



# COMUNE DI AREZZO

Assessorato Urbanistica

Servizio Pianificazione Urbanistica e Governo del Territorio

Piano Strutturale

2019

## B Quadro conoscitivo

Indagini geologiche e idrauliche

**Sindaco**  
Alessandro Ghinelli

**Assessore all' Urbanistica**  
Marco Sacchetti

**Responsabile del Procedimento**  
Ing. Alessandro Farnè

RTI Raggruppamento Temporaneo di Professionisti **Studio D:RH**  
**Architetti associati**  
*Arch. Sergio Dinale*  
**Criteria srl**  
*Arch. Paolo Falqui*  
**Arch. Luca Di Figlia**  
**Urb. Matteo Scamporrino**  
**Avv. Agostino Zanelli Quarantini**

PS

# B1.2.1f

## Settore Sud2 - fascicolo delle sezioni e profili idraulici



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# B1.2.1

## Allegato - Fascicolo delle sezioni e profili idraulici

Garante dell'informazione e della partecipazione  
**Dott.ssa Daniela Farsetti**

Dirigente Servizio Pianificazione Urbanistica  
**Ing. Alessandro Farnè**

Dirigente Servizio Ambiente  
**Ing. Giovanni Baldini**

Dirigente Servizio Progettazione Opere Pubbliche  
**Ing. Antonella Fabbianelli**

Dirigente Progetto per lo sviluppo delle attività economiche negli ambiti Edilizia e SUAP e promozione del territorio  
**Ing. Paolo Frescucci**

Direttore Ufficio Mobilità  
**Ing. Roberto Bernardini**

Direttore Ufficio Programmazione e Sviluppo Economico del Territorio  
**Dott.ssa Stefania Guidelli**

#### **Ufficio del Piano**

Arch. Omero Angeli  
Dott.ssa Antonella Benocci  
Sig. Matteo Borri  
Dott. Giuseppe Cesari  
Arch. Fulvia Comanducci  
Arch. Elisabetta Dreassi  
Geol. Alessandro Forzoni  
Geom. Valentina Mazzoni  
Dott. Vincenzo Oliva  
Arch. Laura Pagliai  
Geom. Gianna Pezzuoli  
Ing. Deborah Romei  
Arch. Laura Rogialli  
Geol. Annalisa Romizi  
Sig.ra Fiorenza Verdelli

#### **Gruppo di progettazione**

#### **Studio D:RH Architetti associati**

Arch. Sergio Dinale  
Arch. Paola Rigonat Hugues  
Arch. Enrico Robazza  
Arch. Kristiana D'Agnolo  
Giulio Brocco

#### **Criteria srl**

Arch. Paolo Falqui  
Ing. Paolo Bagliani  
Arch. Veronica Saggi  
Geol. Andrea Soriga  
Arch. Laura Zanini  
Dott. Riccardo Frau  
Ing. Gianfilippo Serra  
Dott. Vittorio Serra  
Ing. Roberto Ledda  
Dott.ssa Cinzia Marcella Orrù

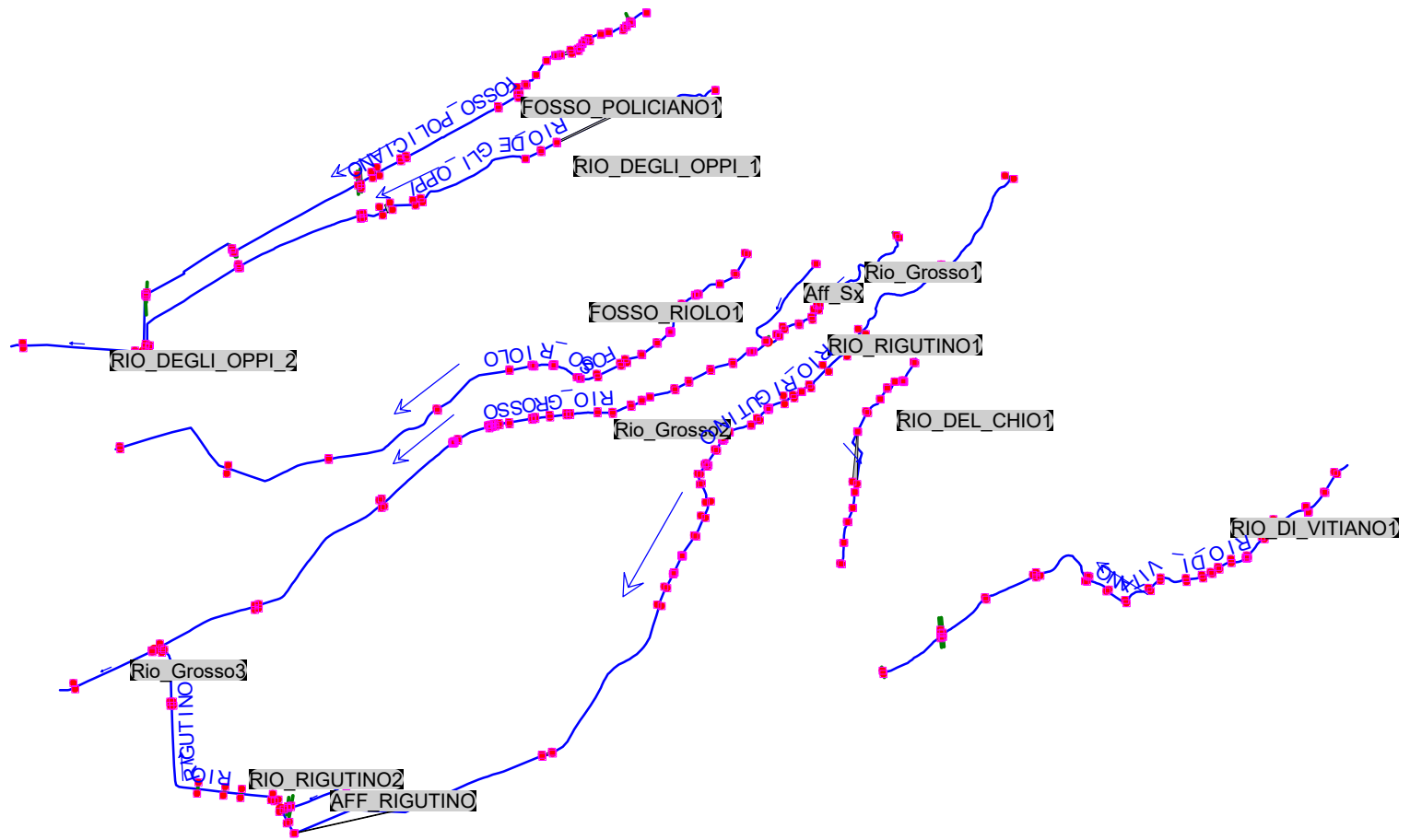
#### **Indagini geologiche e idrauliche**

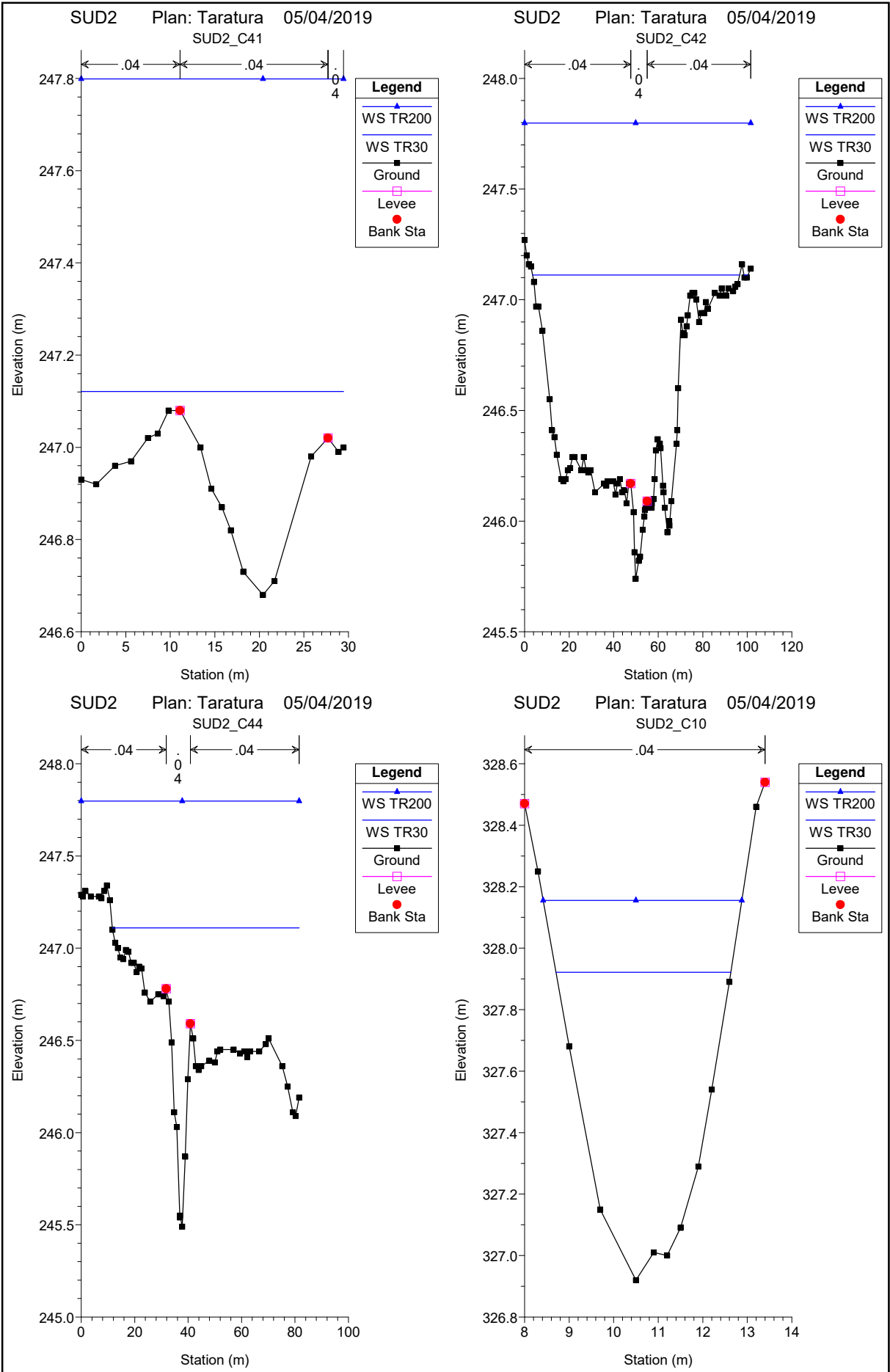
Geol. Maurizio Costa  
Geol. Antonio Pitzalis  
Ing. Pietro Chiavaccini (Prima STP)  
Ing. Elisa Formica

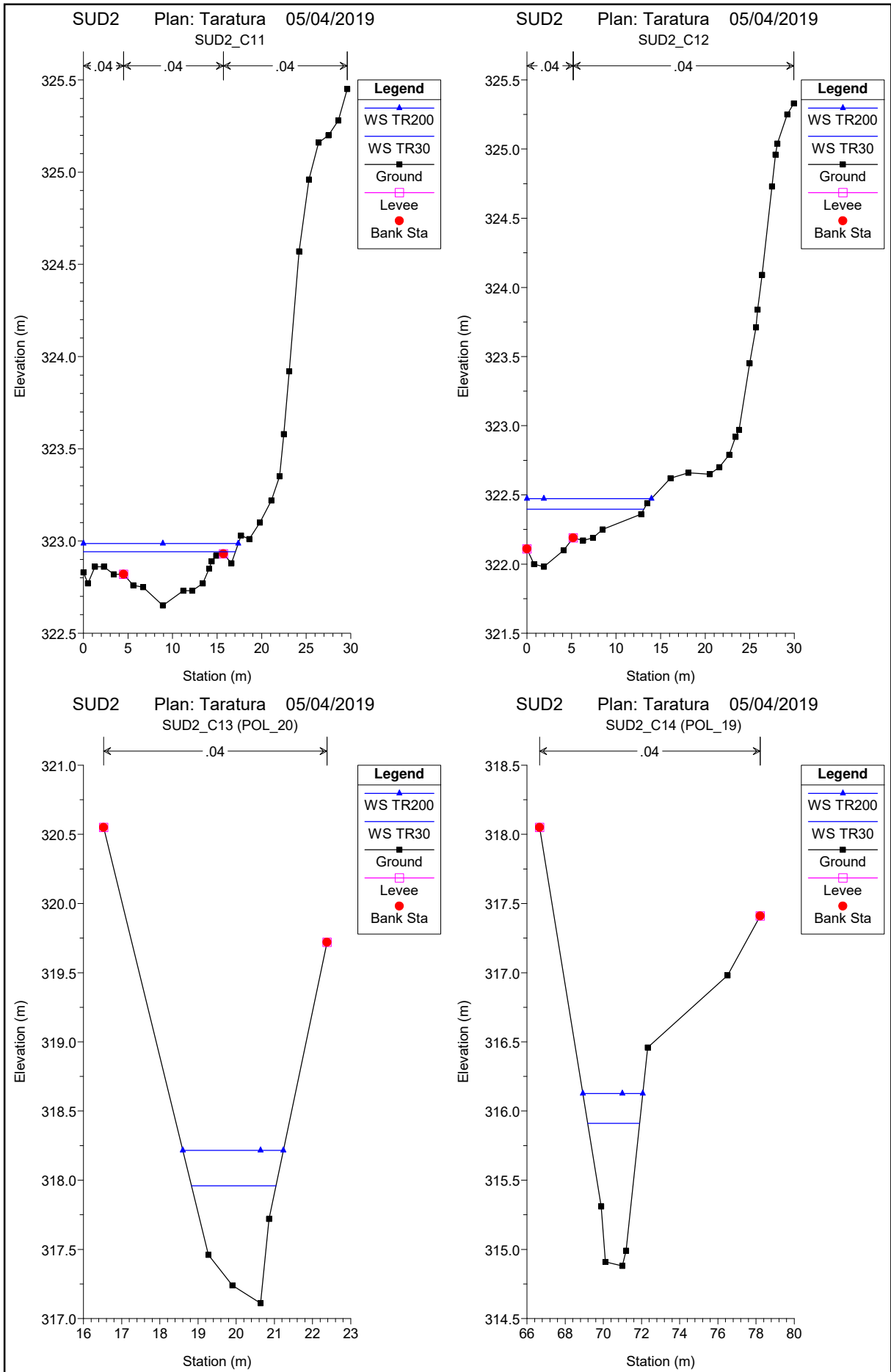
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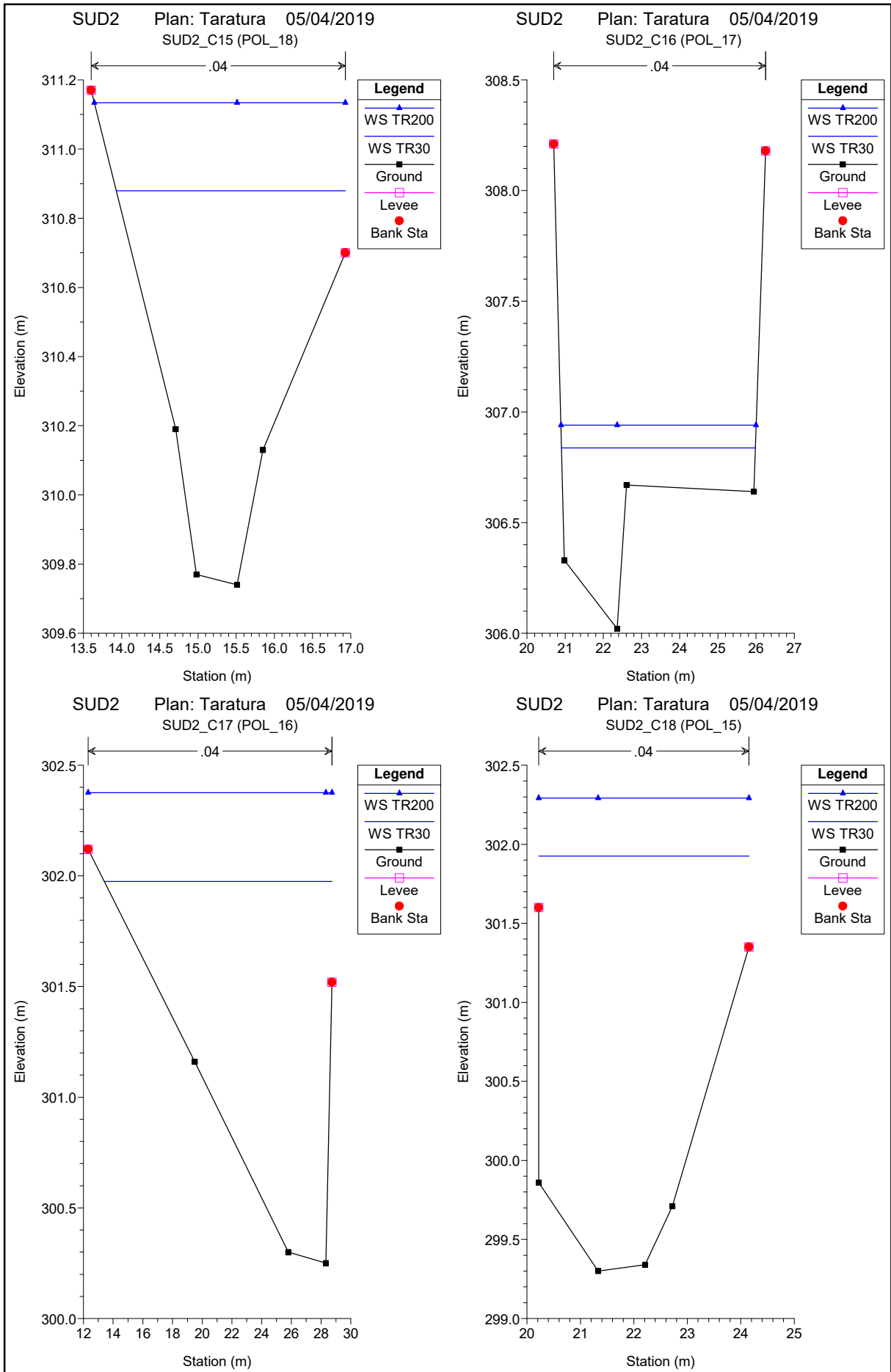
**Urb. Luca Di Figlia**

**Avv. Agostino Zanelli Quarantini**

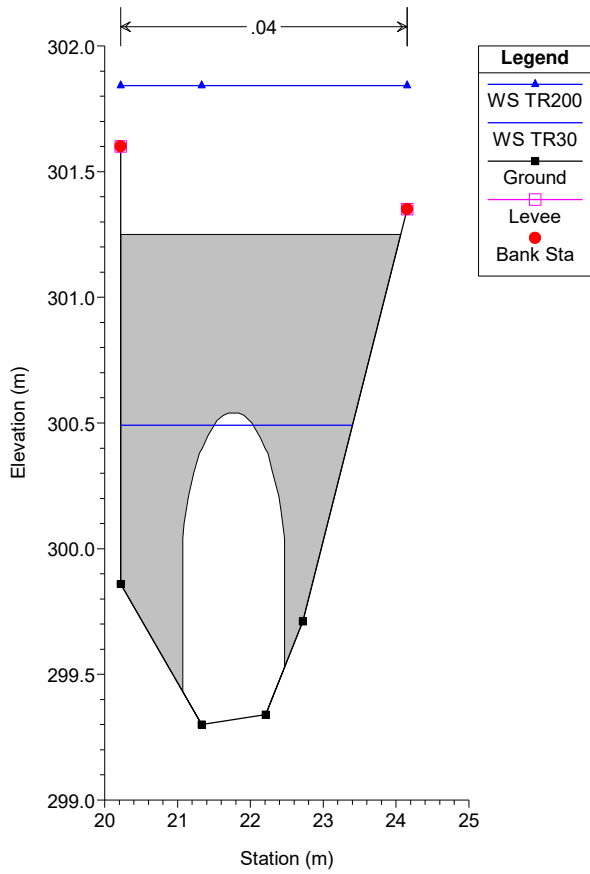




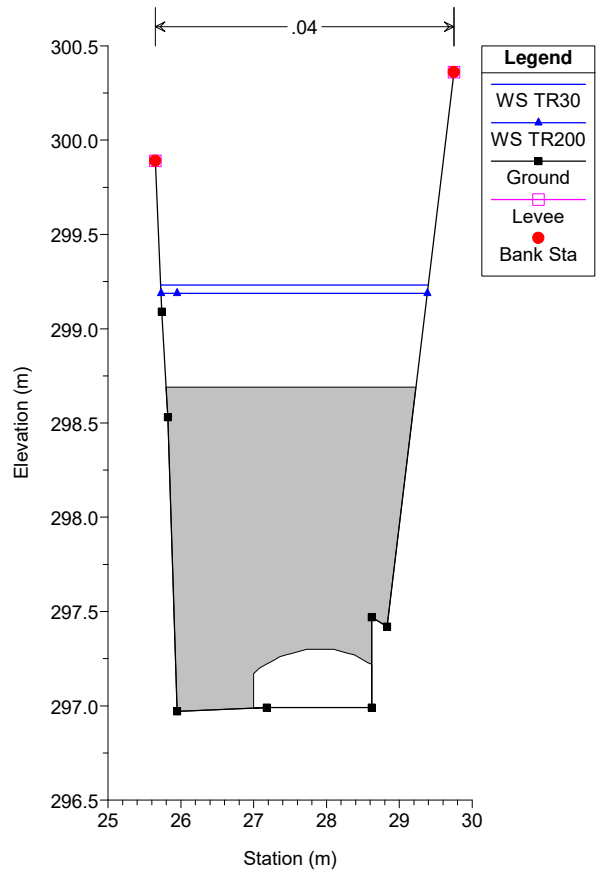




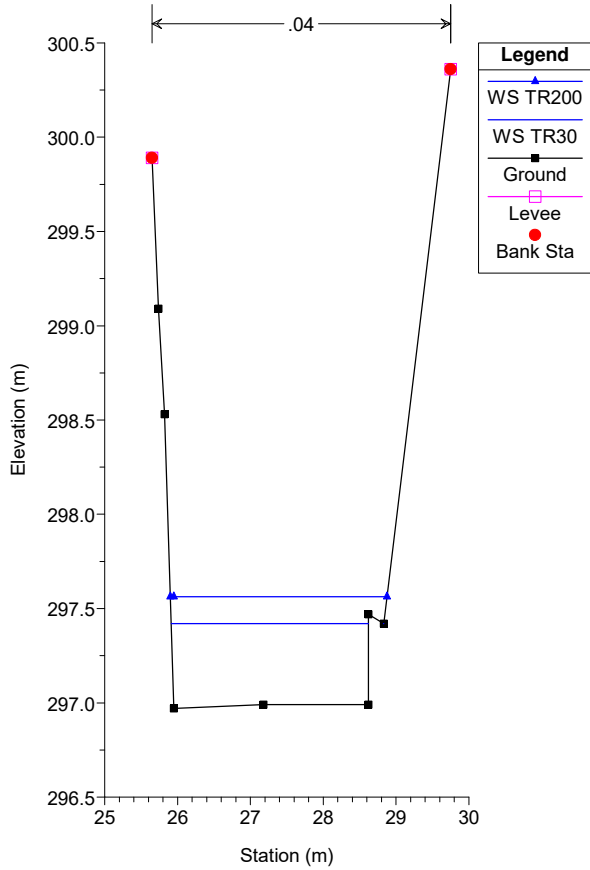
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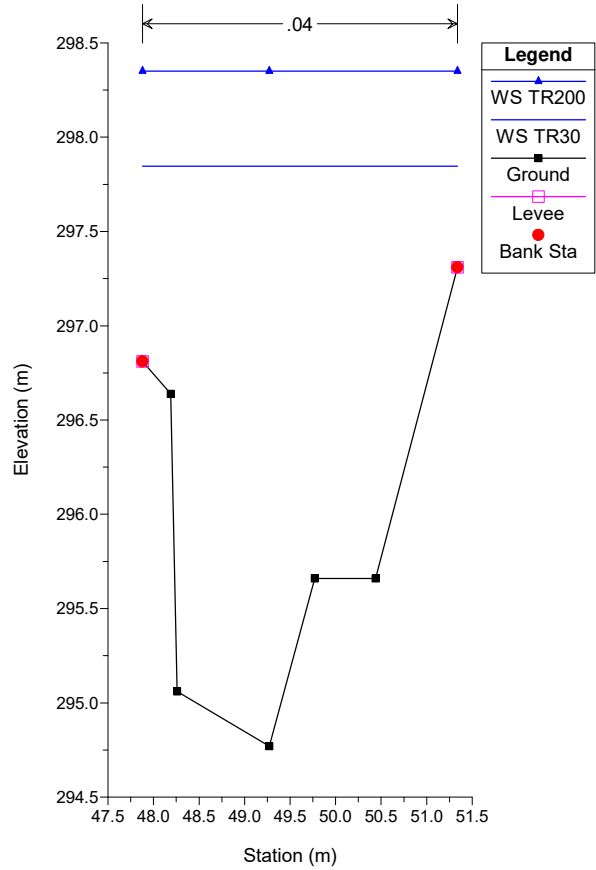
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SUD2 Plan: Taratura 05/04/2019  
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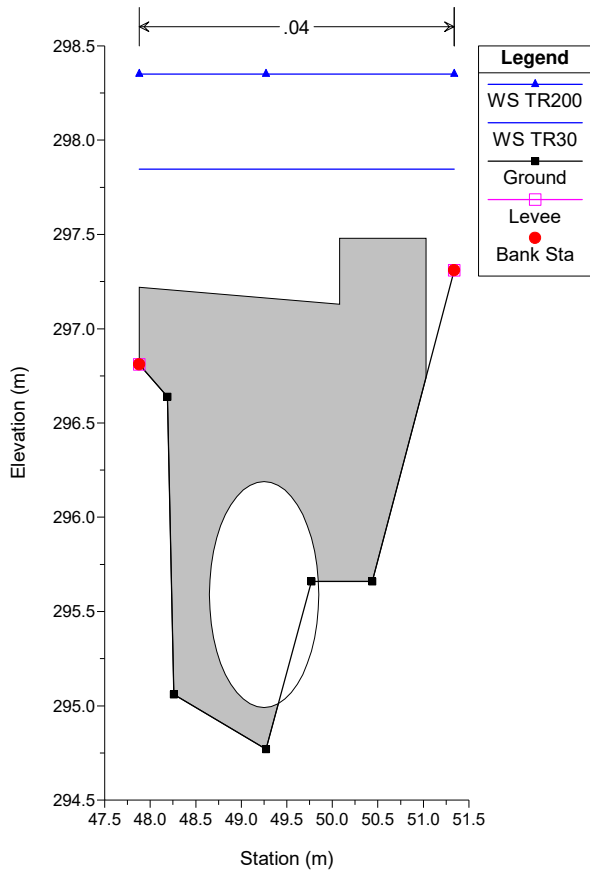


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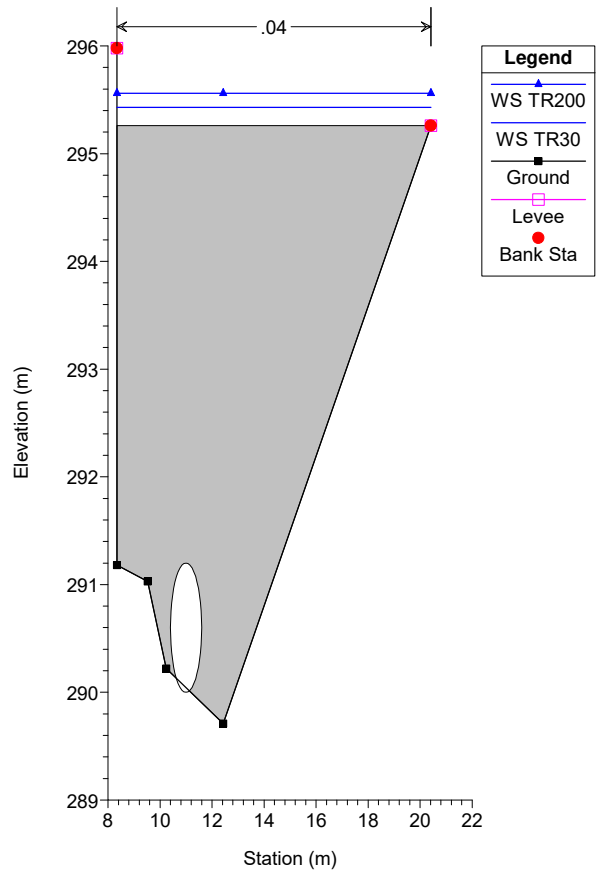




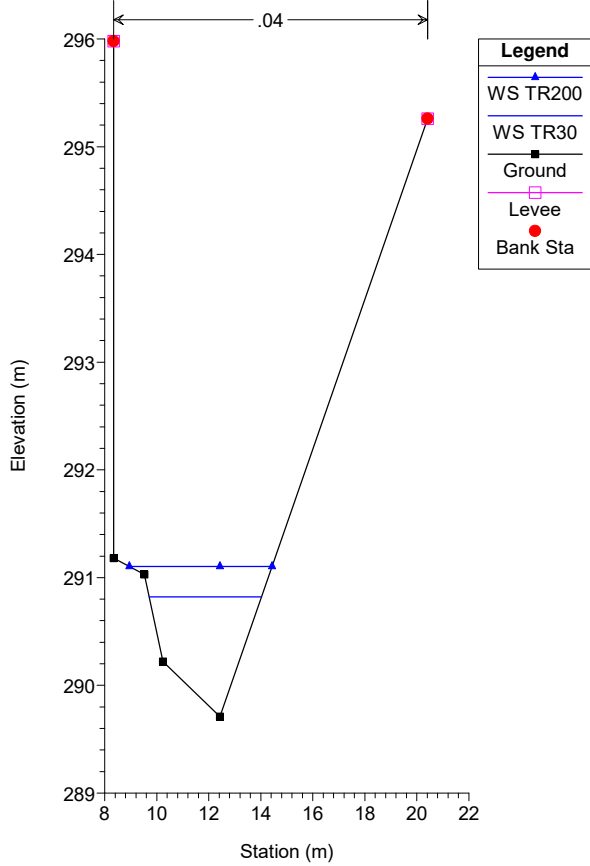
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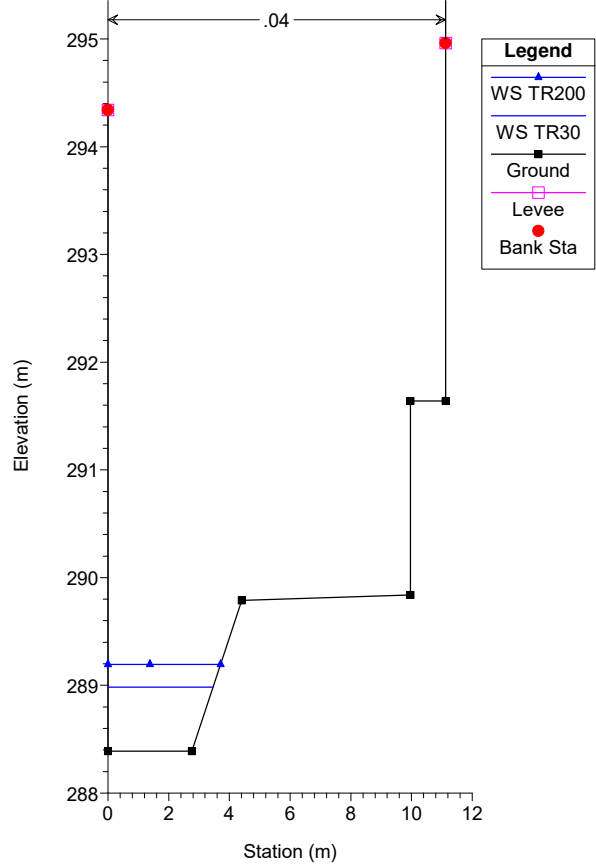
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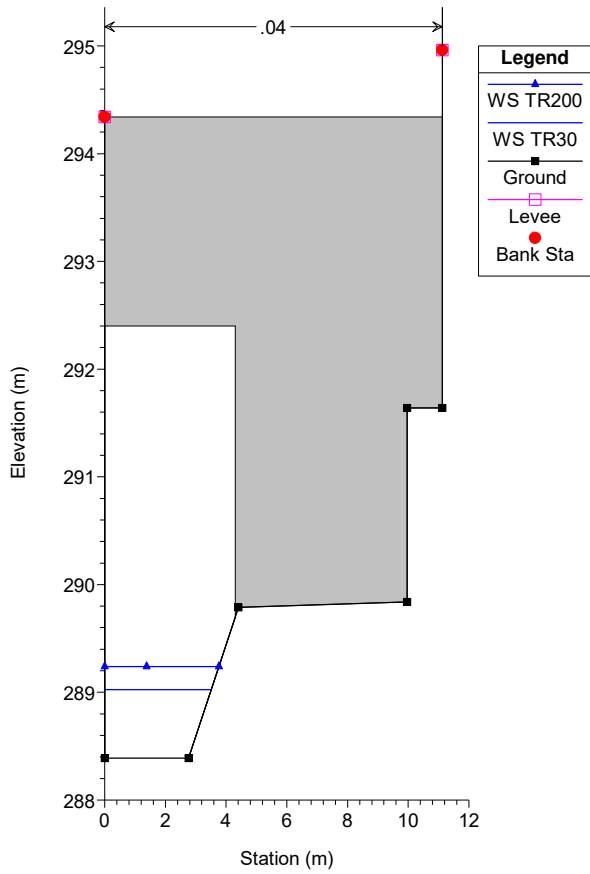
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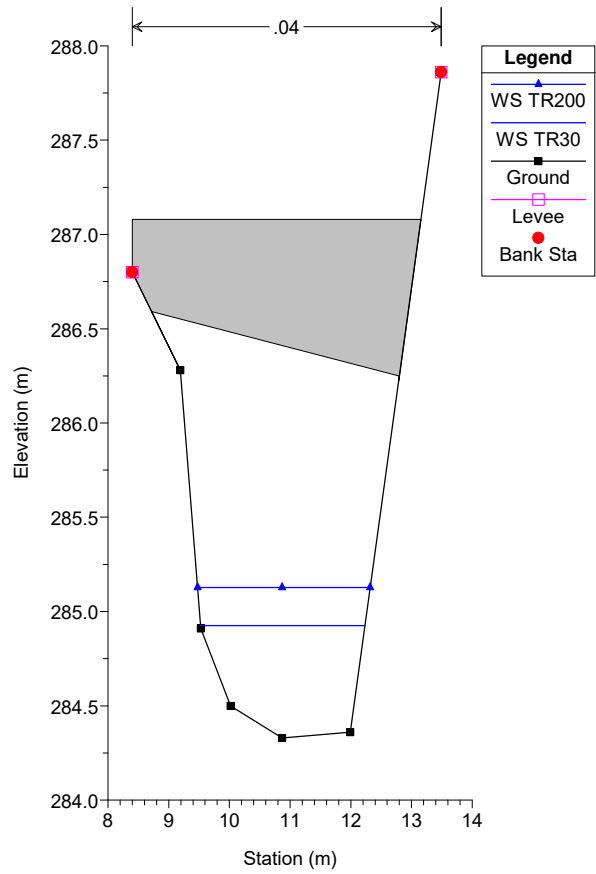
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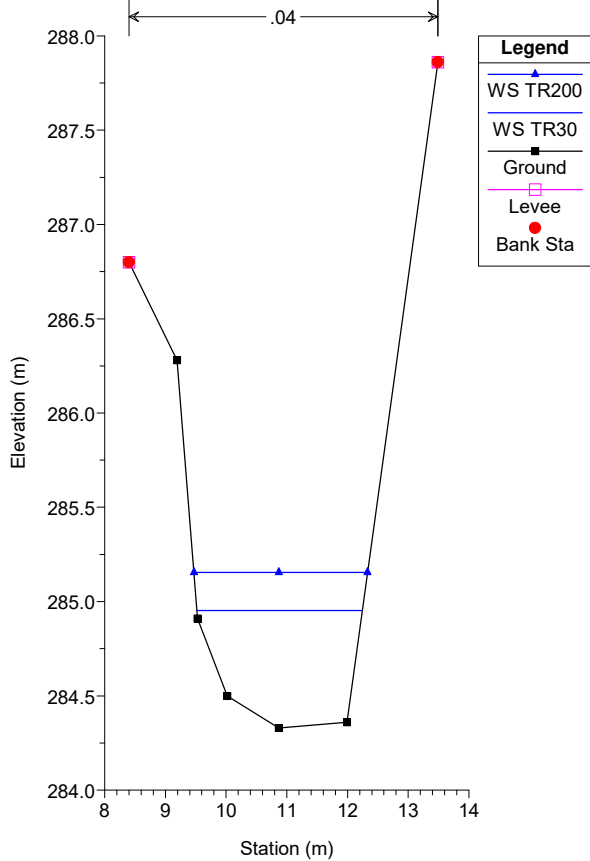
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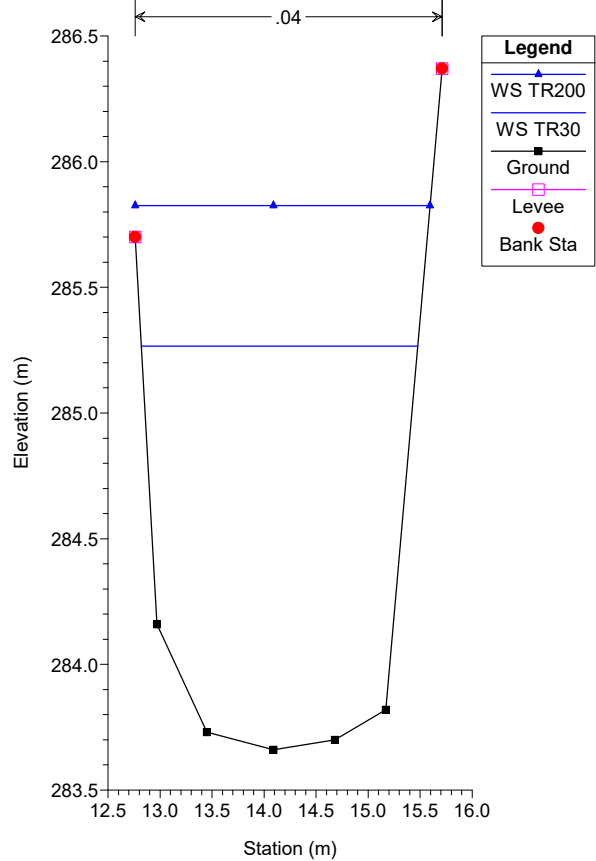
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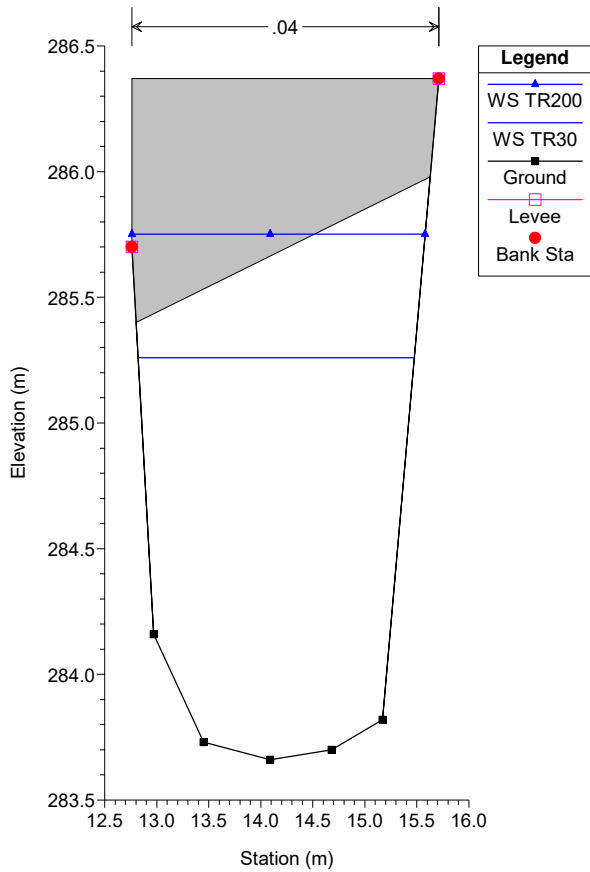
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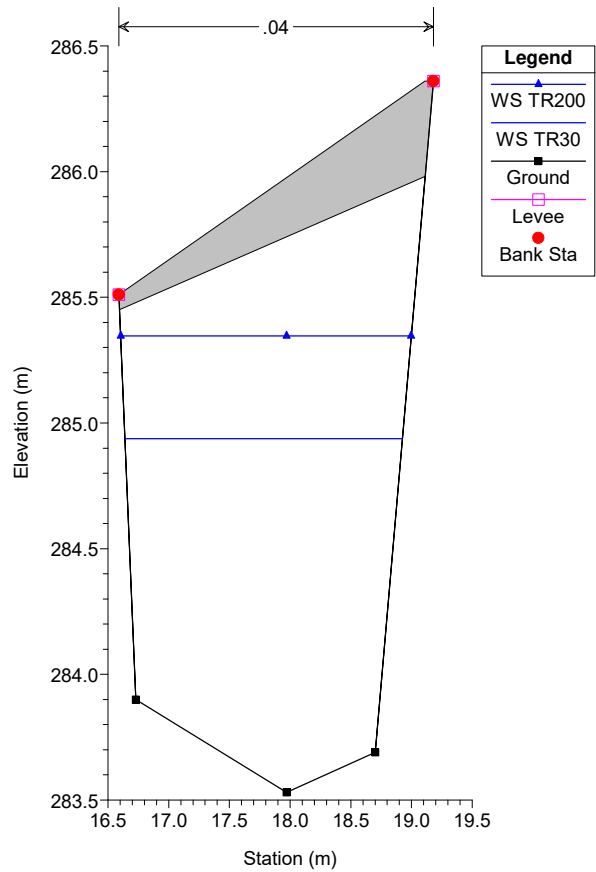
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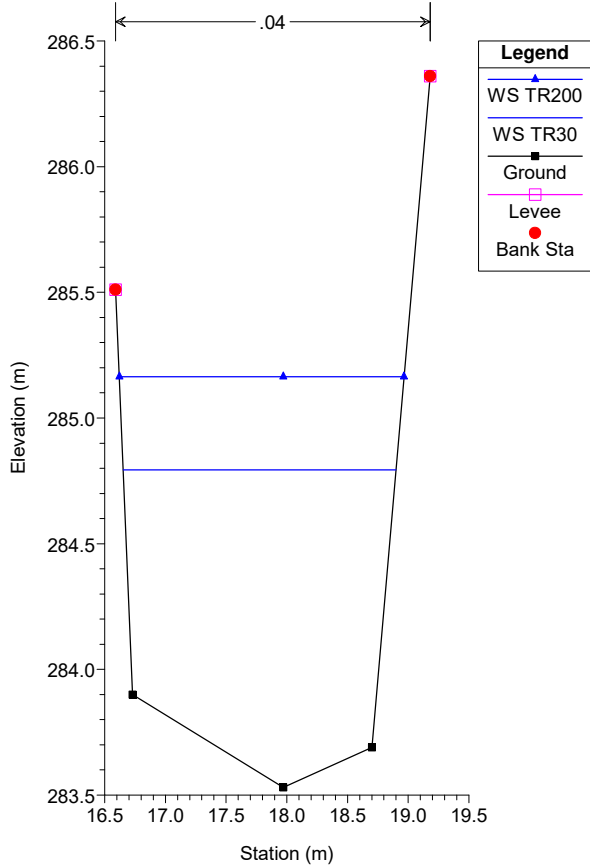
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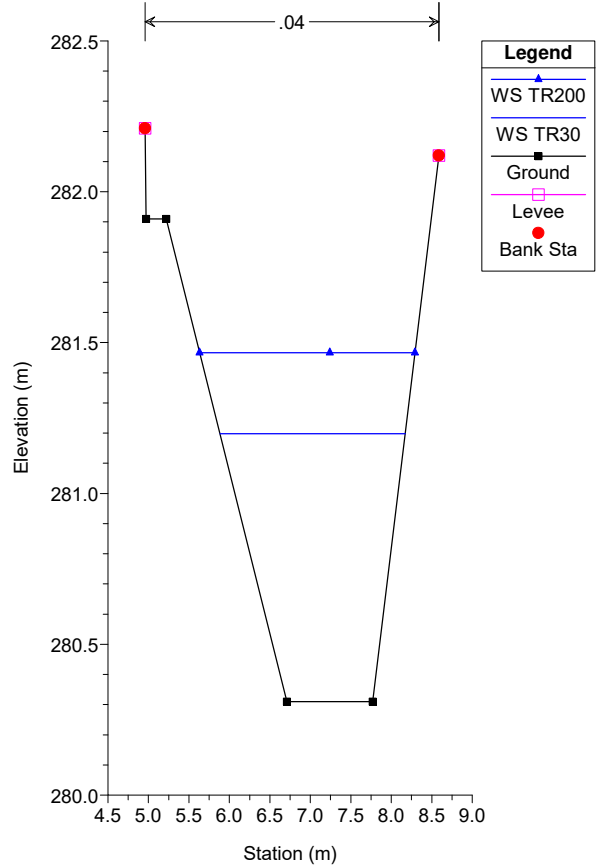
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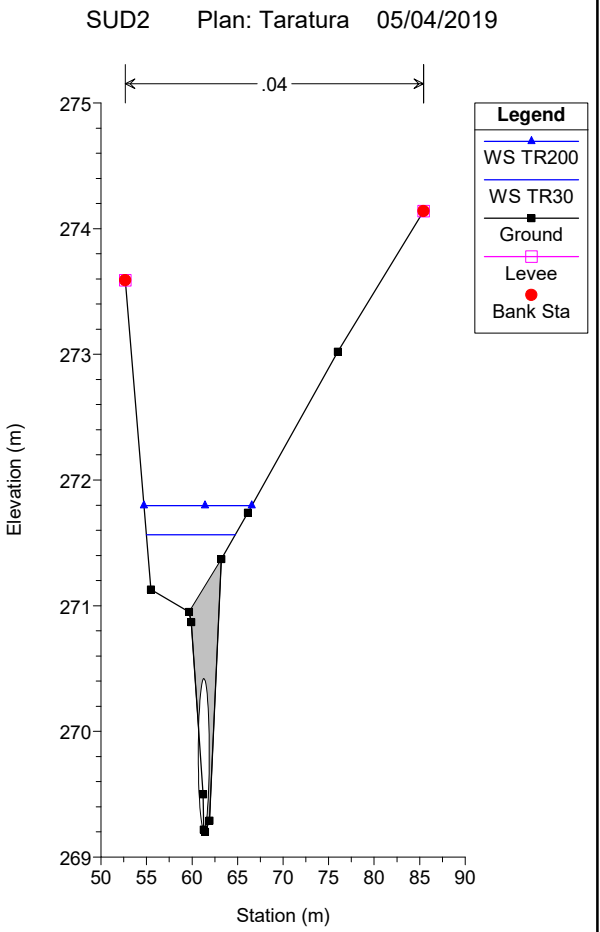
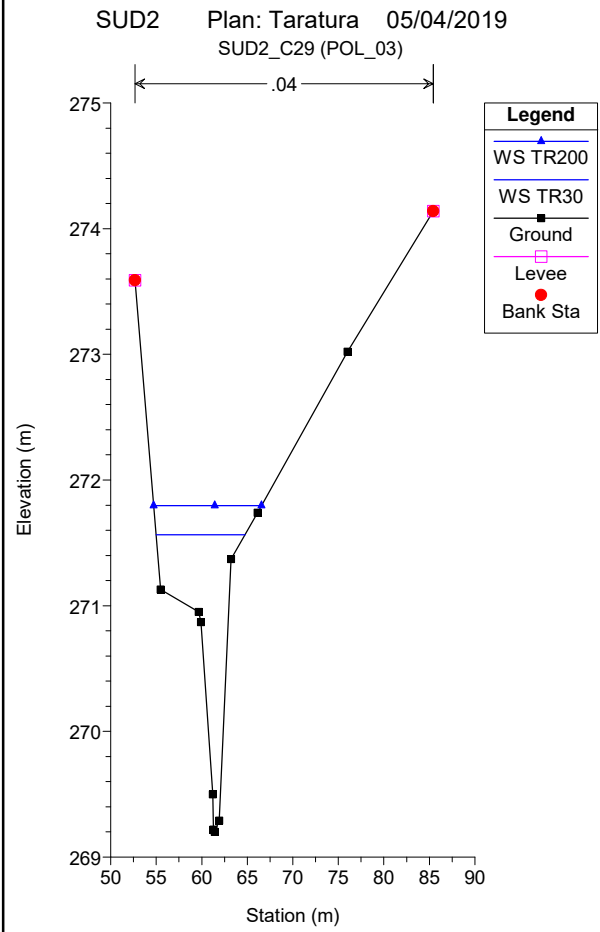
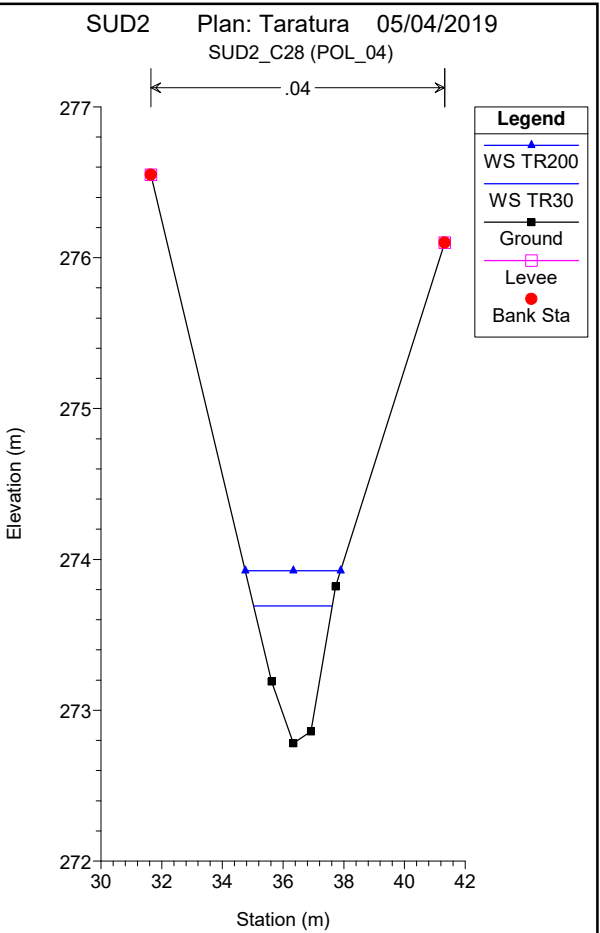
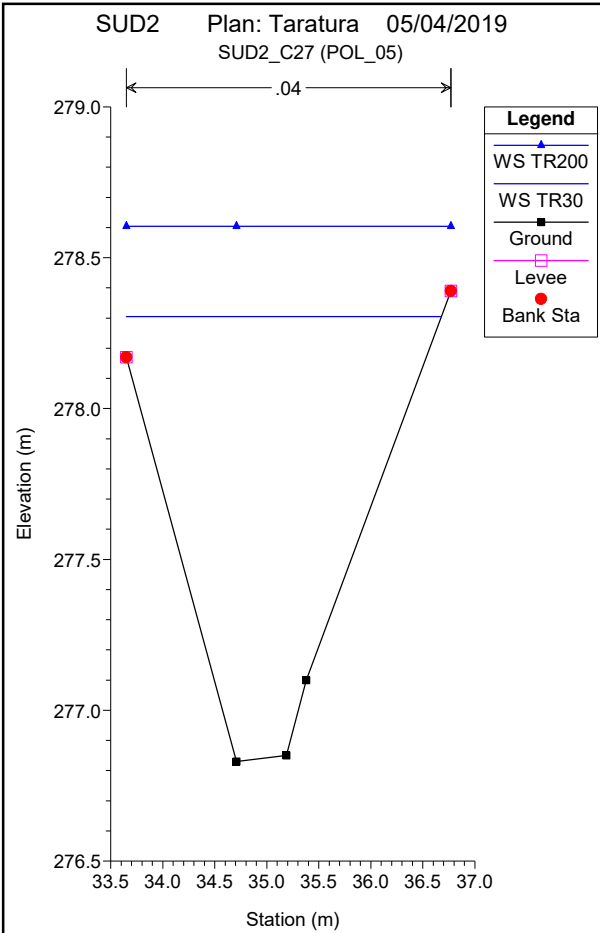


