.96	2.17
Lama	Lama	3677	TR30	3.10	292.72	293.45	293.61	293.95	0.062792	3.14	0.99	2.29	1.53
Lama	Lama	3677	TR200	5.10	292.72	293.82	293.83	294.14	0.025782	2.54	2.01	3.23	1.03
Lama	Lama	3659	TR30	3.10	290.58	292.28	291.51	292.31	0.001868	0.83	3.74	3.31	0.25
Lama	Lama	3659	TR200	5.10	290.58	292.64	291.72	292.69	0.002369	1.03	4.93	3.31	0.27
Lama	Lama	3650		Culvert									
Lama	Lama	3625	TR30	3.10	290.55	291.41	291.41	291.74	0.033627	2.55	1.22	1.84	1.00
Lama	Lama	3625	TR200	5.10	290.55	291.76	291.76	292.02	0.027239	2.26	2.26	4.32	1.00
Lama	Lama	3292	TR30	6.20	285.38	286.42	286.66	287.01	0.054940	3.41	1.82	3.29	1.46
Lama	Lama	3292	TR200	10.20	285.38	286.67	286.87	287.31	0.062960	3.53	2.89	5.91	1.61
Lama	Lama	2967	TR30	6.20	279.78	282.44	280.84	282.46	0.000406	0.50	12.39	9.66	0.14
Lama	Lama	2967	TR200	10.20	279.78	282.41	281.18	282.44	0.001210	0.85	12.01	9.66	0.24
Lama	Lama	2940		Bridge									
Lama	Lama	2930	TR30	6.20	279.58	280.18	280.59	282.12	0.333781	6.17	1.01	3.27	3.55
Lama	Lama	2930	TR200	10.20	279.58	280.36	280.83	282.30	0.214785	6.17	1.65	3.81	2.99
Lama	Lama	2613	TR30	6.20	276.57	277.45	277.45	277.80	0.025349	2.62	2.36	3.43	1.01
Lama	Lama	2613	TR200	10.20	276.57	277.73	277.73	278.20	0.025722	3.05	3.34	3.55	1.00
Lama	Lama	2280	TR30	6.20	273.17	273.96	274.10	274.48	0.043202	3.18	1.95	3.42	1.34
Lama	Lama	2280	TR200	10.20	273.17	274.20	274.37	274.88	0.042430	3.63	2.81	3.77	1.34
Lama	Lama	1833	TR30	6.20	267.50	268.51	268.62	269.00	0.036754	3.09	2.01	3.13	1.23
Lama	Lama	1833	TR200	10.20	267.50	268.77	269.08	269.40	0.037201	3.52	2.90	3.70	1.27
Lama	Lama	1562	TR30	6.20	264.63	266.42	265.34	266.43	0.000323	0.47	13.18	10.14	0.13
Lama	Lama	1562	TR200	10.20	264.63	266.67	265.53	266.69	0.000515	0.65	15.70	10.14	0.17
Lama	Lama	1400		Bridge									
Lama	Lama	1350	TR30	6.20	264.23	264.85	265.14	266.06	0.232930	4.87	1.27	4.54	2.94
Lama	Lama	1350	TR200	10.20	264.23	265.92	265.33	266.00	0.002731	1.26	8.11	6.95	0.37
Lama	Lama	1340	TR30	6.20	263.13	265.43	264.14	265.47	0.001072	0.85	7.33	3.84	0.20
Lama	Lama	1340	TR200	10.20	263.13	265.88	264.42	265.95	0.001688	1.13	9.05	3.84	0.23
Lama	Lama	1330		Culvert									
Lama	Lama	1320	TR30	6.20	263.13	265.28	264.14	265.32	0.001332	0.92	6.75	3.84	0.22
Lama	Lama	1320	TR200	10.20	263.13	265.74	264.42	265.82	0.001966	1.20	8.53	3.84	0.26
Lama	Lama	1300	TR30	6.20	263.13	265.23	264.14	265.28	0.001433	0.94	6.56	3.84	0.23
Lama	Lama	1300	TR200	10.20	263.13	265.67	264.42	265.75	0.002142	1.24	8.25	3.84	0.27
Lama	Lama	1298		Culvert									
Lama	Lama	1297	TR30	6.20	263.13	264.30	264.14	264.52	0.012715	2.08	2.98	3.82	0.75
Lama	Lama	1297	TR200	10.20	263.13	264.63	264.42	264.93	0.012529	2.39	4.26	3.84	0.73