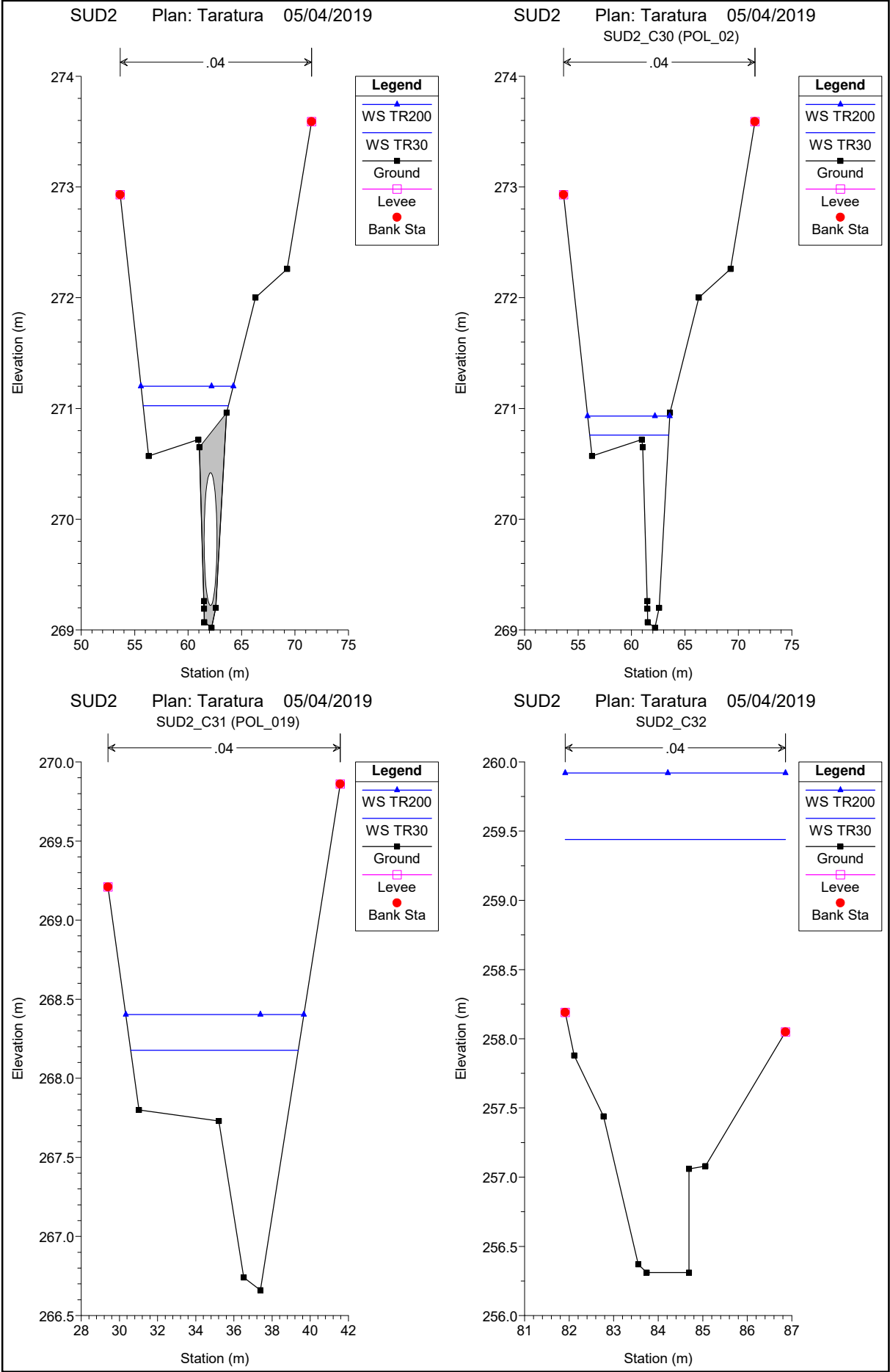
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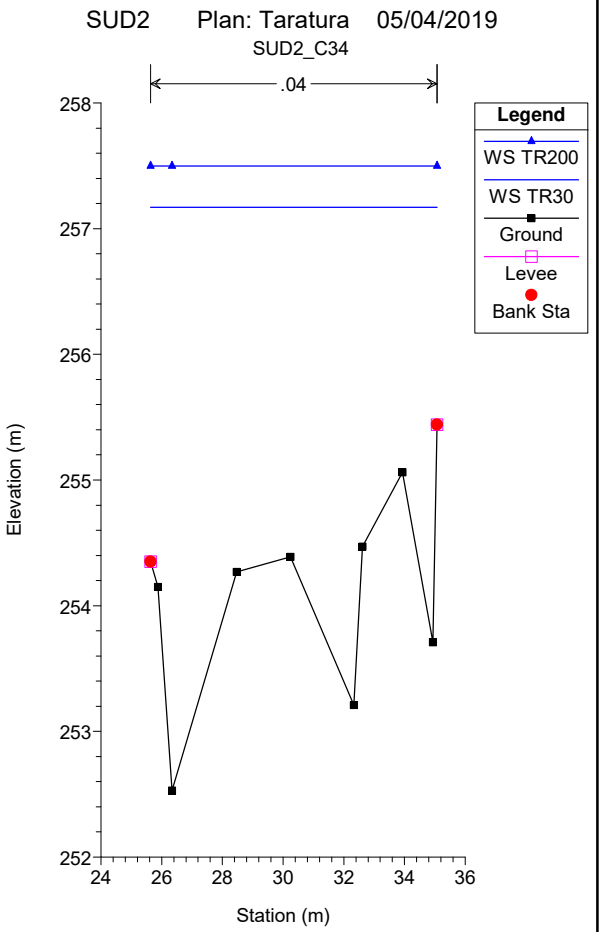
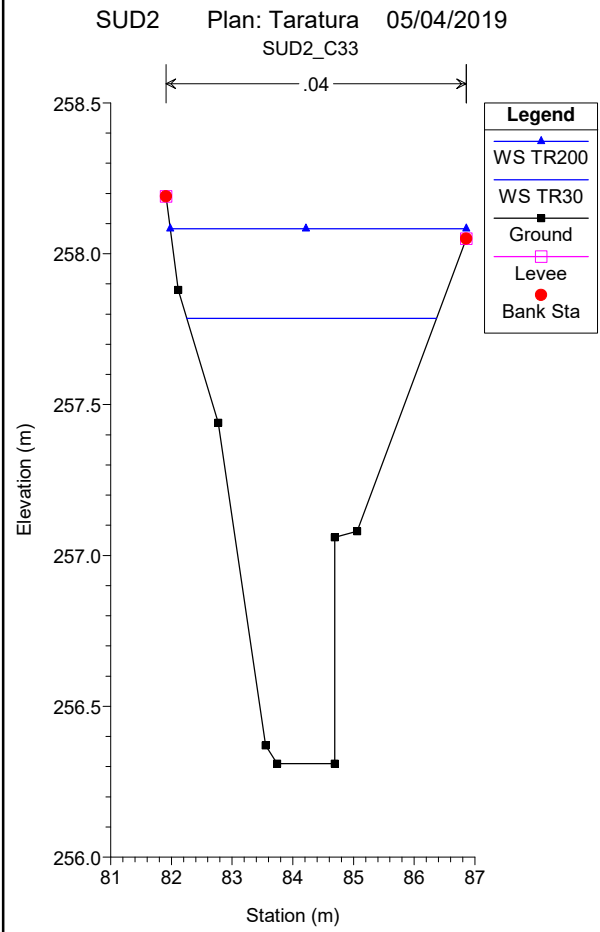
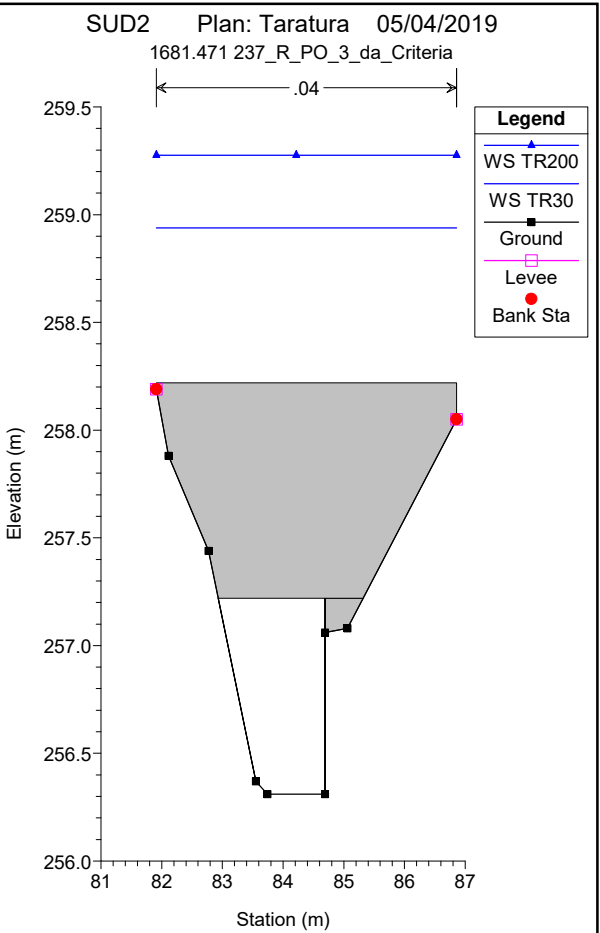
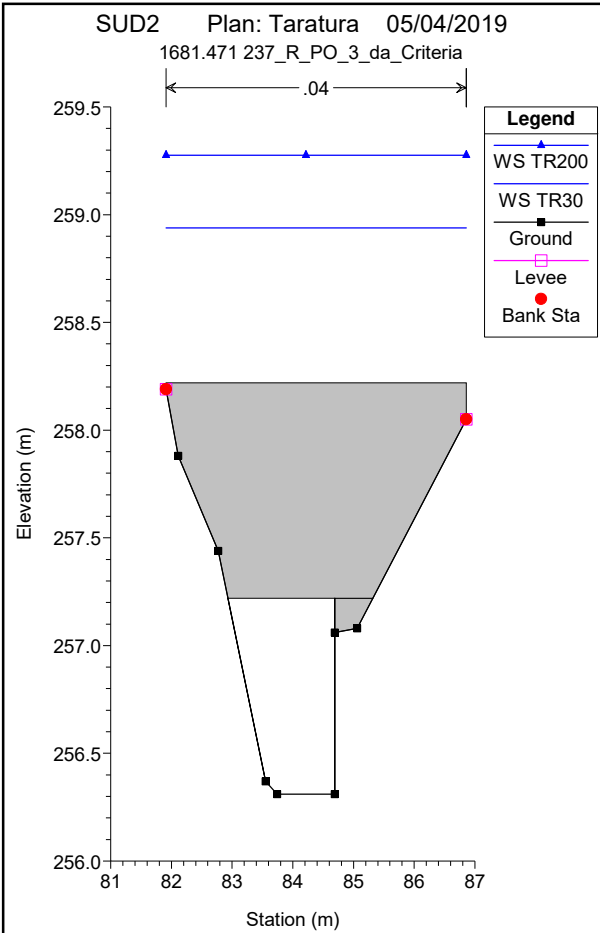


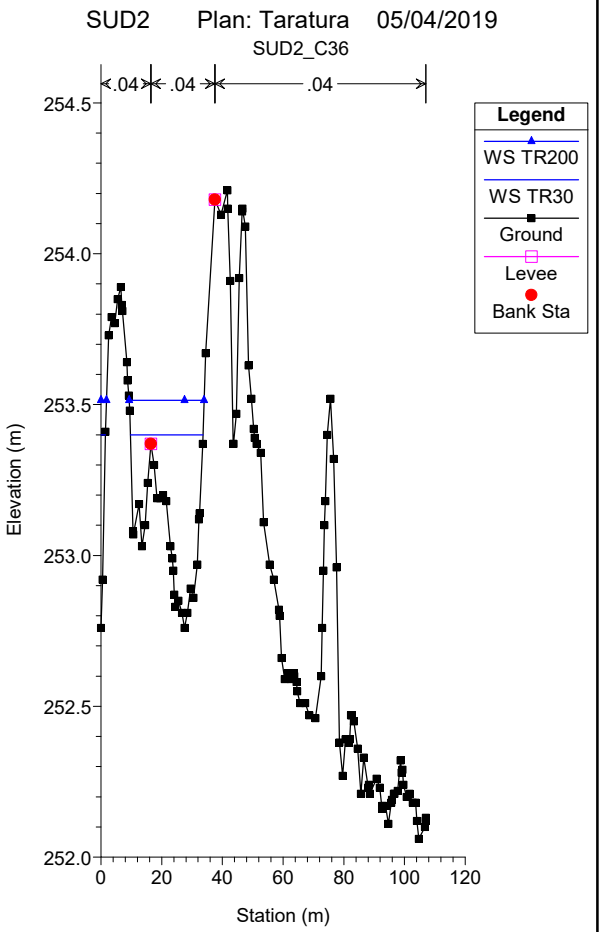
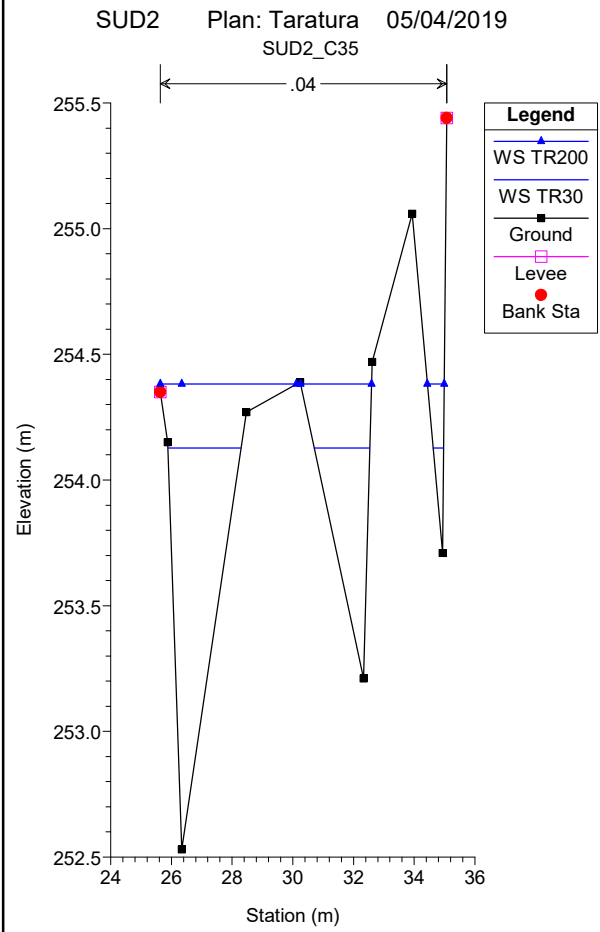
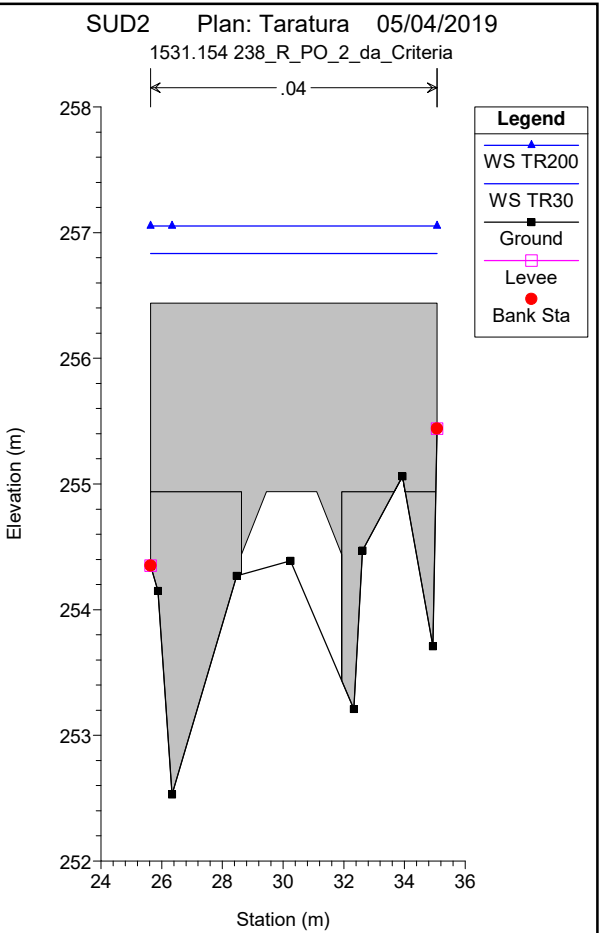
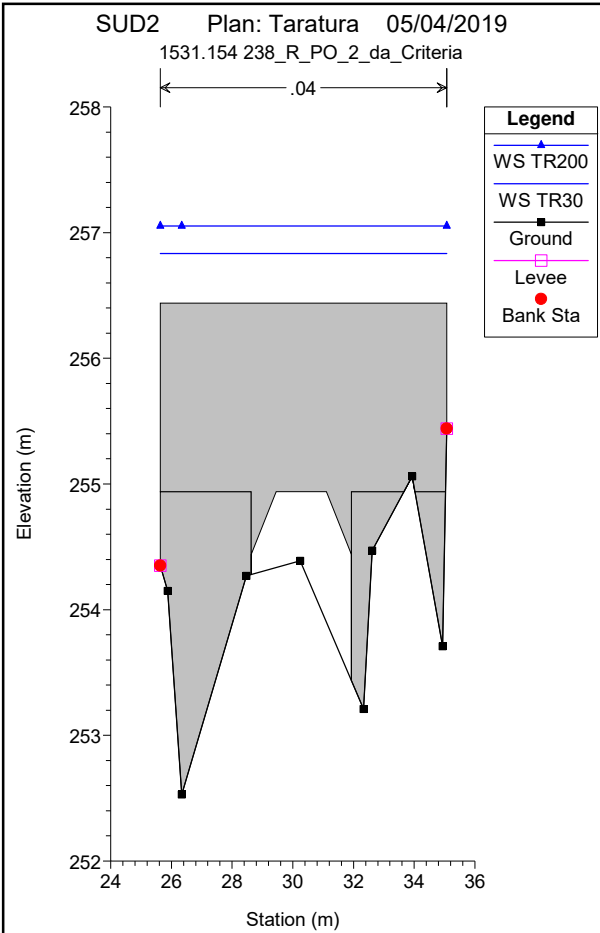
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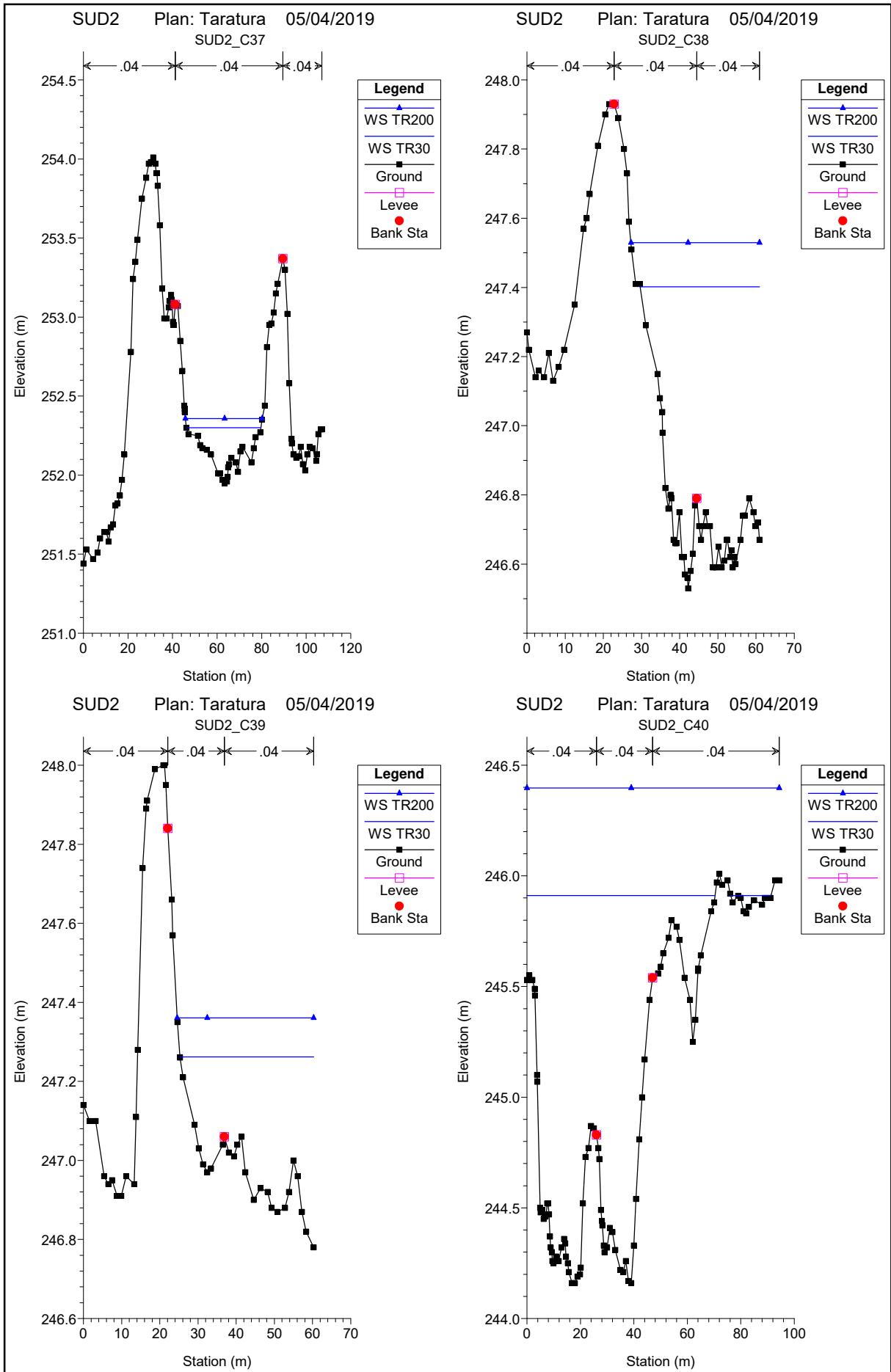




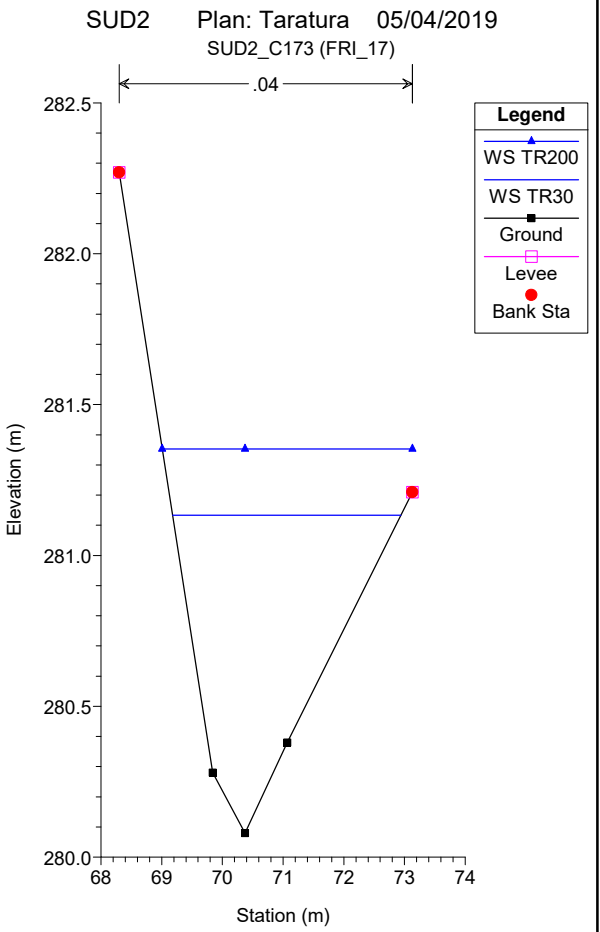
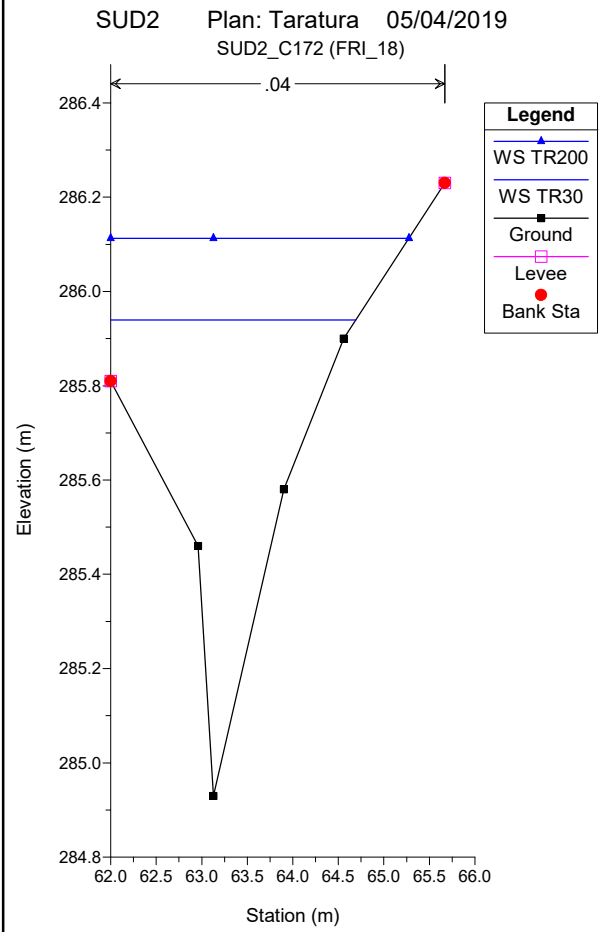
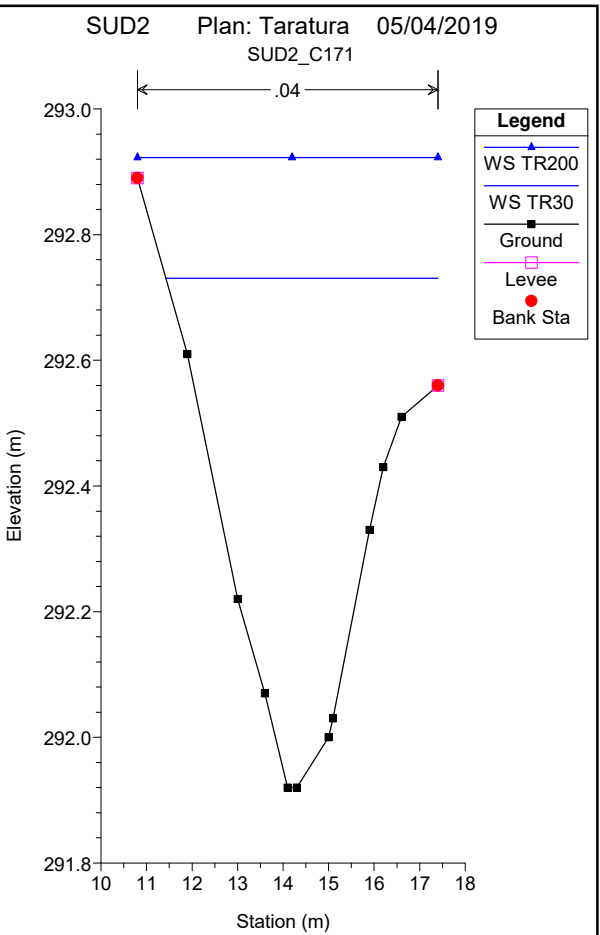
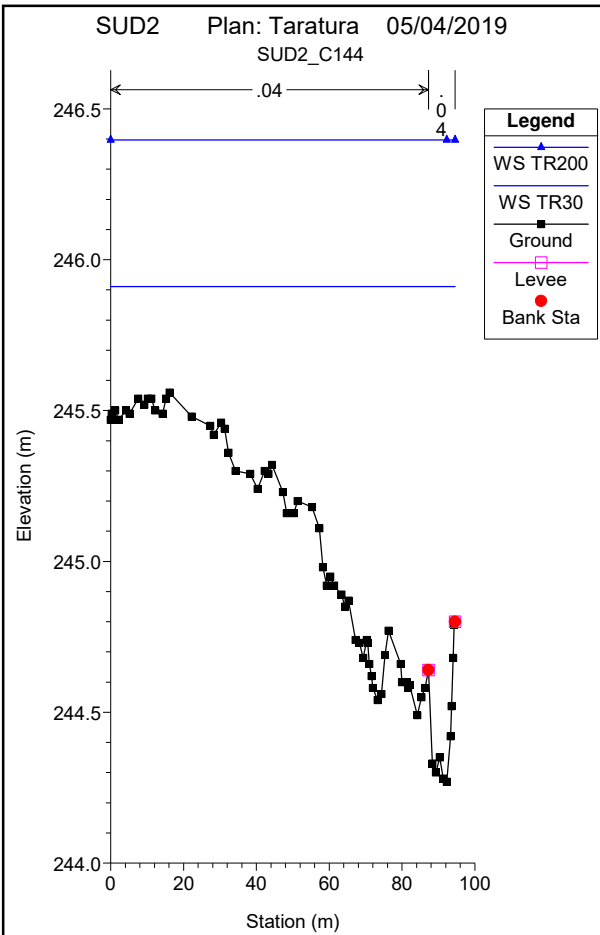


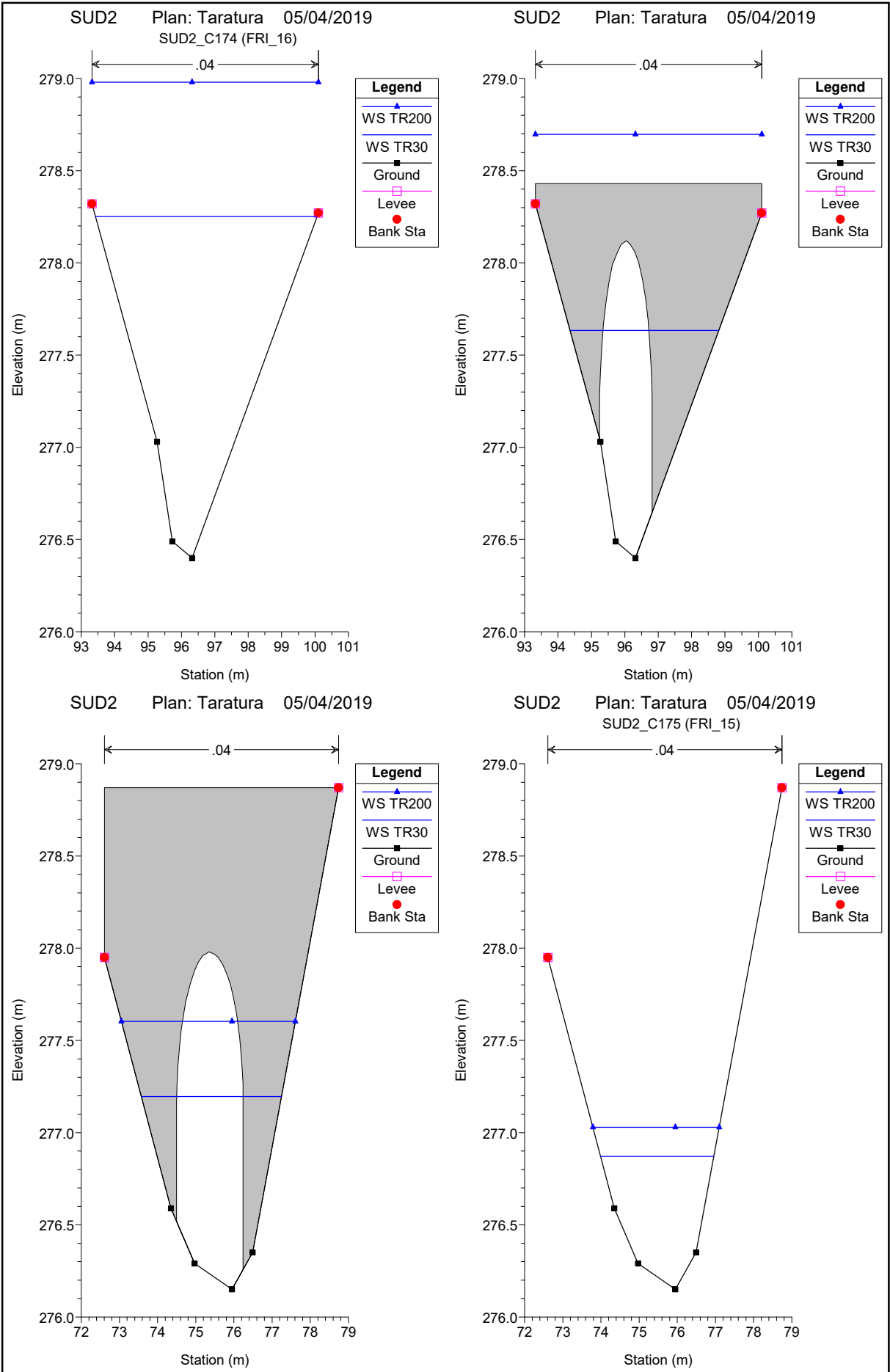


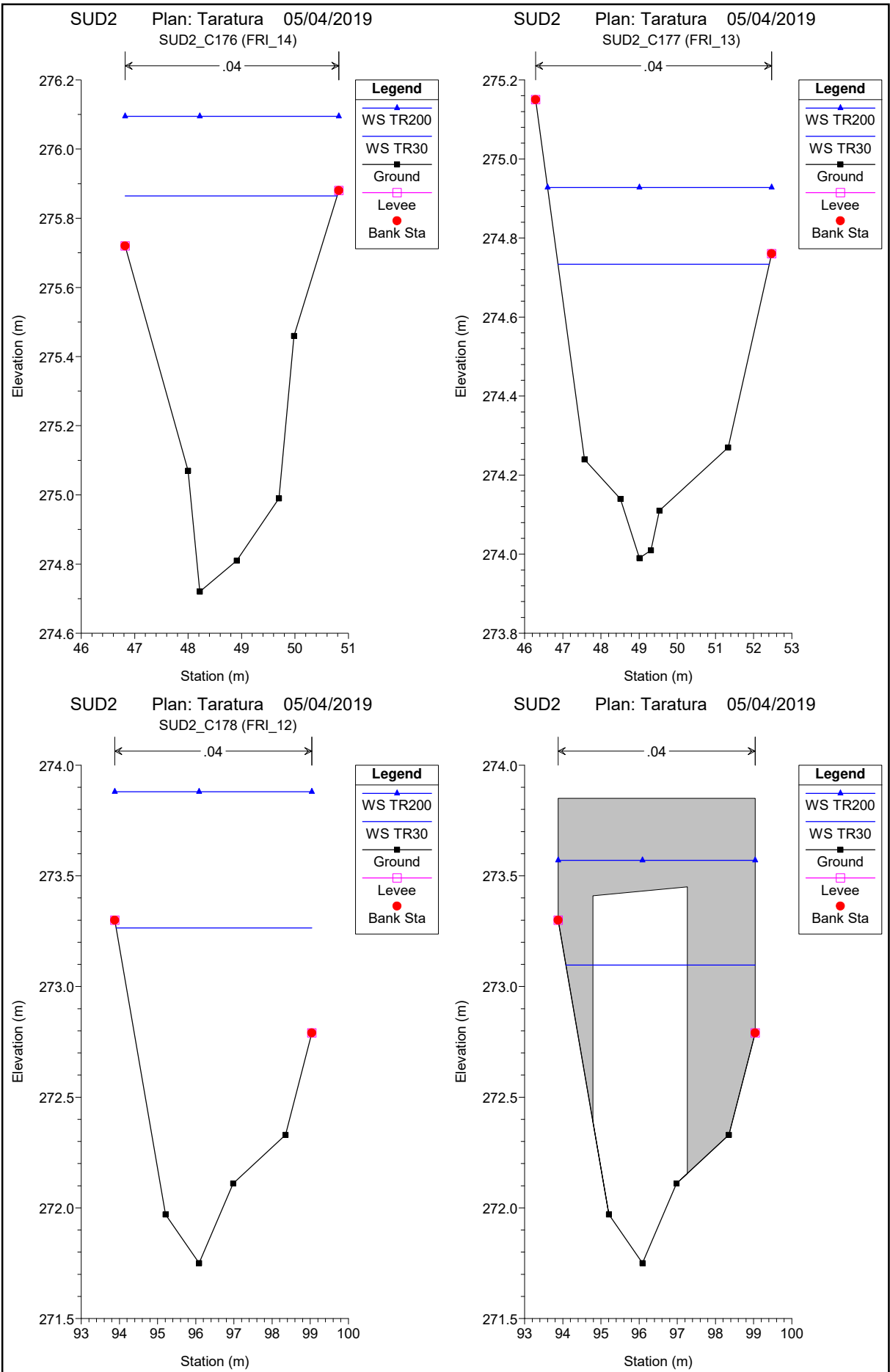




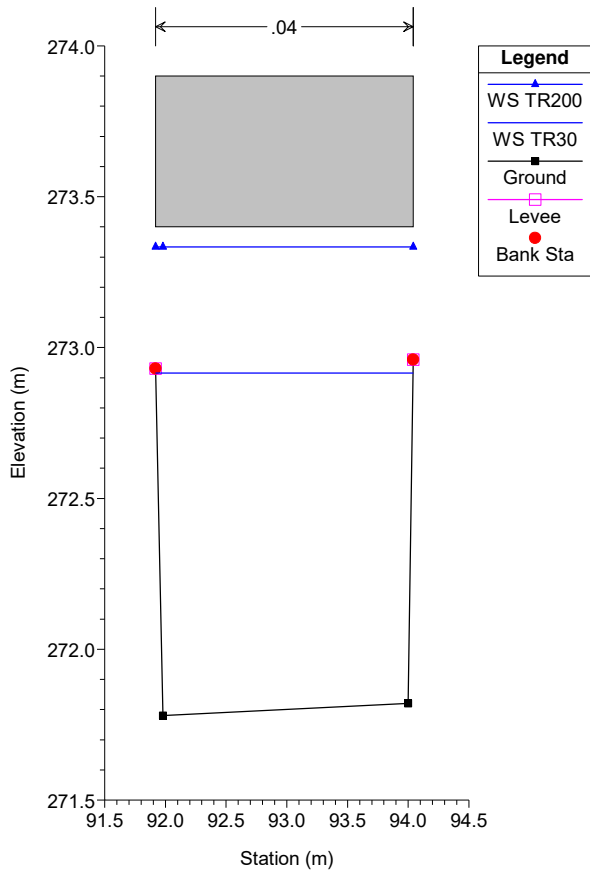




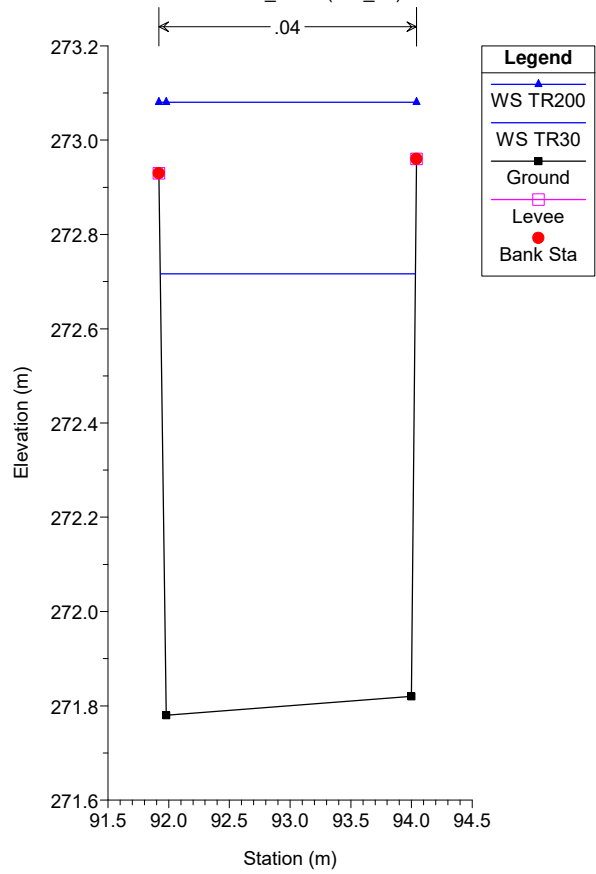




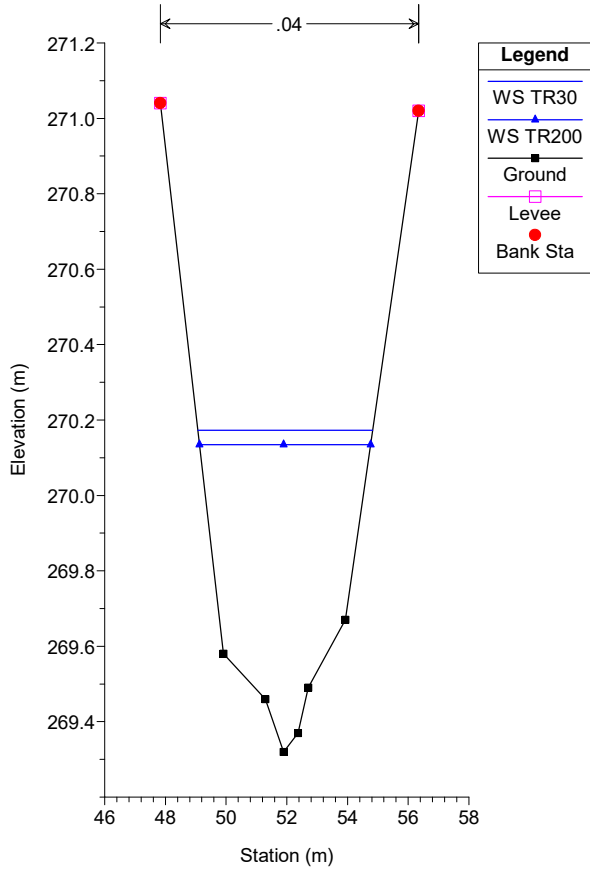
SUD2 Plan: Taratura 05/04/2019



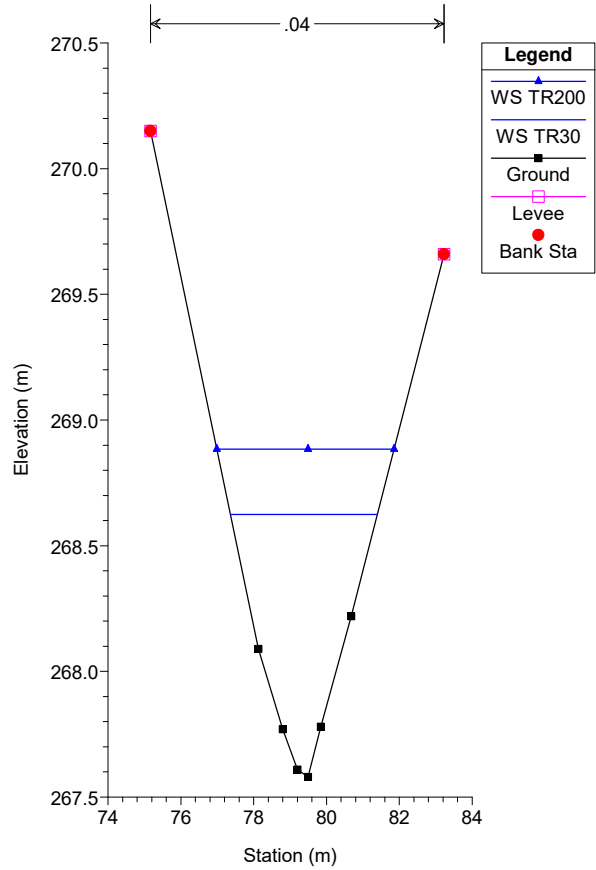
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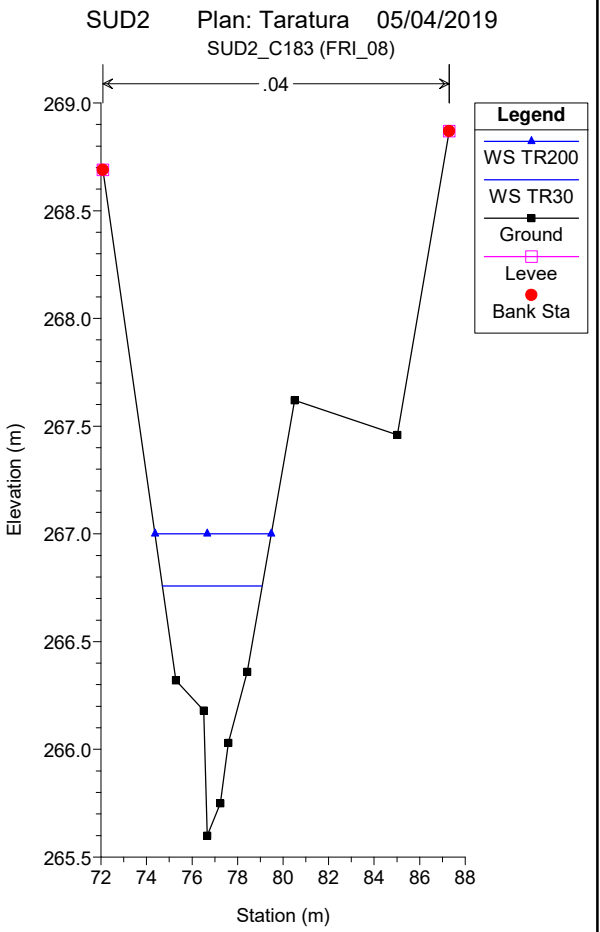
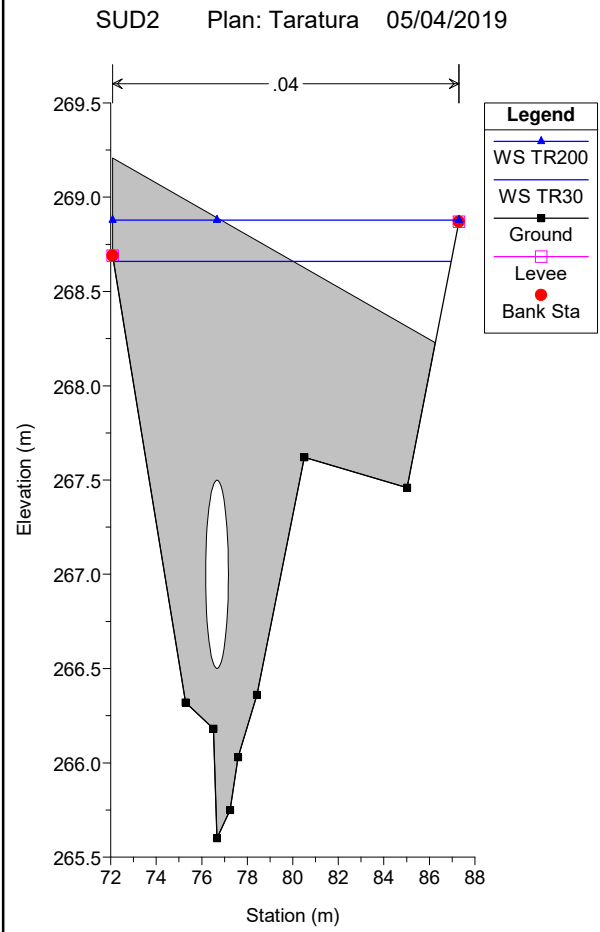
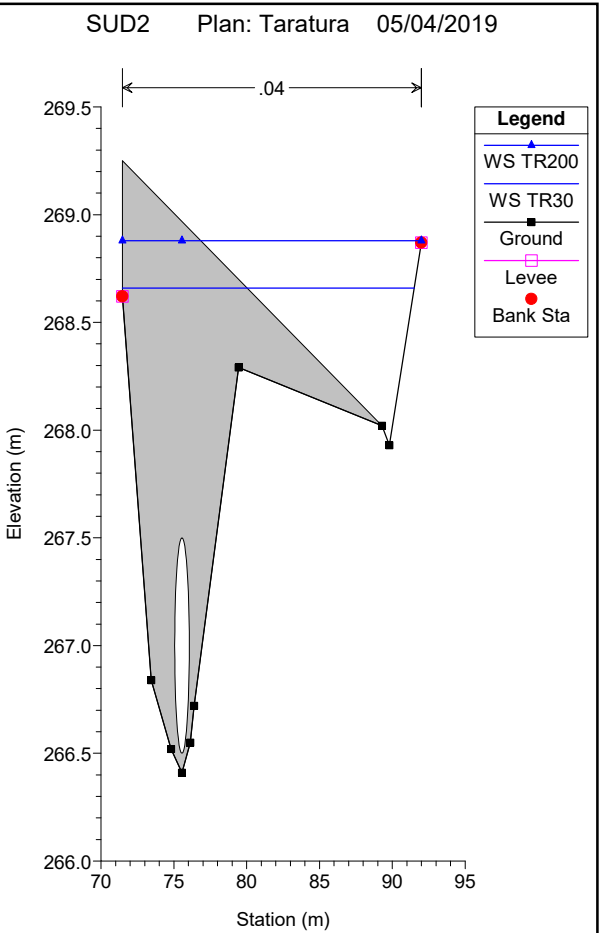
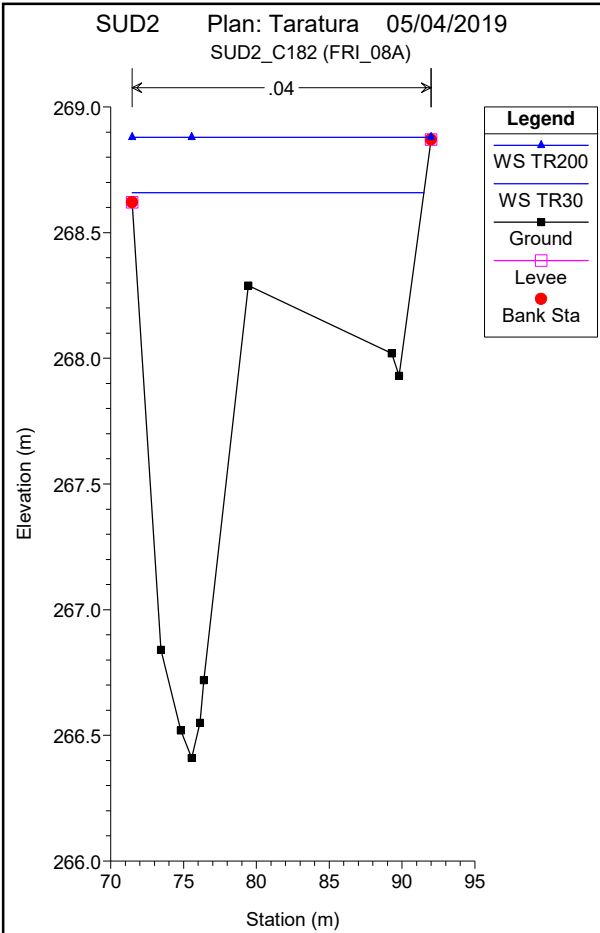


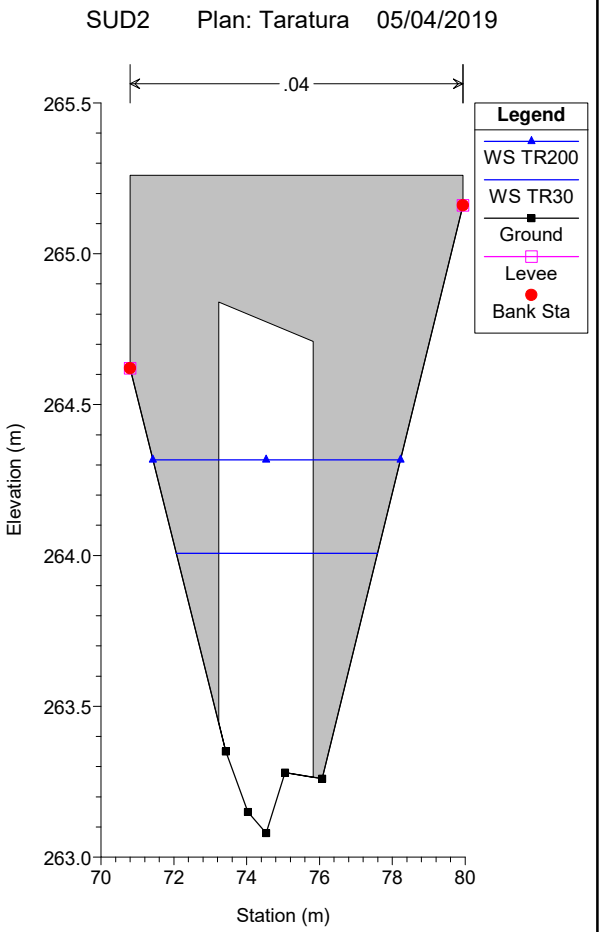
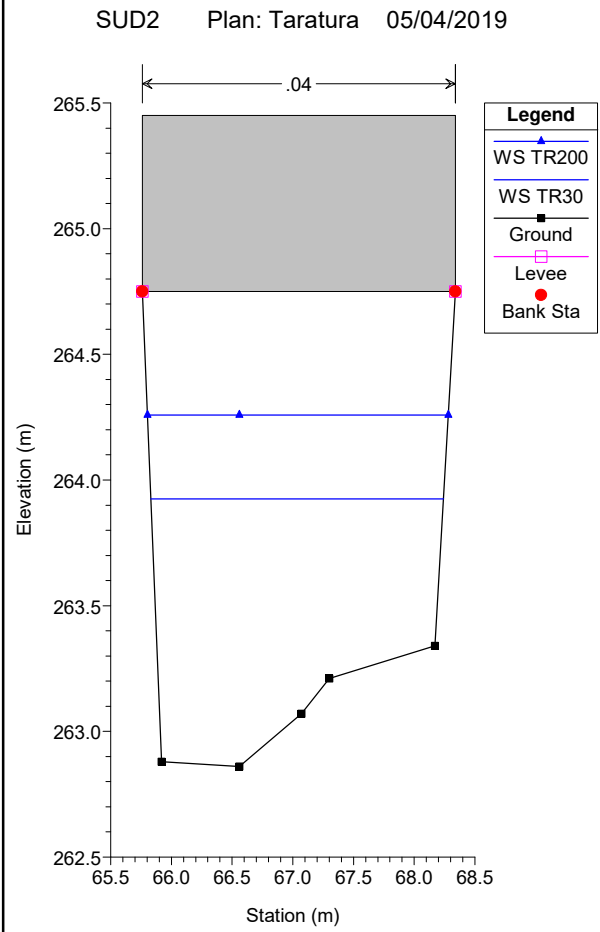
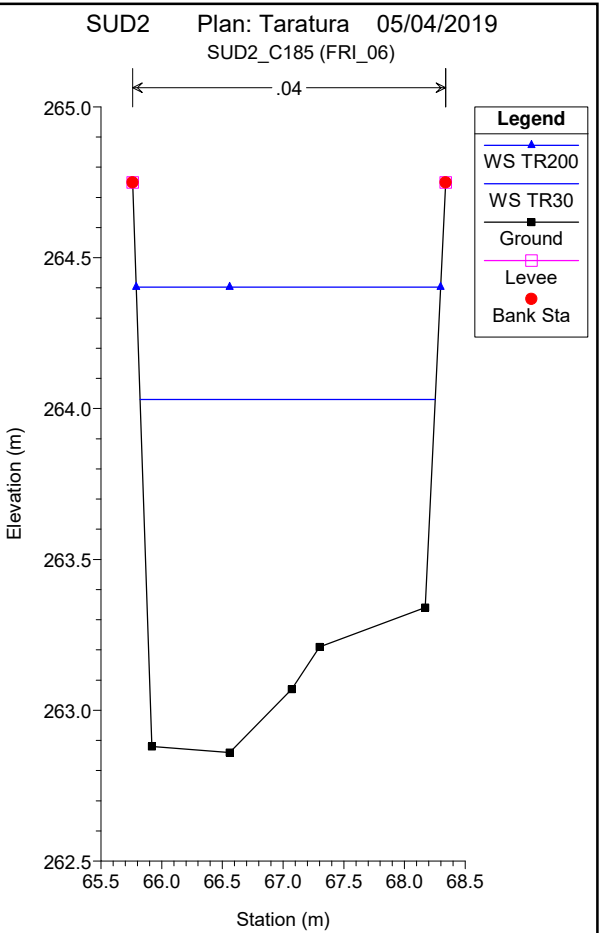
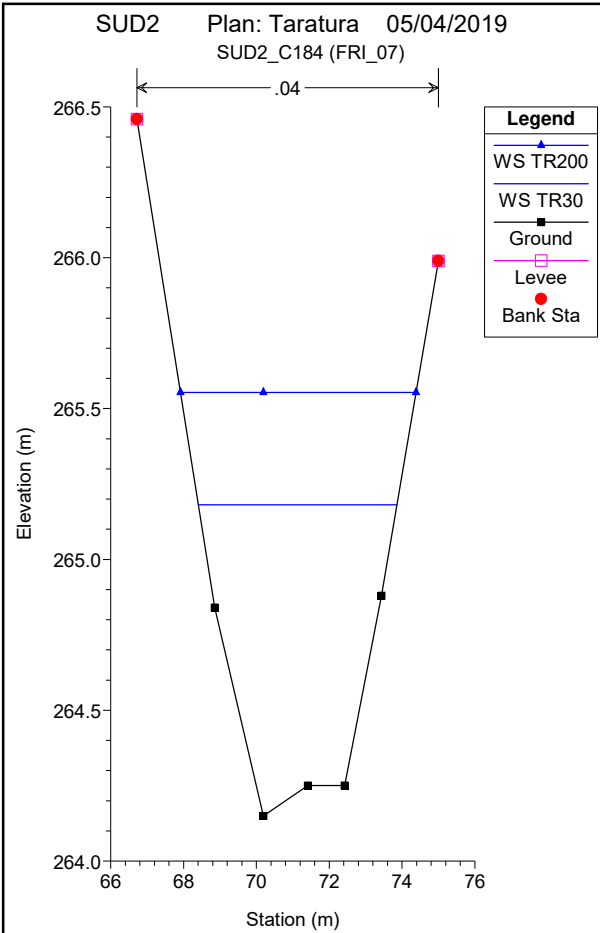
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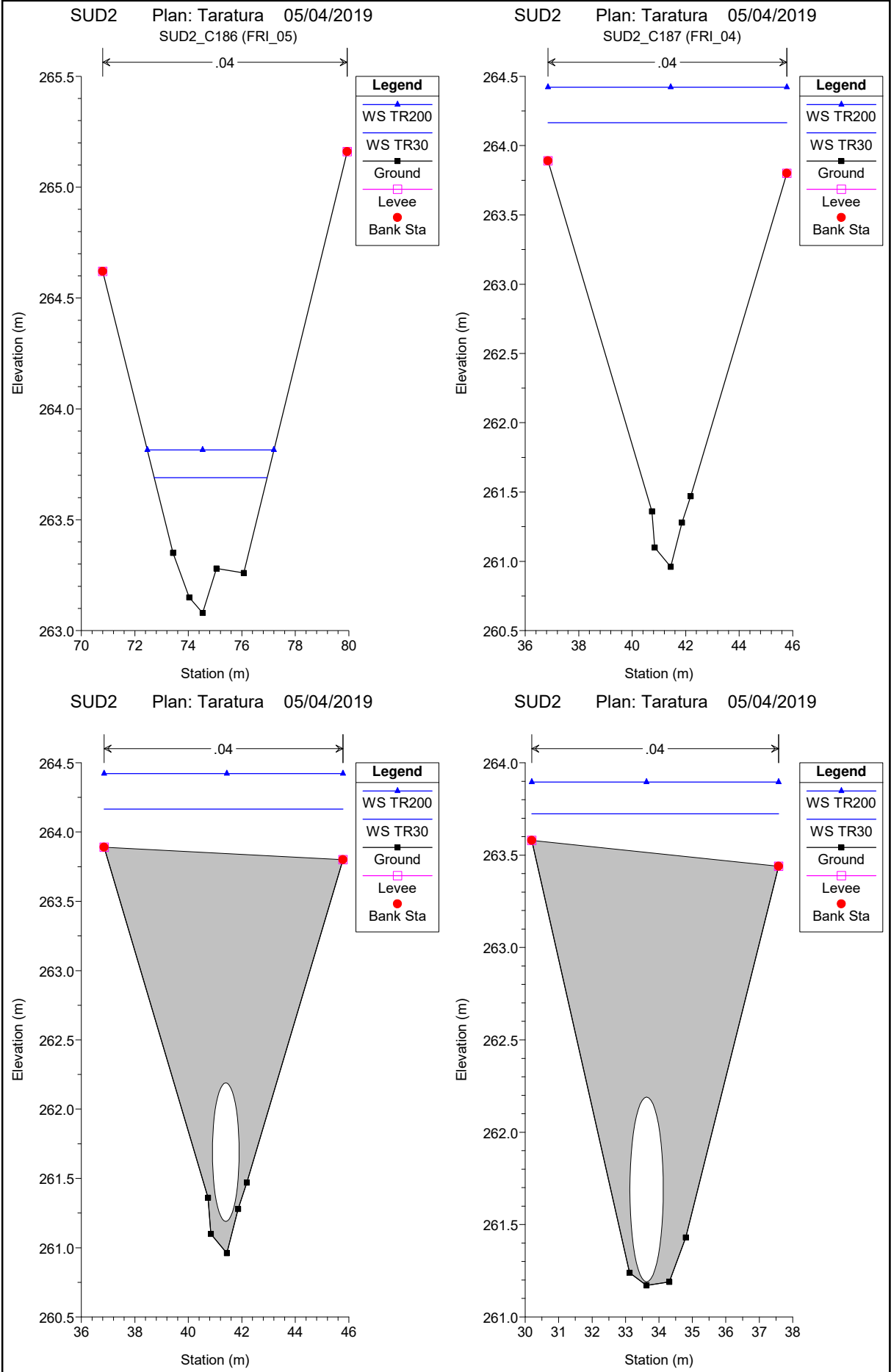


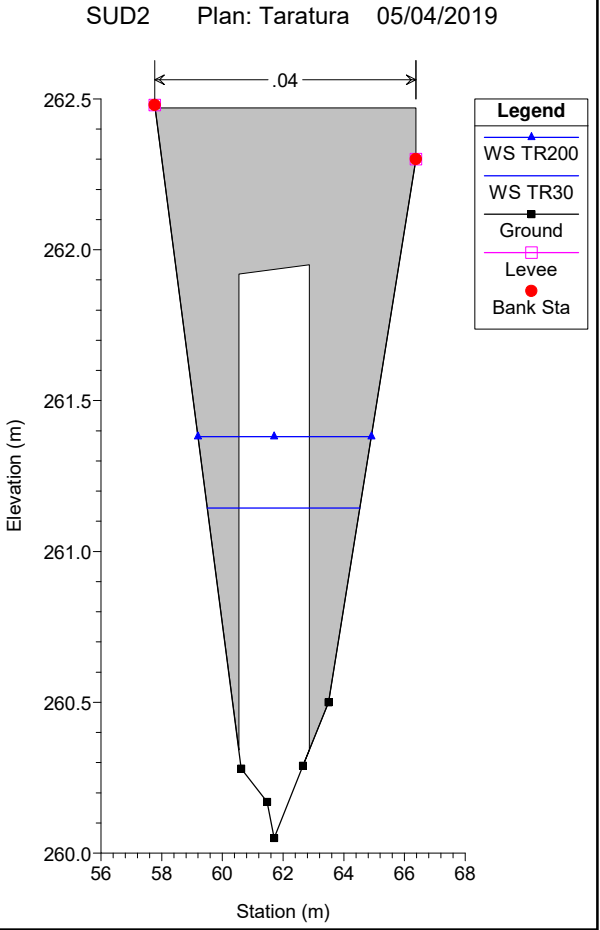
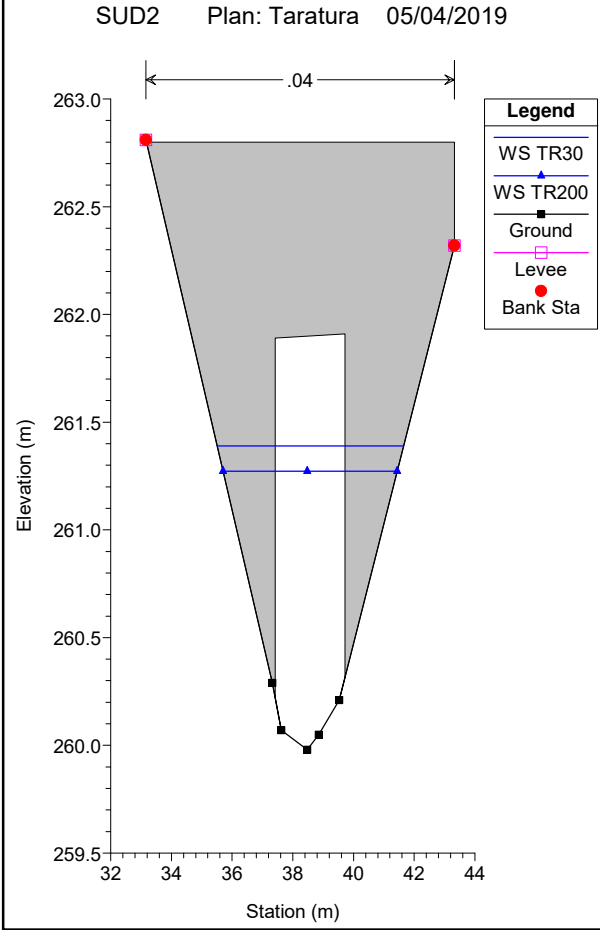
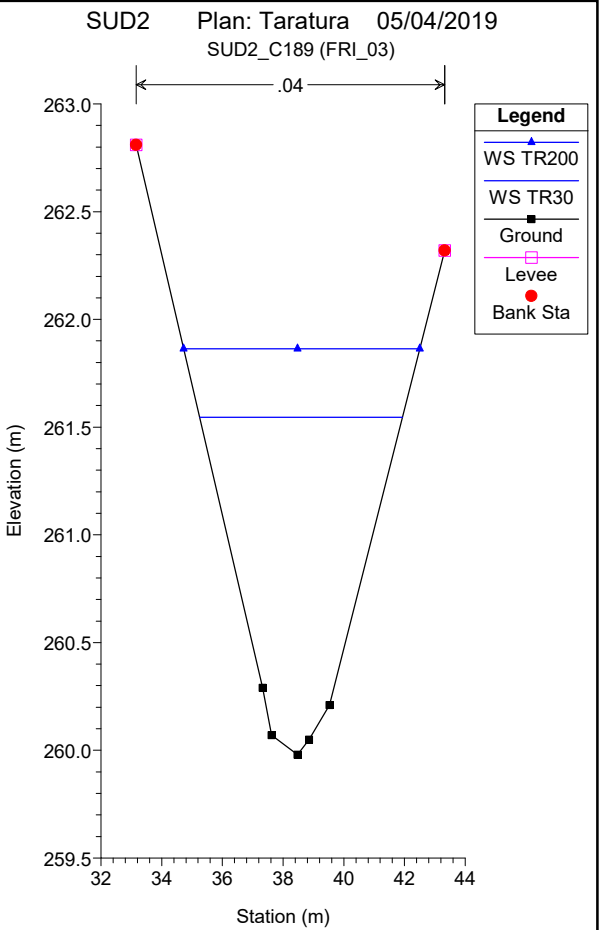
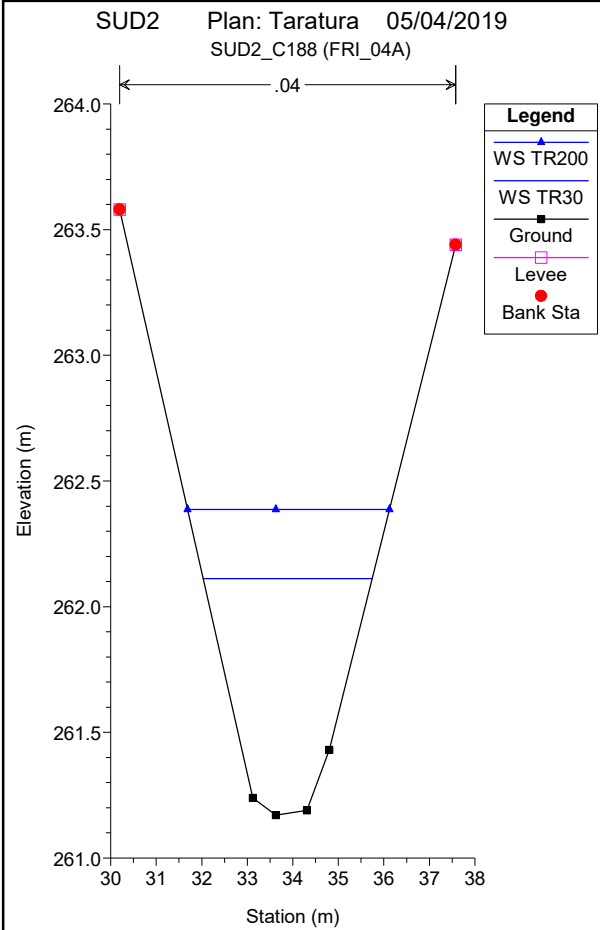
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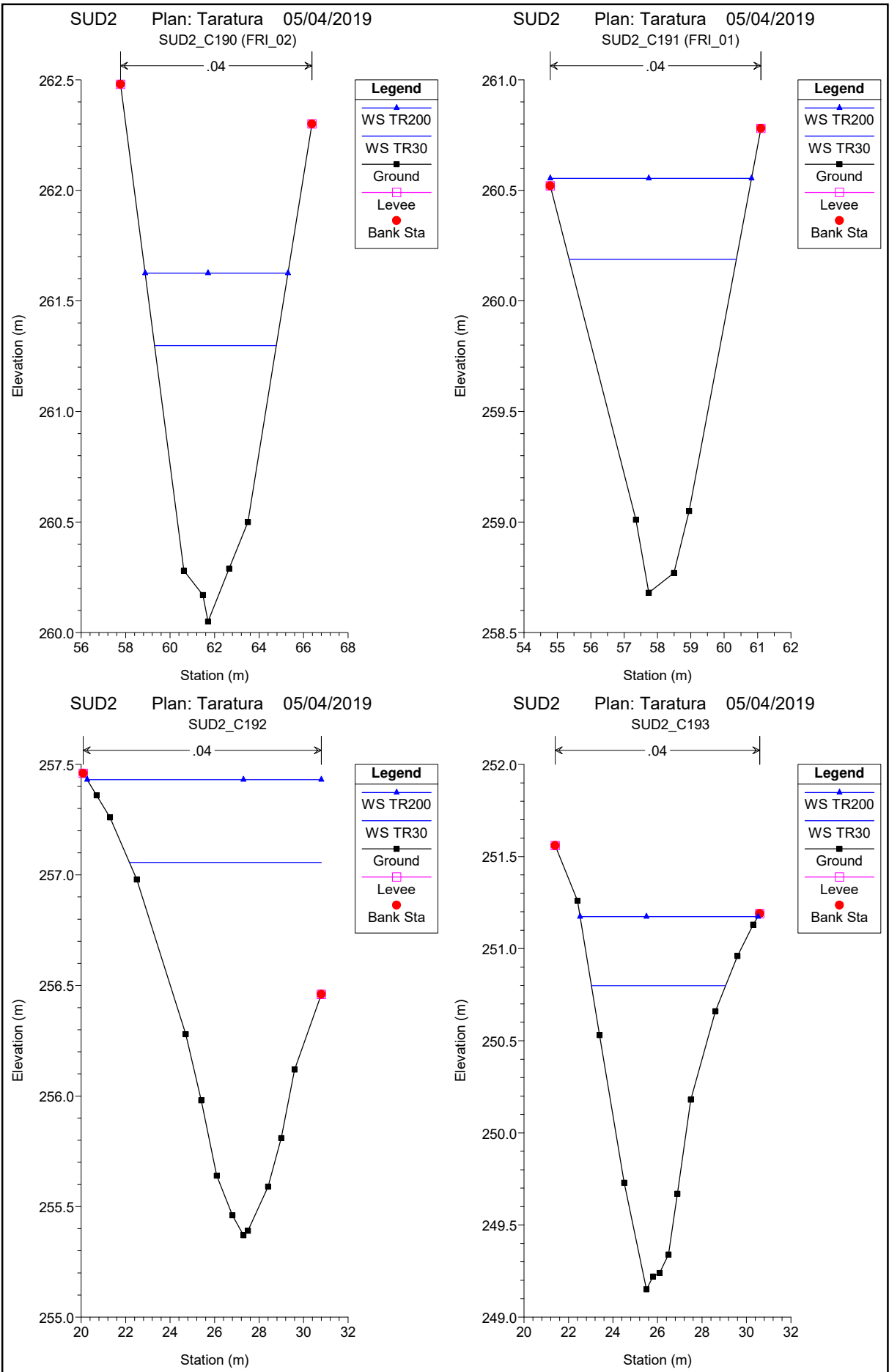


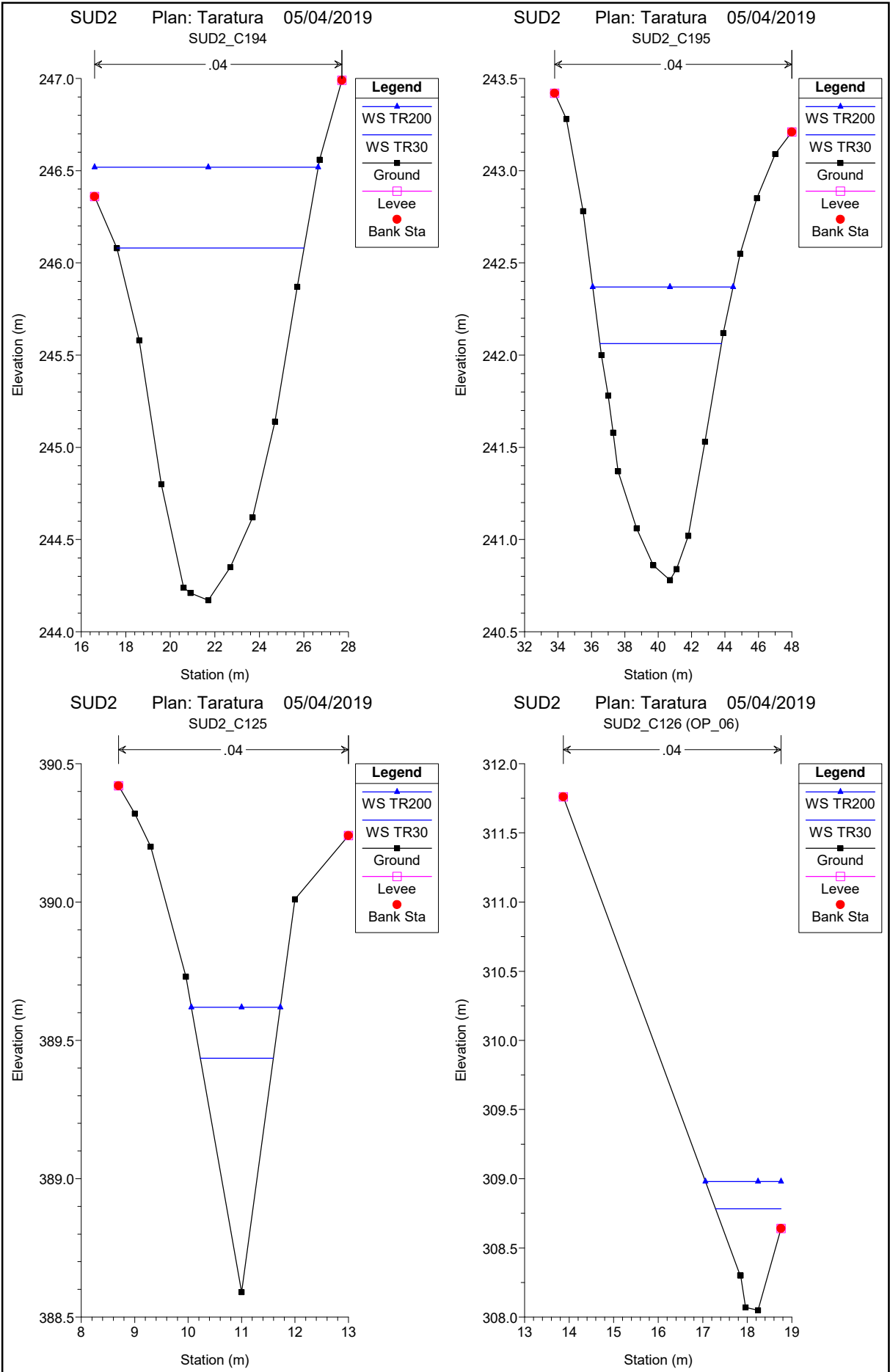


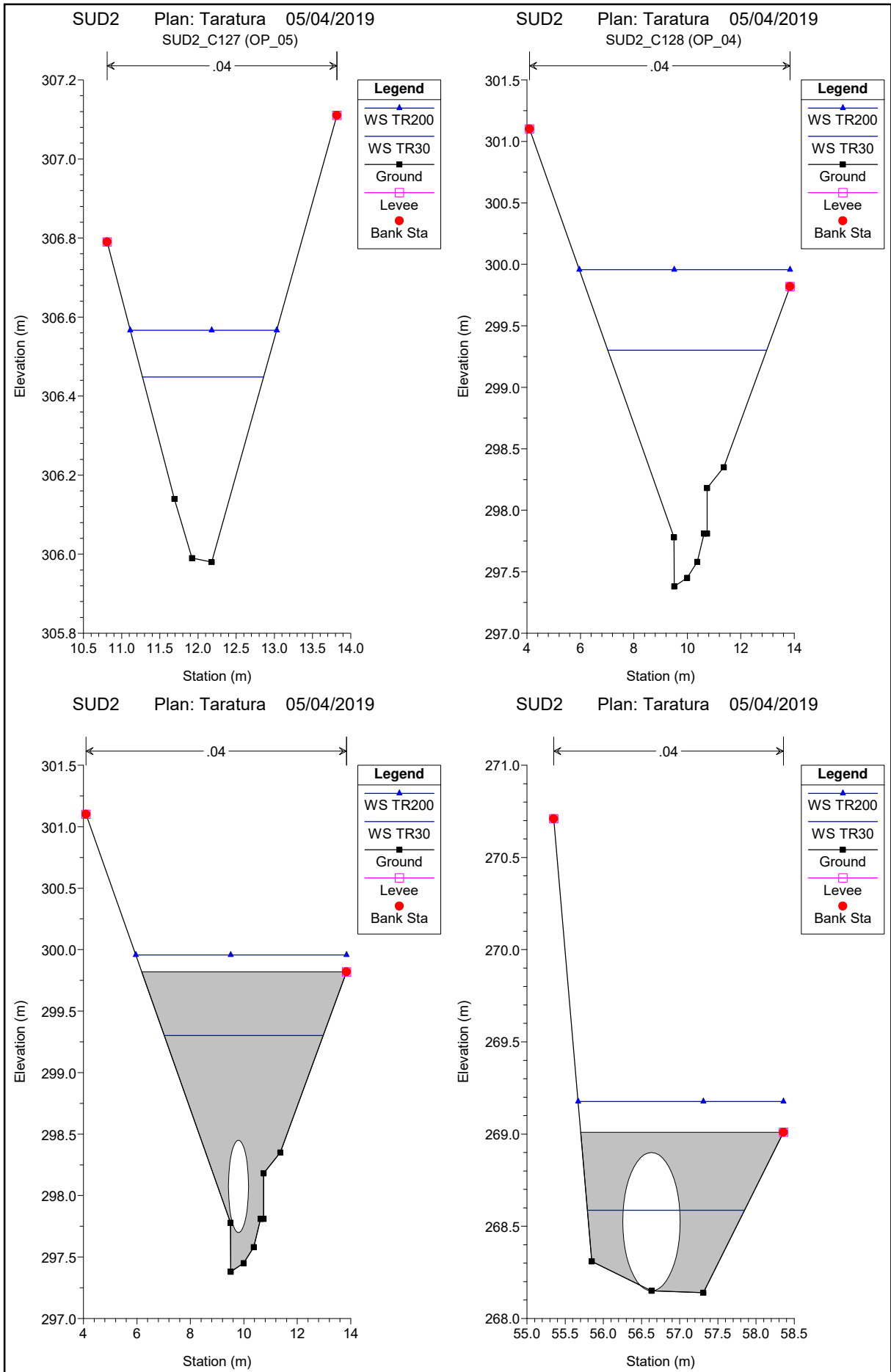


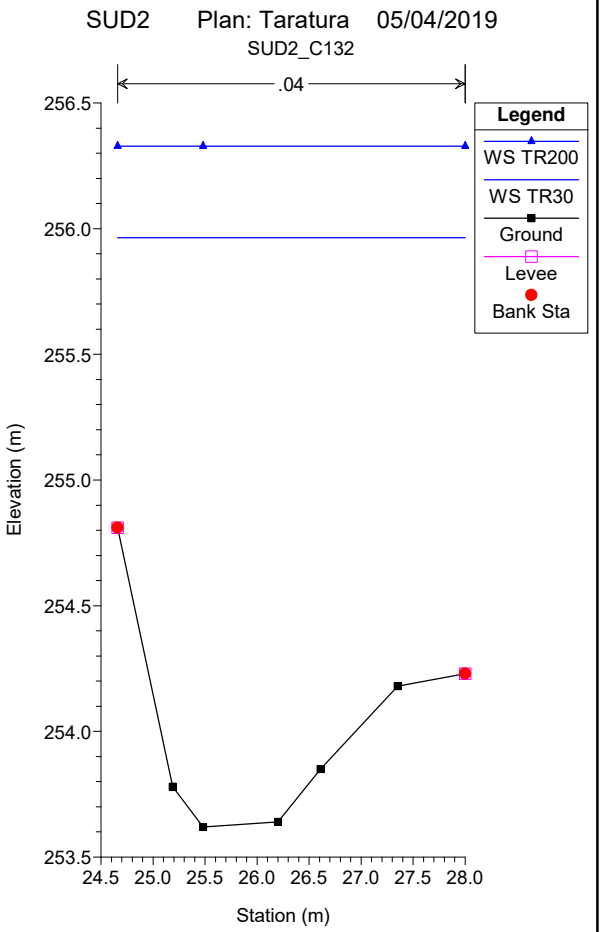
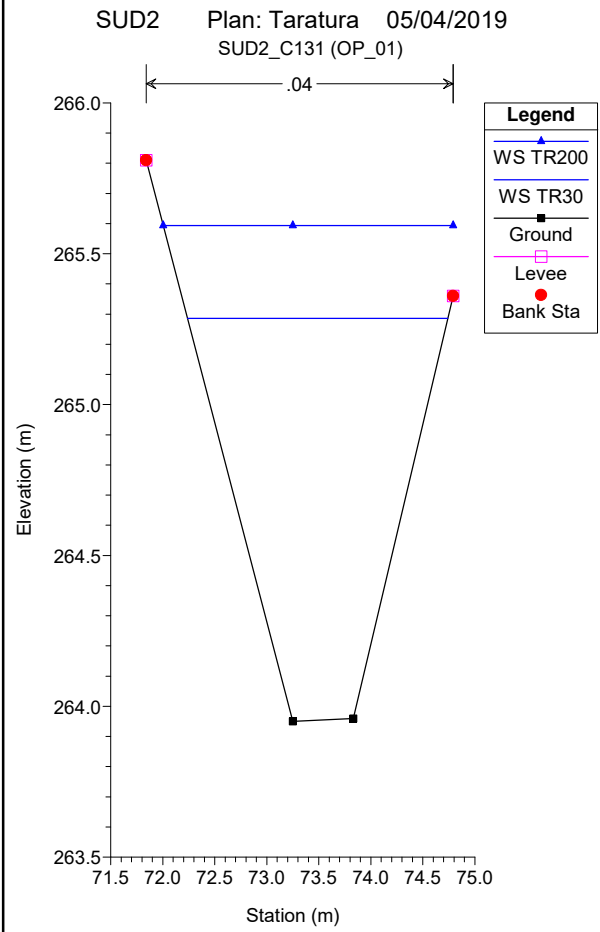
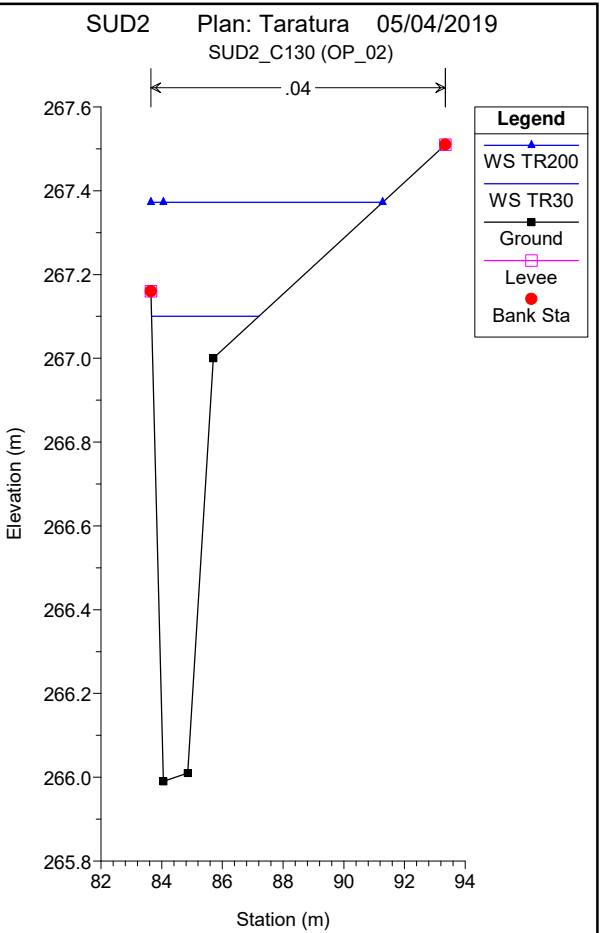
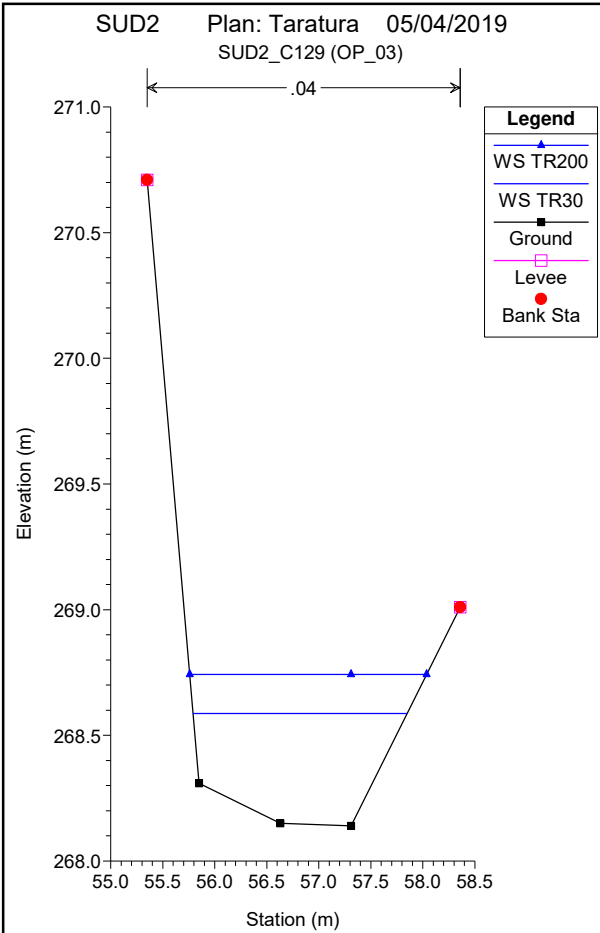


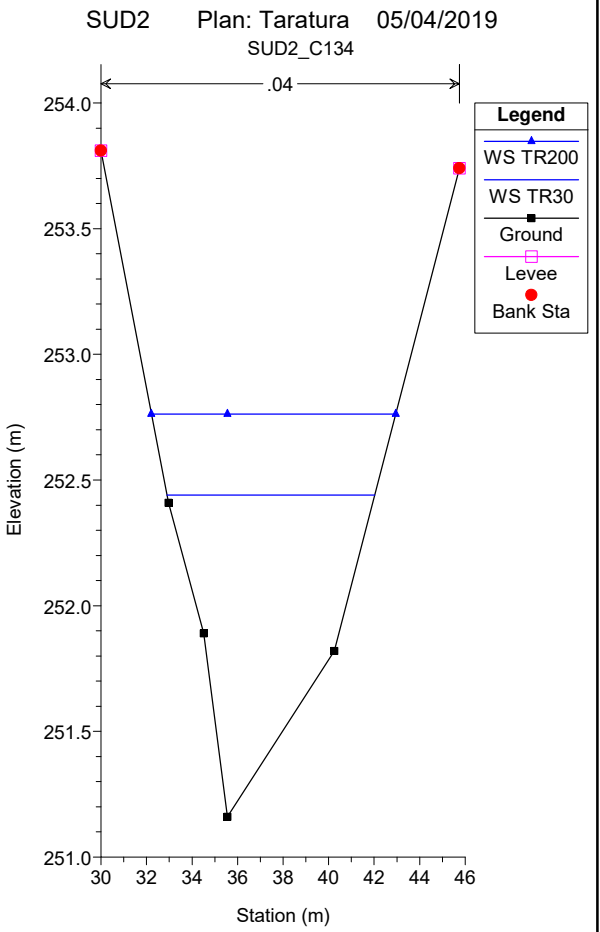
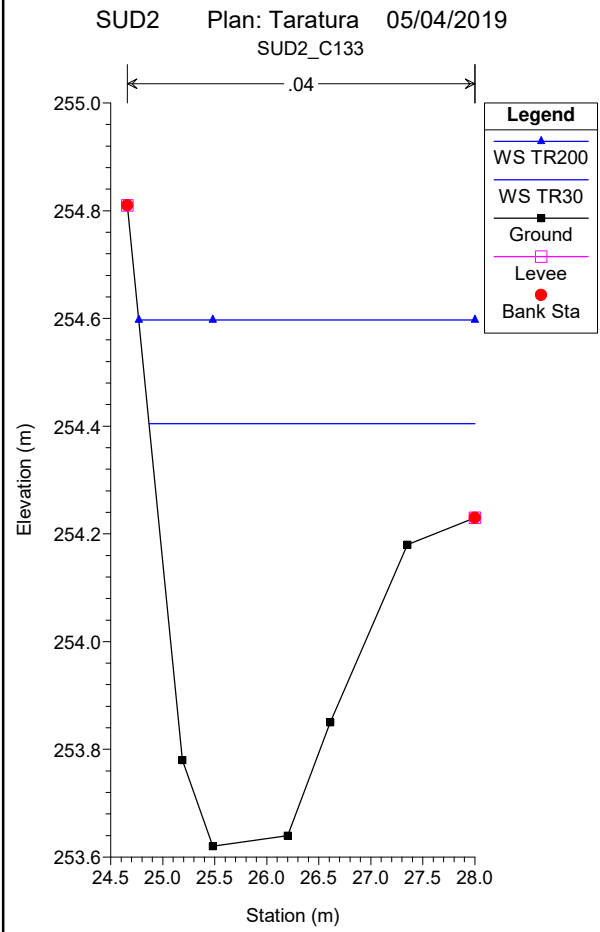
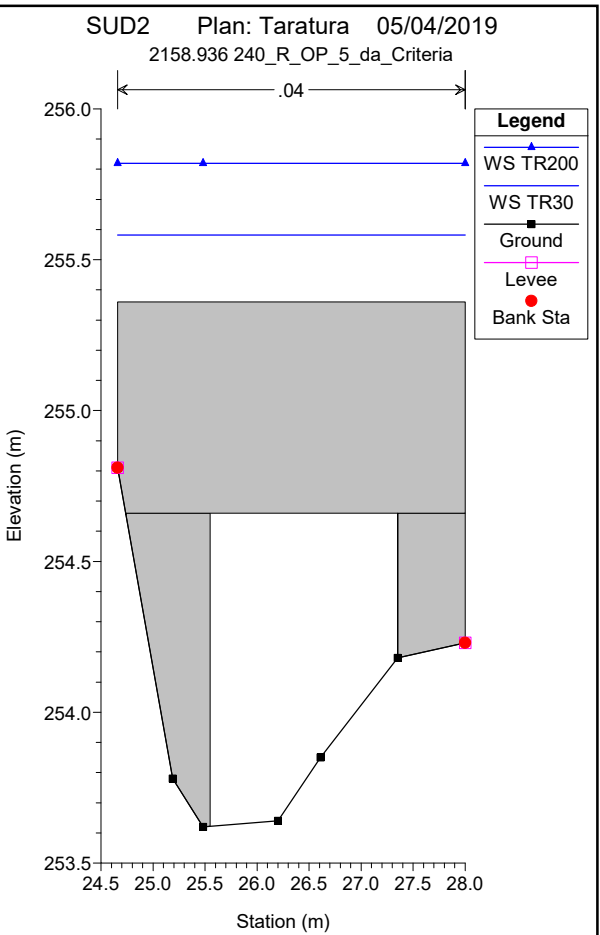
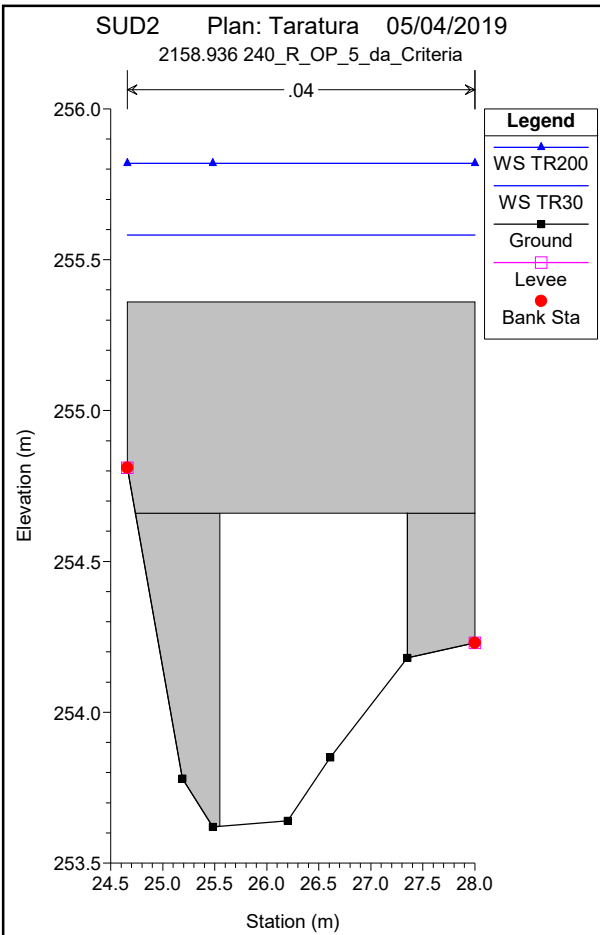


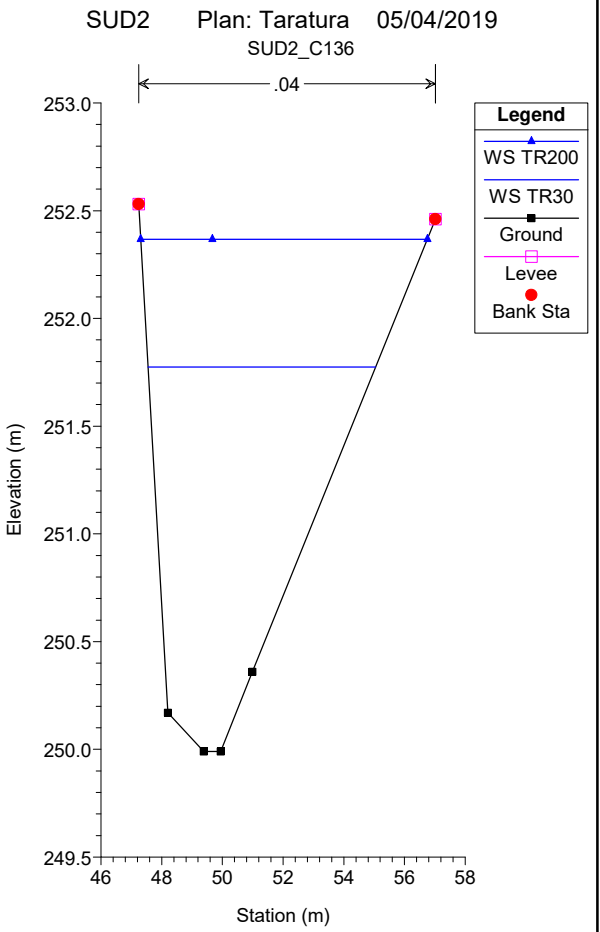
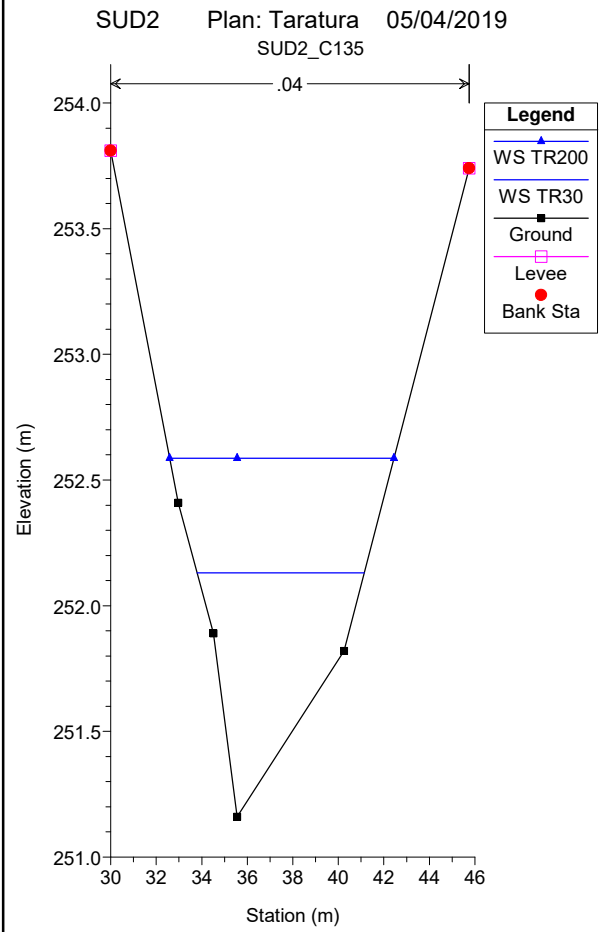
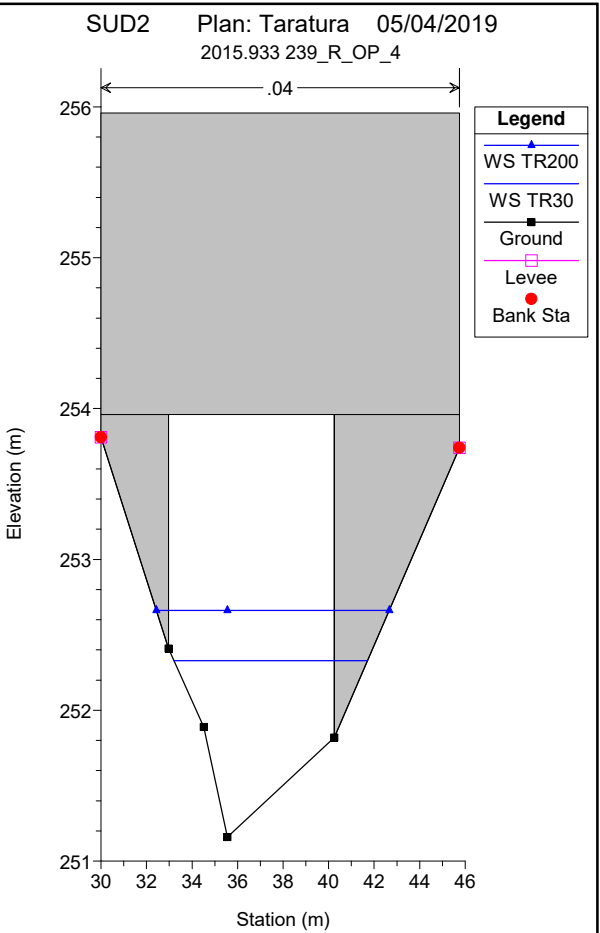
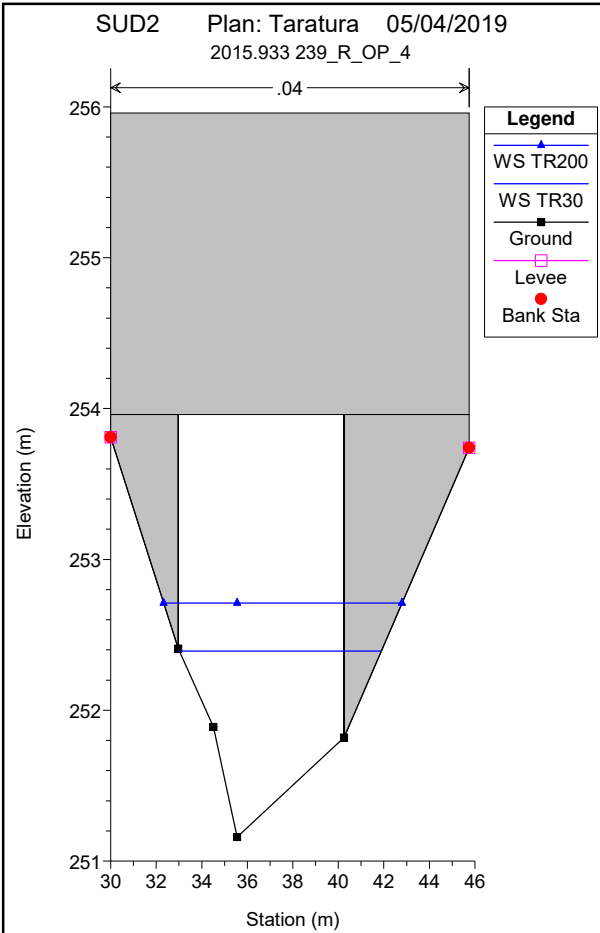