Lama	Lama	778	TR30	6.20	259.63	260.88	260.88	261.33	0.032943	2.96	2.09	2.34	1.00
Lama	Lama	778	TR200	10.20	259.63	261.33	261.33	261.83	0.031280	3.12	3.27	3.28	1.00
Lama	Lama	449	TR30	6.20	257.87	259.53	258.91	259.61	0.003678	1.31	4.75	4.49	0.41
Lama	Lama	449	TR200	10.20	257.87	260.78	259.21	260.83	0.001077	0.95	10.75	4.81	0.20
Lama	Lama	420		Bridge									
Lama	Lama	418	TR30	6.20	257.47	258.62	258.40	258.79	0.009522	1.86	3.34	4.18	0.66
Lama	Lama	418	TR200	10.20	257.47	258.27	258.67	259.60	0.107696	5.10	2.00	3.56	2.17
Lama	Lama	44	TR30	6.20	256.04	257.63	257.25	257.77	0.008288	1.70	3.65	4.06	0.57
Lama	Lama	44	TR200	10.20	256.04	258.53	257.58	258.60	0.002593	1.19	8.54	6.46	0.33
Lama	Lama	10		Bridge									
Lama	Lama	4	TR30	6.20	256.04	257.04	257.25	257.71	0.058223	3.63	1.71	2.47	1.39
Lama	Lama	4	TR200	10.20	256.04	257.16	257.58	258.47	0.105191	5.07	2.01	2.81	1.91
Aff Matto	Aff Matto	8	TR30	3.00	277.65	278.03	278.03	278.17	0.024217	1.65	1.82	6.46	0.99
Aff Matto	Aff Matto	8	TR200	5.00	277.65	278.15	278.15	278.34	0.022366	1.94	2.58	6.64	0.99
Aff Matto	Aff Matto	7	TR30	3.00	265.97	266.43	266.52	266.73	0.056691	2.44	1.23	4.59	1.50
Aff Matto	Aff Matto	7	TR200	5.00	265.97	266.53	266.67	266.94	0.063702	2.85	1.76	5.67	1.63
Aff Matto	Aff Matto	6	TR30	3.00	258.69	261.25	259.34	261.25	0.000060	0.23	15.42	12.17	0.05
Aff Matto	Aff Matto	6	TR200	5.00	258.69	261.37	259.58	261.37	0.000129	0.35	16.81	12.17	0.08

HEC-RAS Plan: Taratura (Continued)

River	Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Aff Matto	Aff Matto	5.5											
			Bridge										
Aff Matto	Aff Matto	5	TR30	3.00	257.22	258.40	258.01	258.54	0.011611	1.67	1.80	1.75	0.53
Aff Matto	Aff Matto	5	TR200	5.00	257.22	258.06	258.30	258.91	0.088326	4.08	1.22	1.62	1.50
Aff Matto	Aff Matto	4	TR30	3.00	252.63	253.37	253.37	253.58	0.023491	2.01	1.49	3.59	1.00
Aff Matto	Aff Matto	4	TR200	5.00	252.63	253.74	253.56	253.83	0.012765	1.37	3.64	10.32	0.74
Aff Matto	Aff Matto	3	TR30	3.00	248.83	249.77	249.59	249.81	0.004840	0.87	3.43	9.23	0.46
Aff Matto	Aff Matto	3	TR200	5.00	248.83	249.79	249.70	249.88	0.011836	1.39	3.59	9.36	0.72
Aff Matto	Aff Matto	2	TR30	6.60	248.59	249.02	249.02	249.09	0.019601	1.34	6.17	43.35	0.88
Aff Matto	Aff Matto	2	TR200	10.60	248.59	249.85	249.08	249.85	0.000062	0.20	62.19	76.55	0.06
Aff Matto	Aff Matto	1	TR30	6.60	244.39	247.75	245.06	247.75	0.000001	0.06	121.25	42.74	0.01
Aff Matto	Aff Matto	1	TR200	10.60	244.39	249.85	245.13	249.85	0.000001	0.06	210.99	42.74	0.01
Aff Matto	Aff Matto	0.5	TR30	6.60	242.96	247.74	244.33	247.74	0.000065	0.29	22.86	6.09	0.05
Aff Matto	Aff Matto	0.5	TR200	10.60	242.96	249.84	244.58	249.84	0.000055	0.30	35.65	6.09	0.04