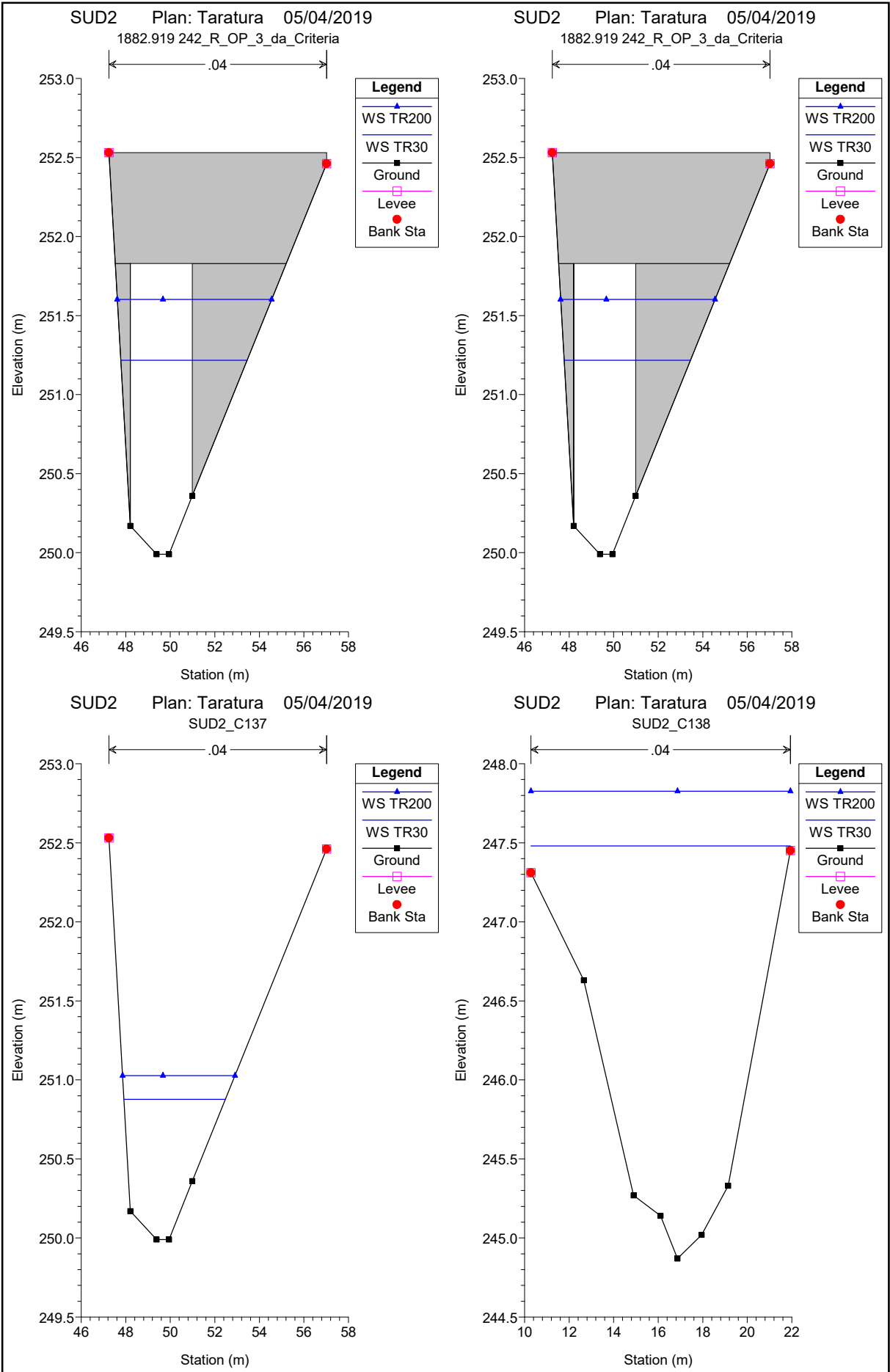


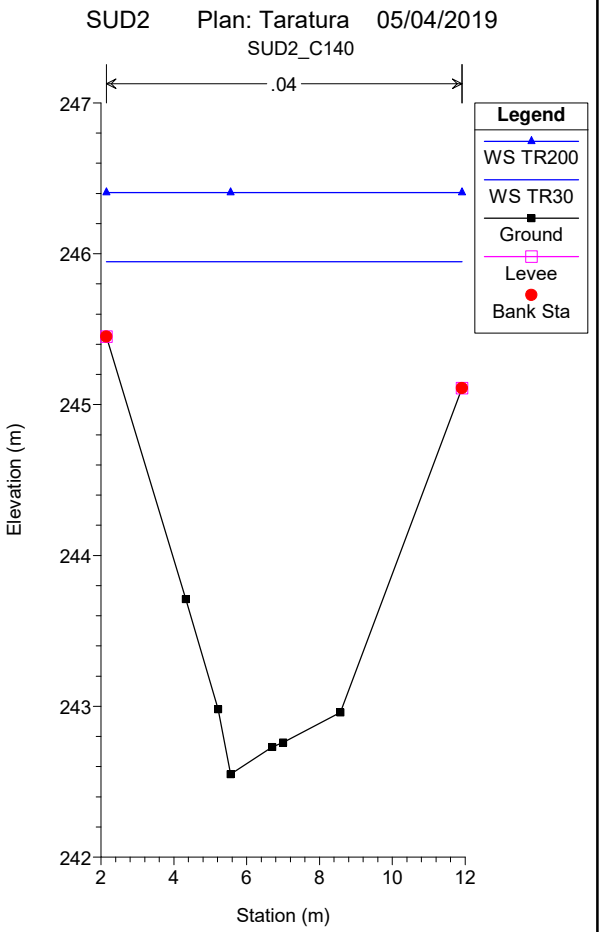
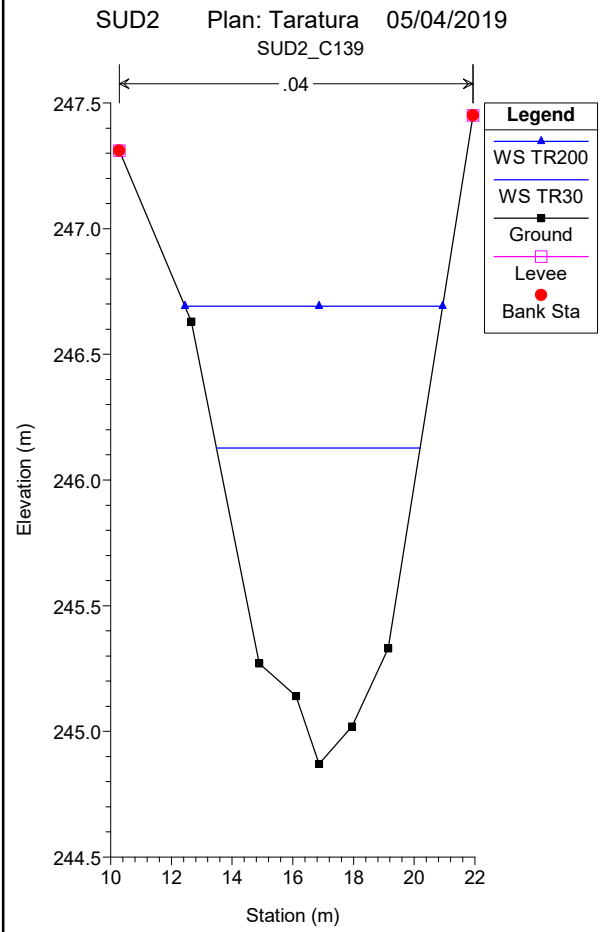
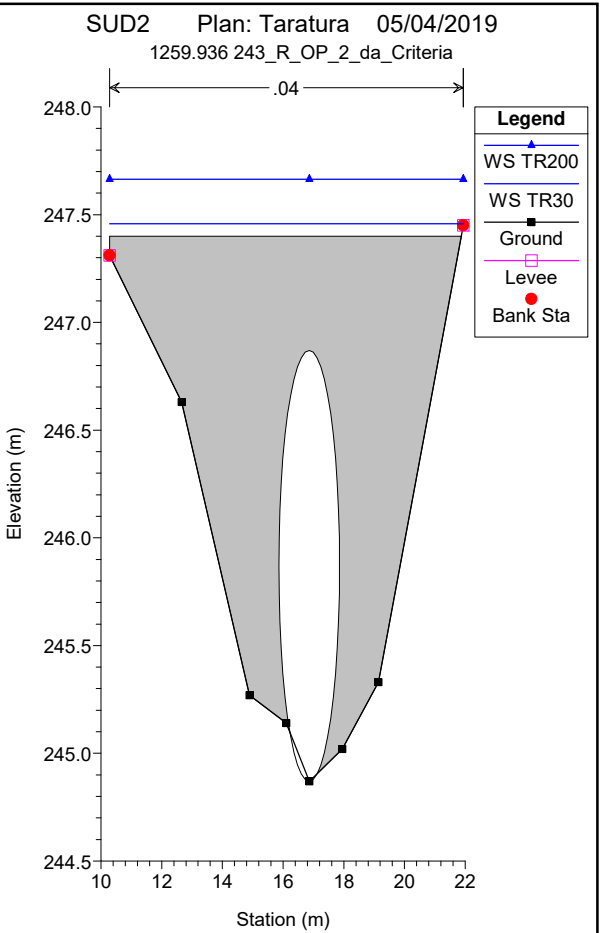
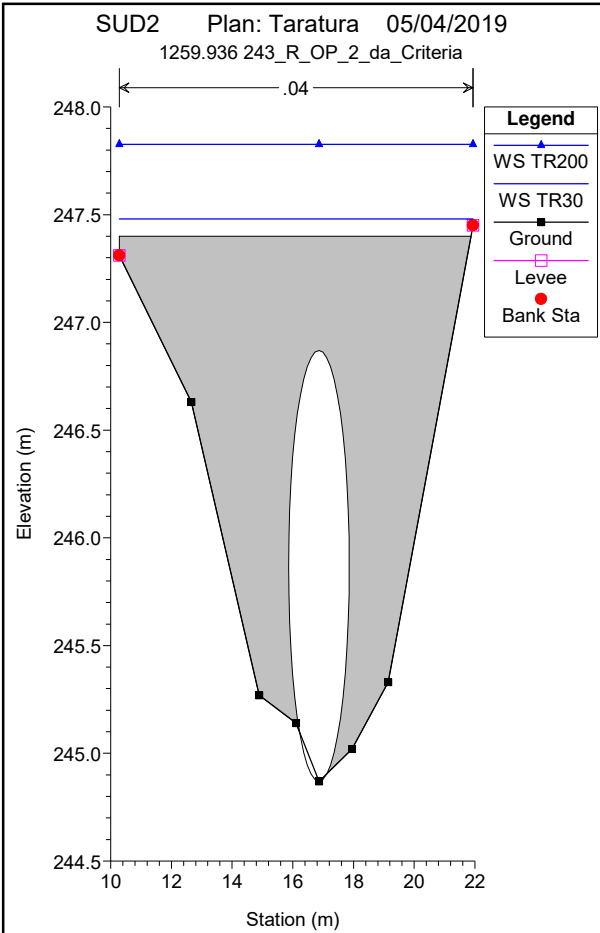




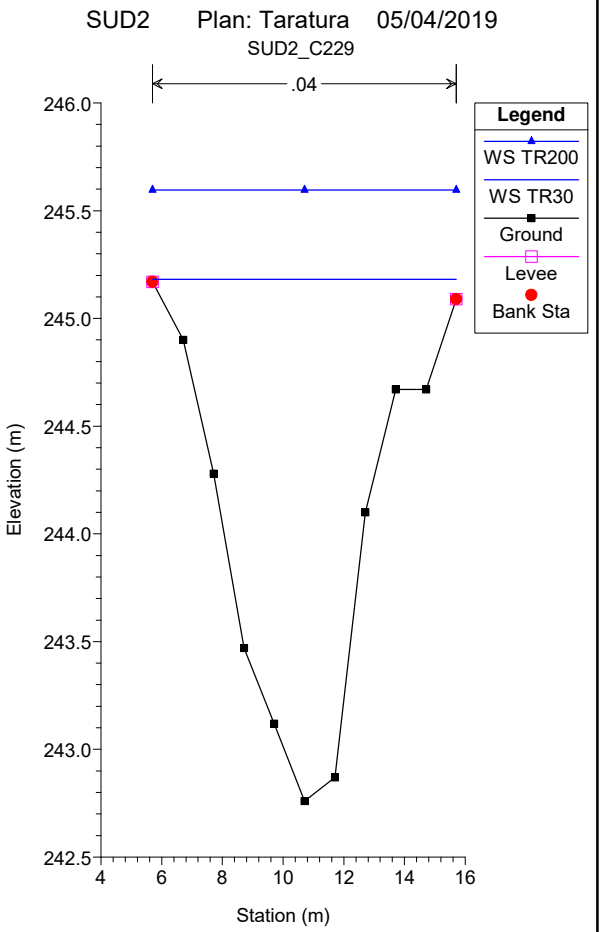
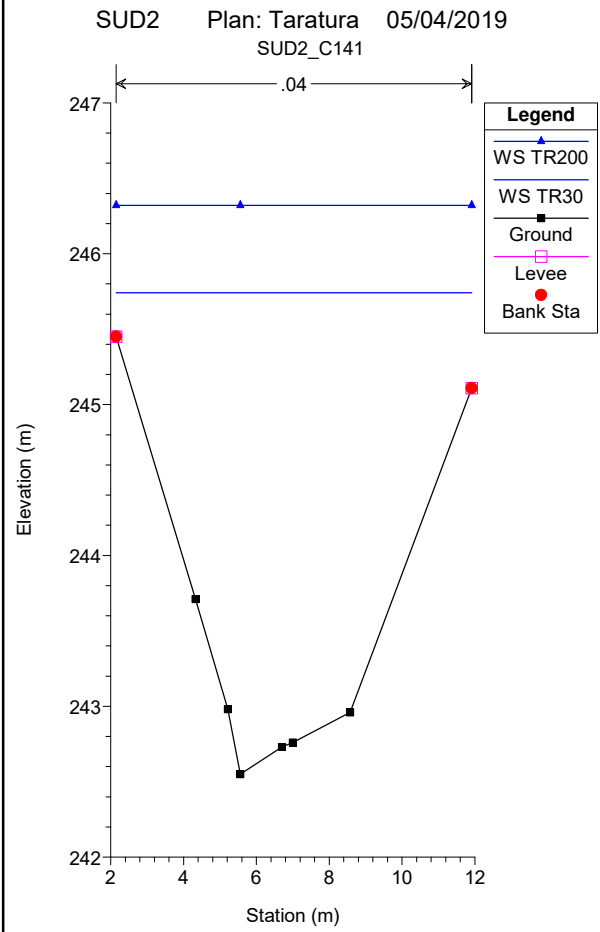
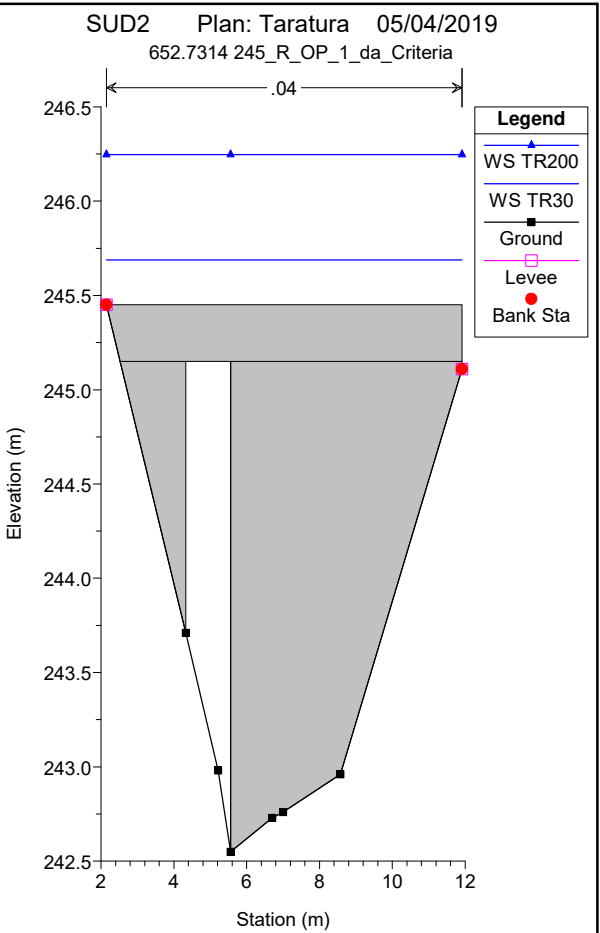
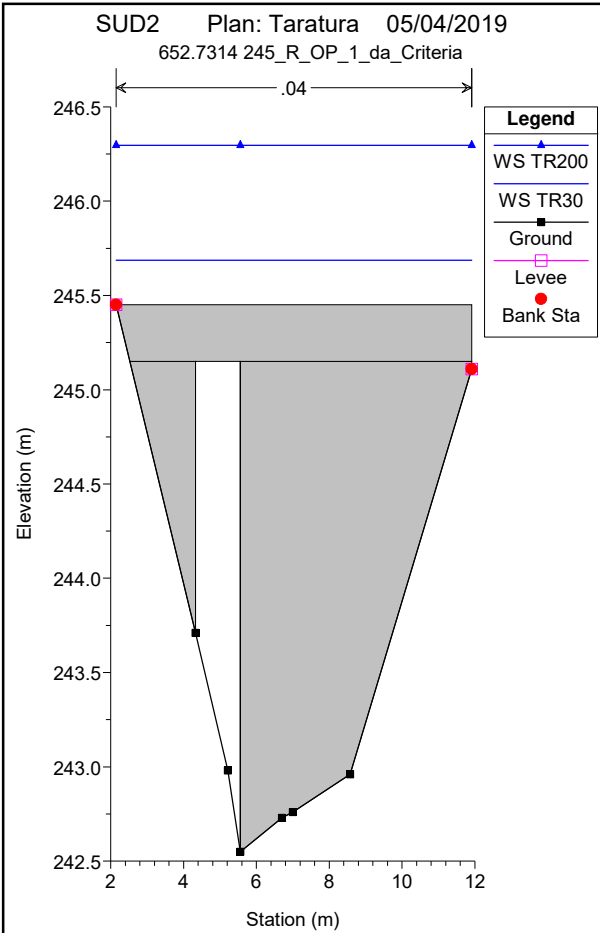


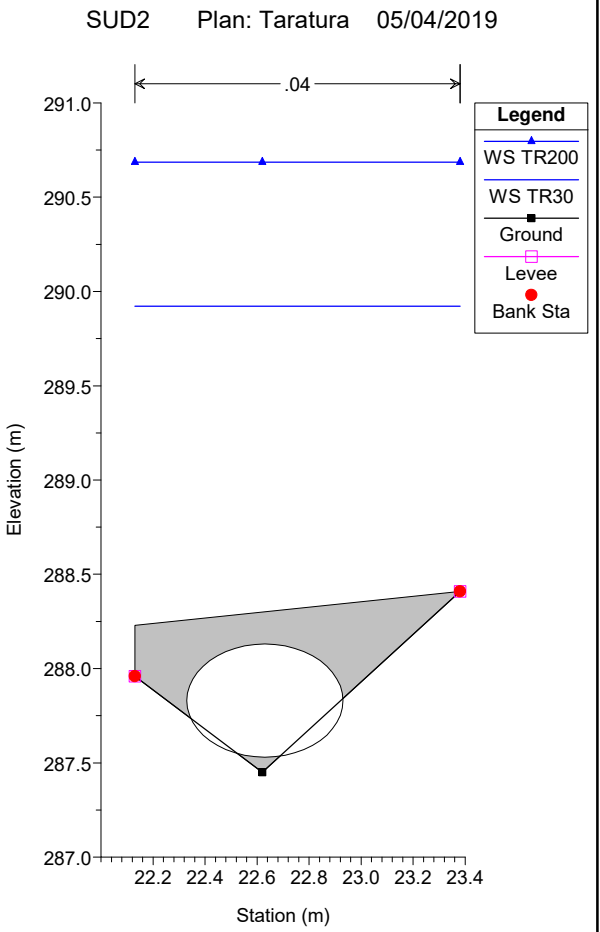
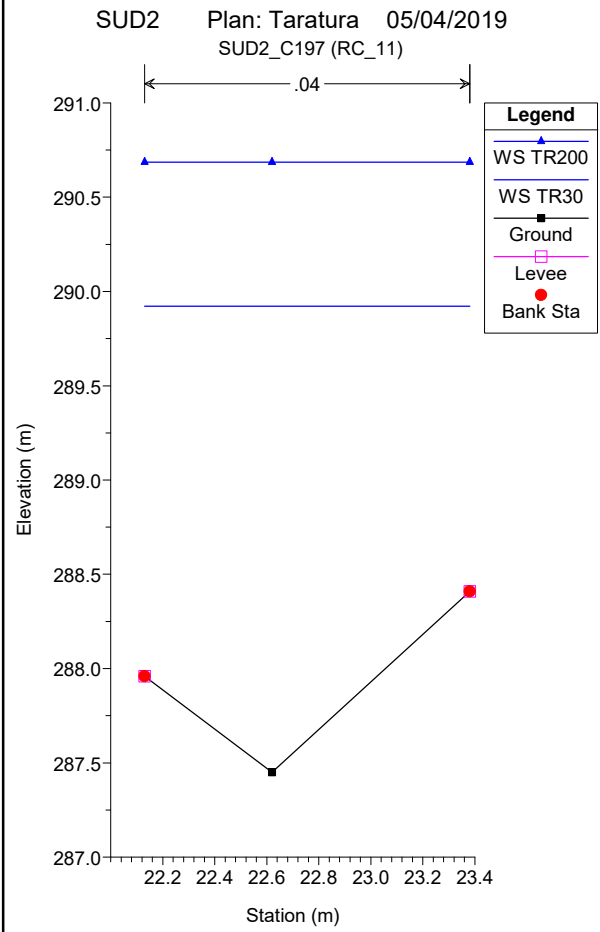
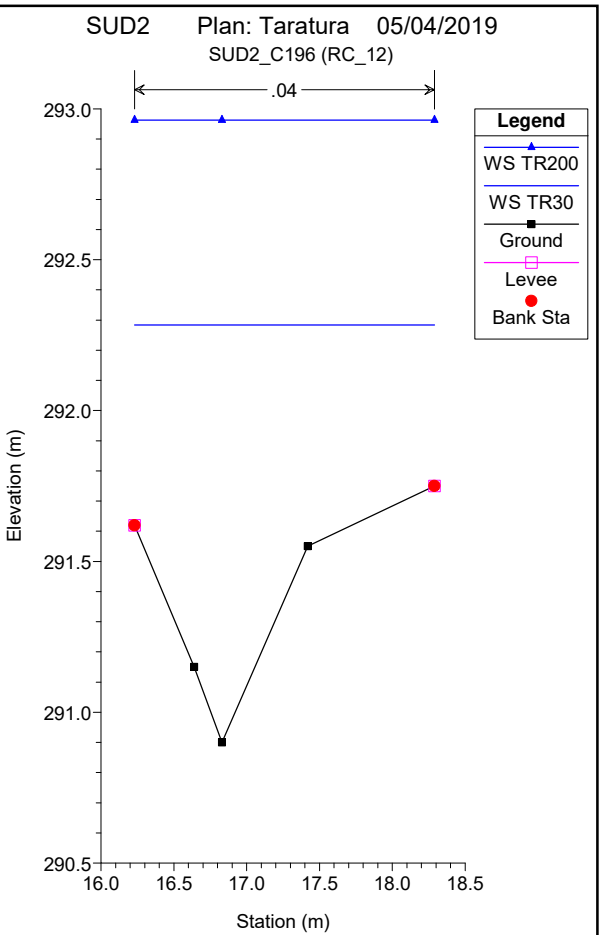
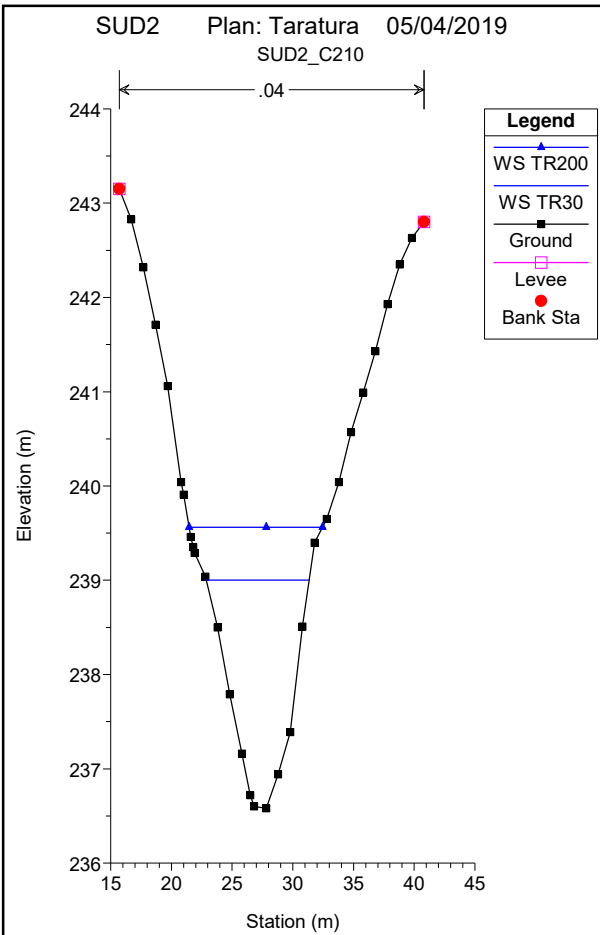




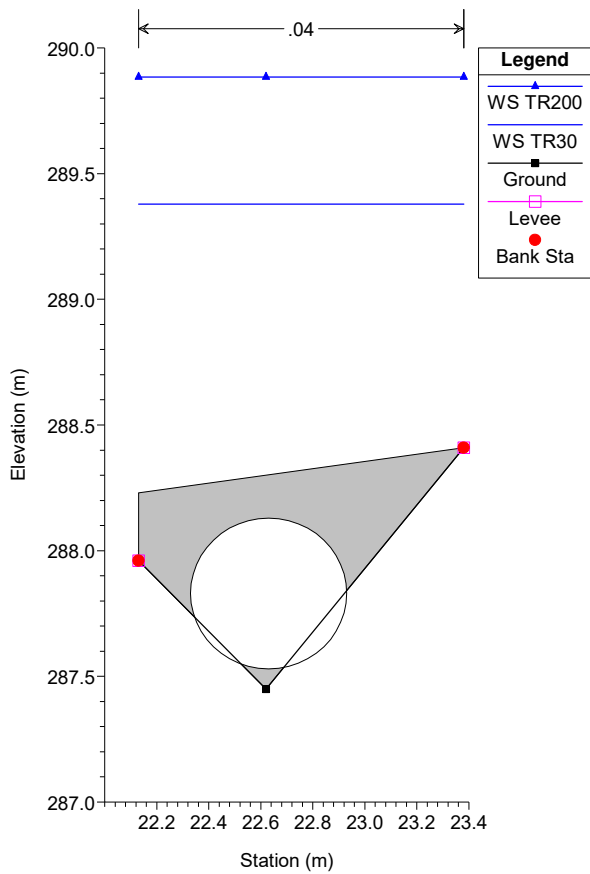




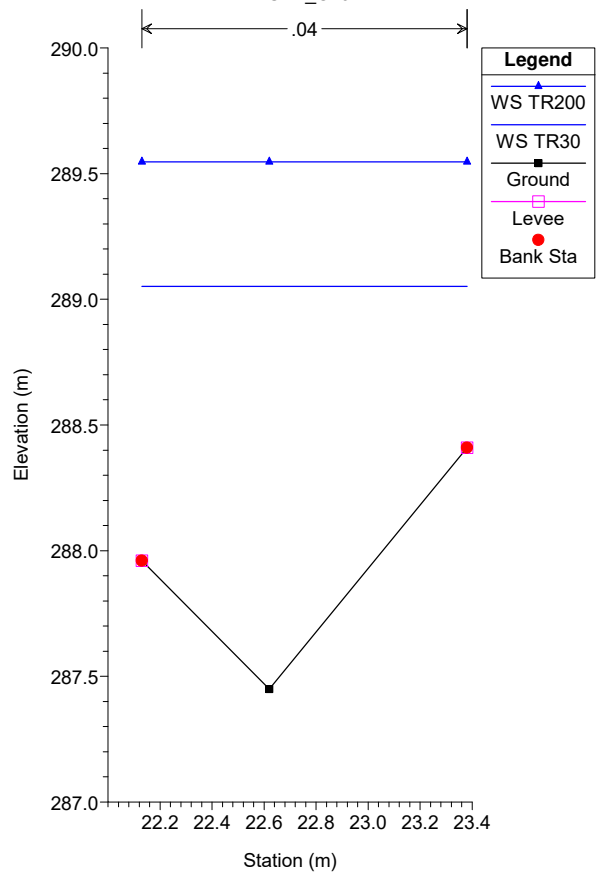




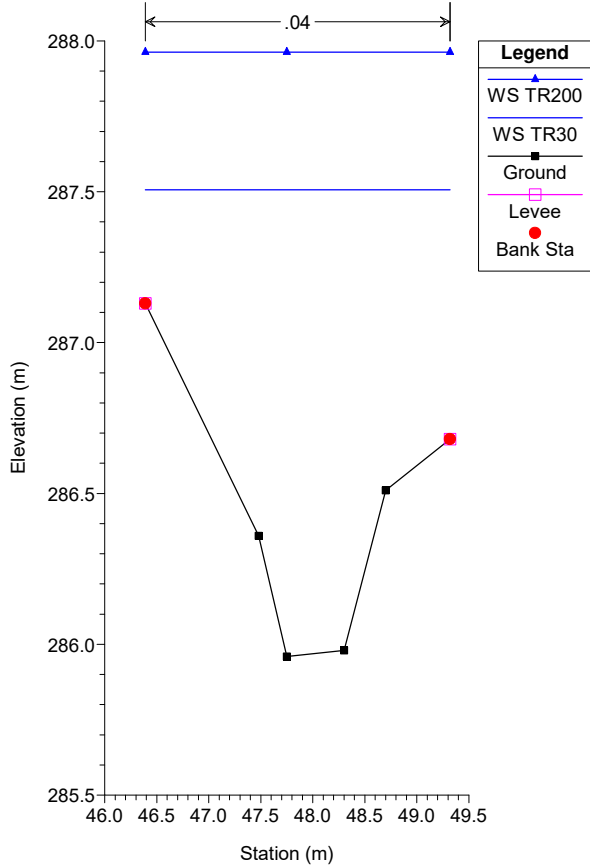
SUD2 Plan: Taratura 05/04/2019



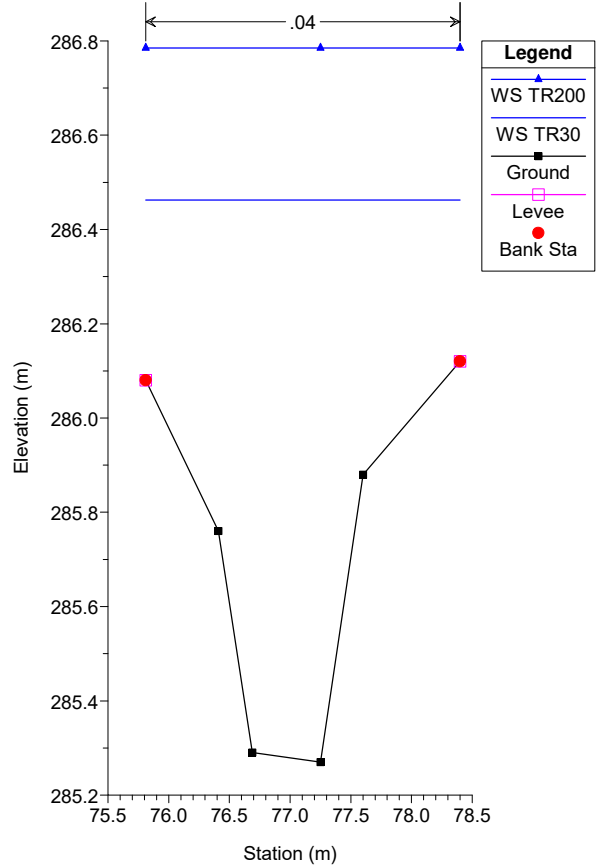
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C197

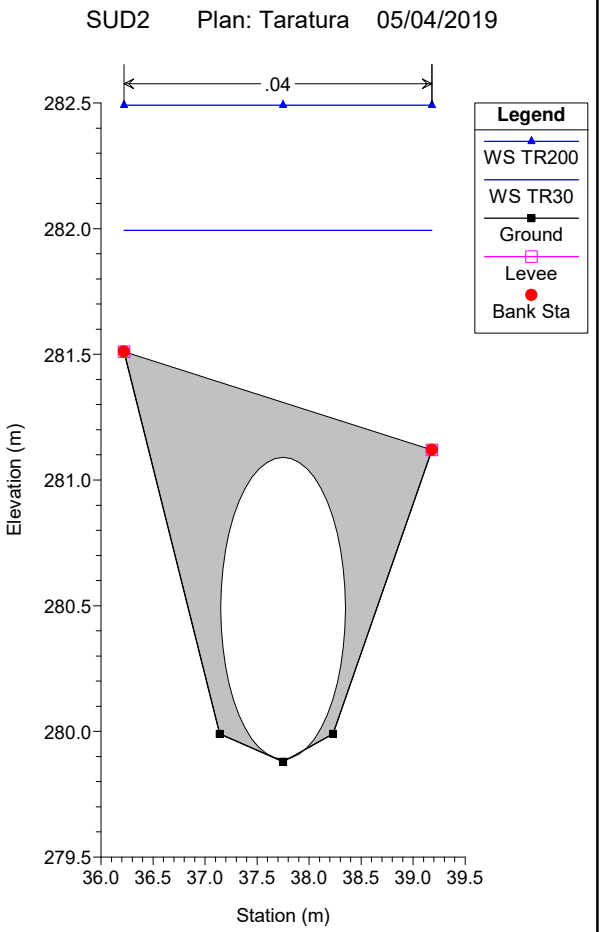
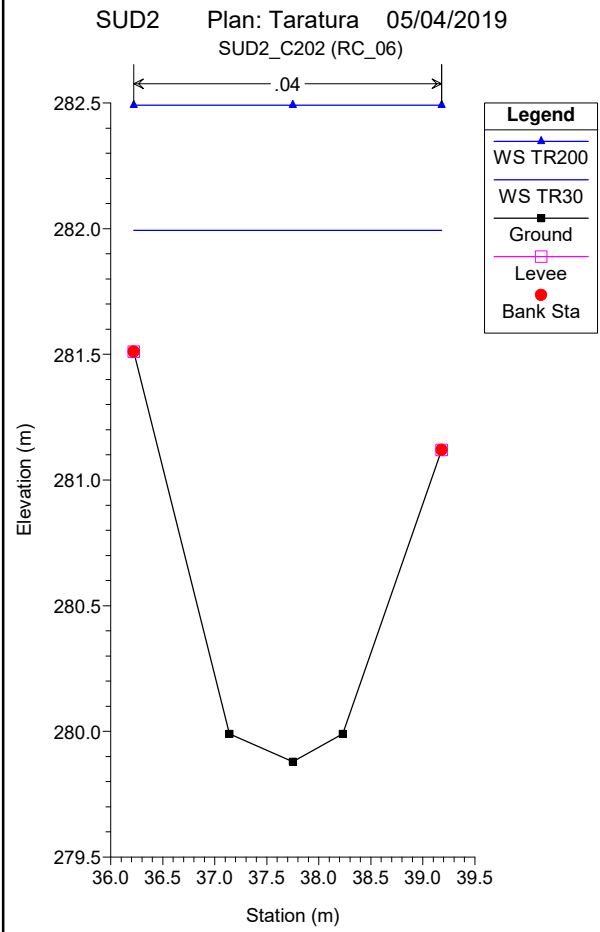
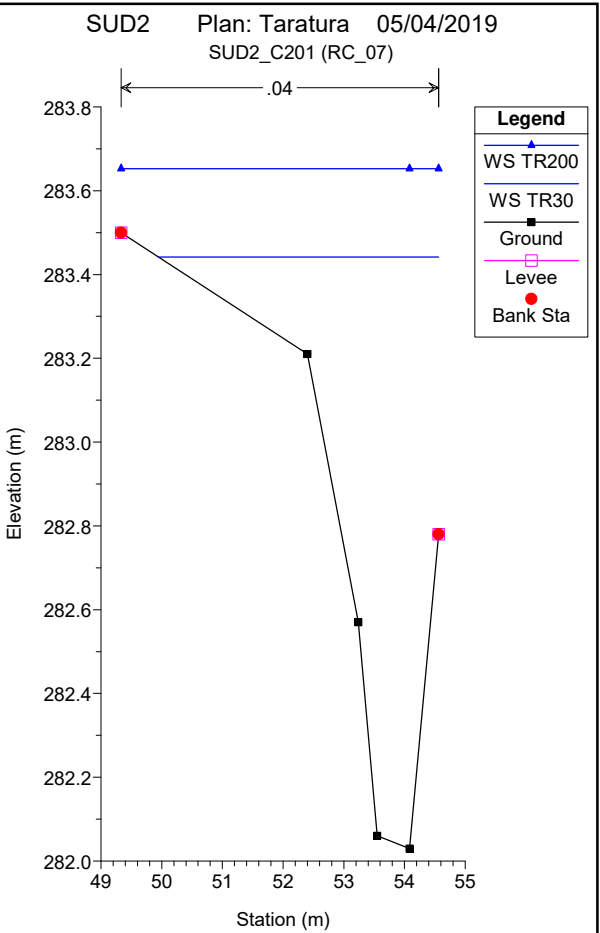
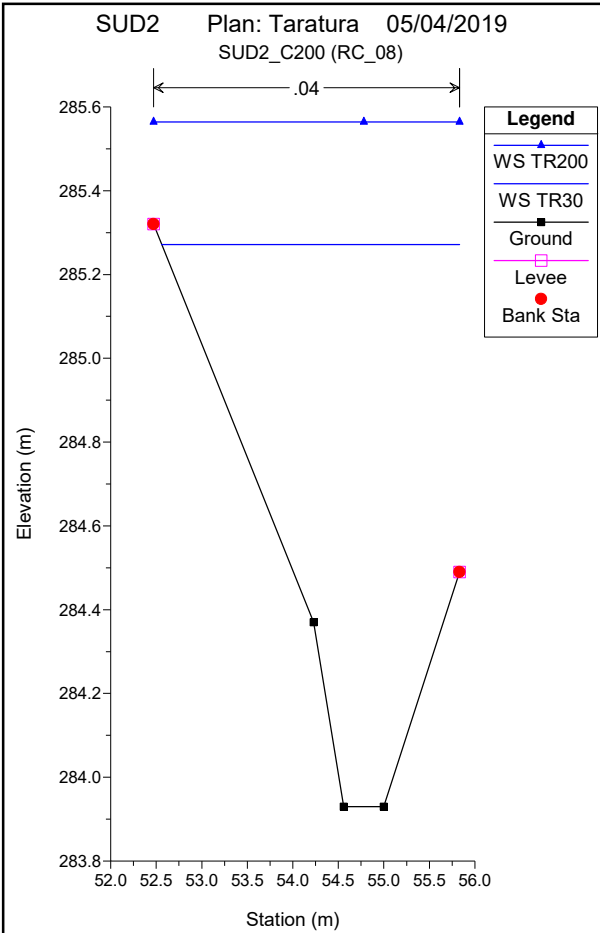


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C198 (RC\_10)

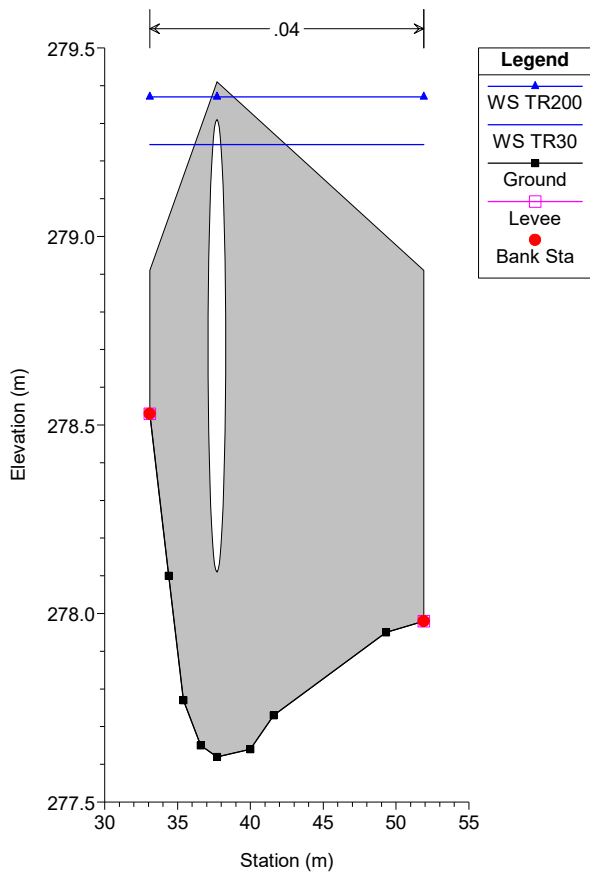


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C199 (RC\_09)

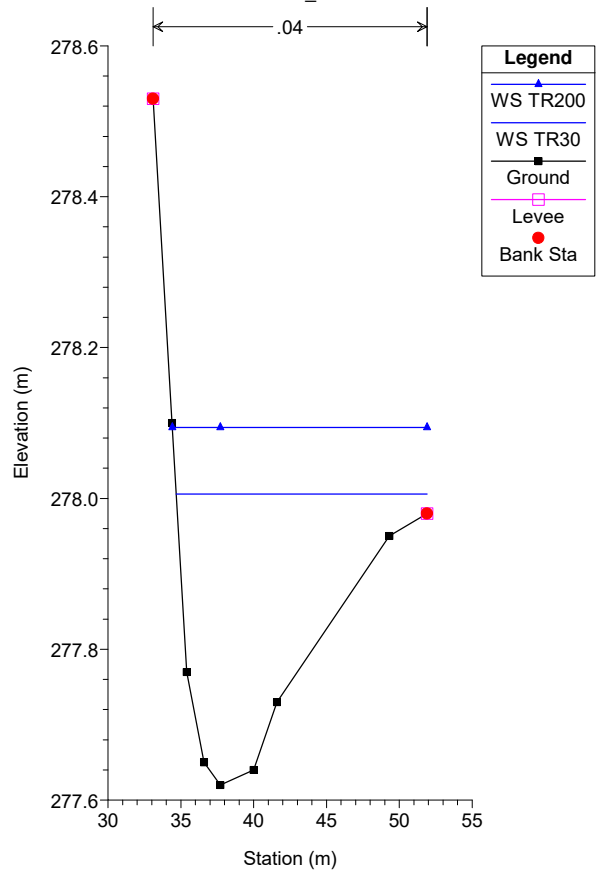




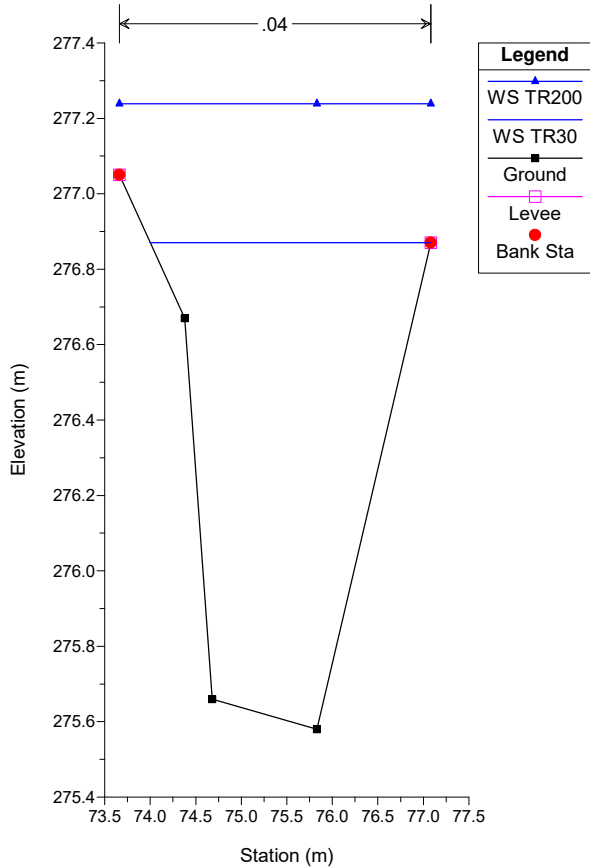
SUD2 Plan: Taratura 05/04/2019



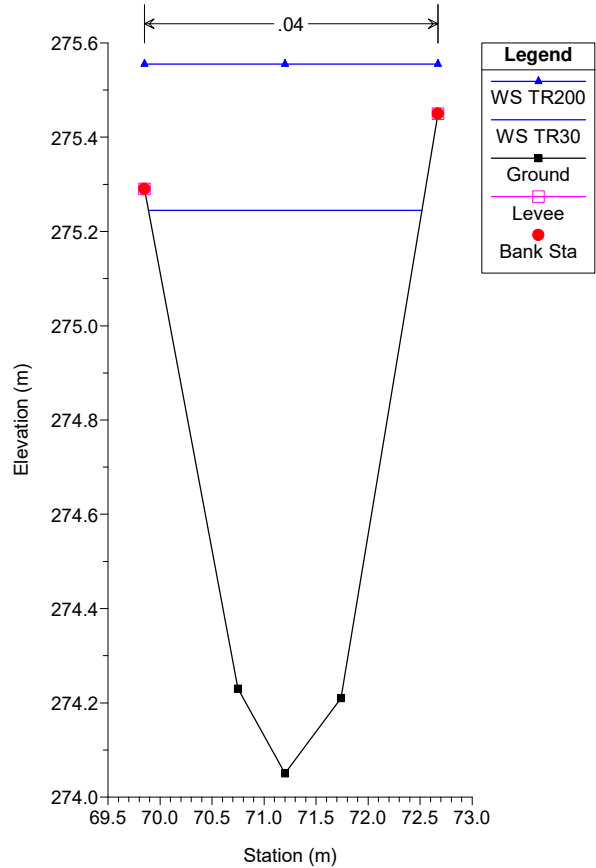
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C204

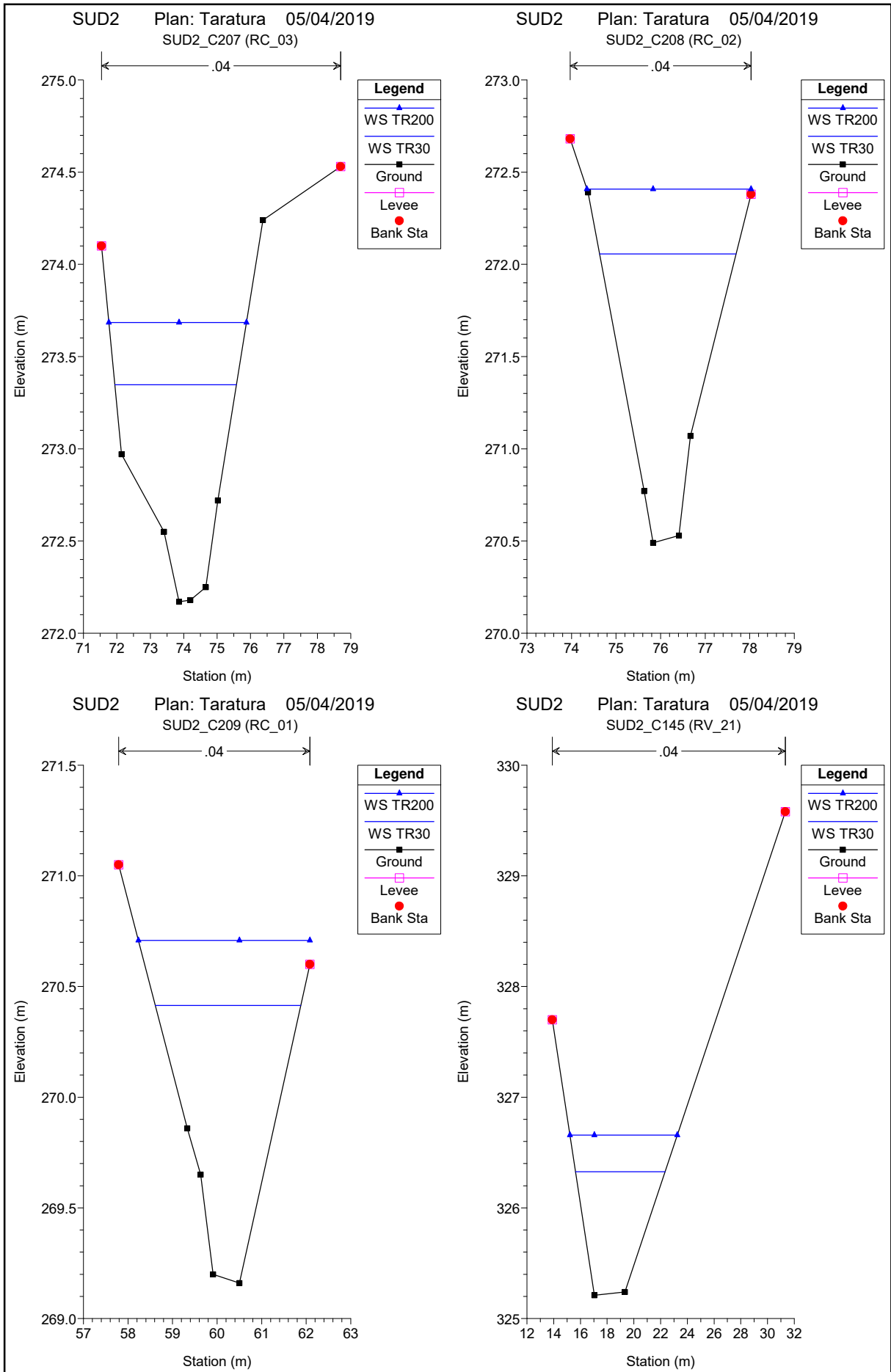


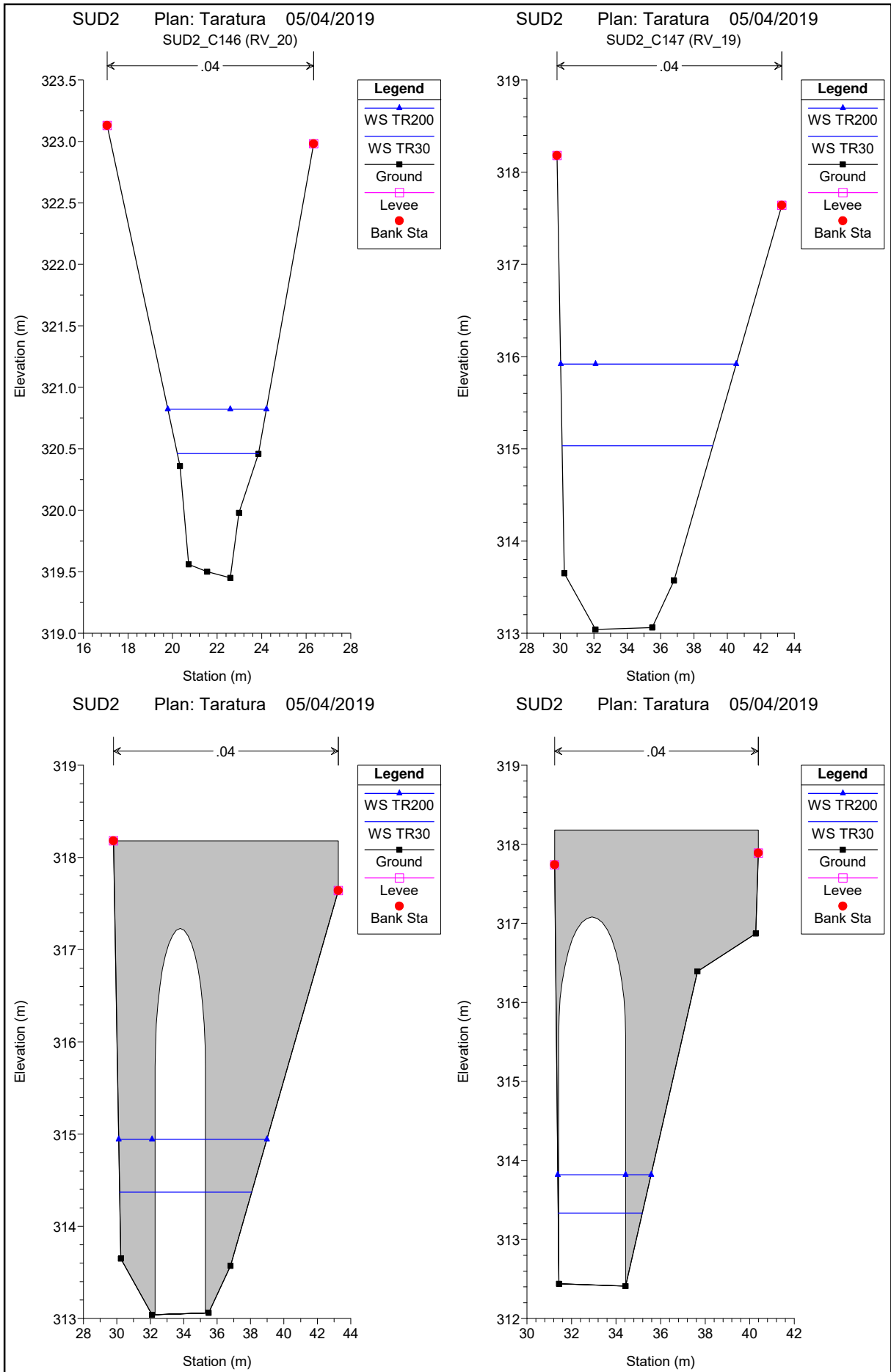
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C205 (RC\_05)

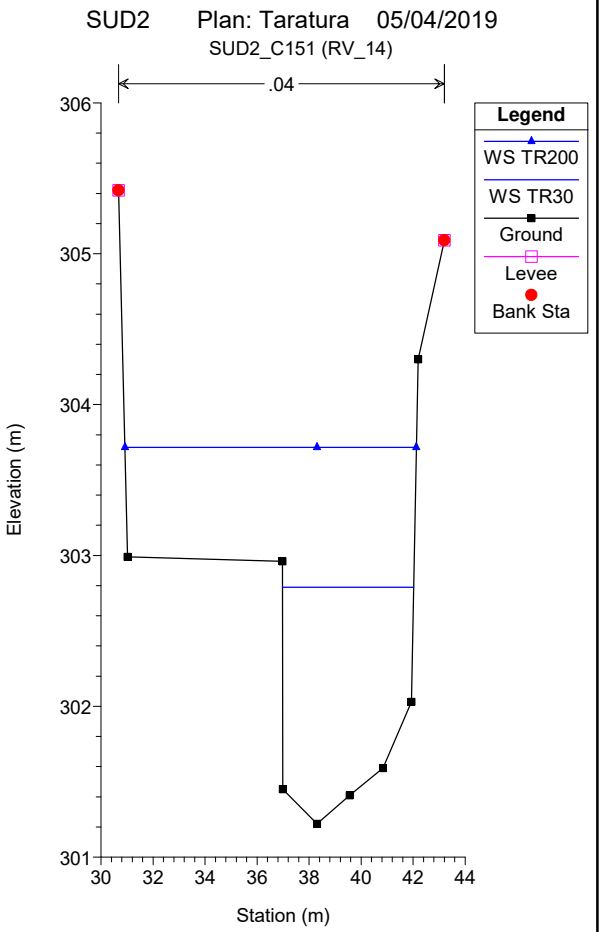
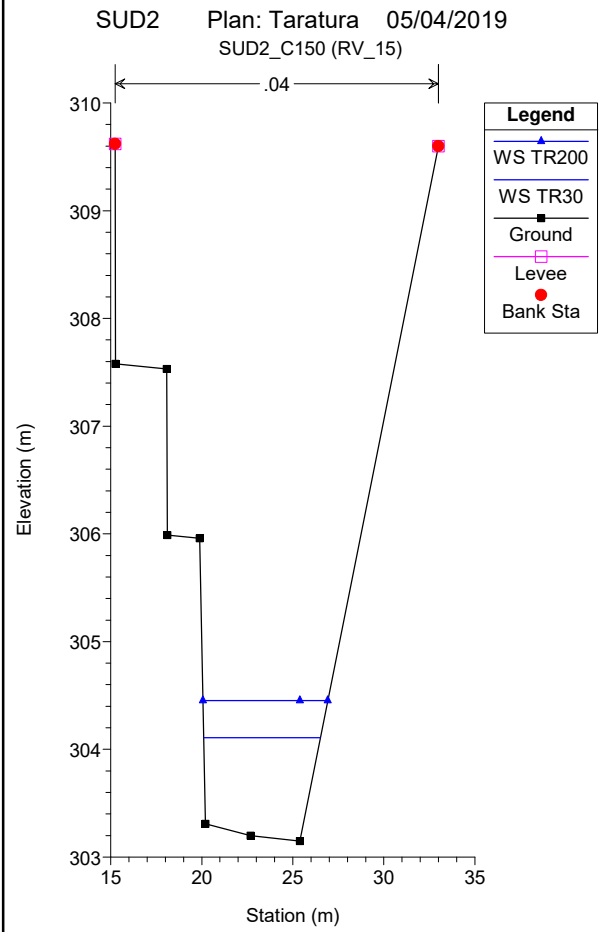
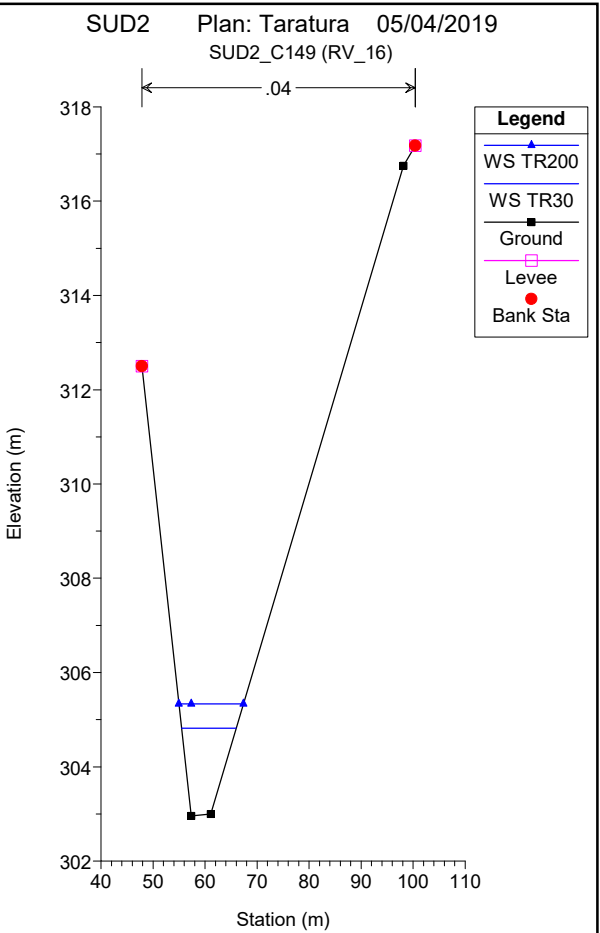
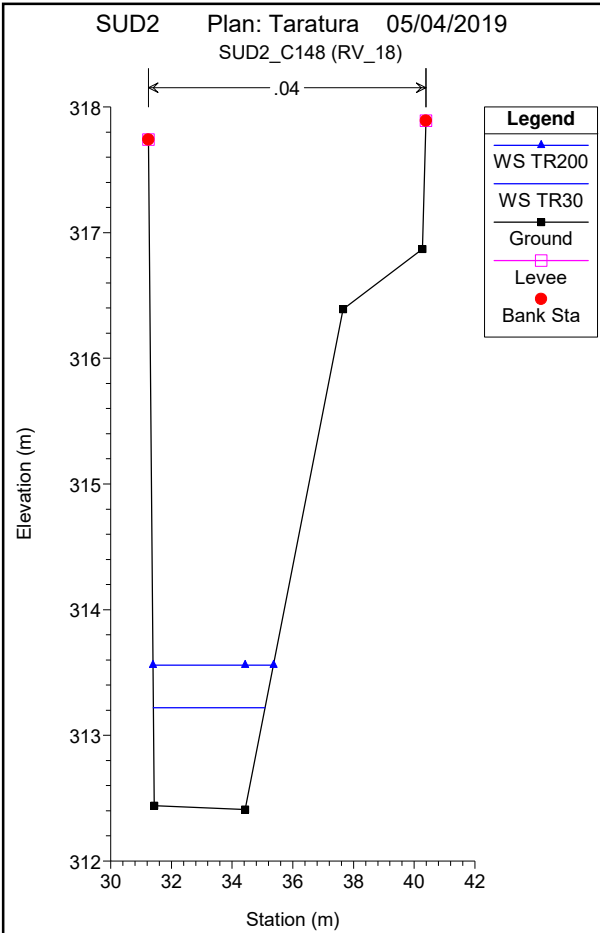


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C206 (RC\_04)



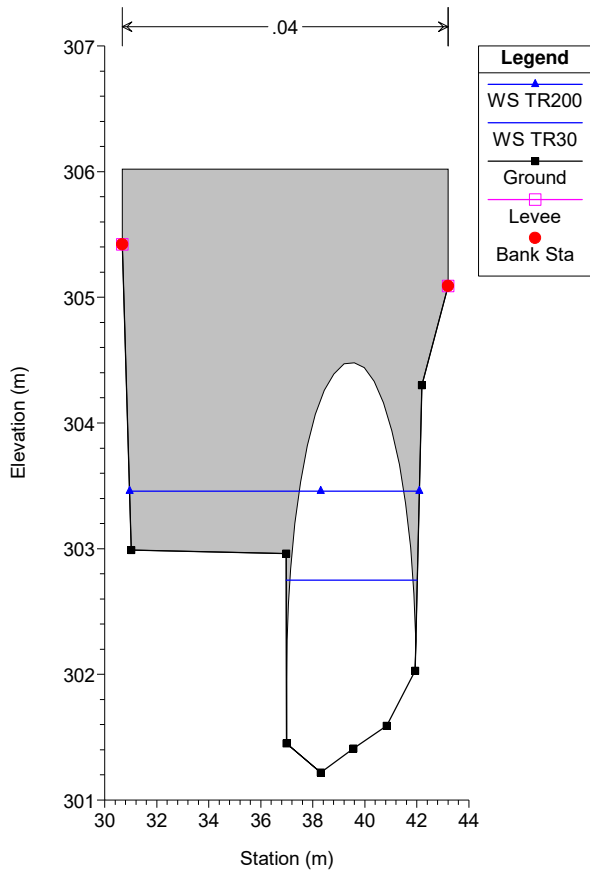




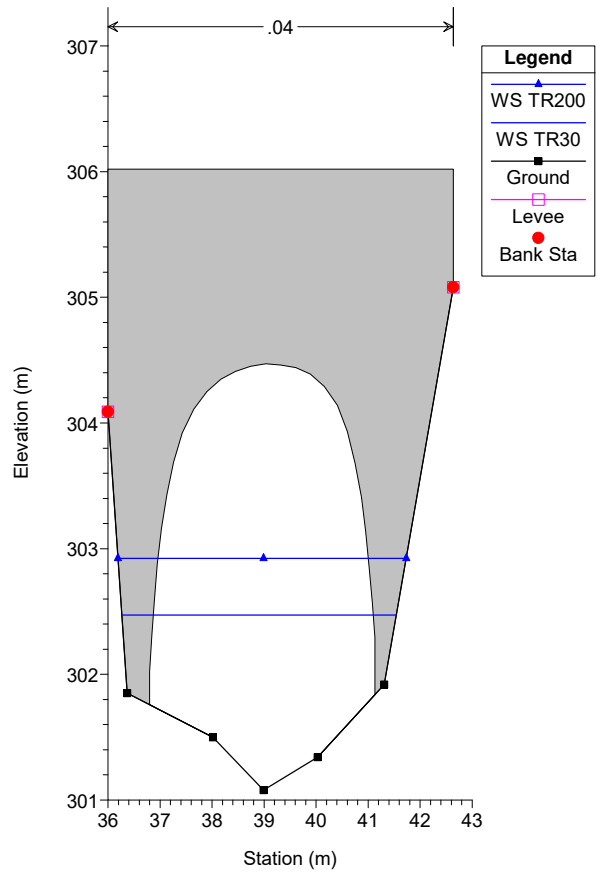




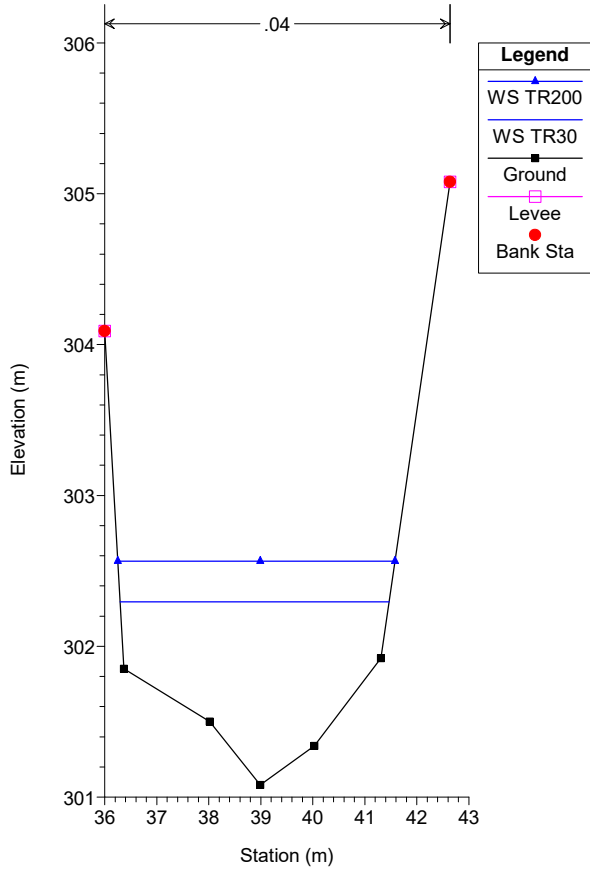
SUD2 Plan: Taratura 05/04/2019



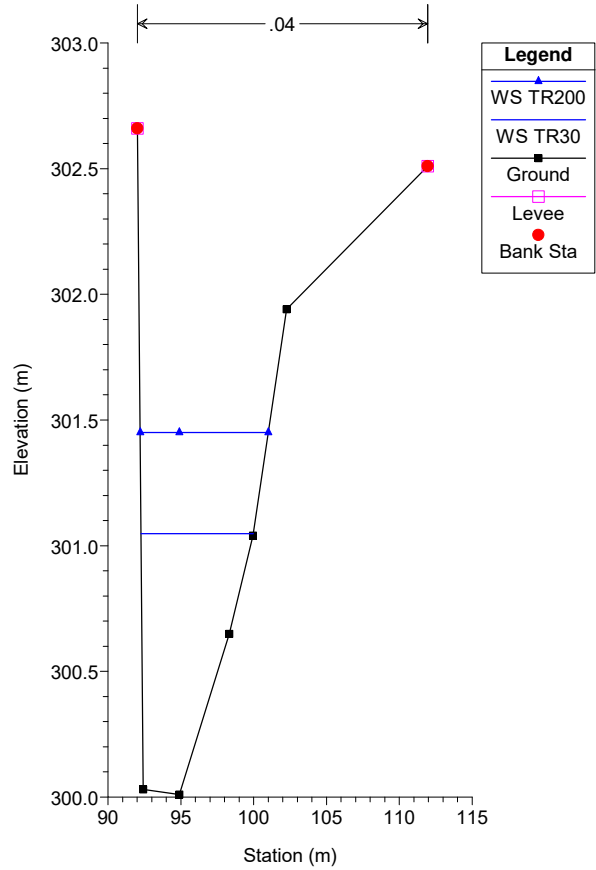
SUD2 Plan: Taratura 05/04/2019

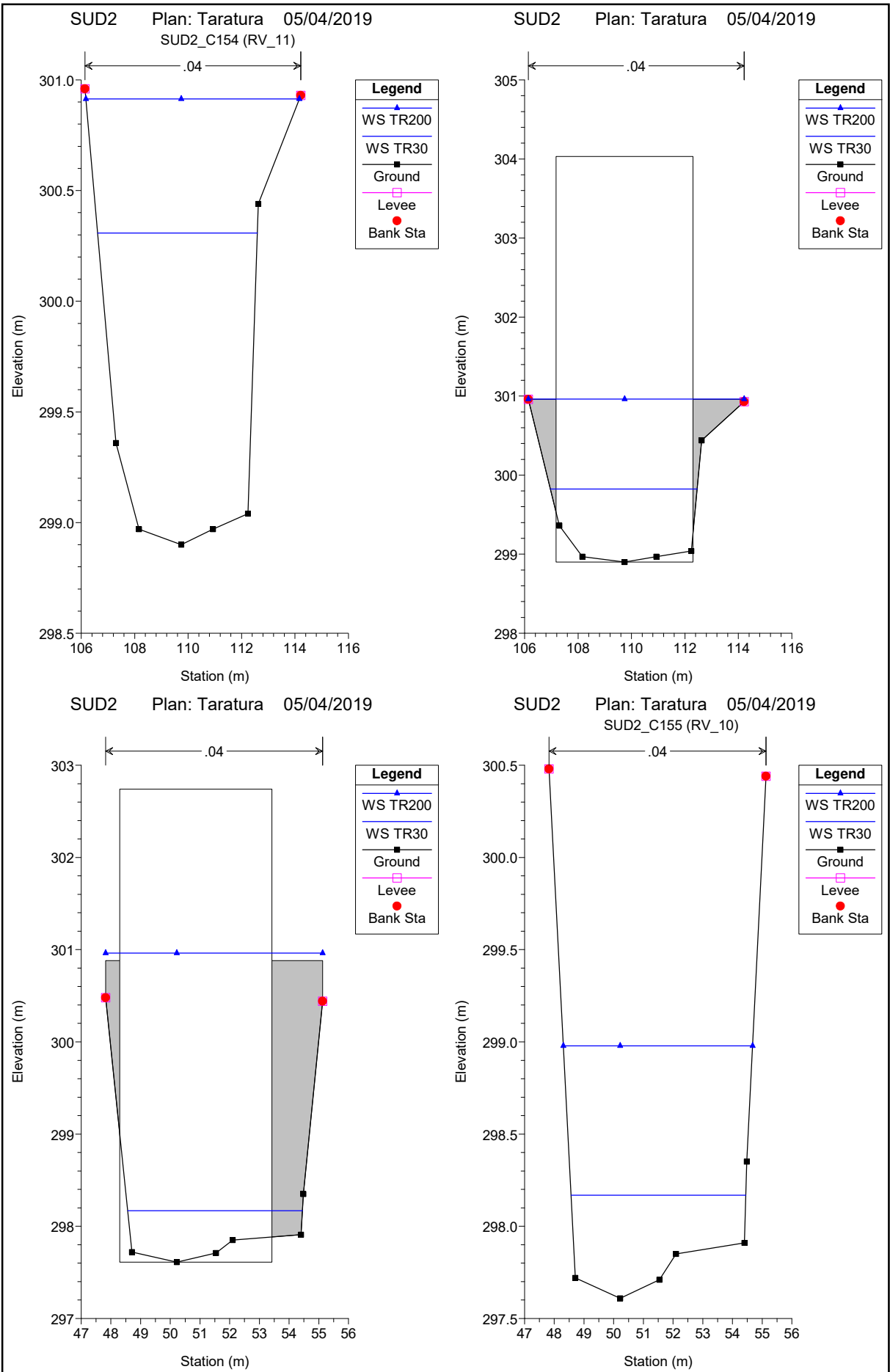


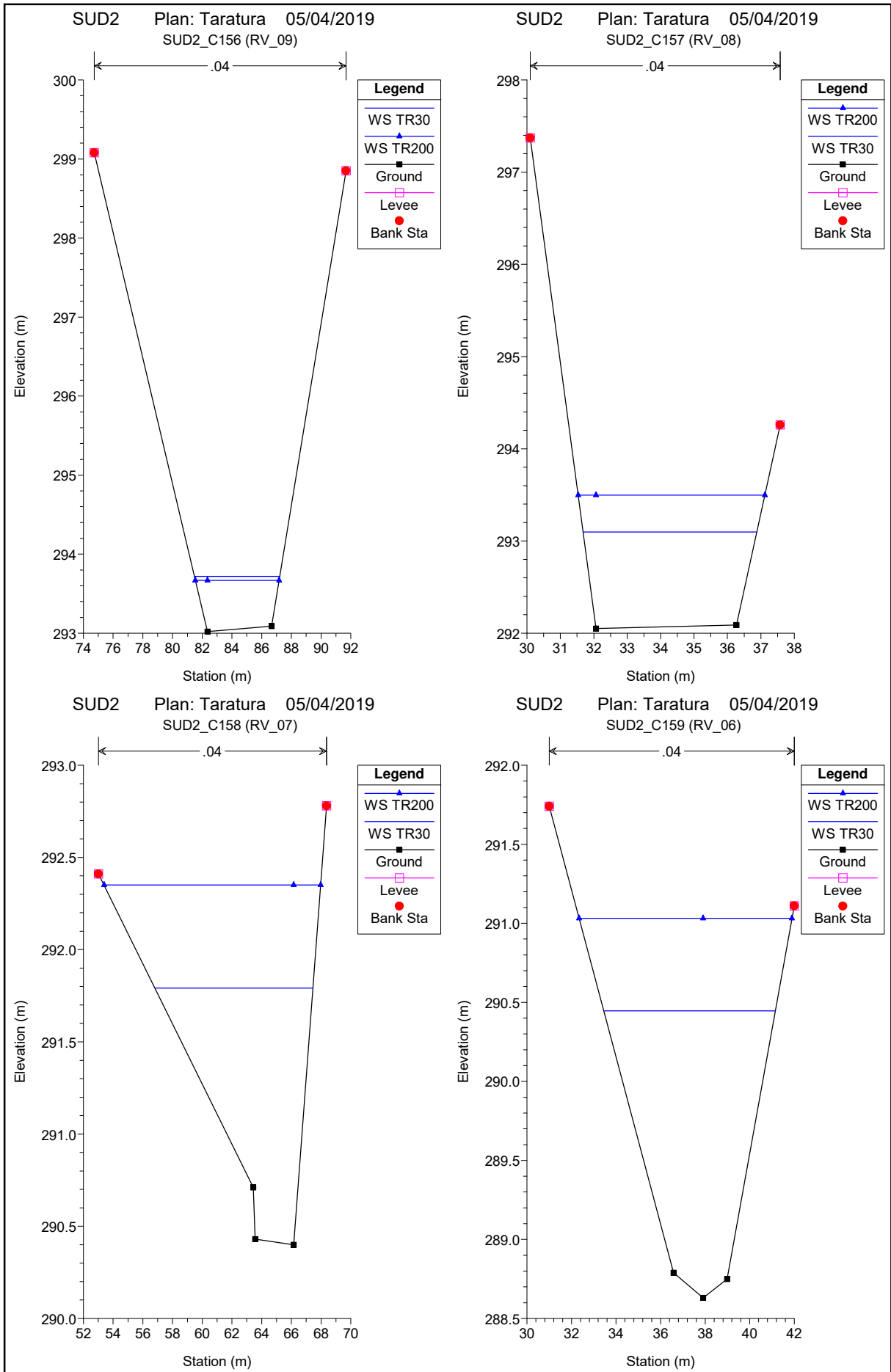
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C152 (RV\_13)

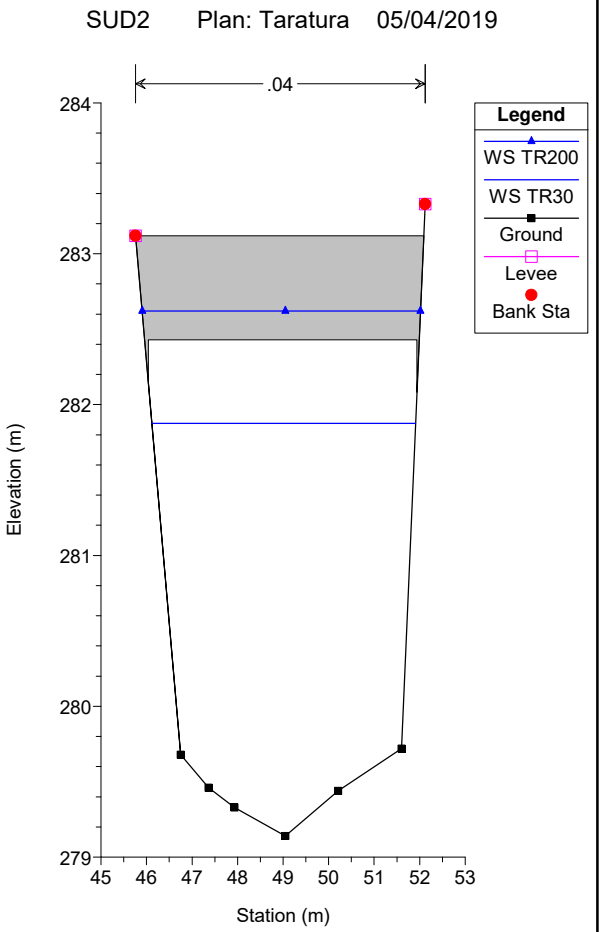
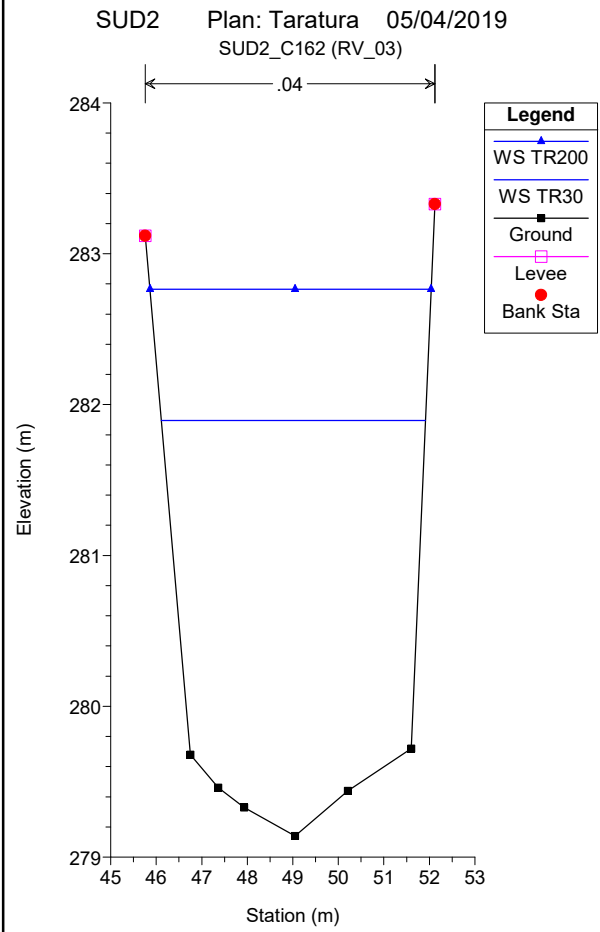
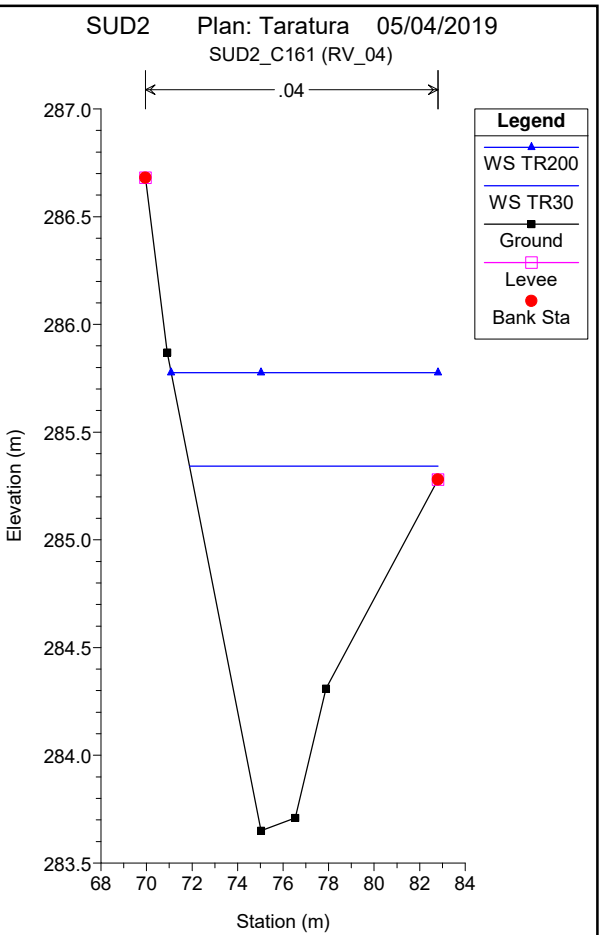
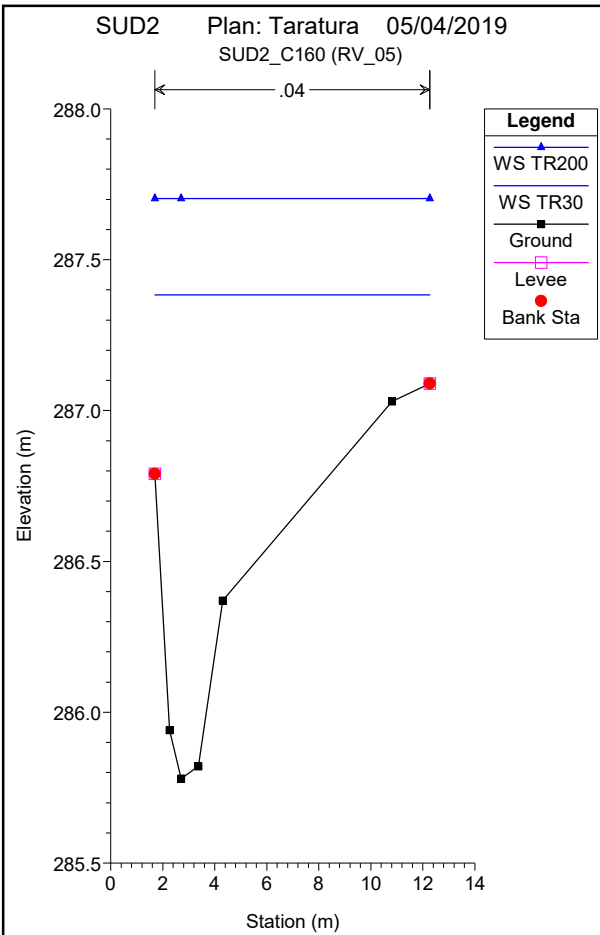


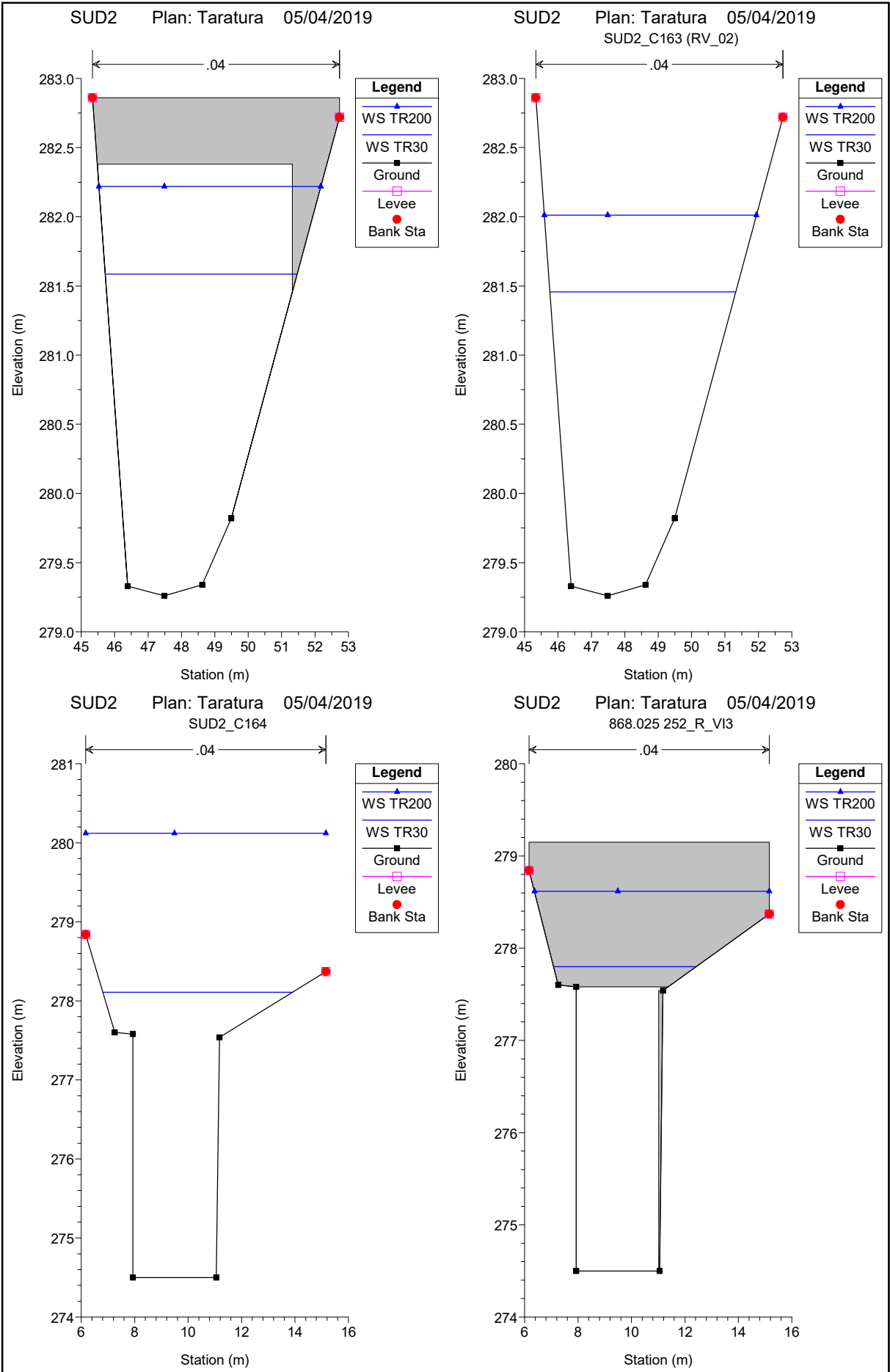
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C153 (RV\_12)

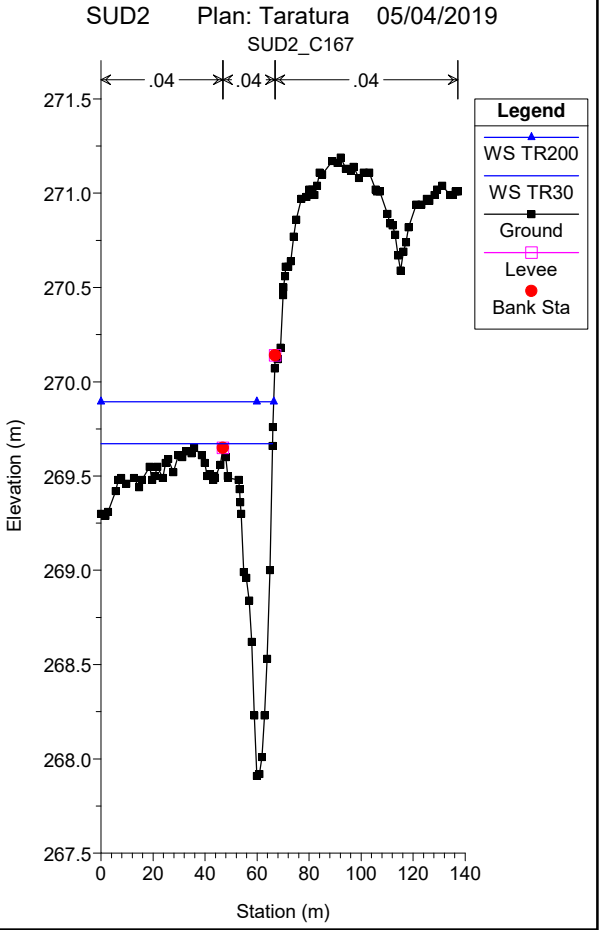
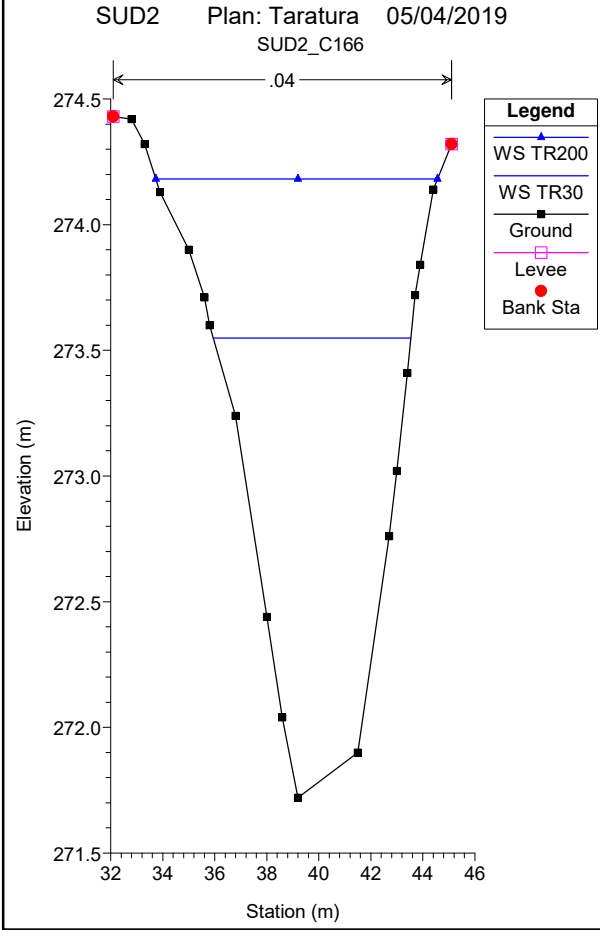
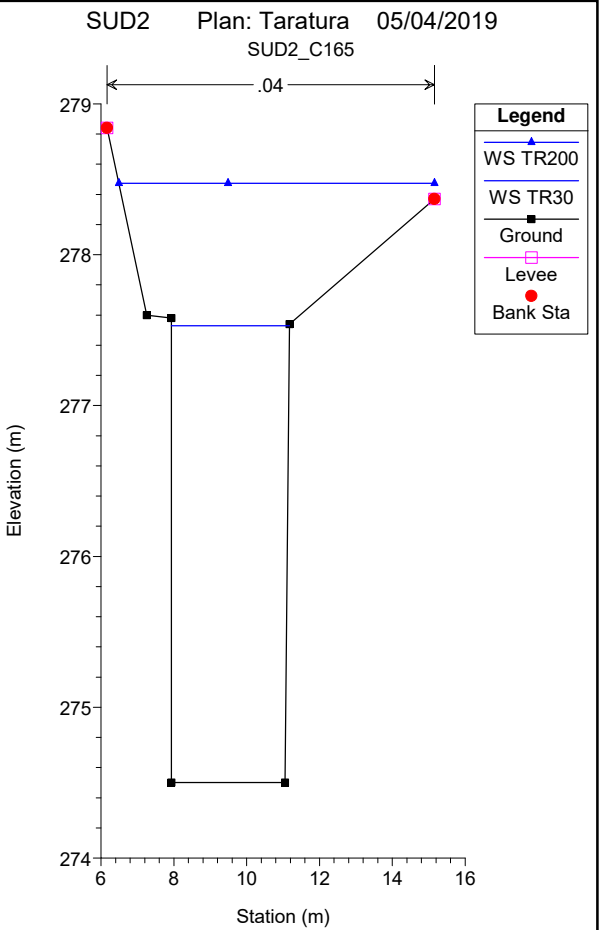
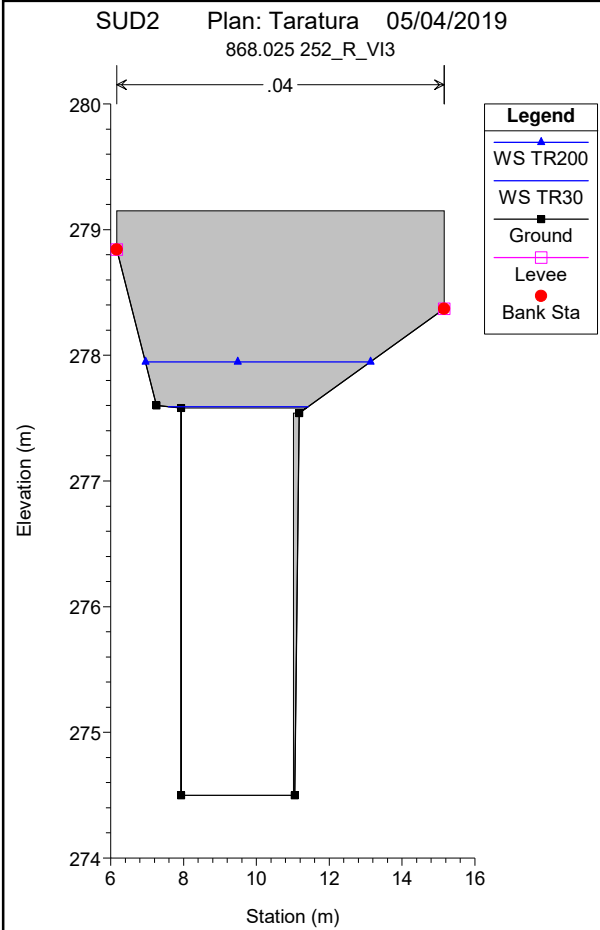


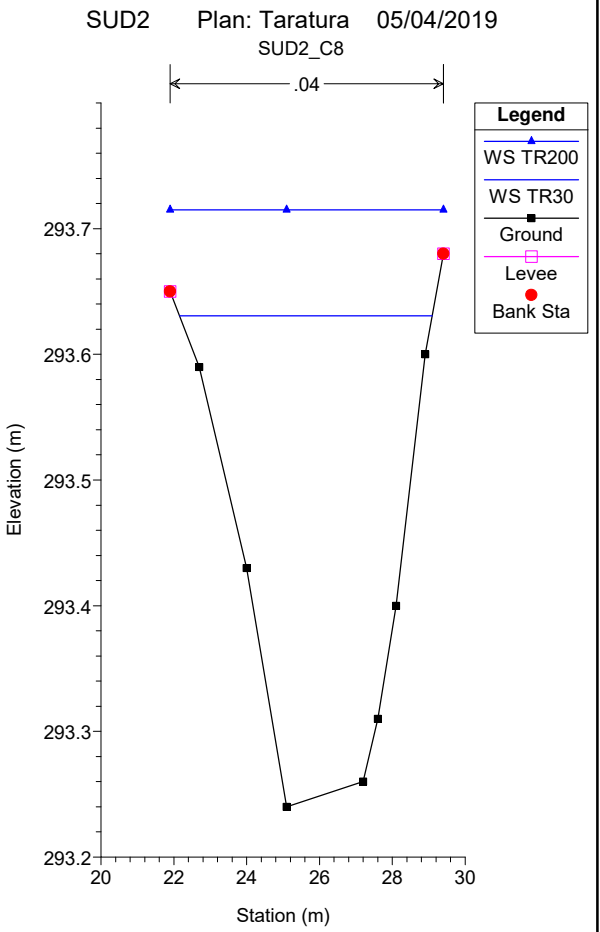
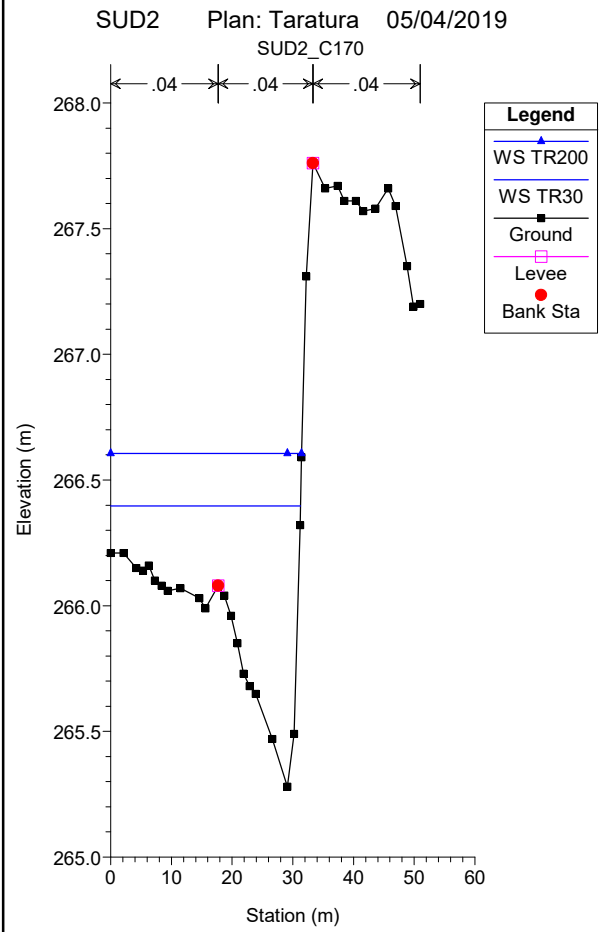
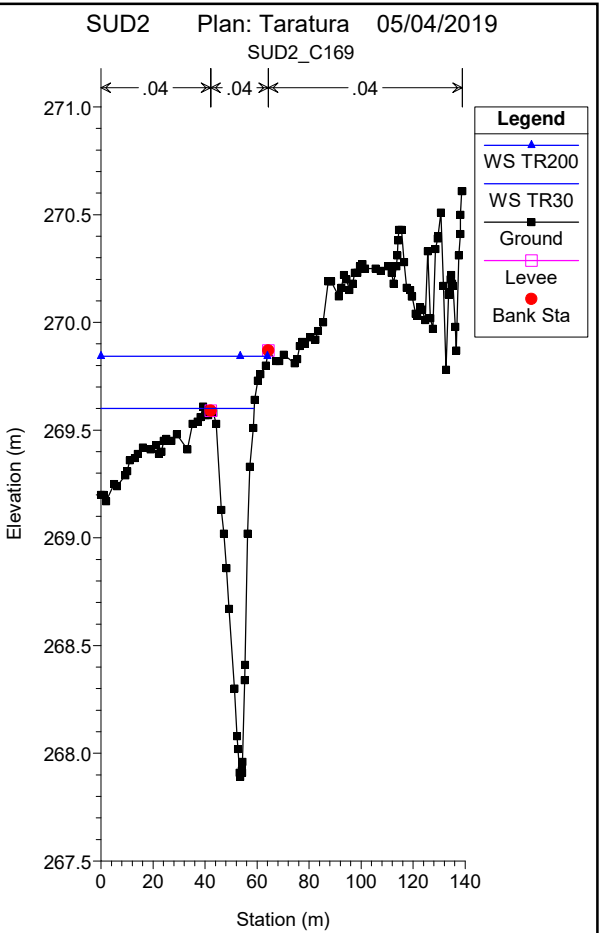
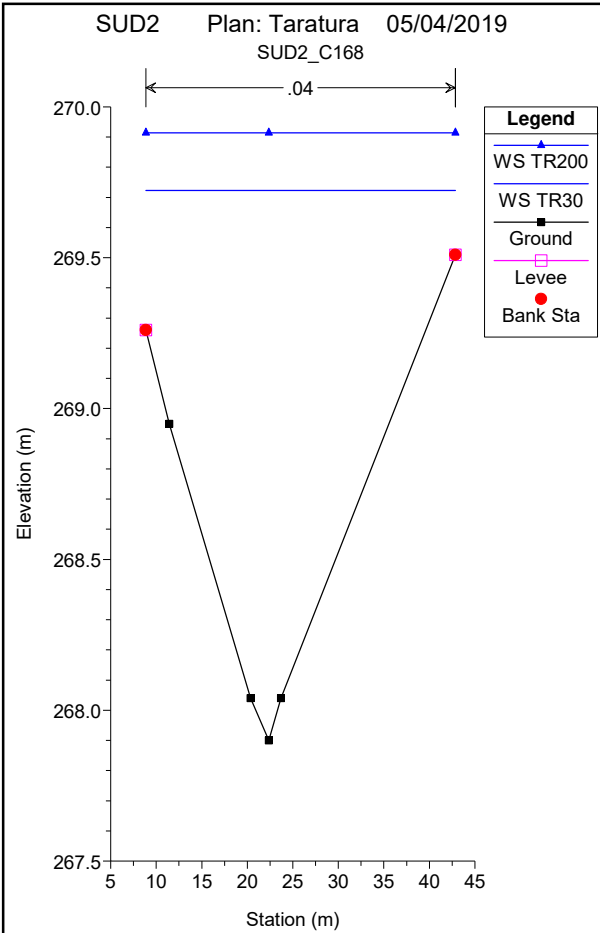


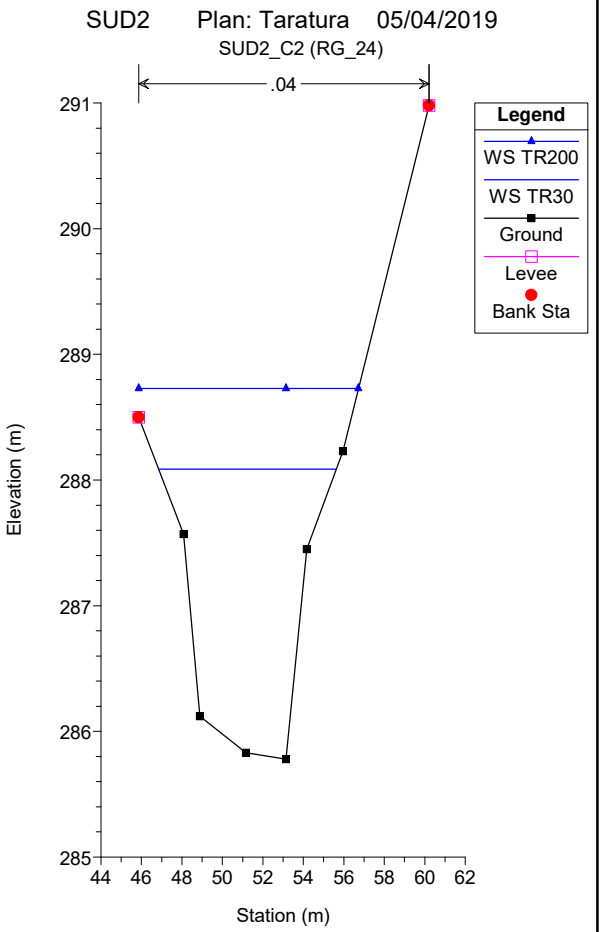
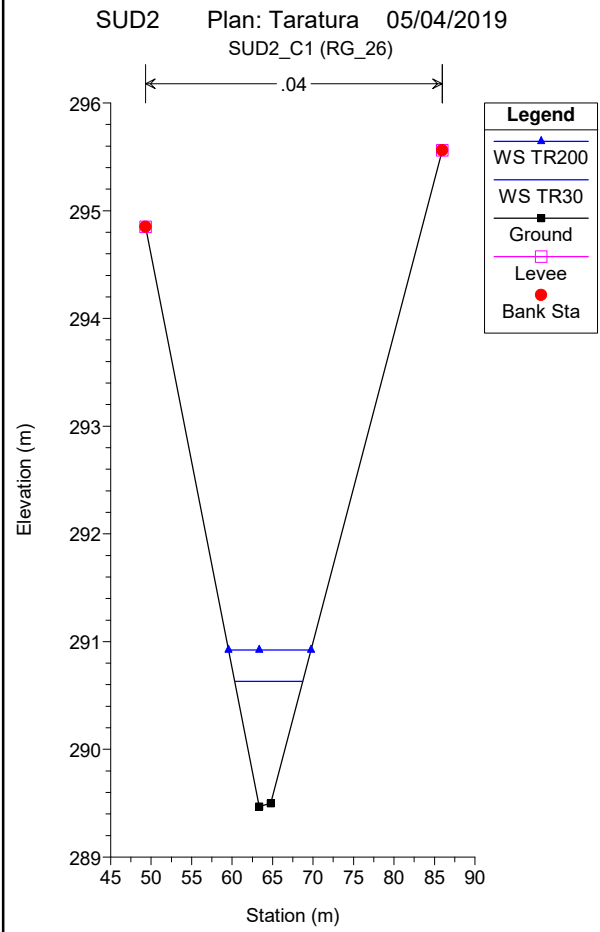
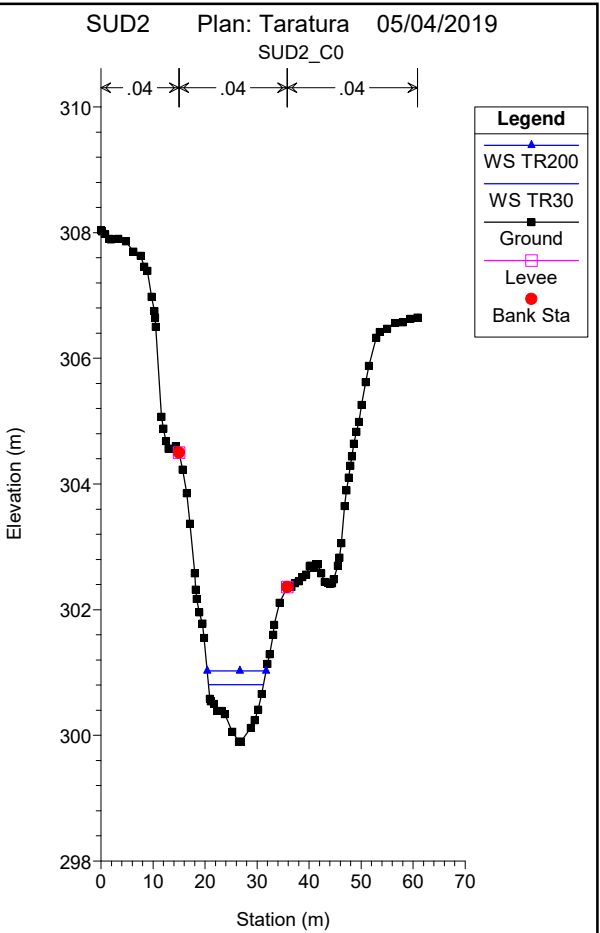
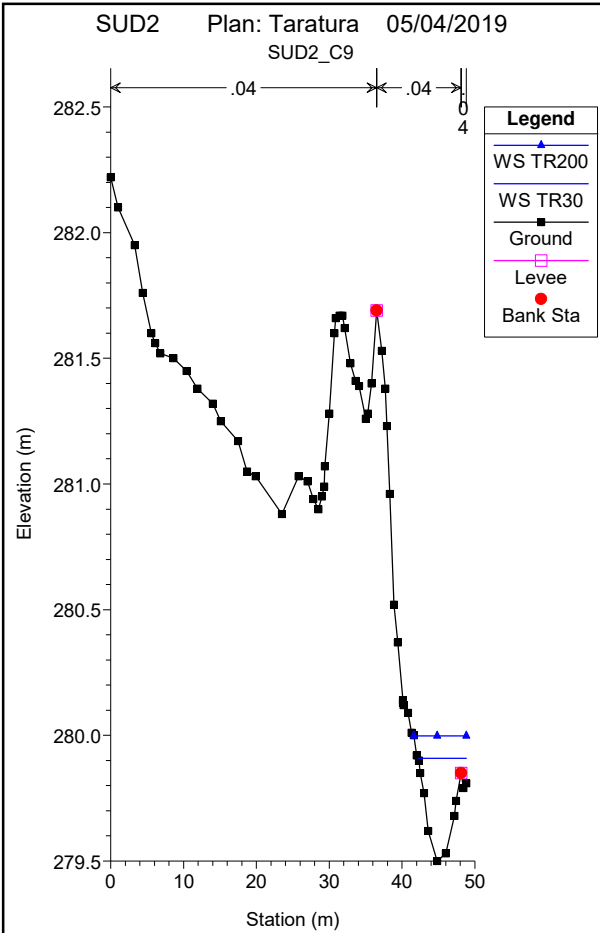






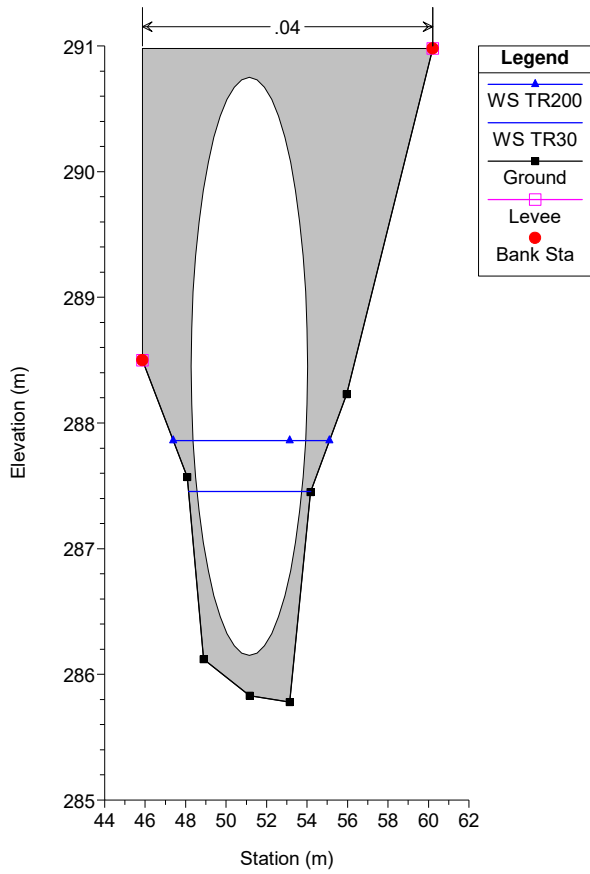




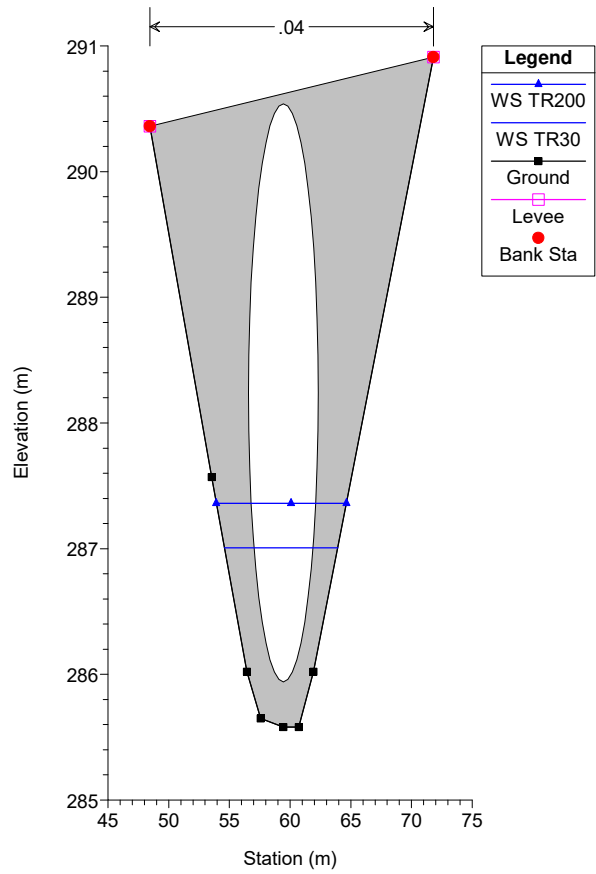




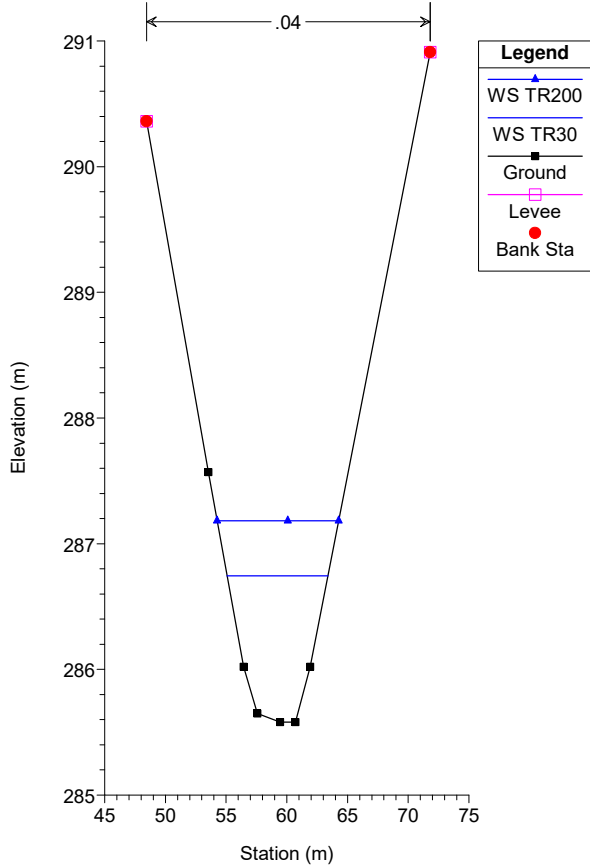
SUD2 Plan: Taratura 05/04/2019



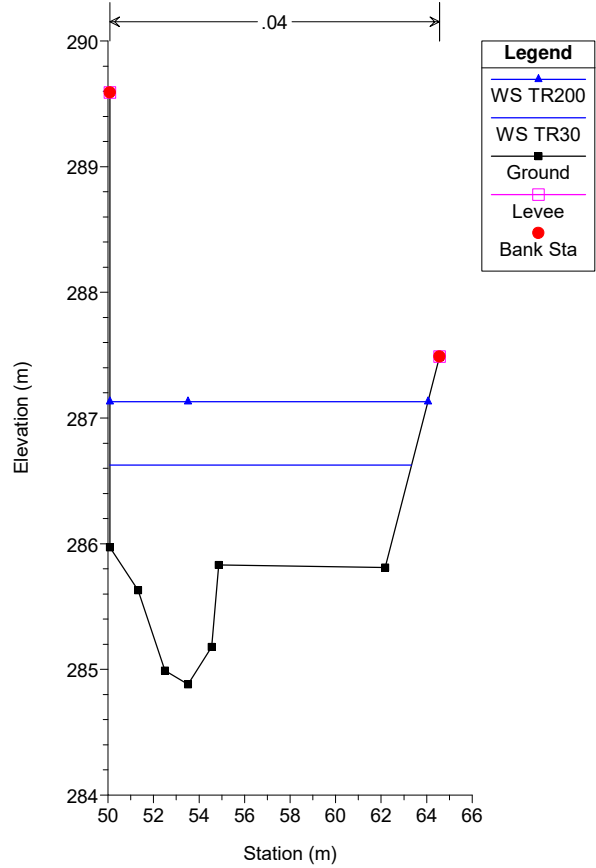
SUD2 Plan: Taratura 05/04/2019

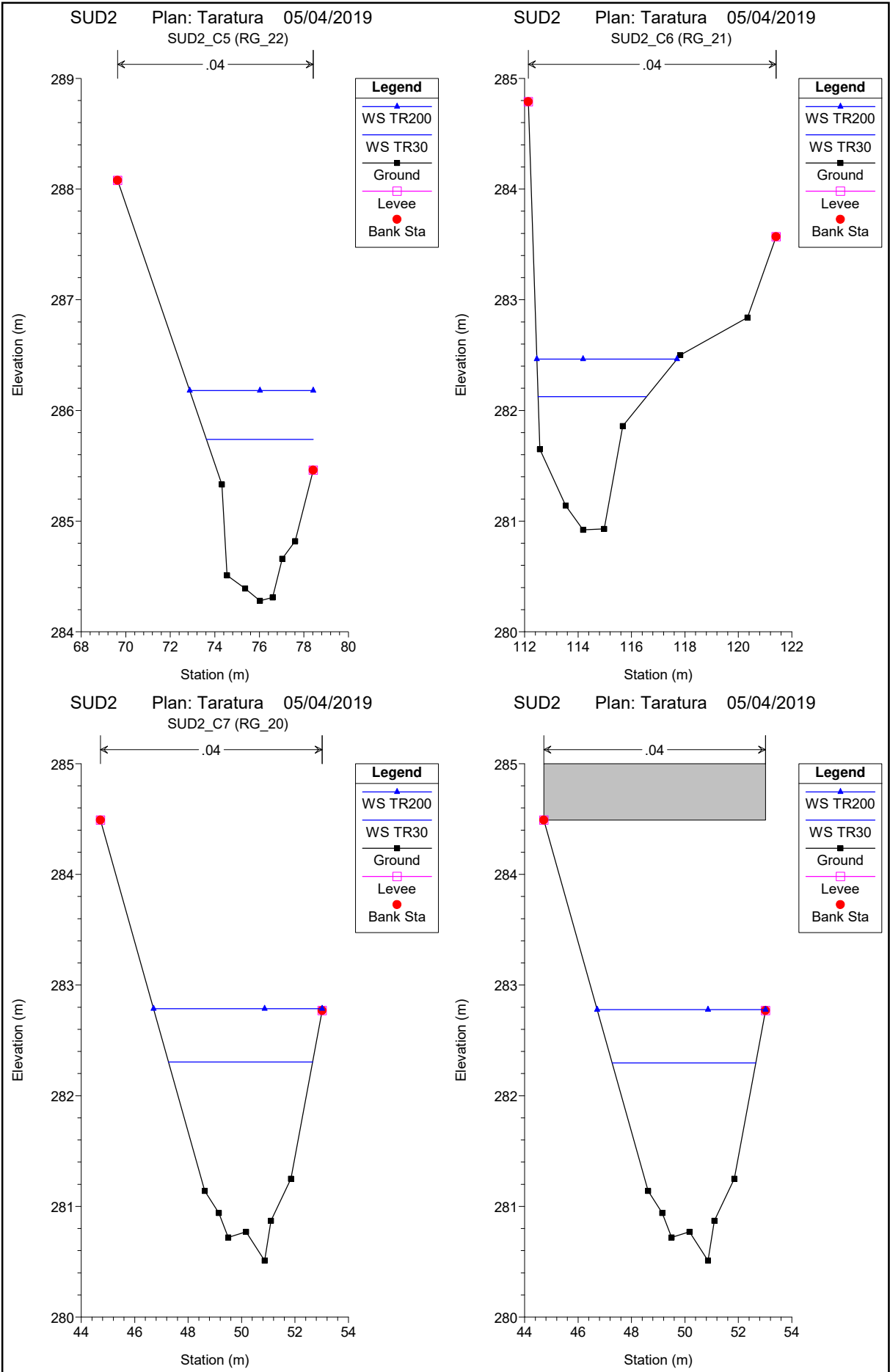


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C3 (RG\_24A)

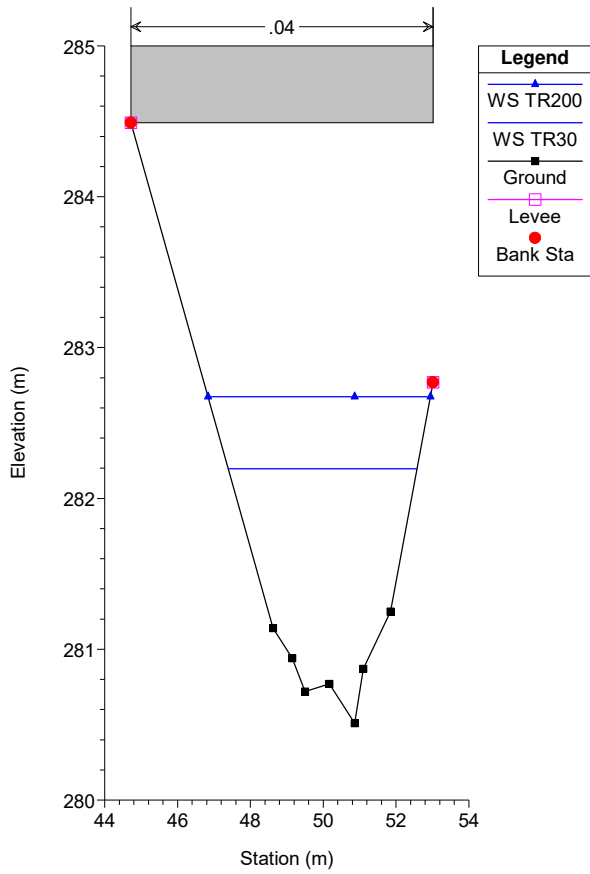


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C4 (RG\_23)

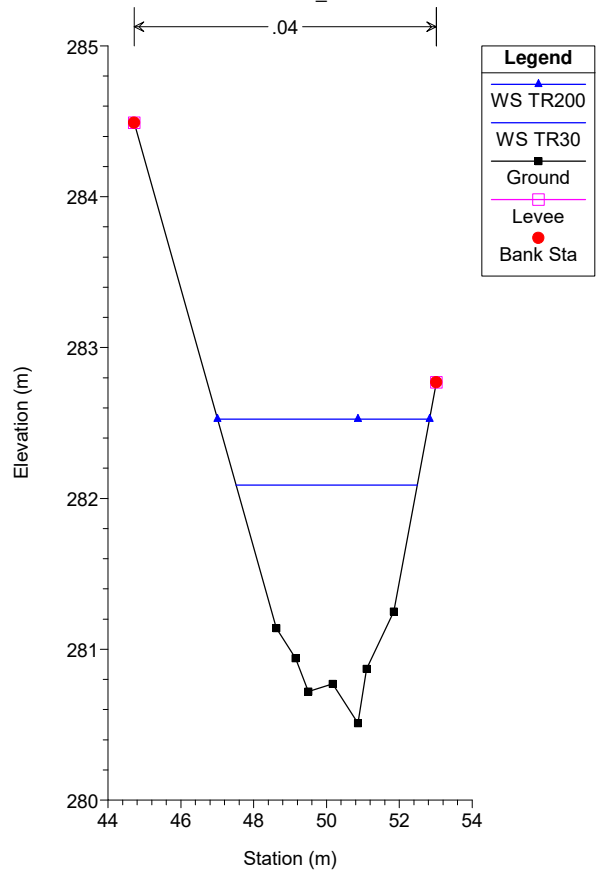




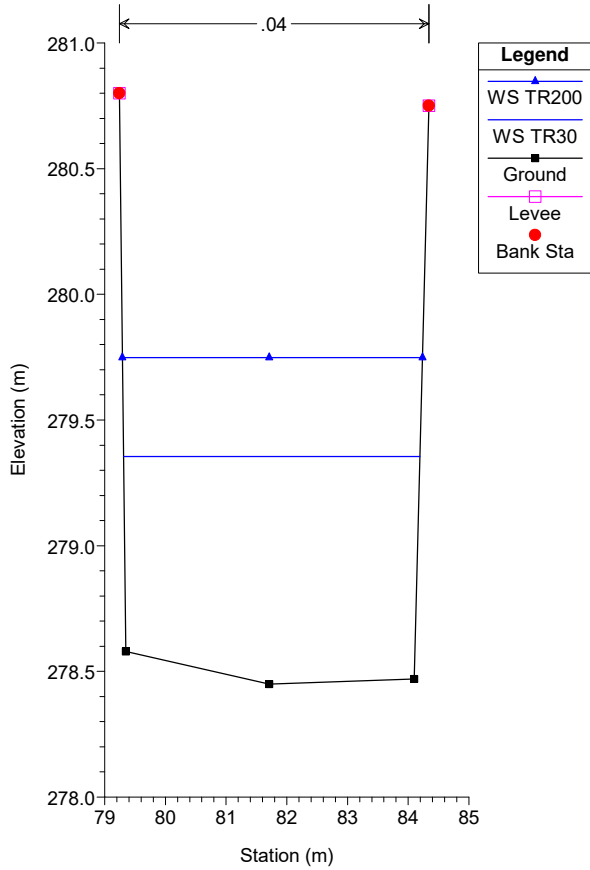
SUD2 Plan: Taratura 05/04/2019



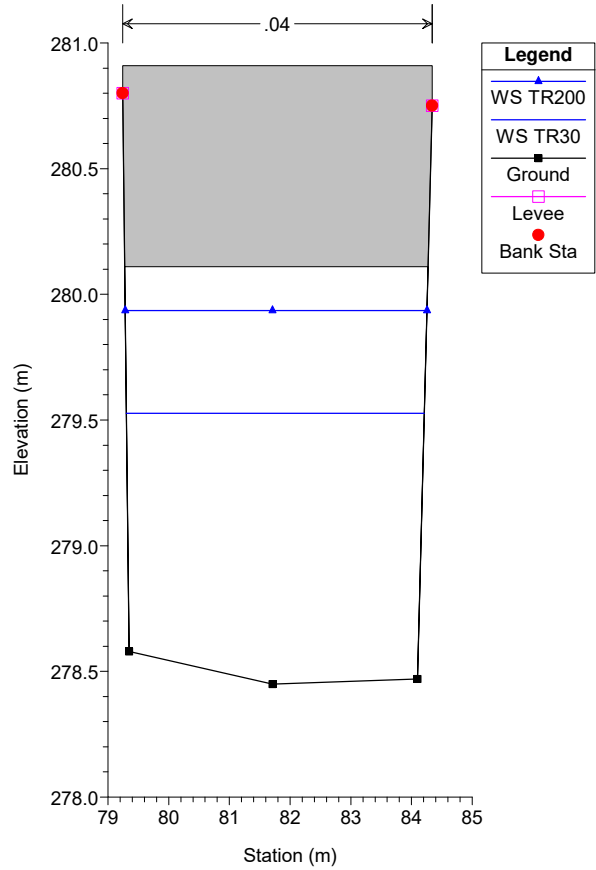
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C7



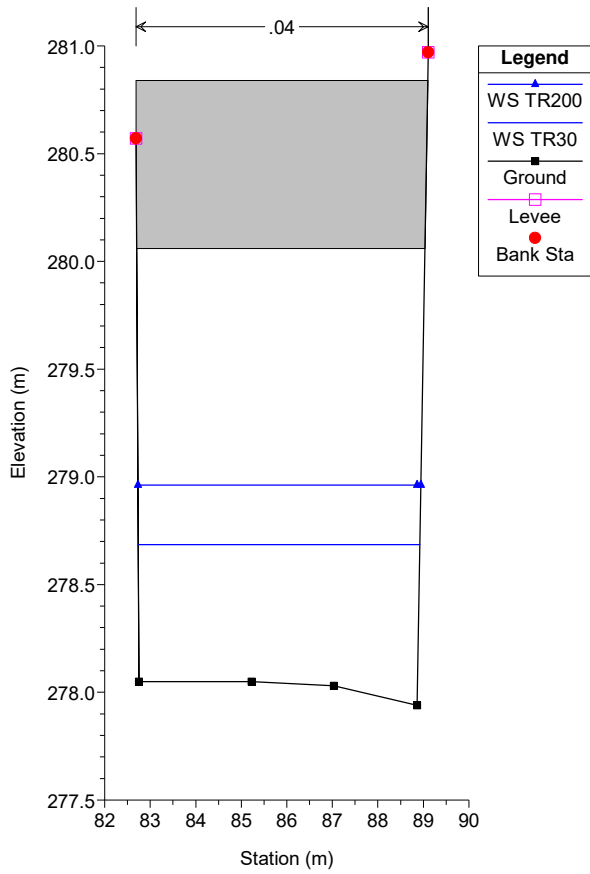
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C95 (RG\_18)



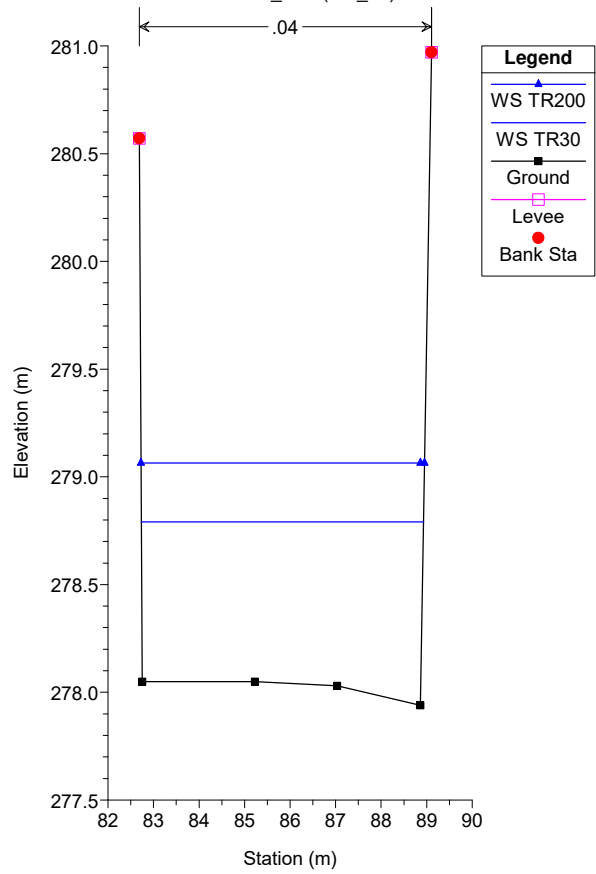
SUD2 Plan: Taratura 05/04/2019



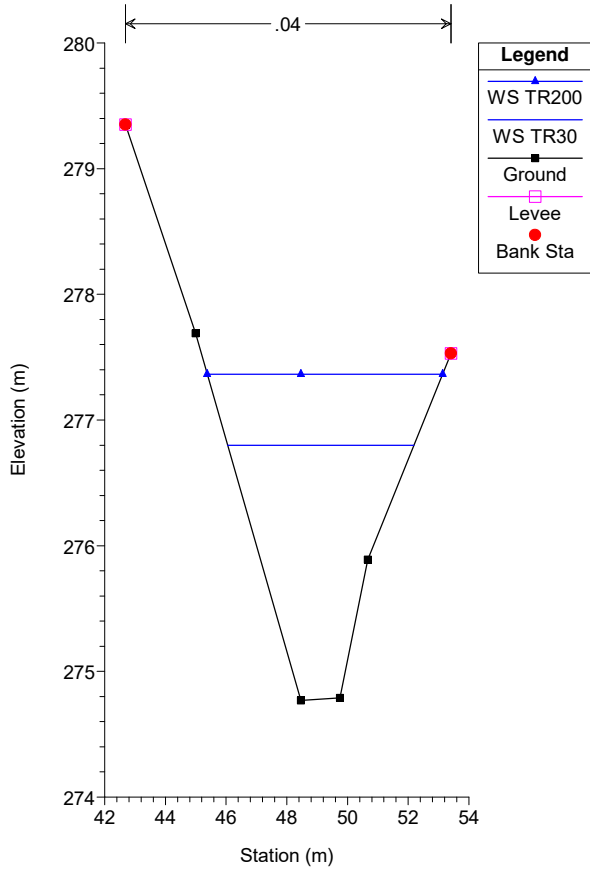
SUD2 Plan: Taratura 05/04/2019



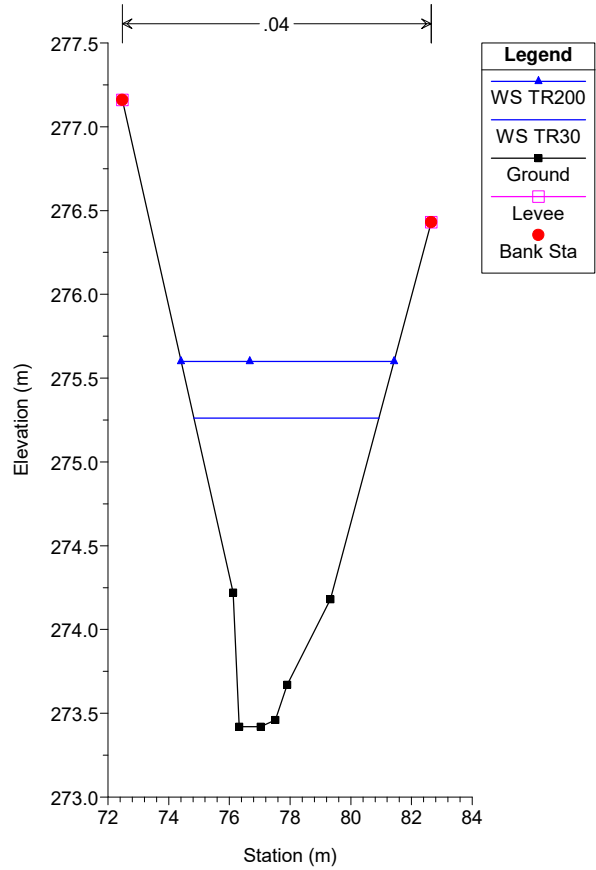
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C96 (RG\_17)

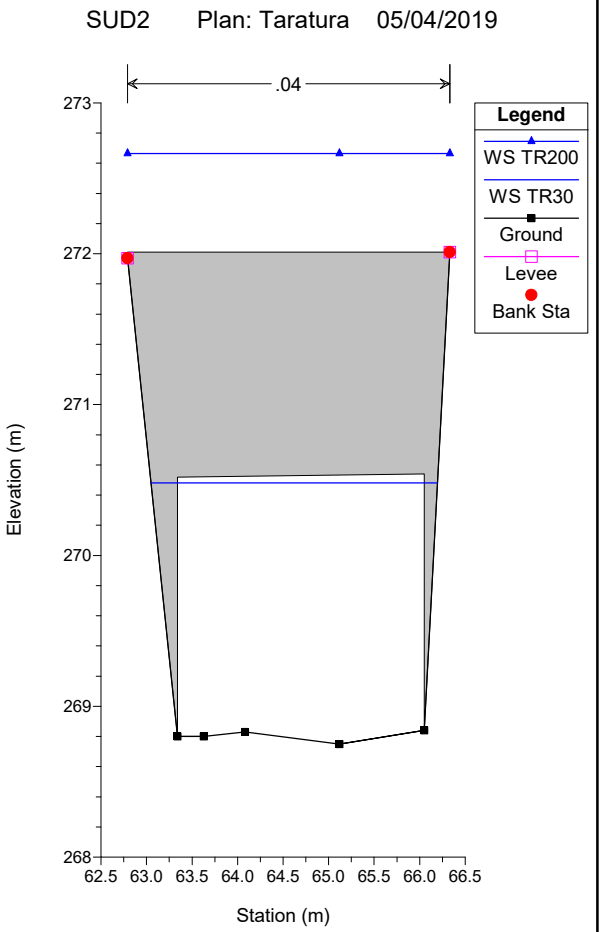
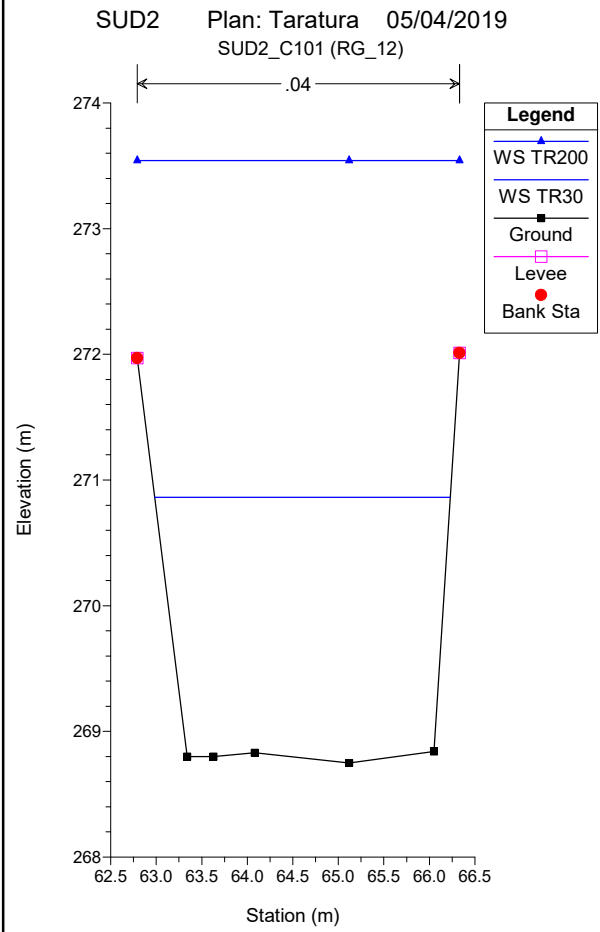
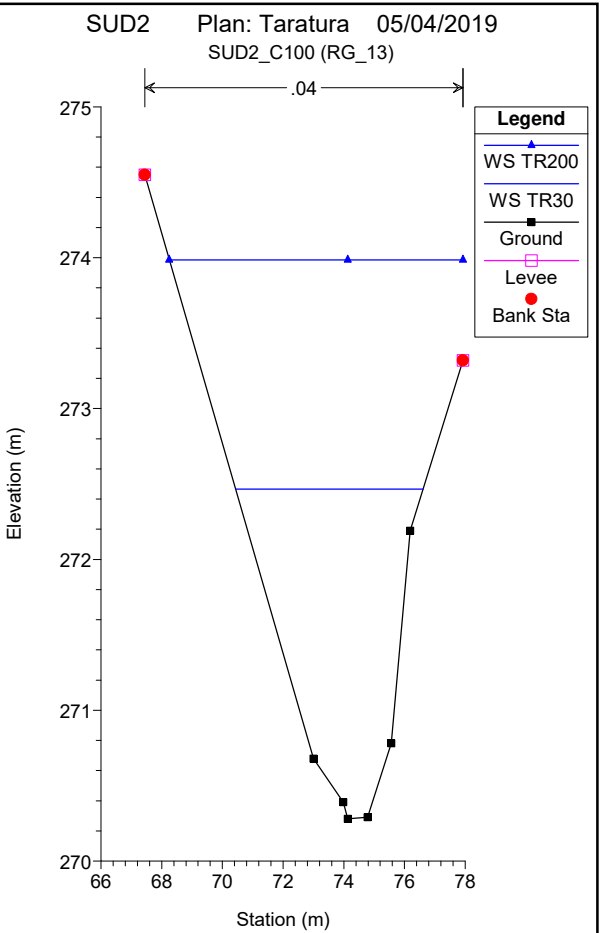
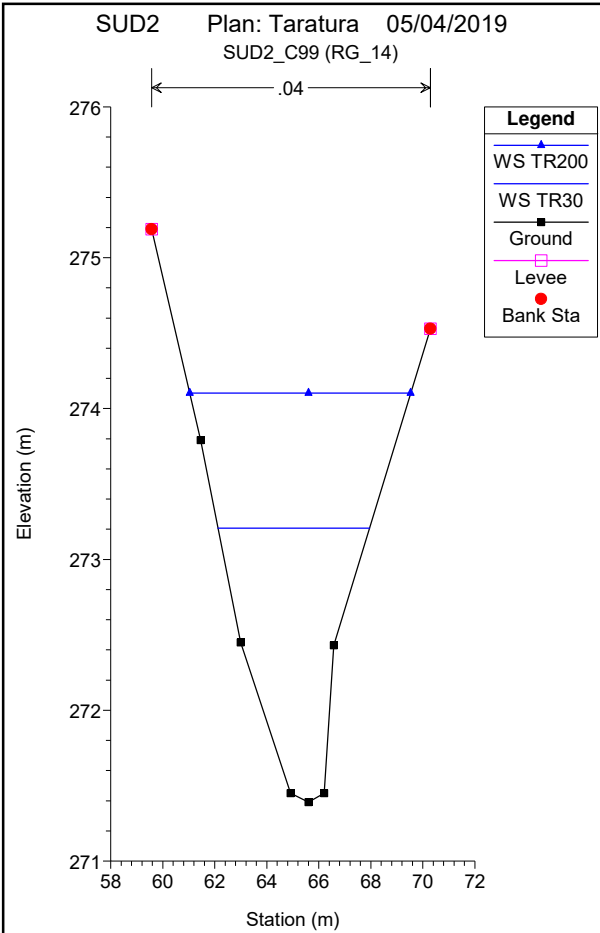


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C97 (RG\_16)

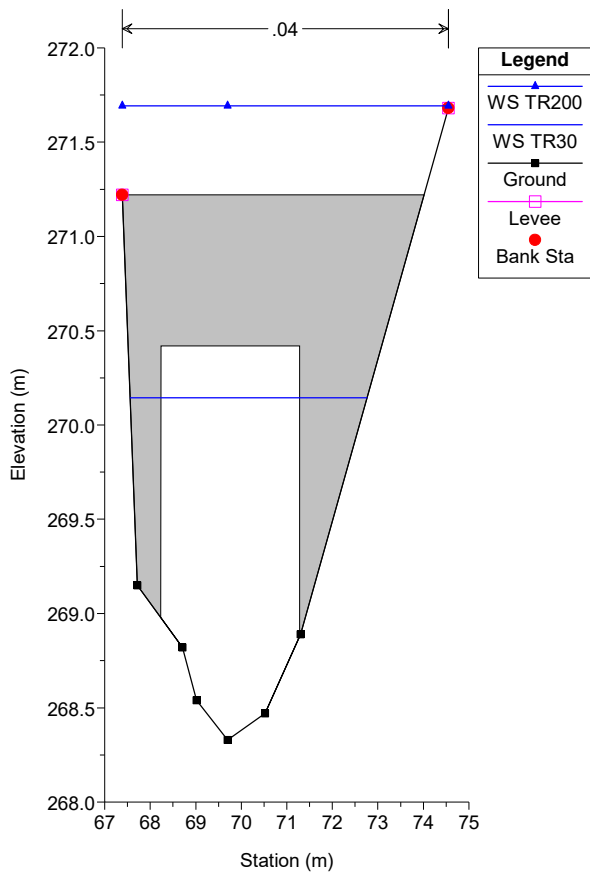


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C98 (RG\_15)

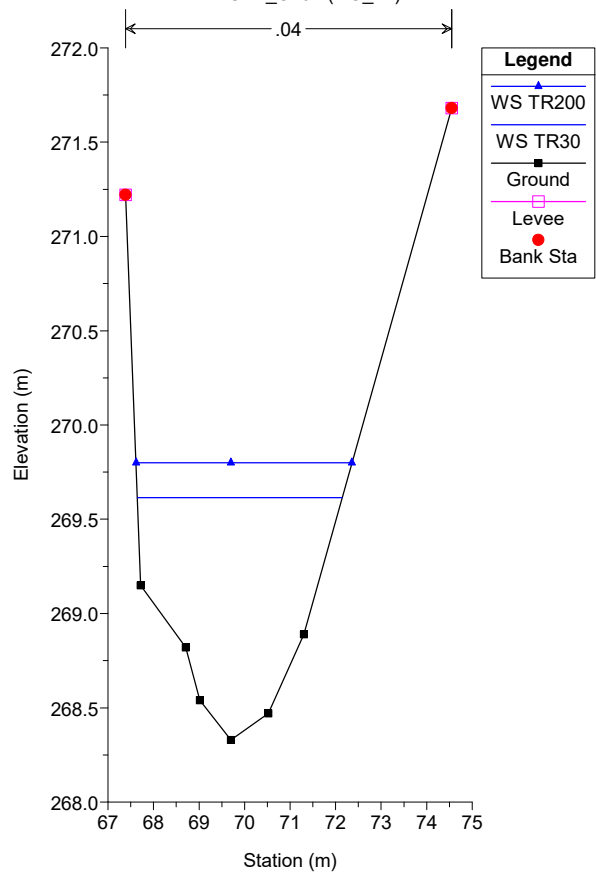




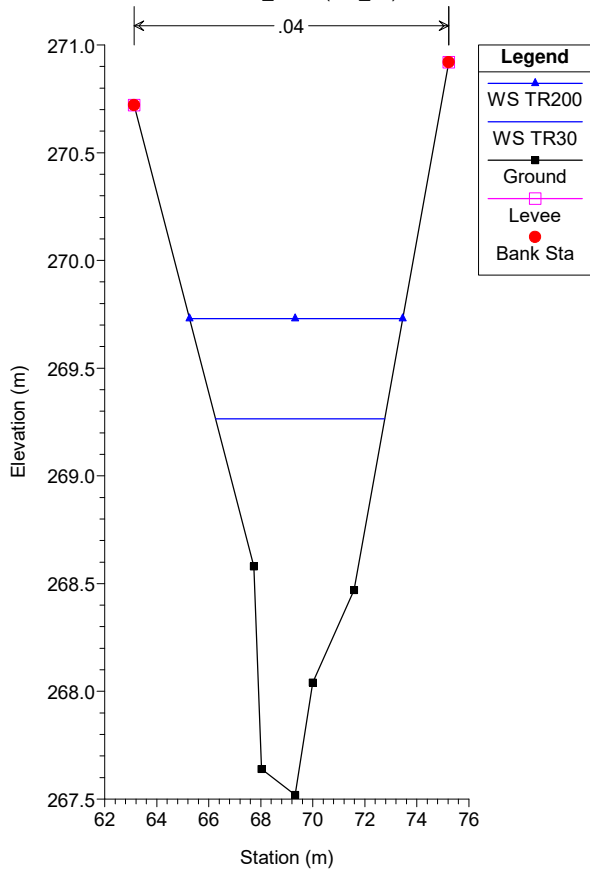
SUD2 Plan: Taratura 05/04/2019



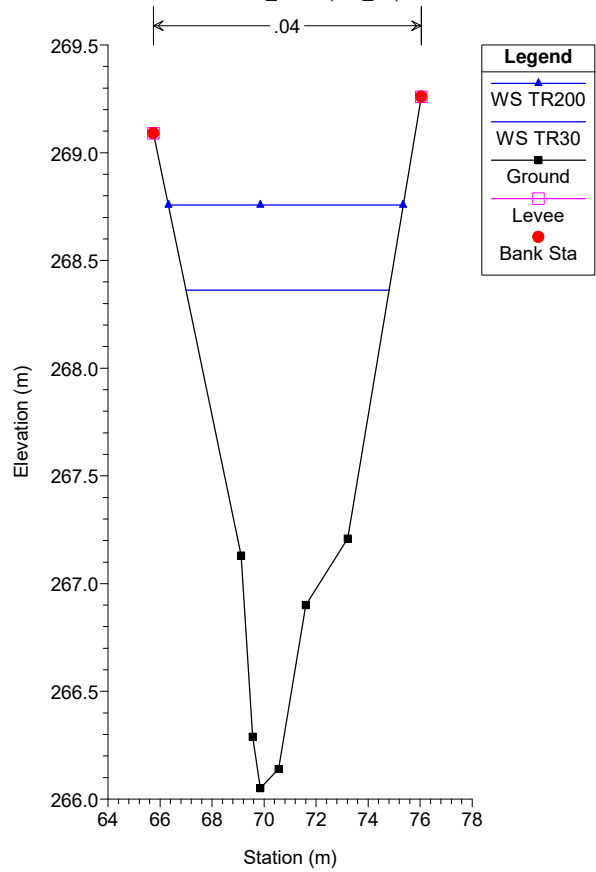
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C102 (RG\_11)

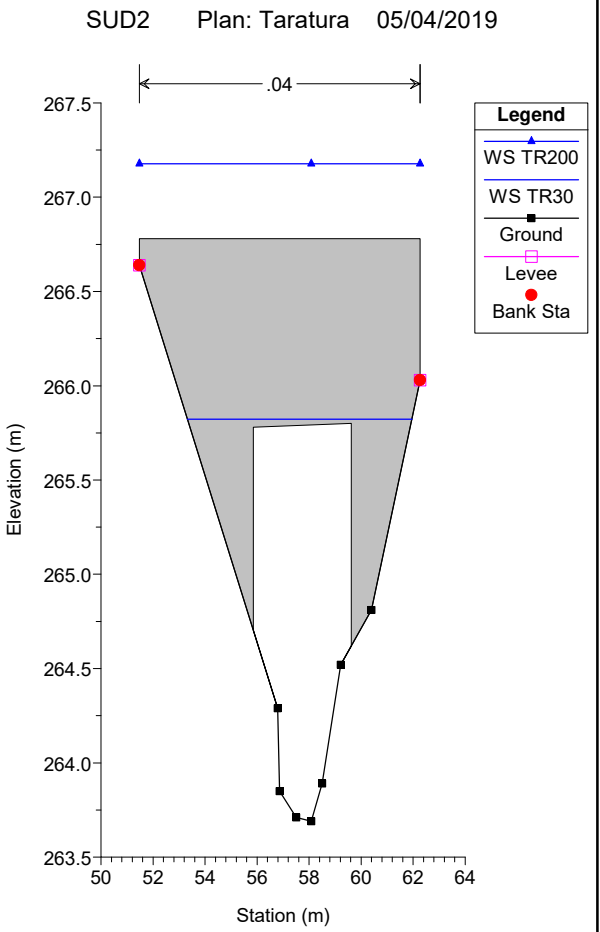
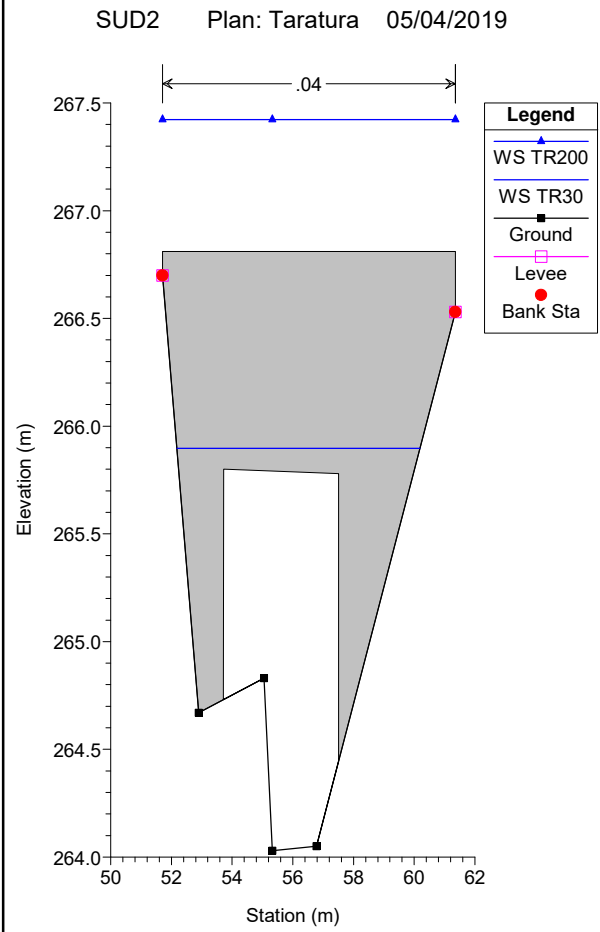
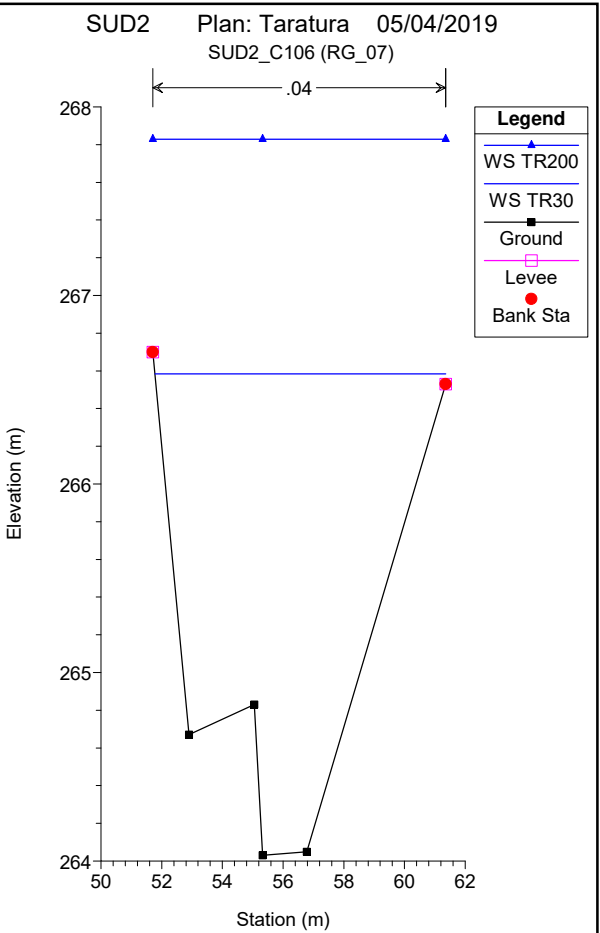
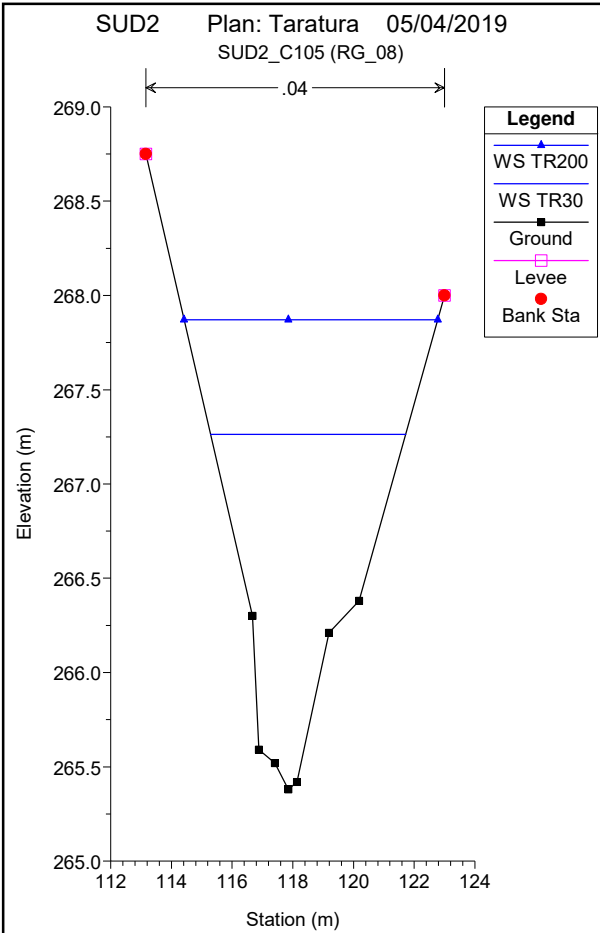


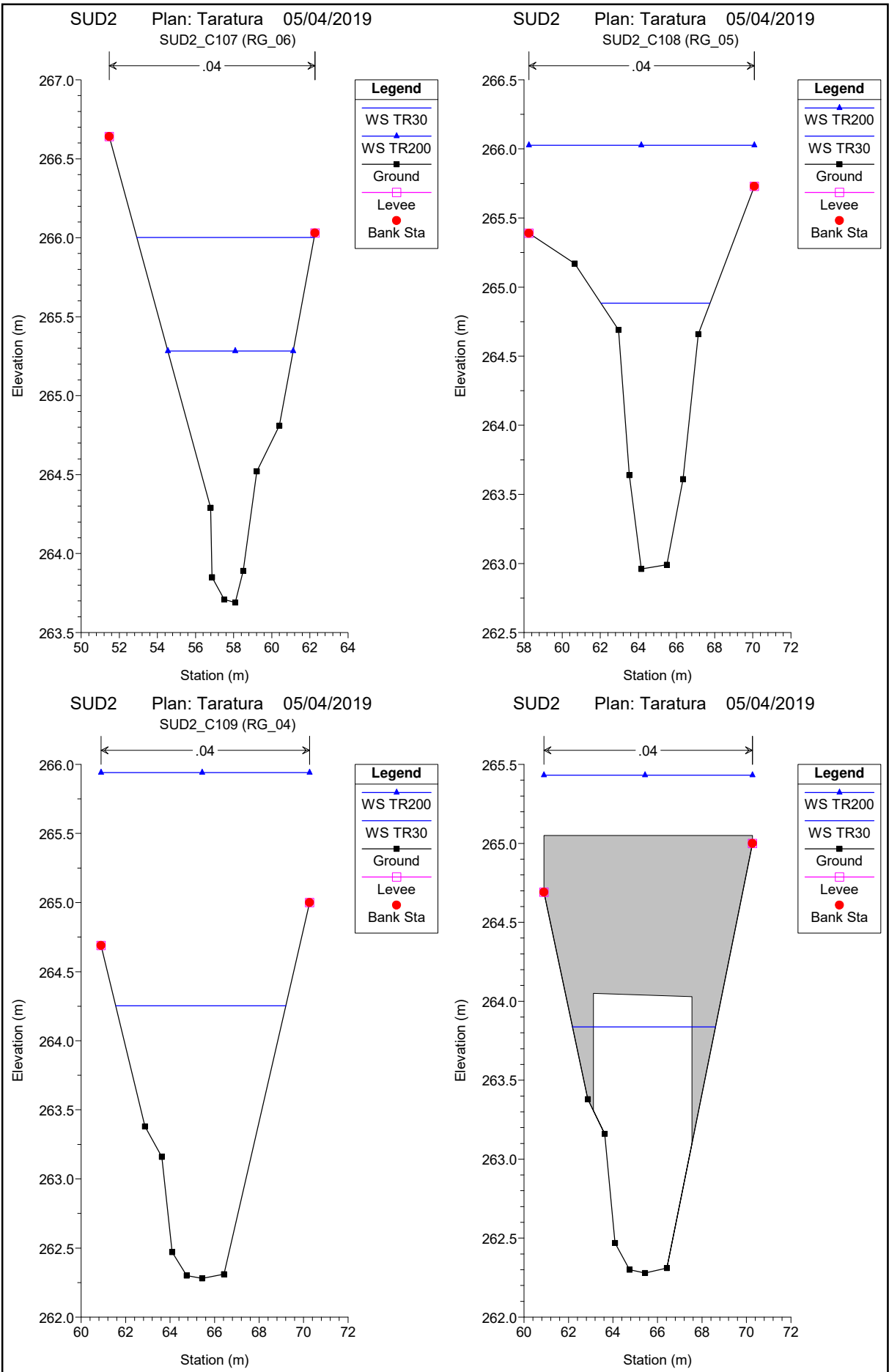
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C103 (RG\_10)



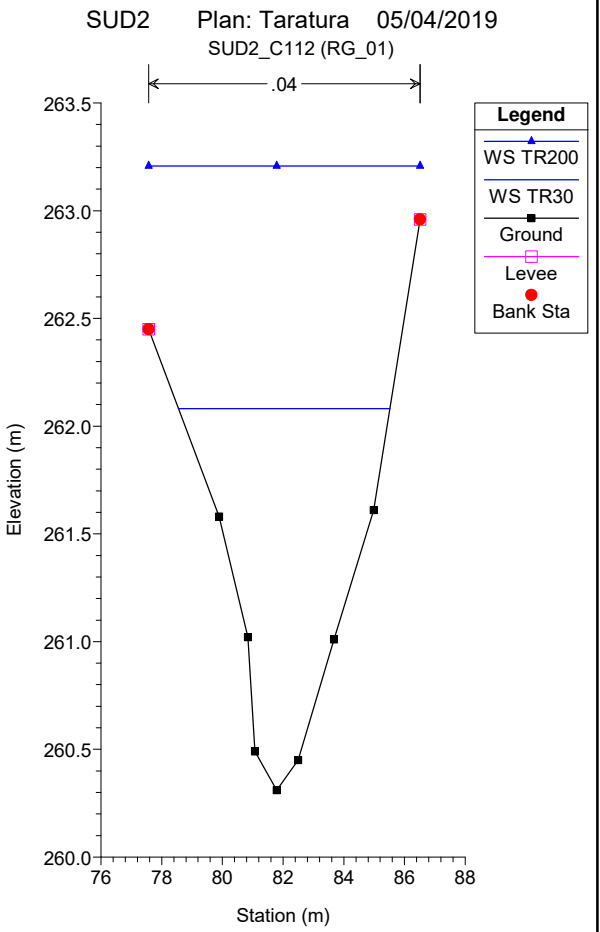
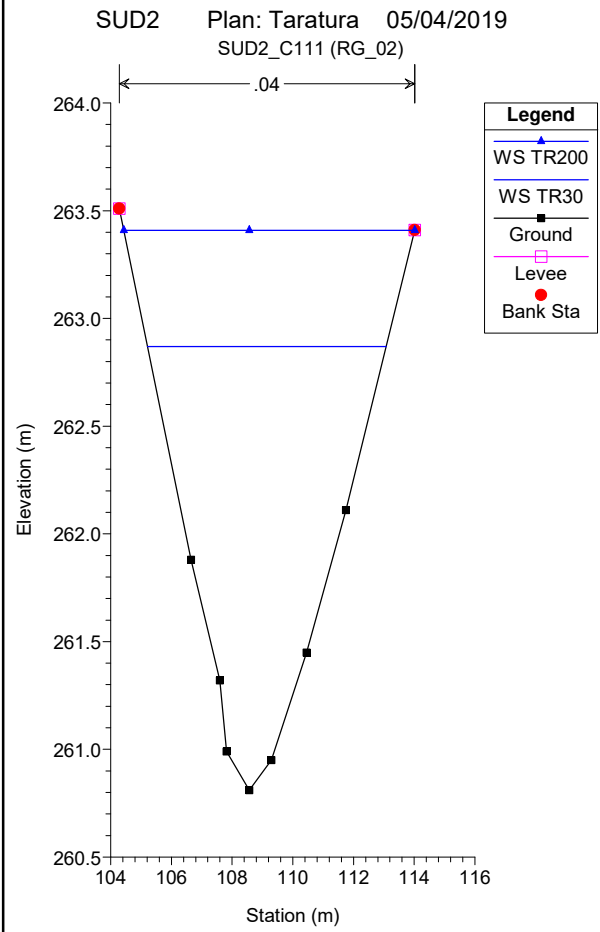
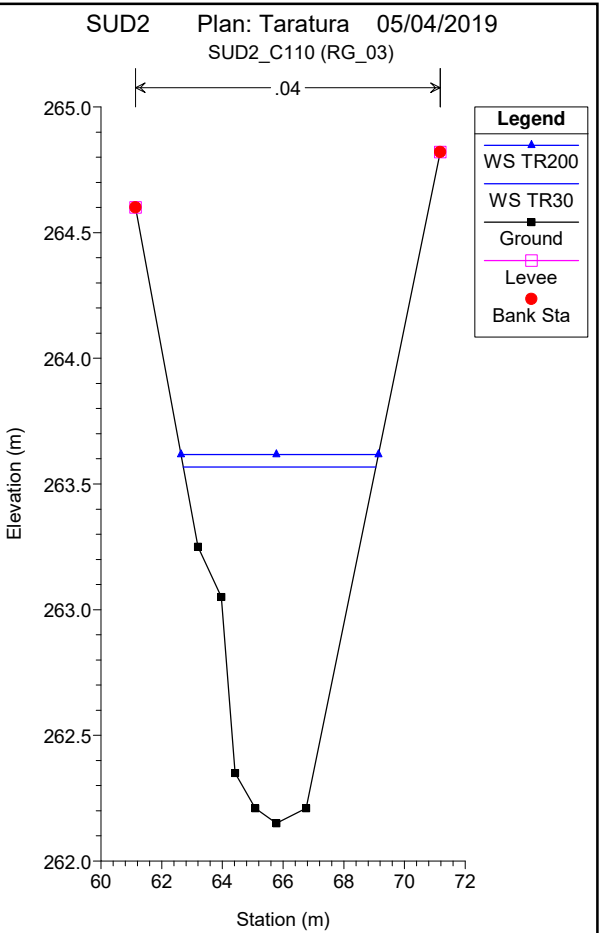
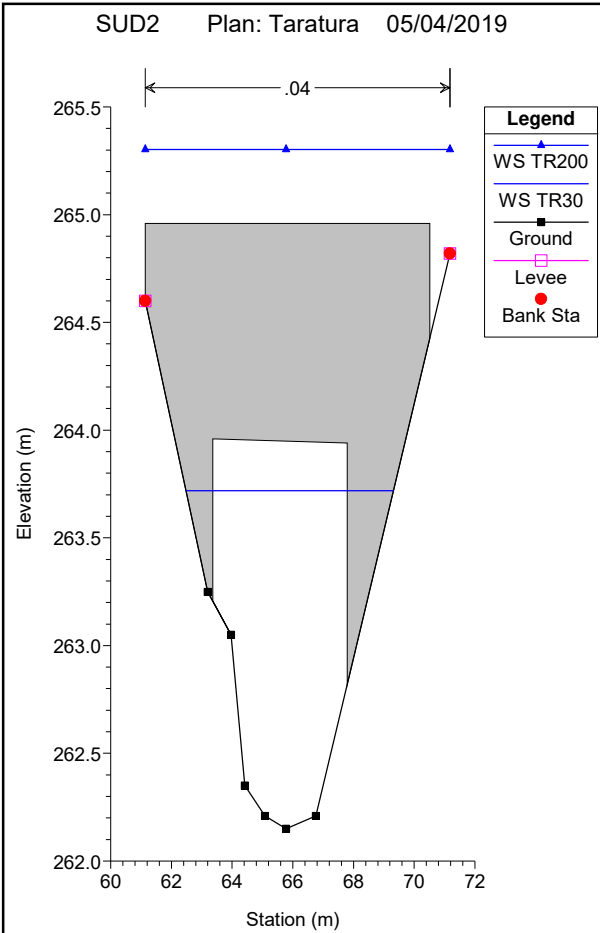
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C104 (RG\_09)

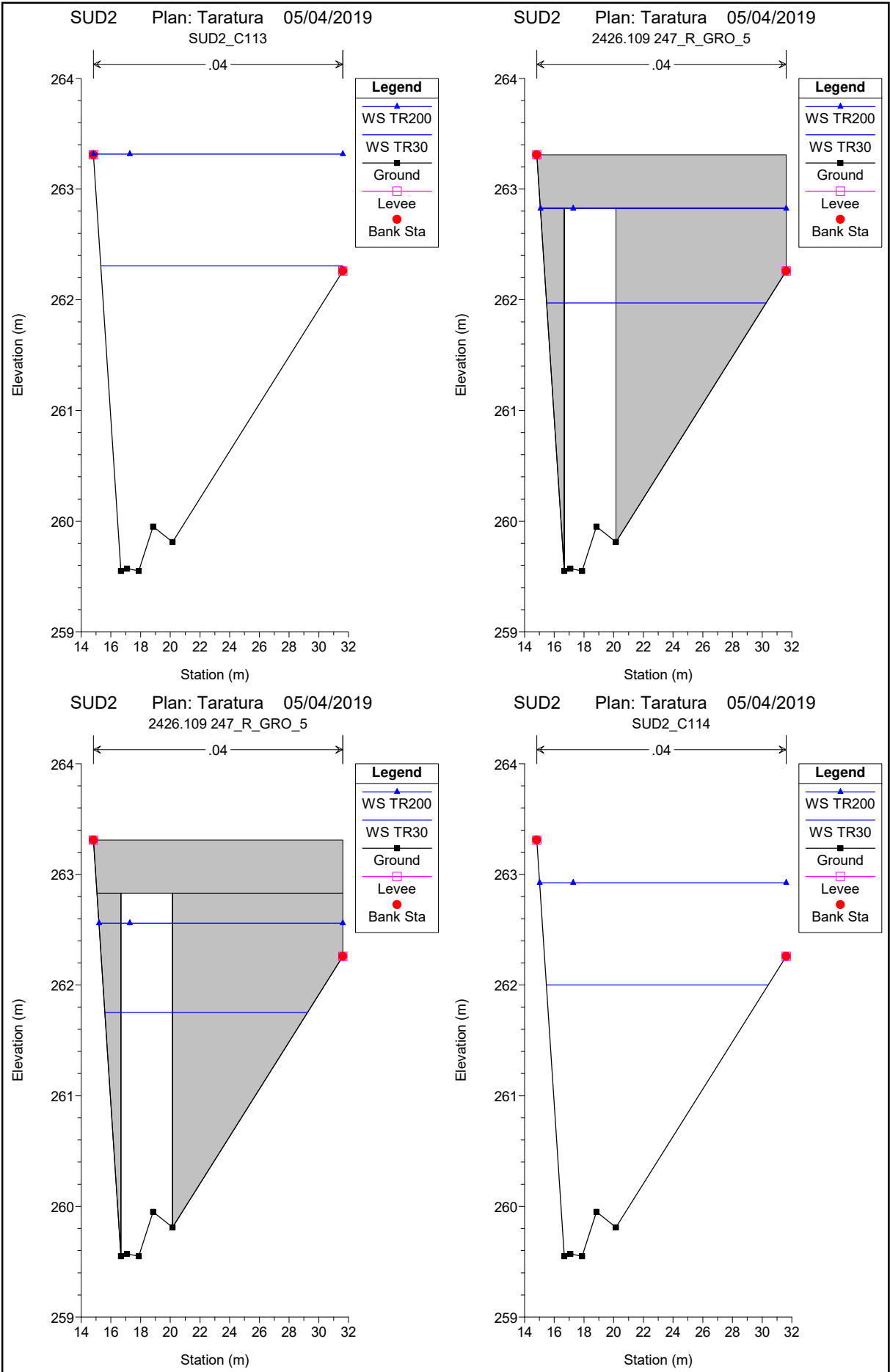


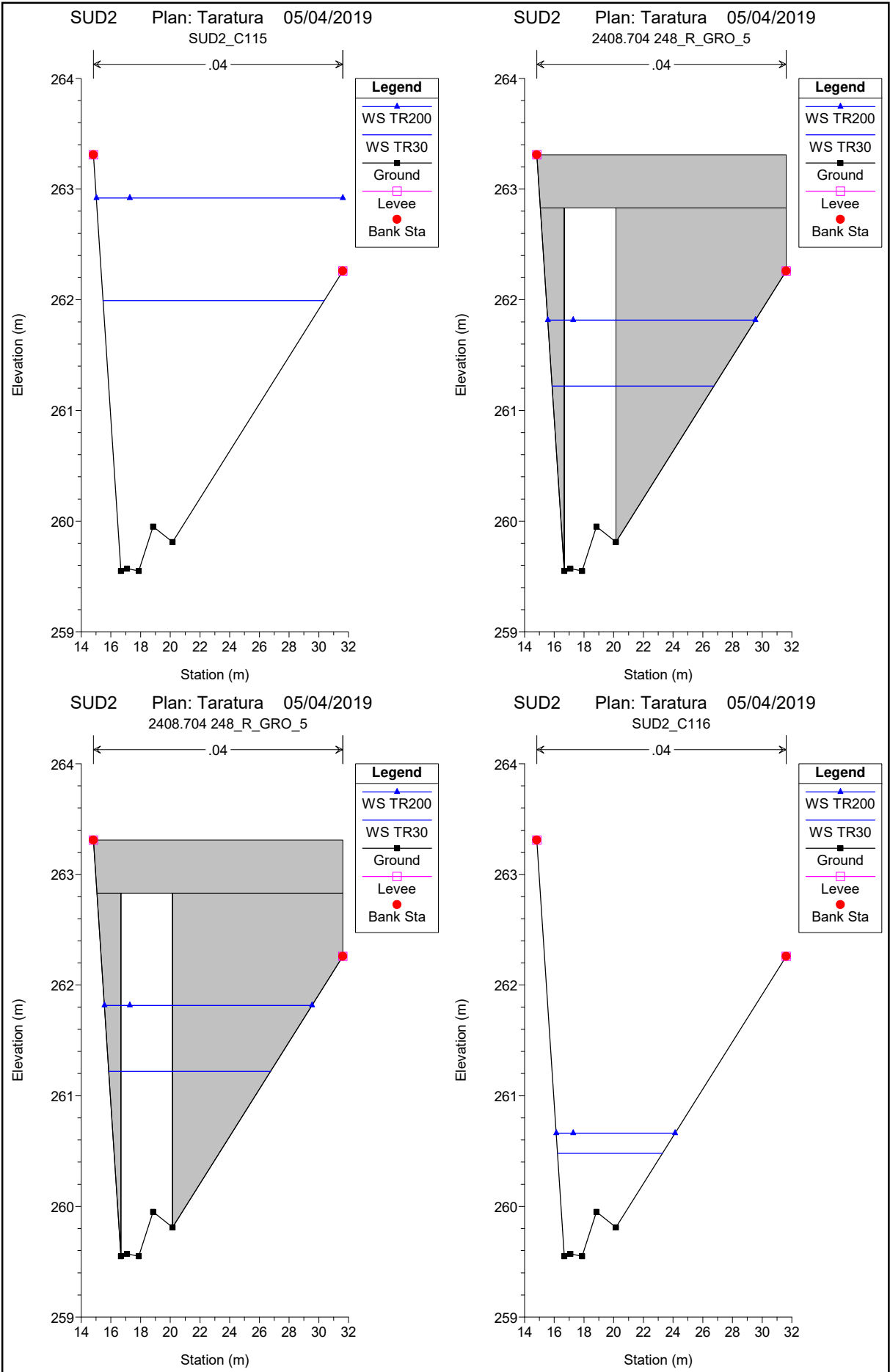


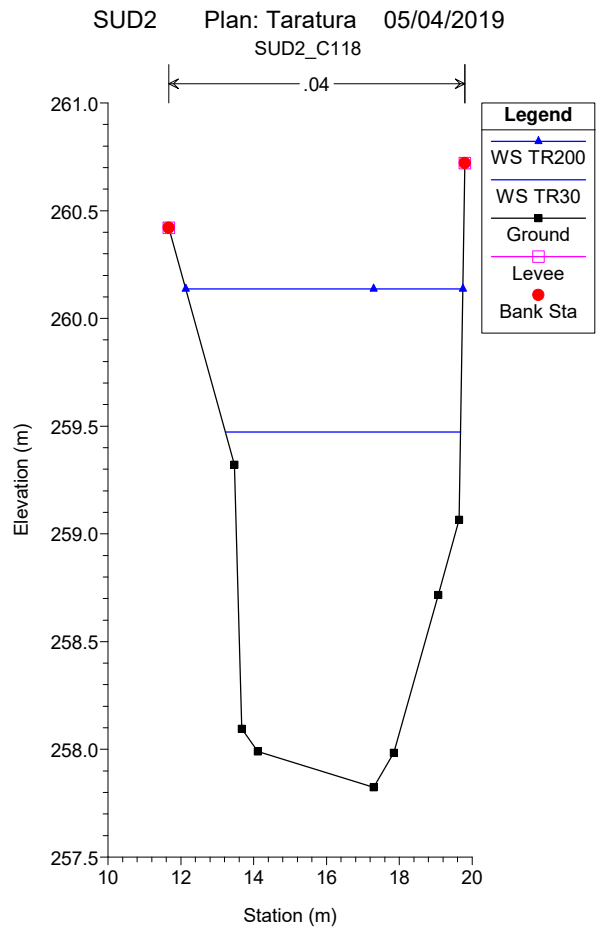
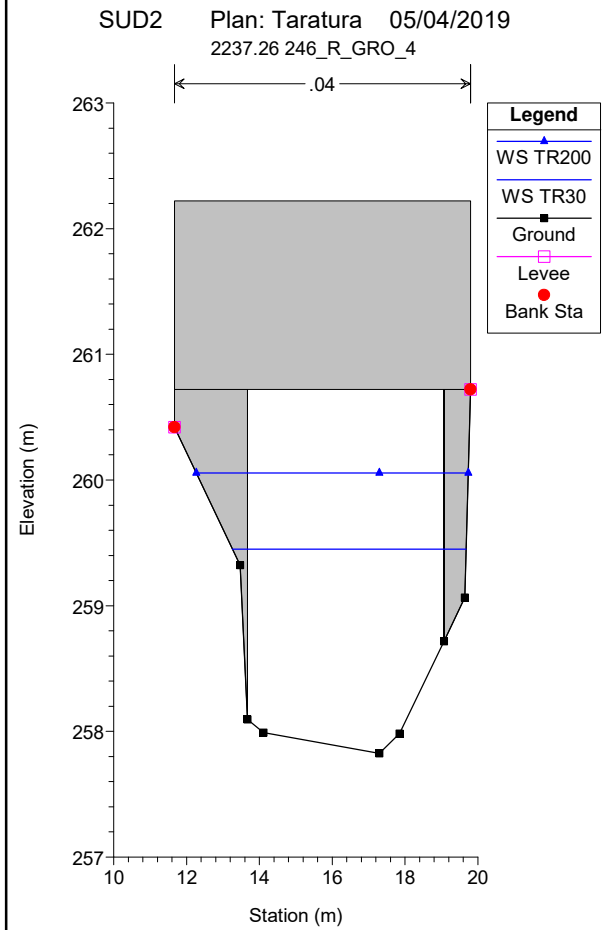
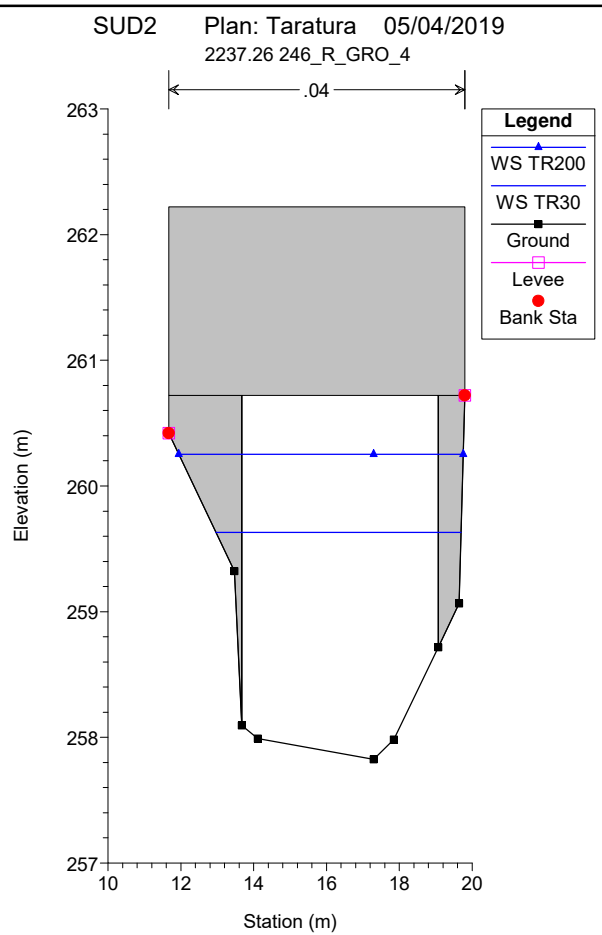
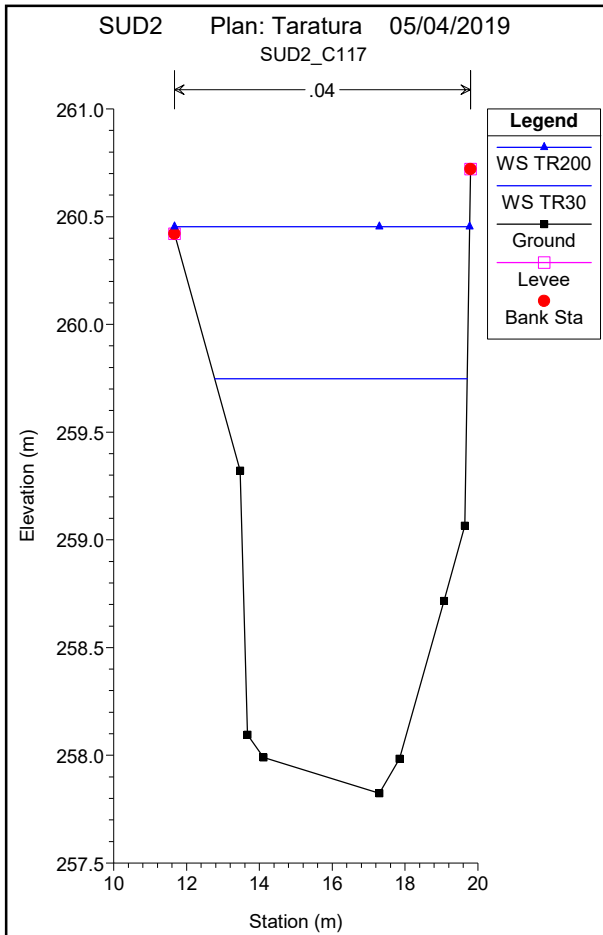


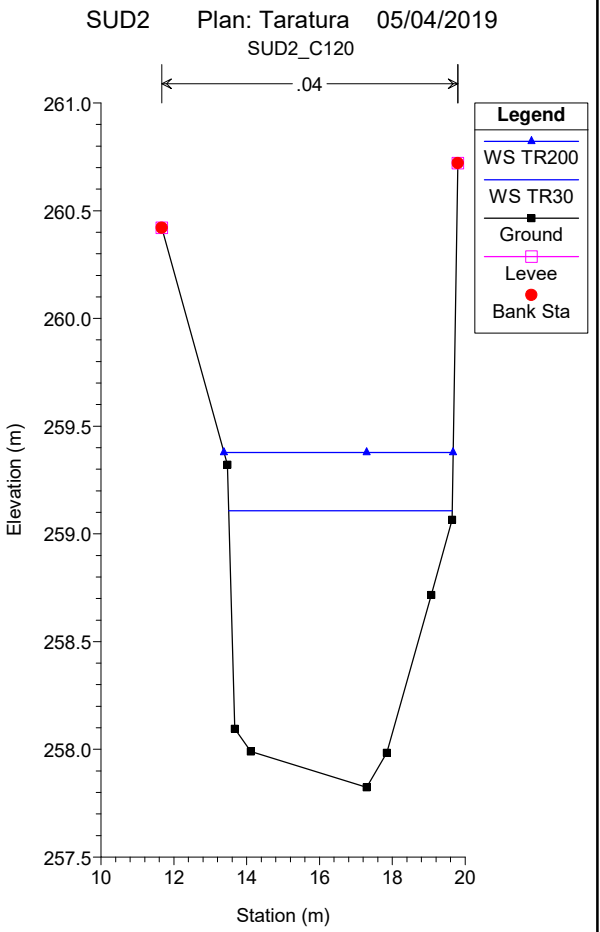
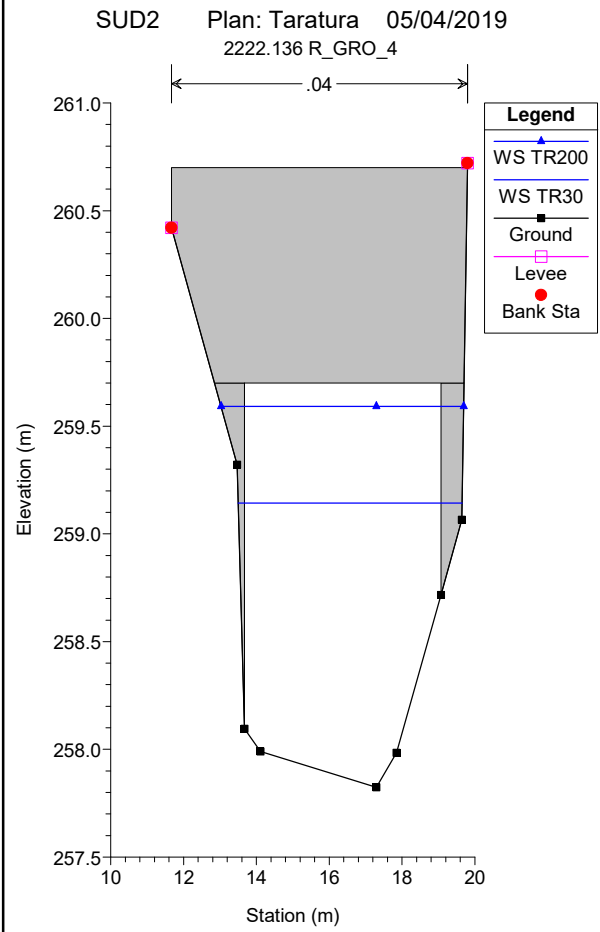
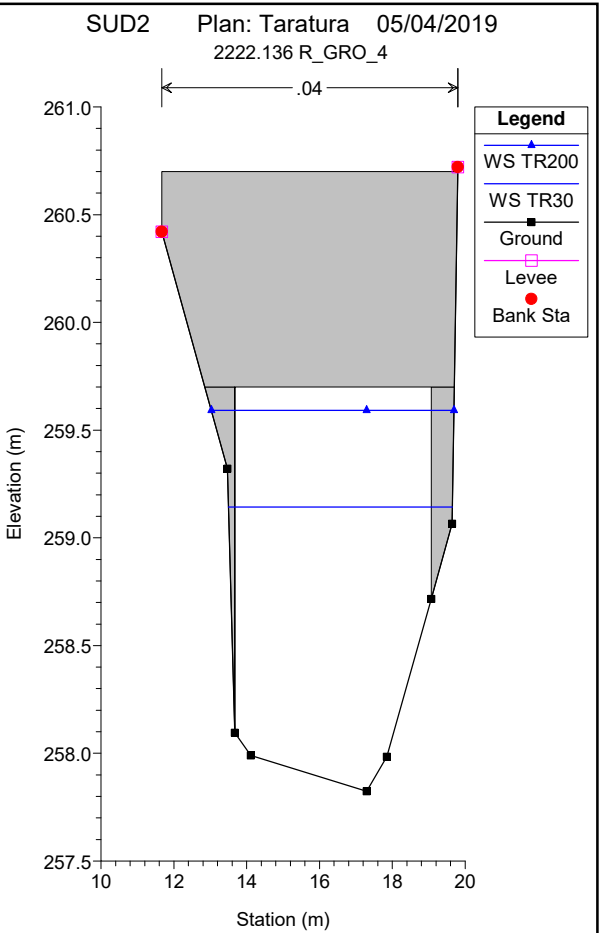
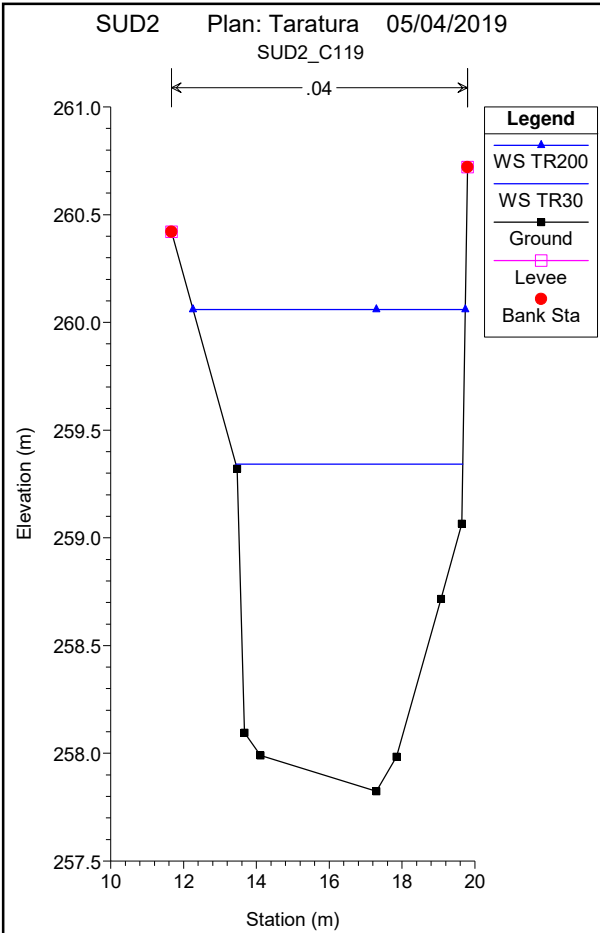


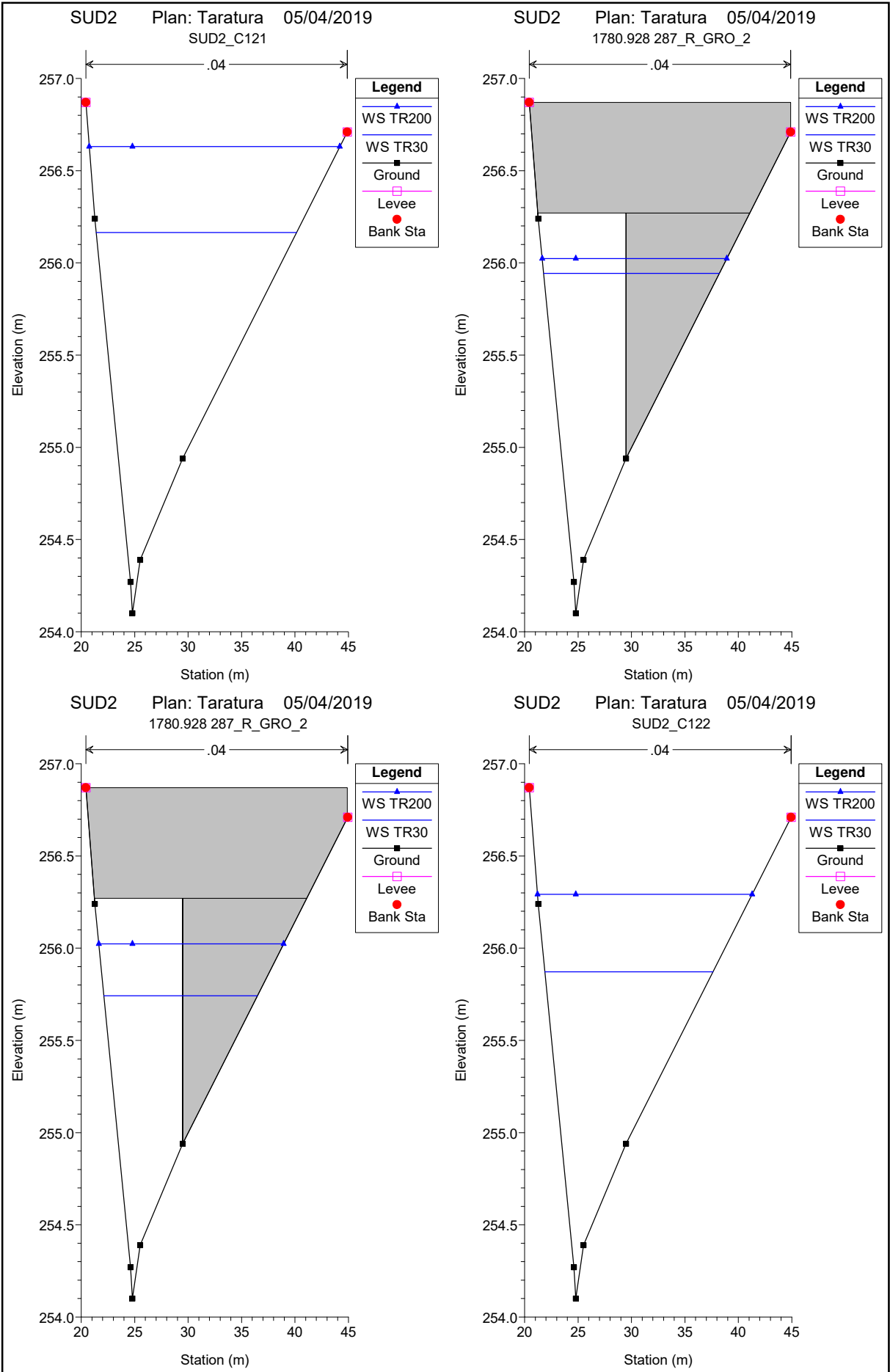


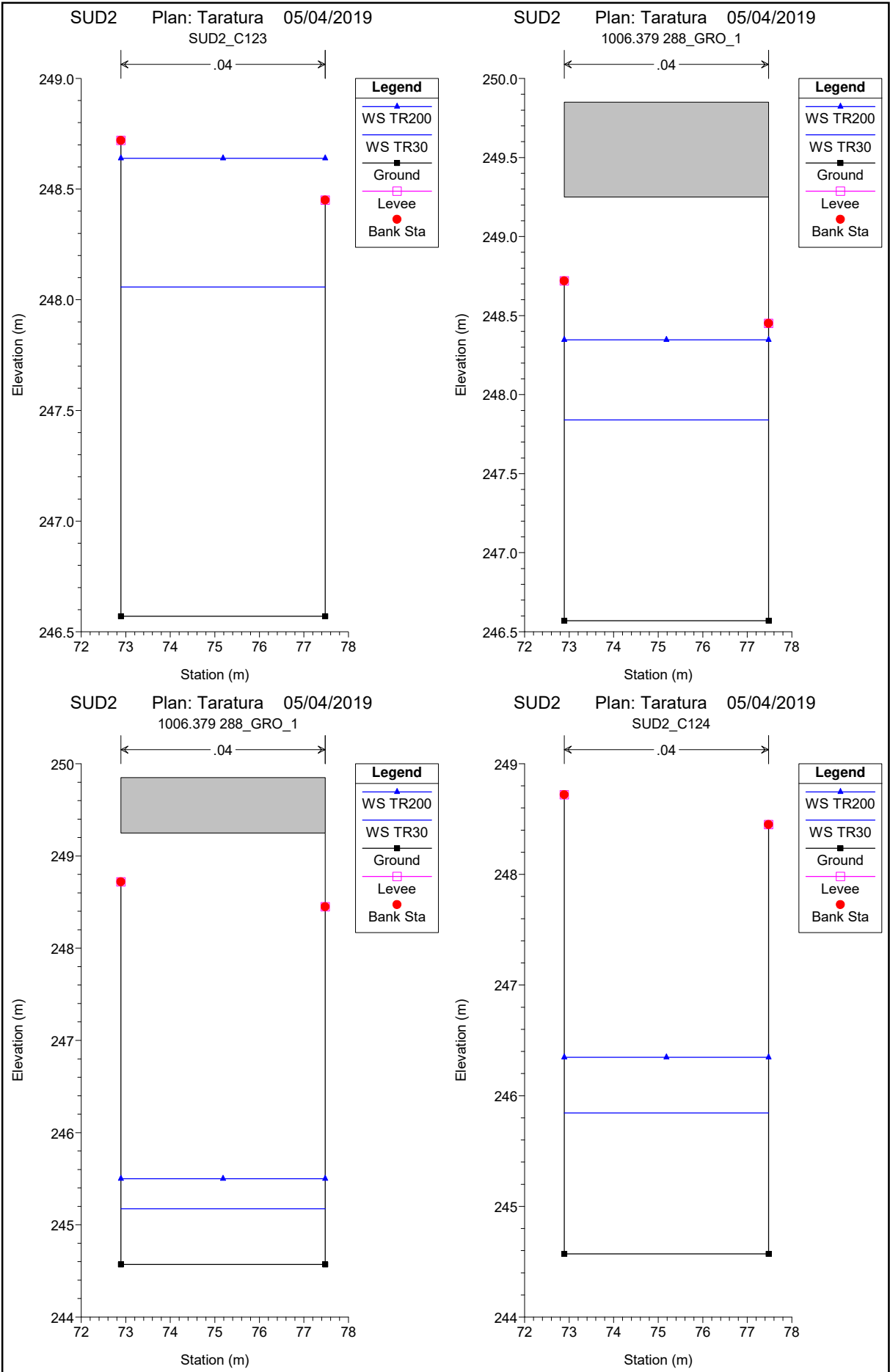


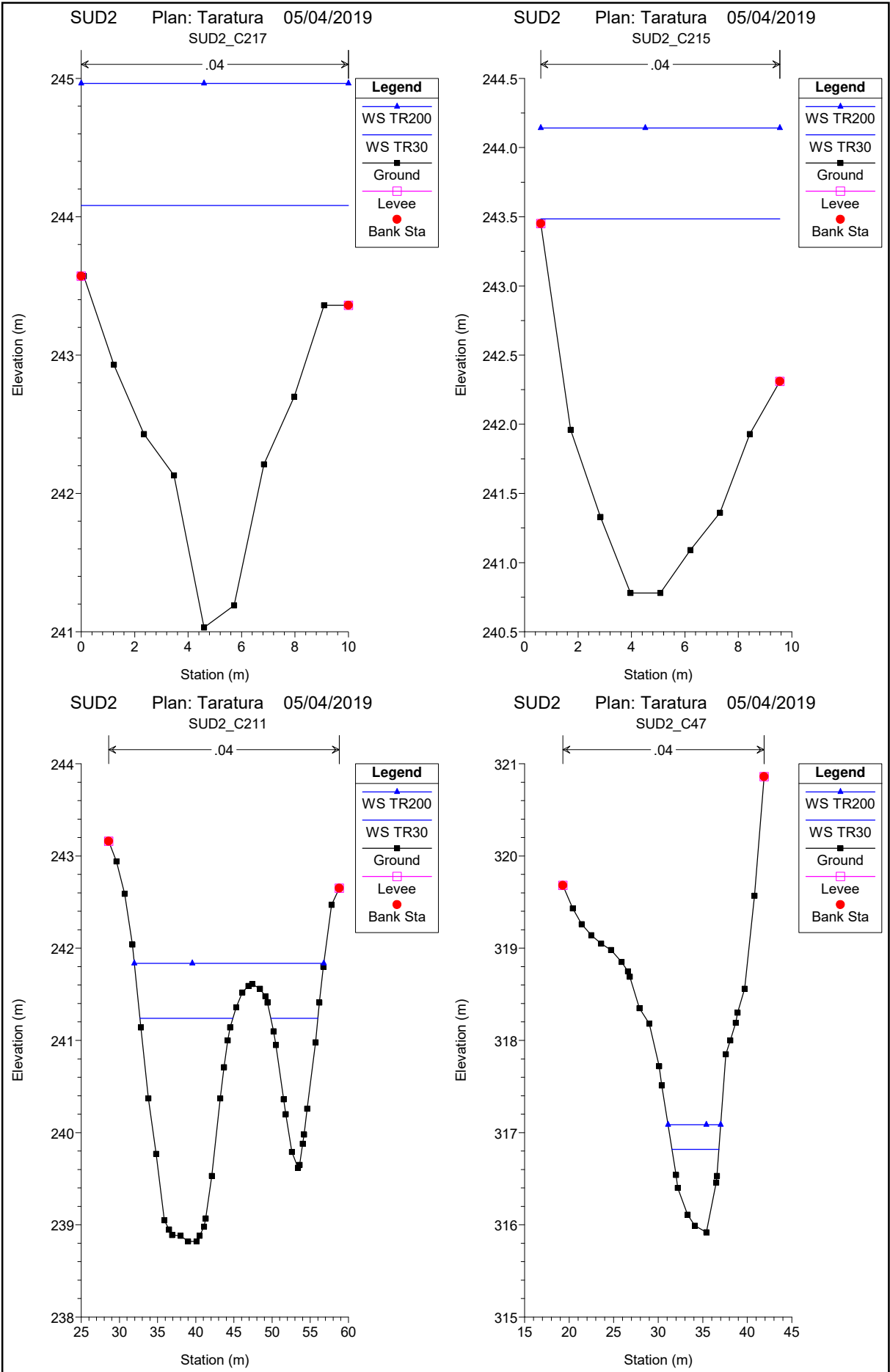




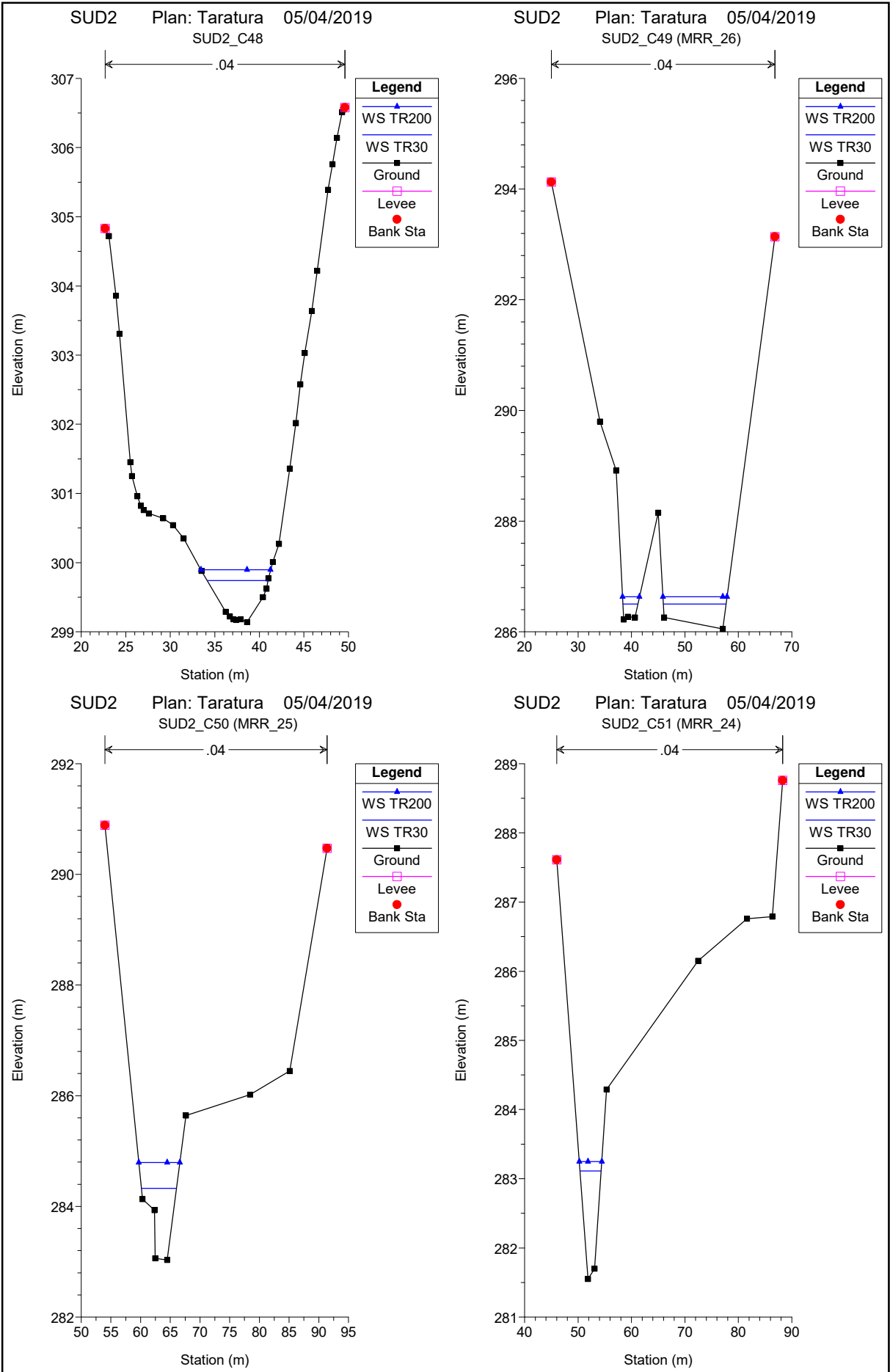


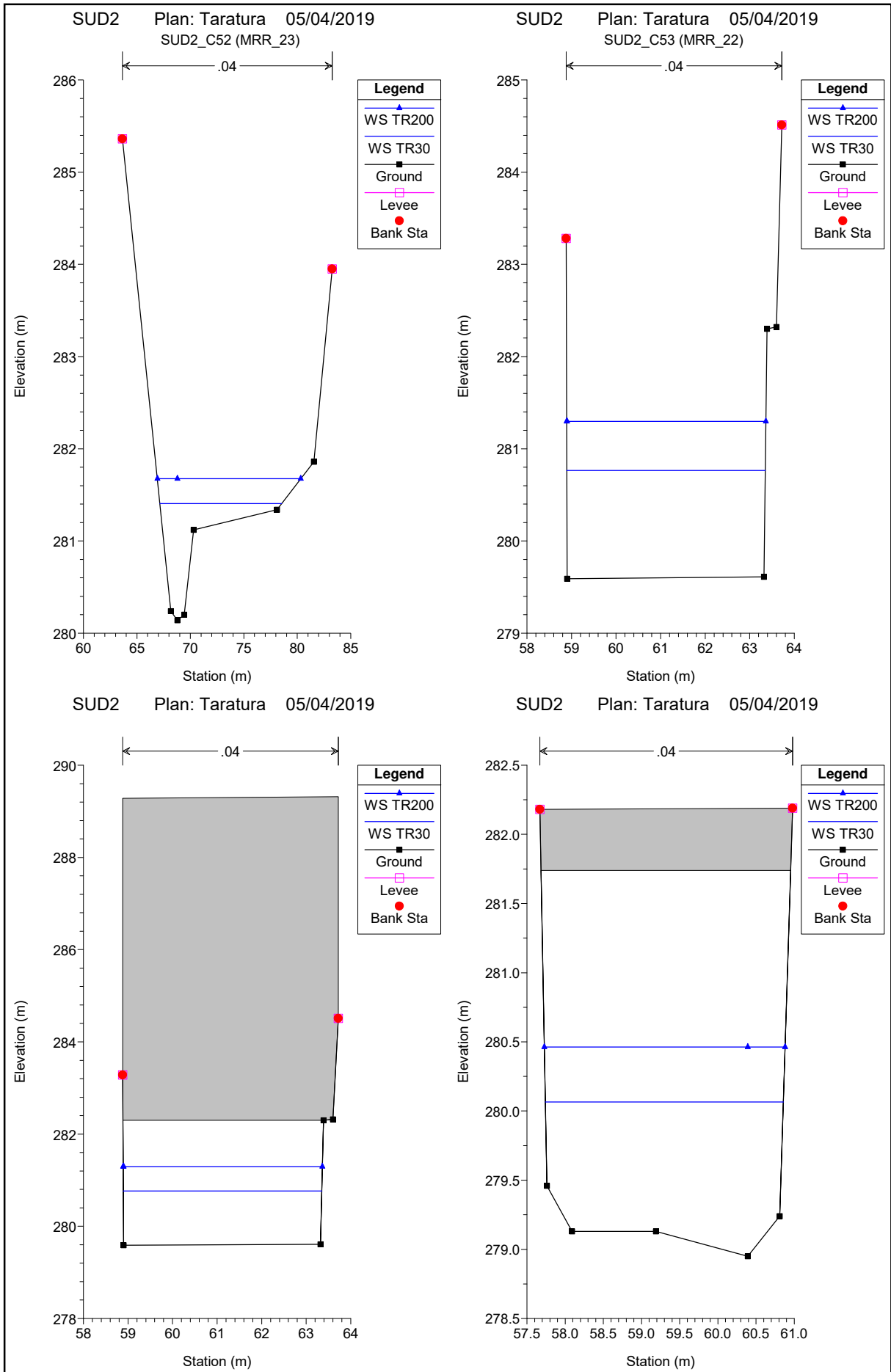


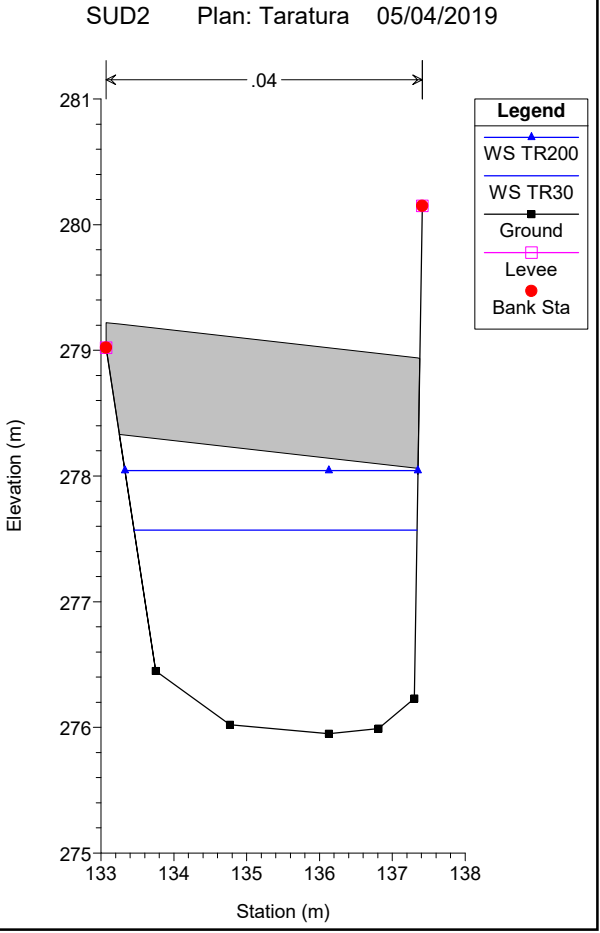
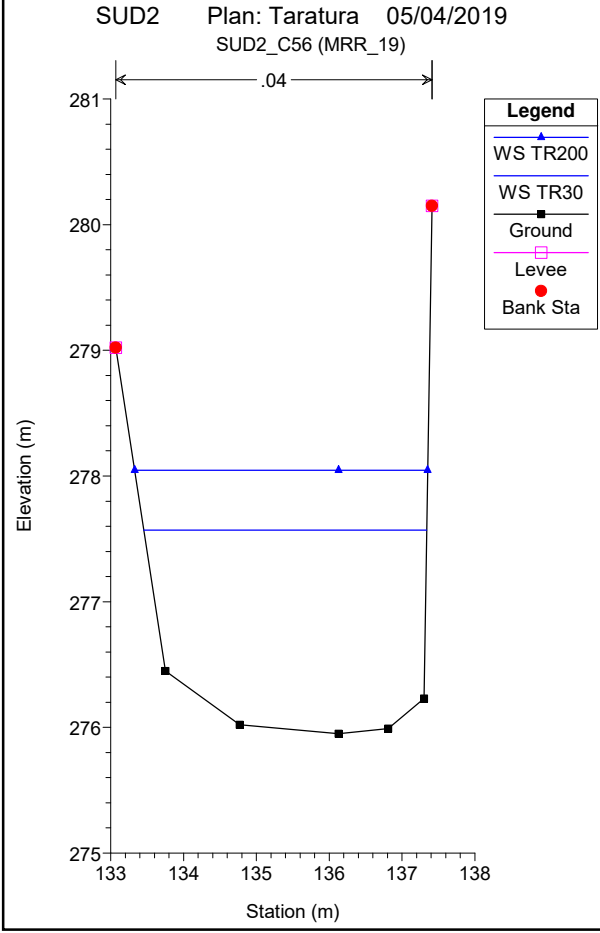
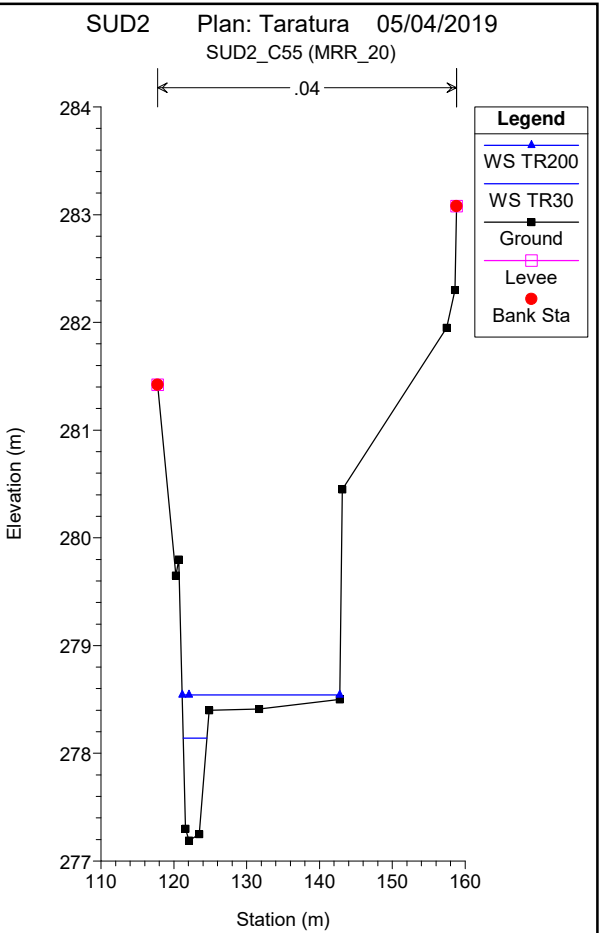
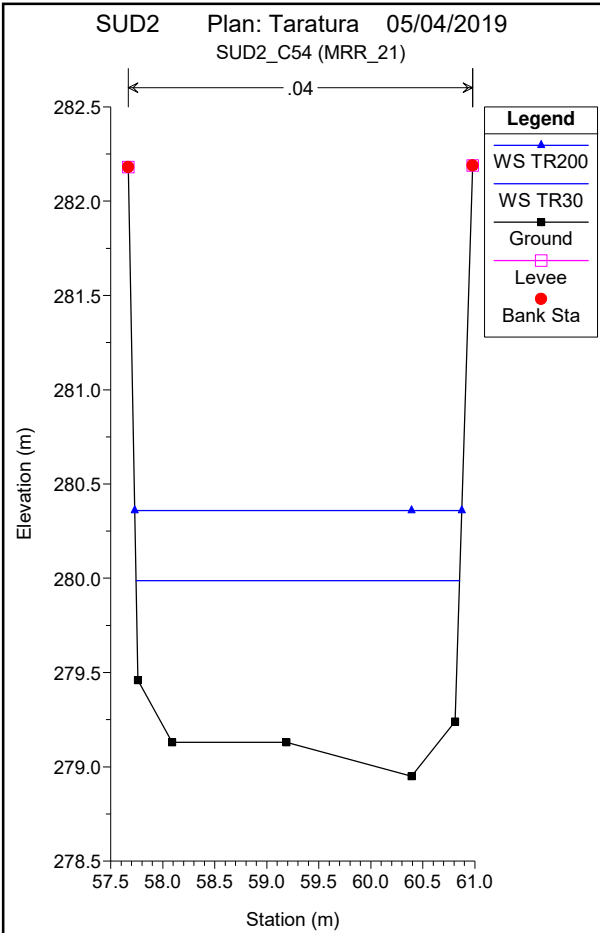


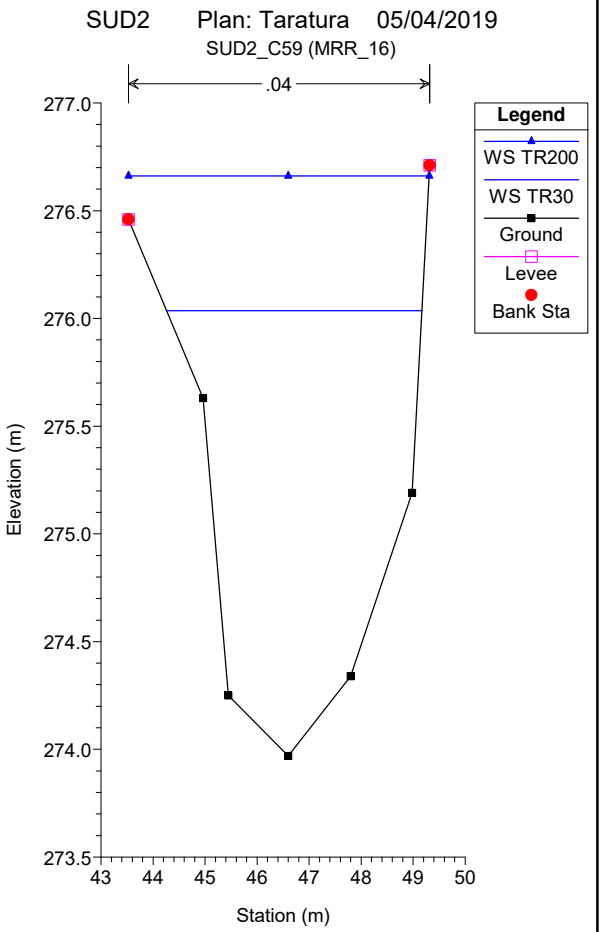
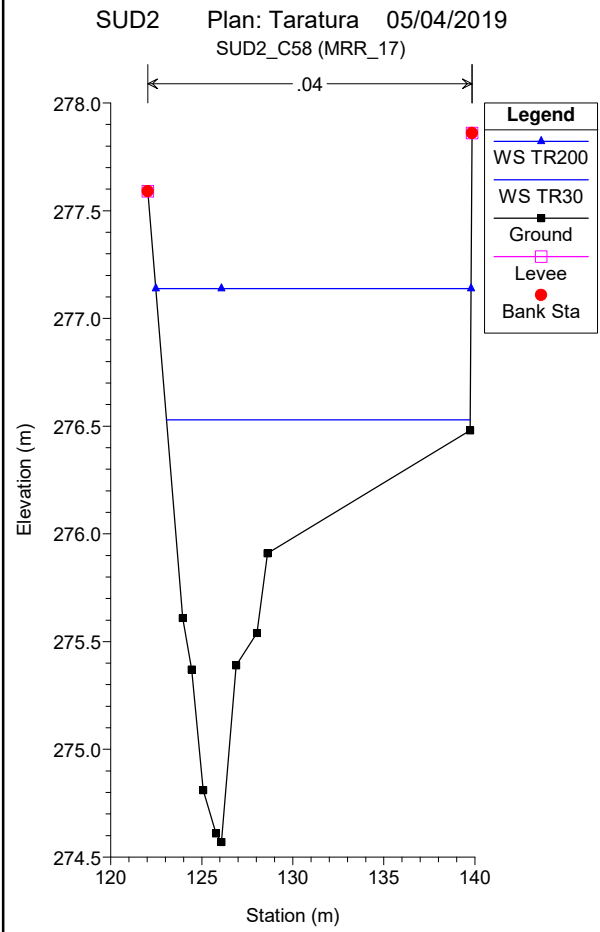
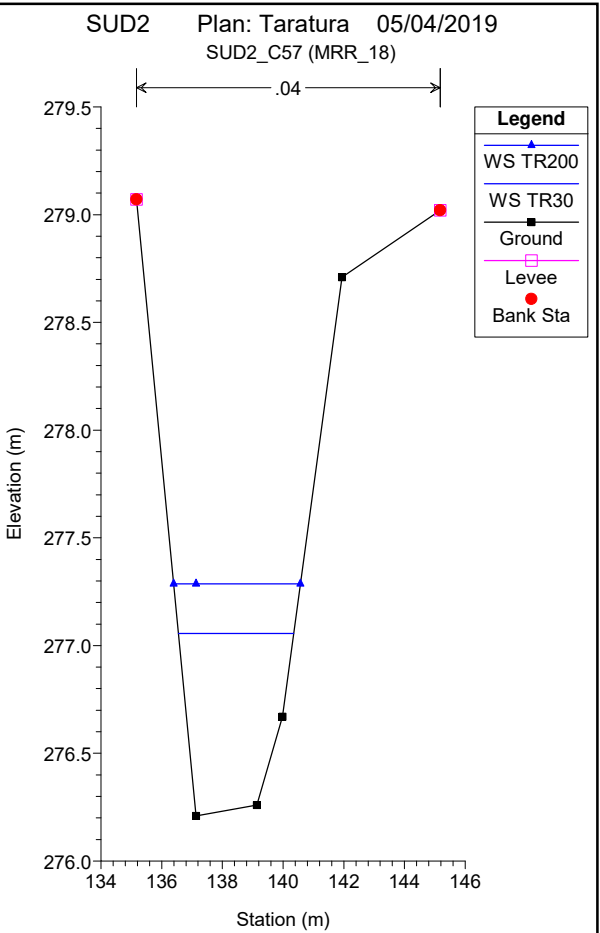
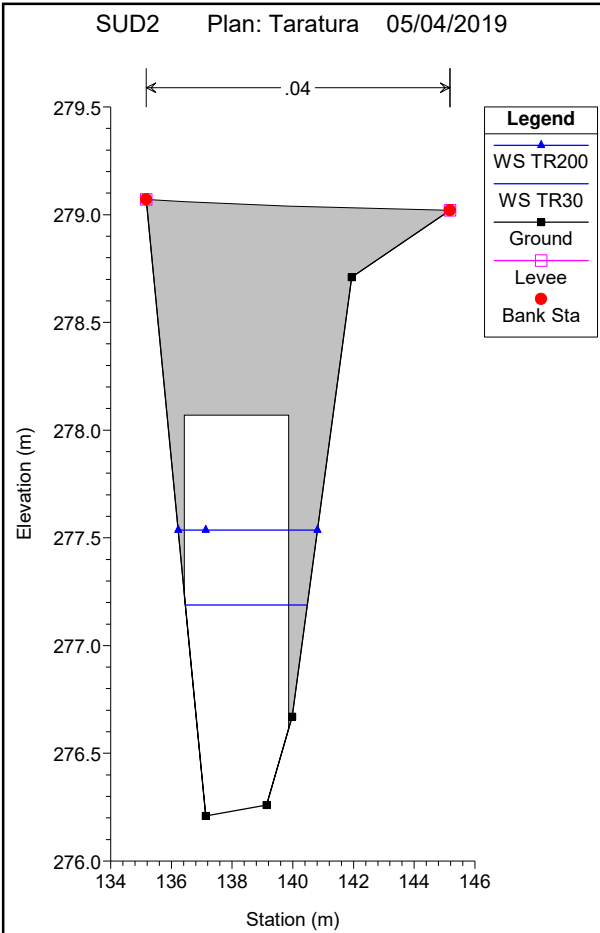


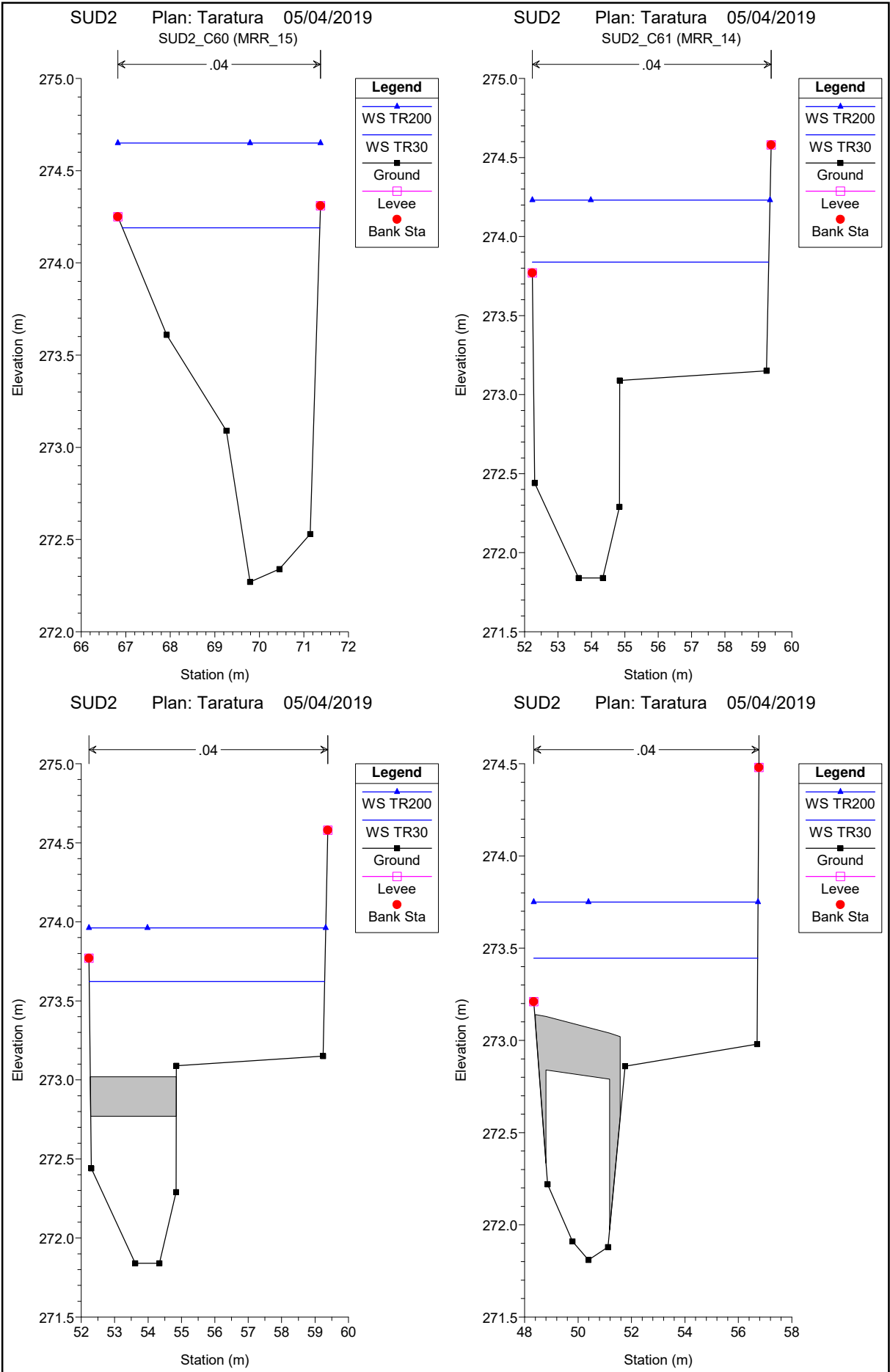


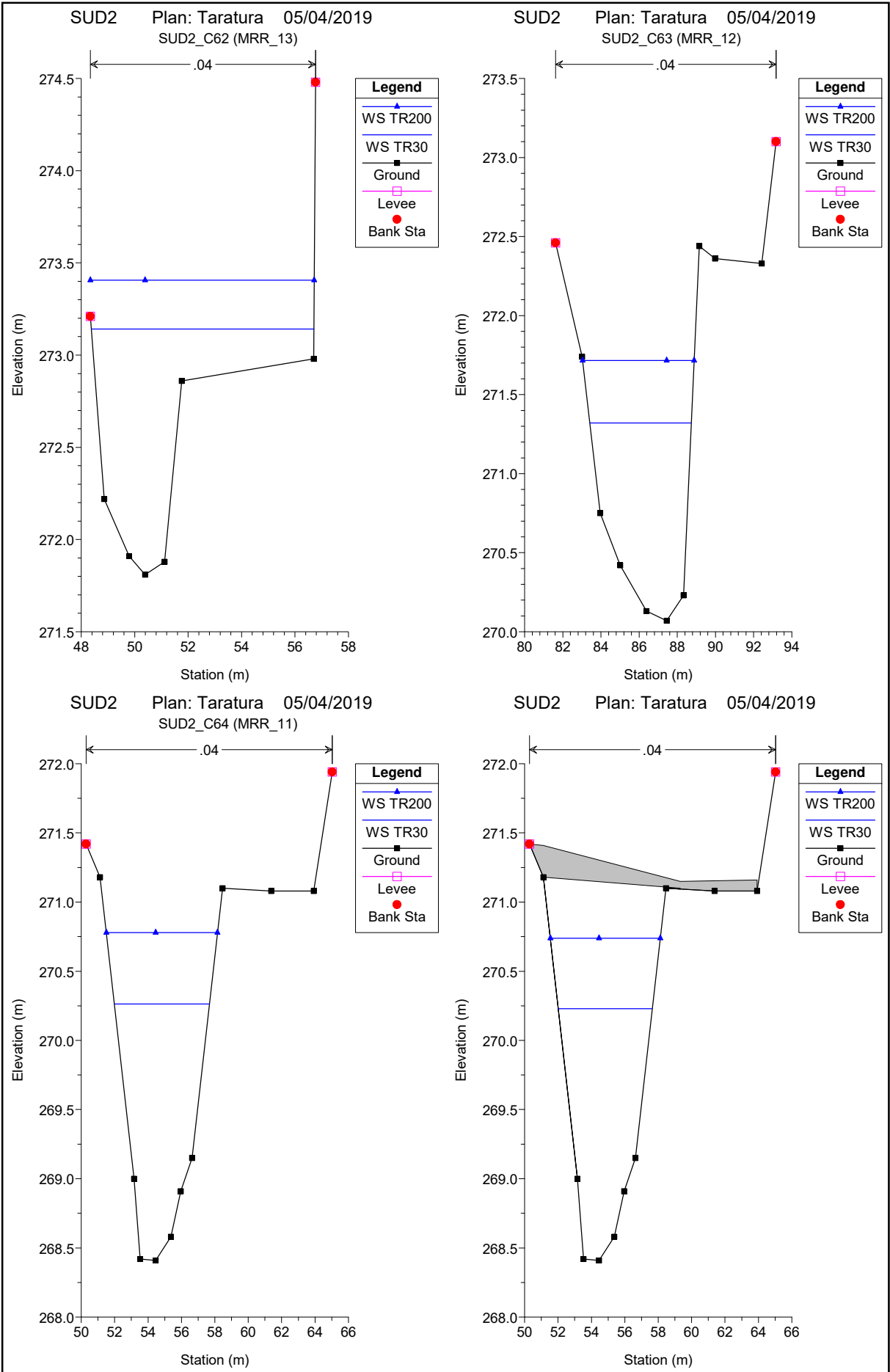




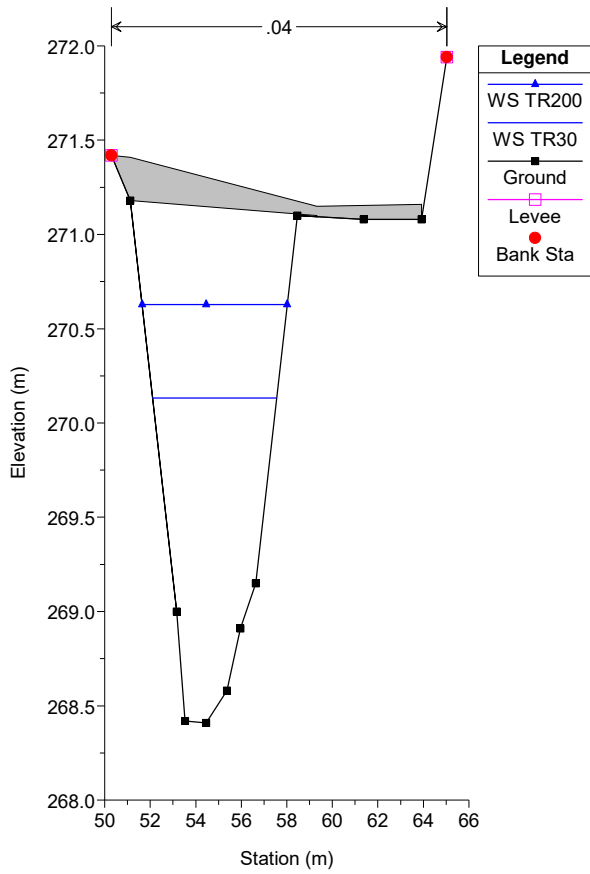




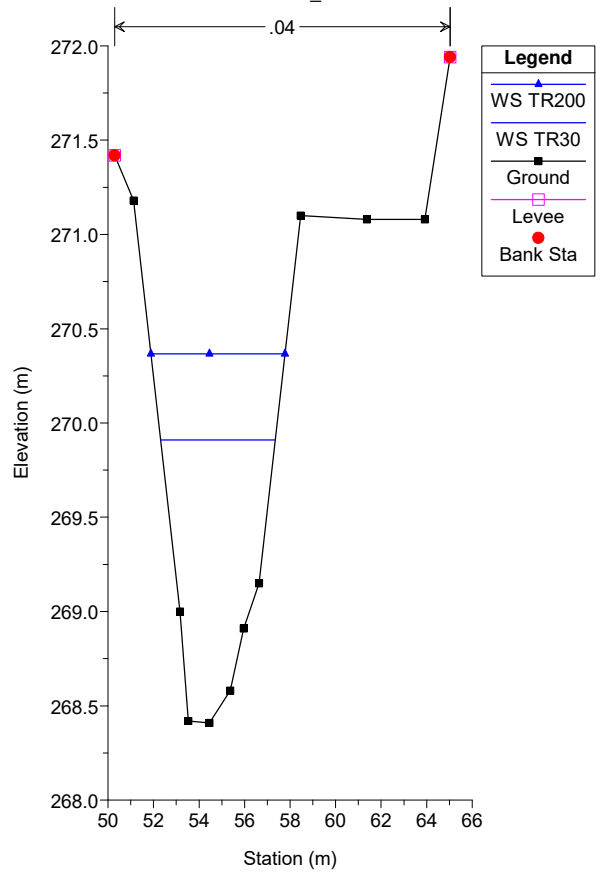




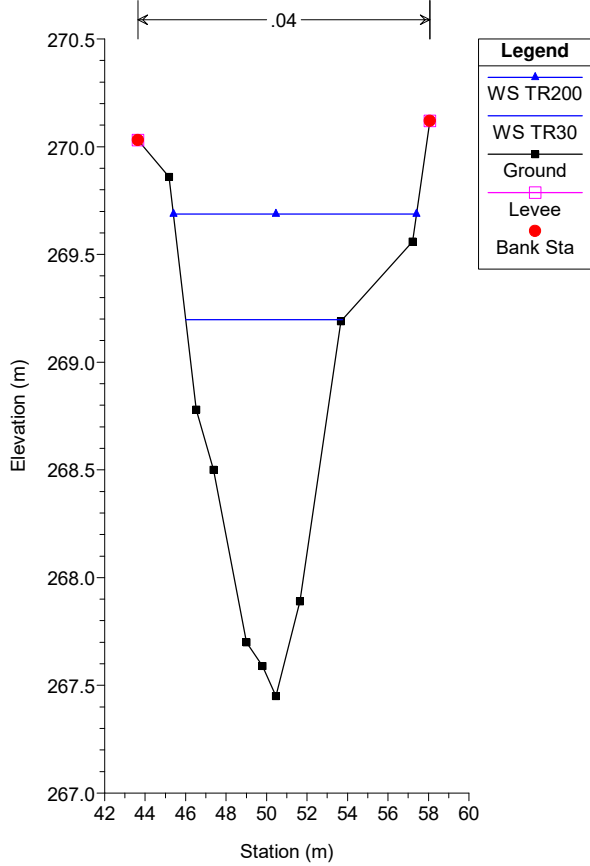
SUD2 Plan: Taratura 05/04/2019



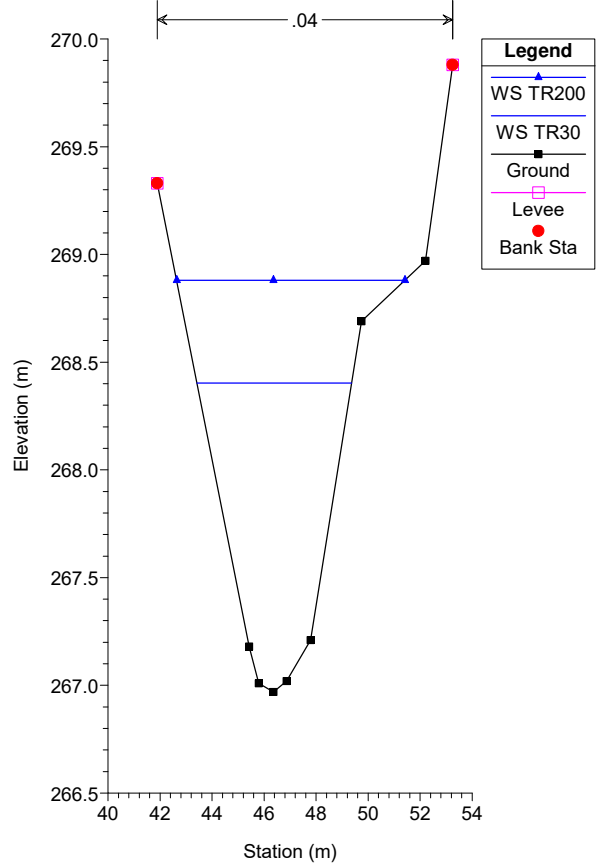
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C64

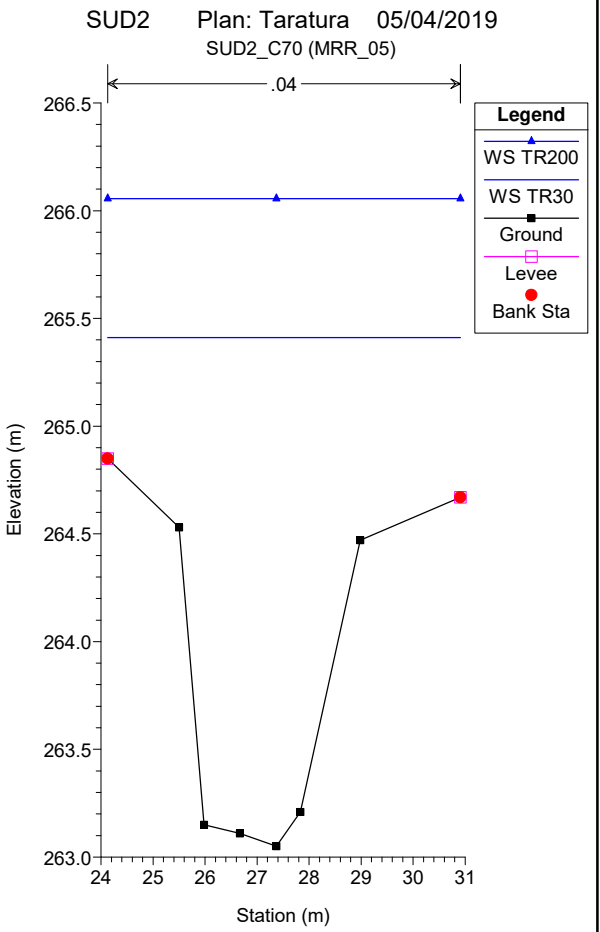
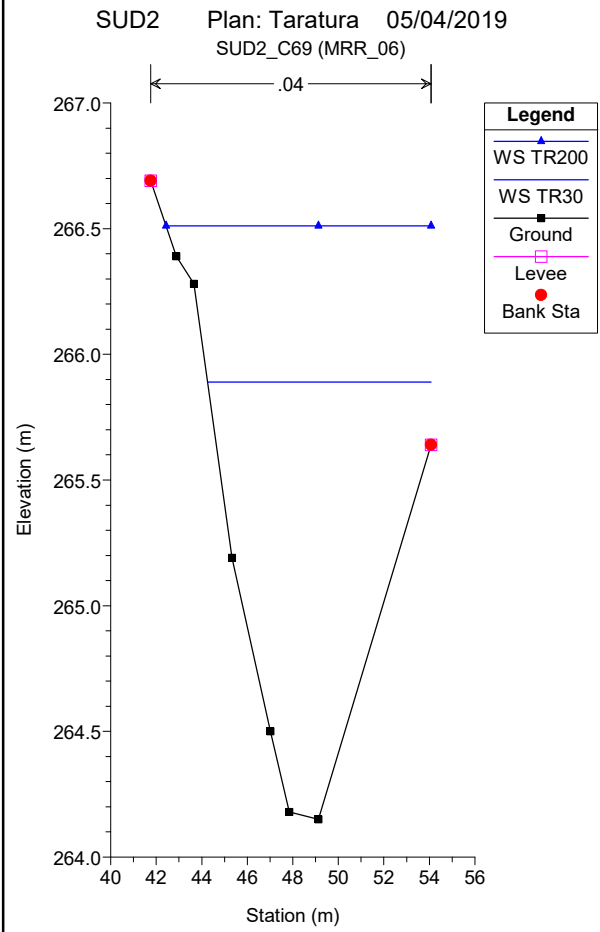
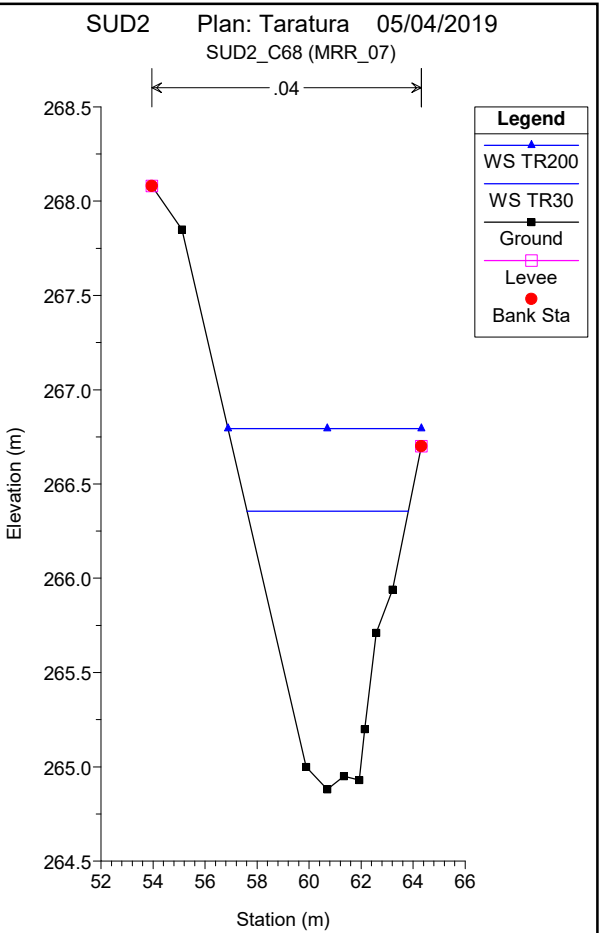
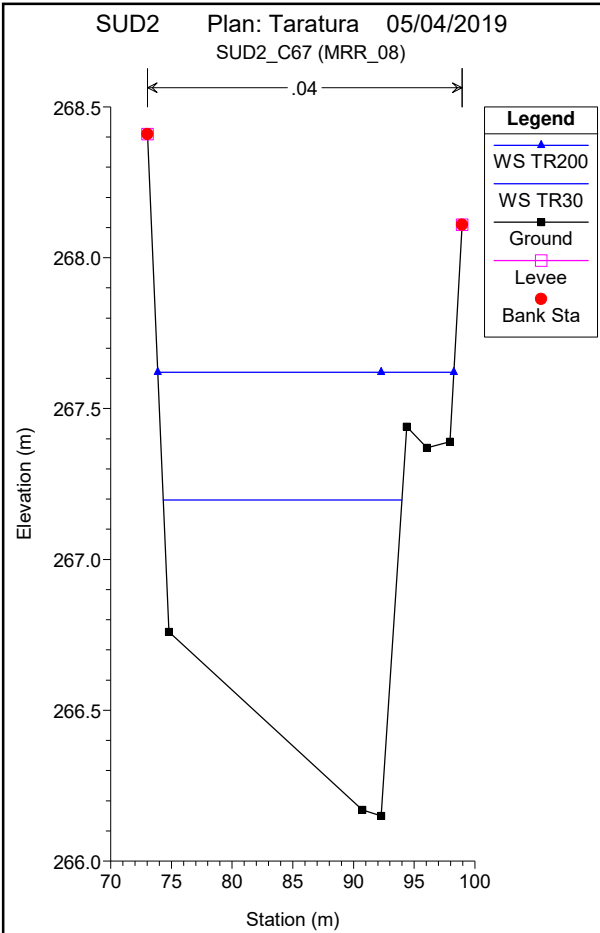


SUD2 Plan: Taratura 05/04/2019  
SUD2\_C65 (MRR\_10)



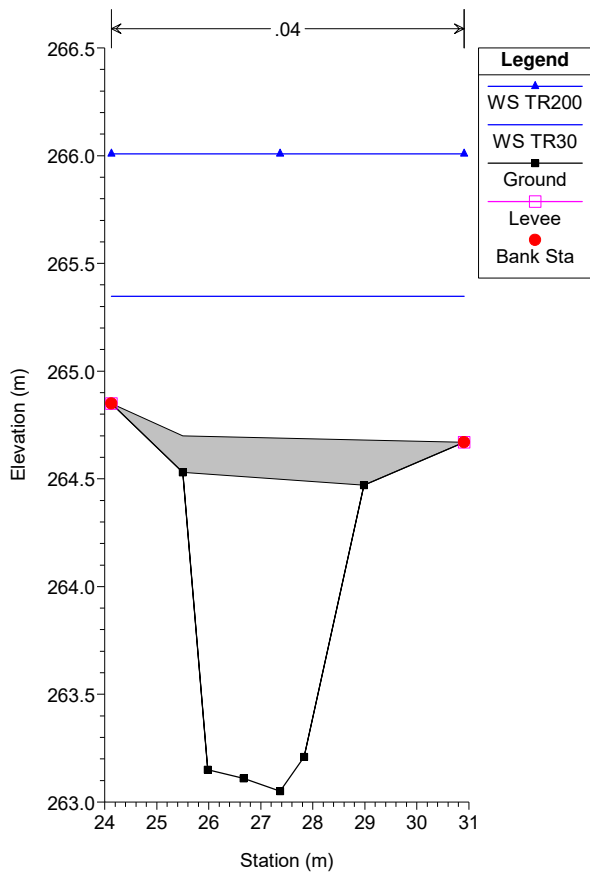
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C66 (MRR\_09)



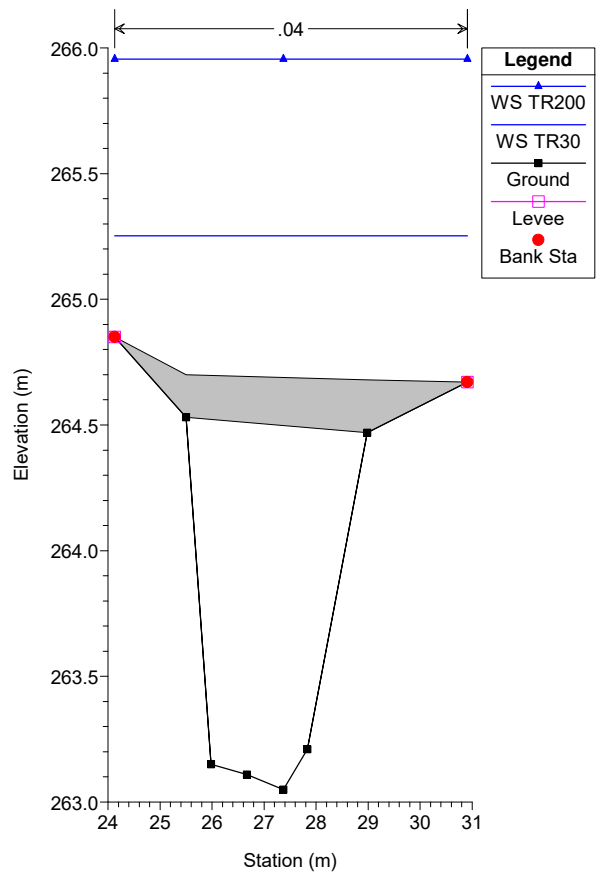




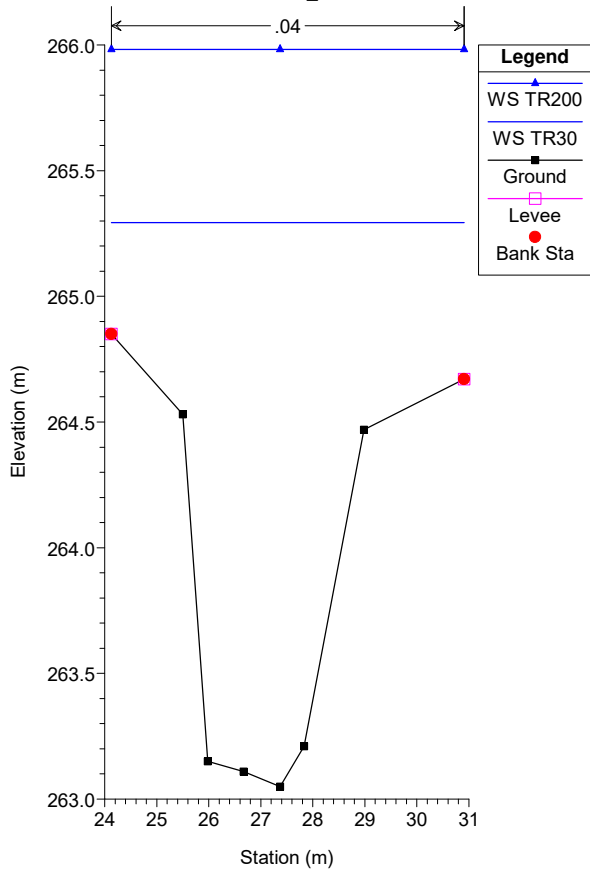
SUD2 Plan: Taratura 05/04/2019



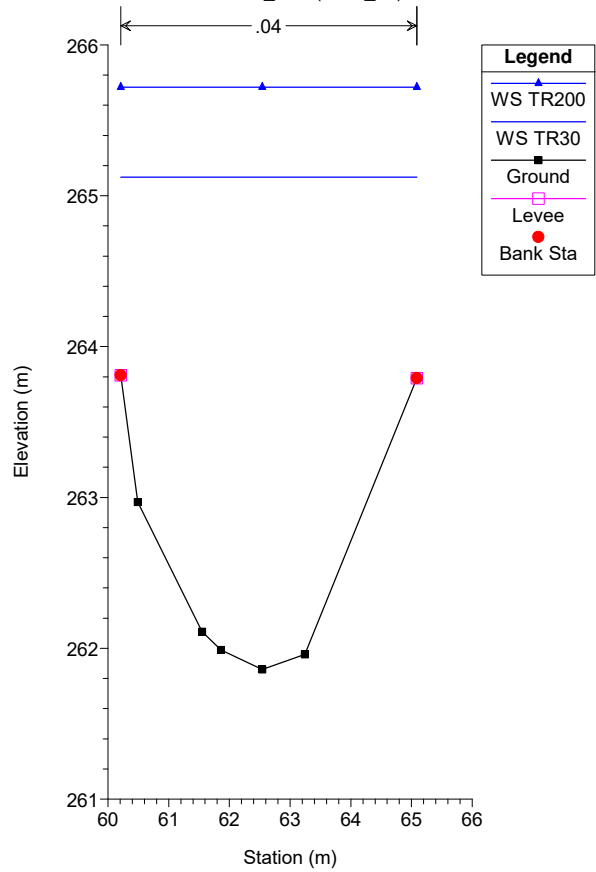
SUD2 Plan: Taratura 05/04/2019



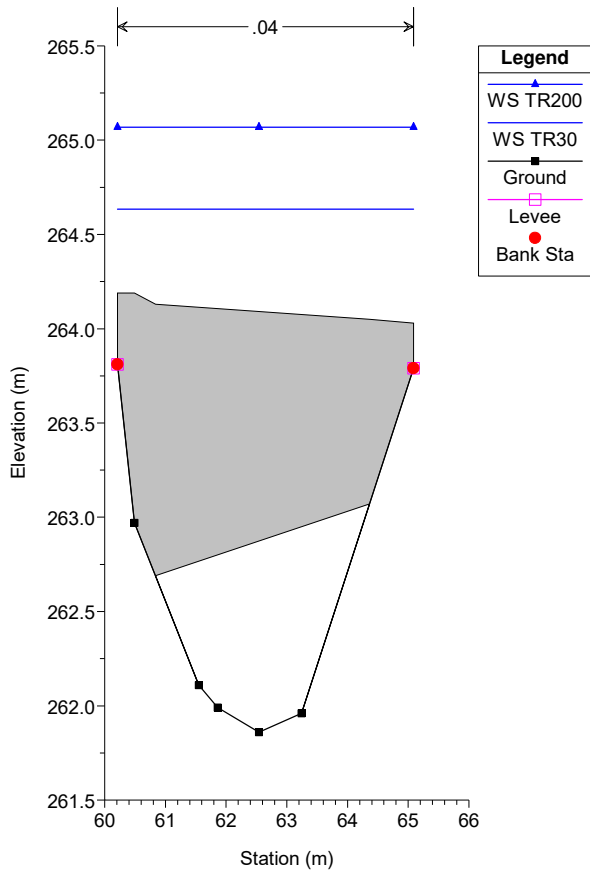
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C70



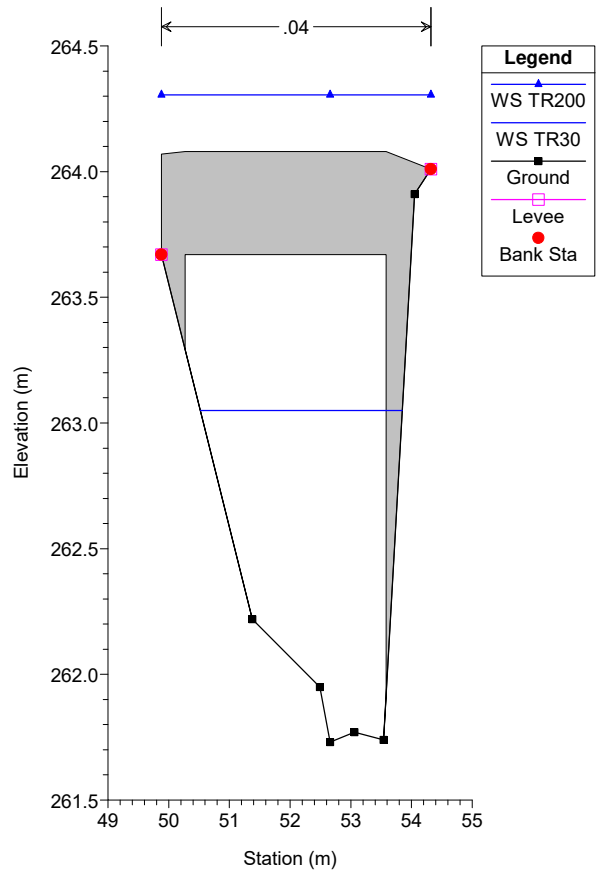
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C71 (MRR\_04)



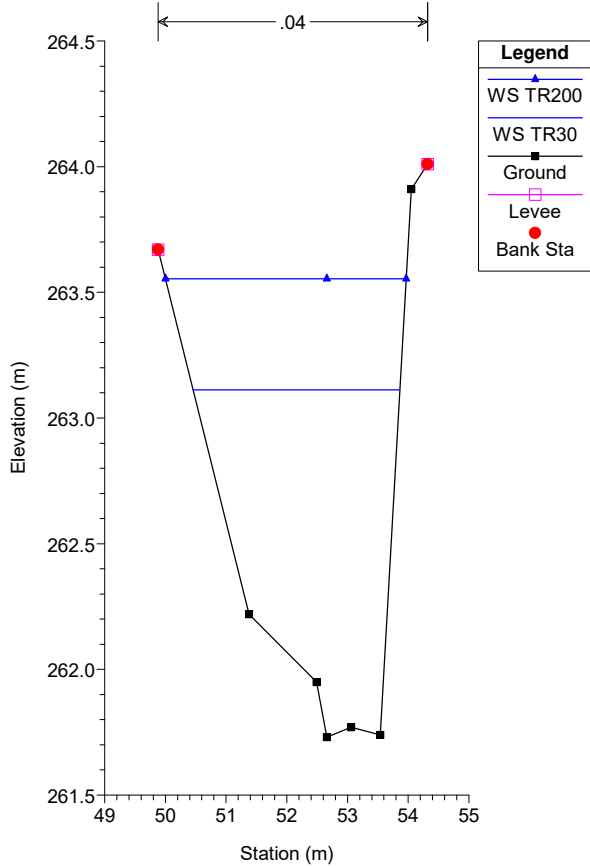
SUD2 Plan: Taratura 05/04/2019



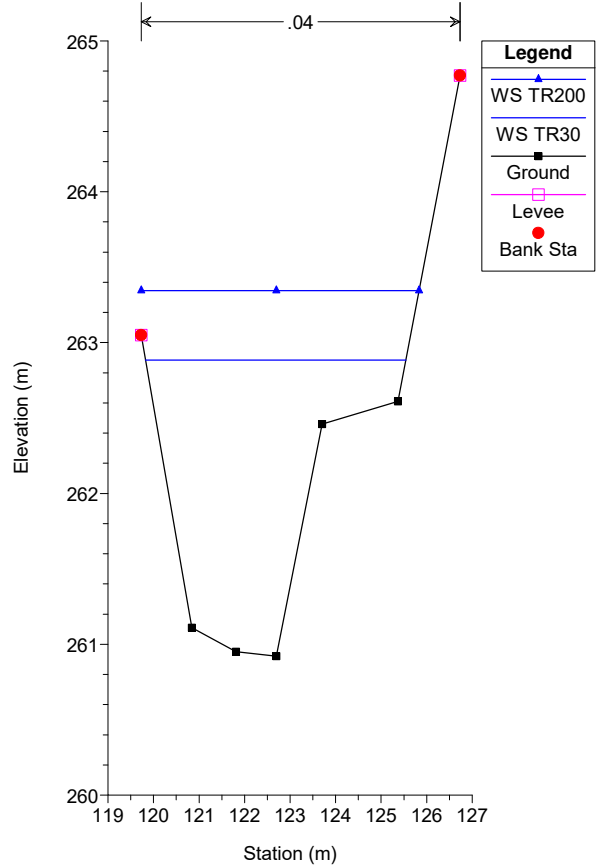
SUD2 Plan: Taratura 05/04/2019

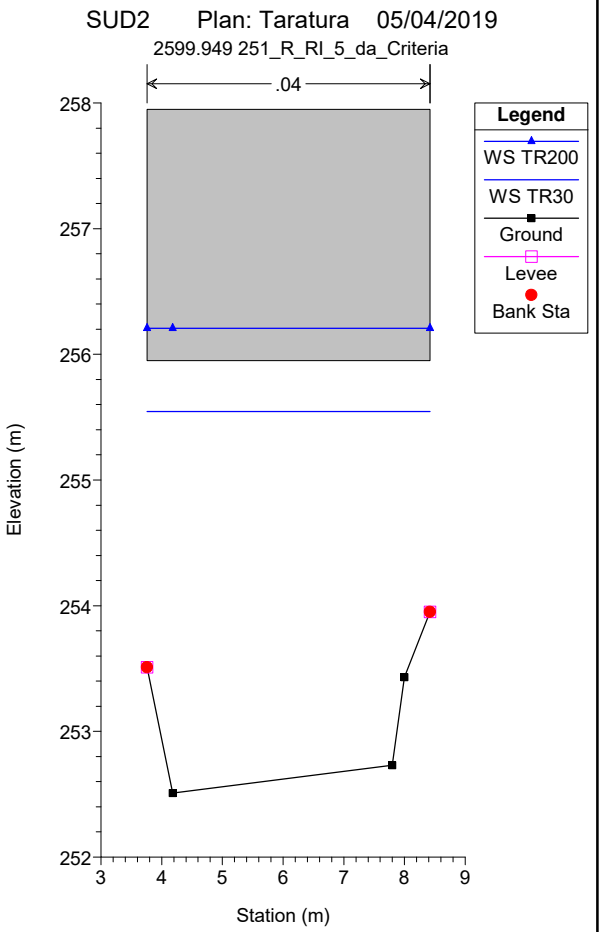
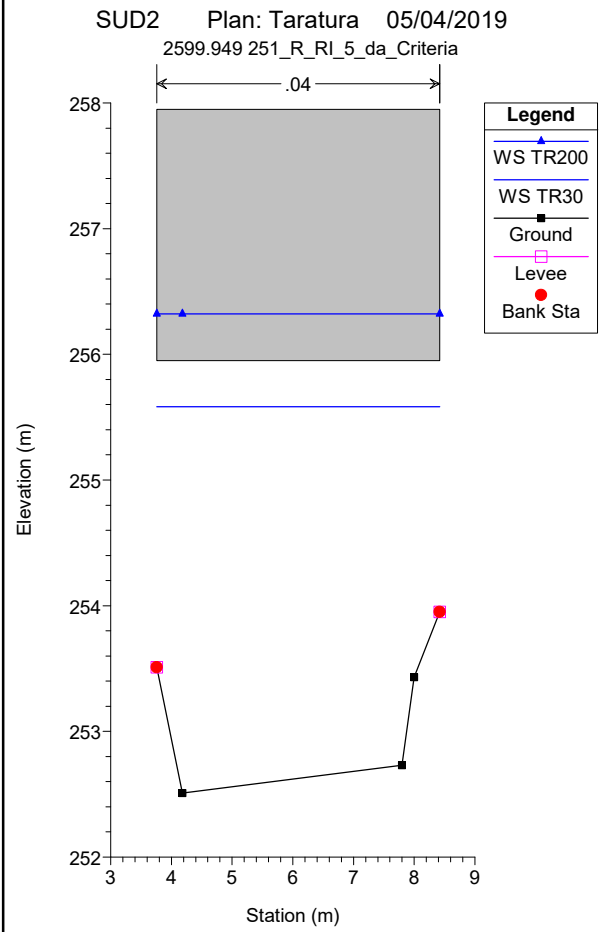
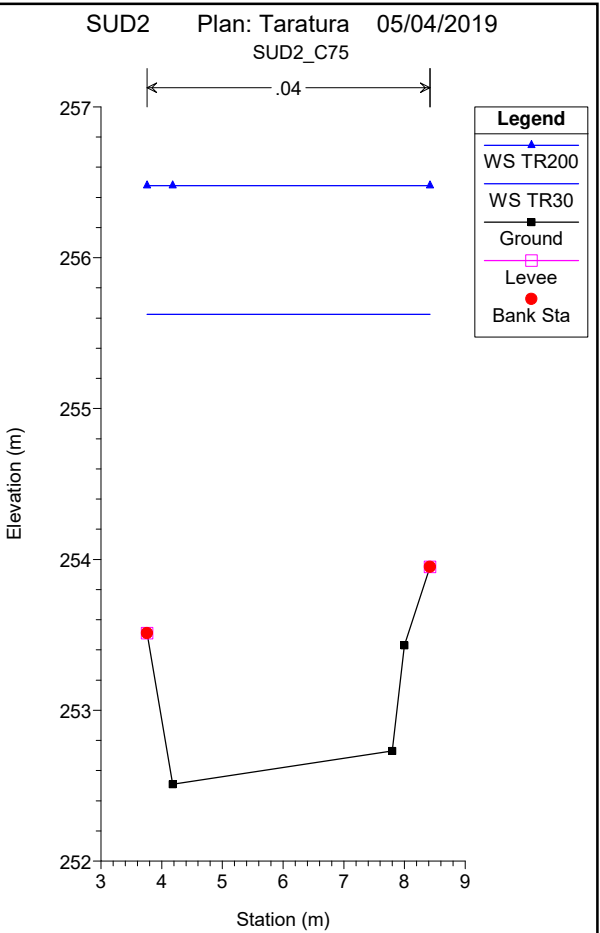
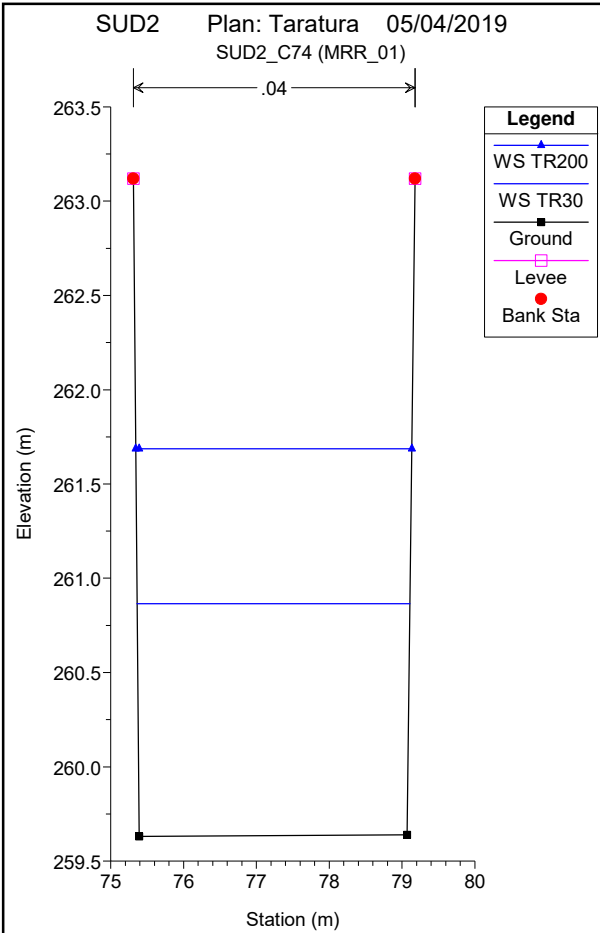


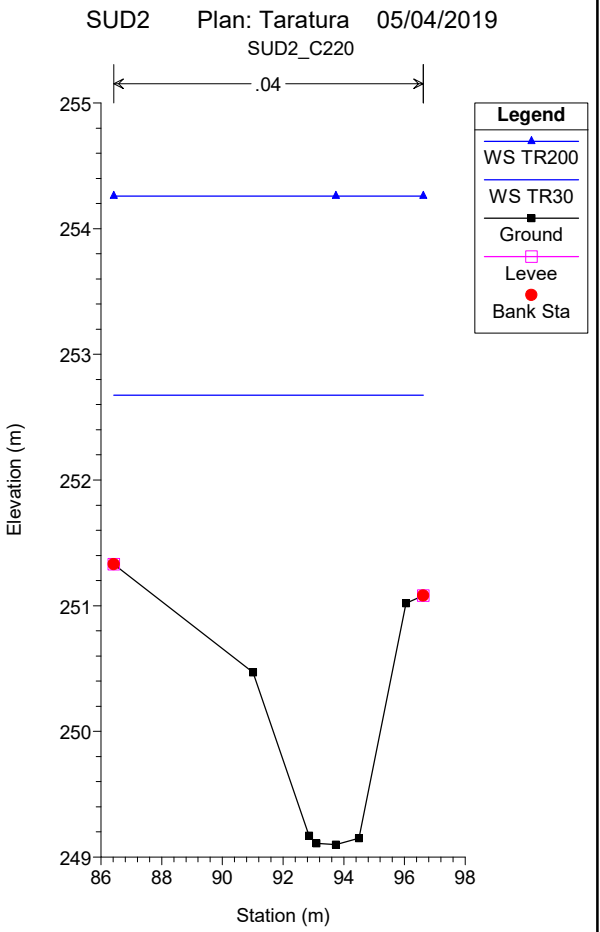
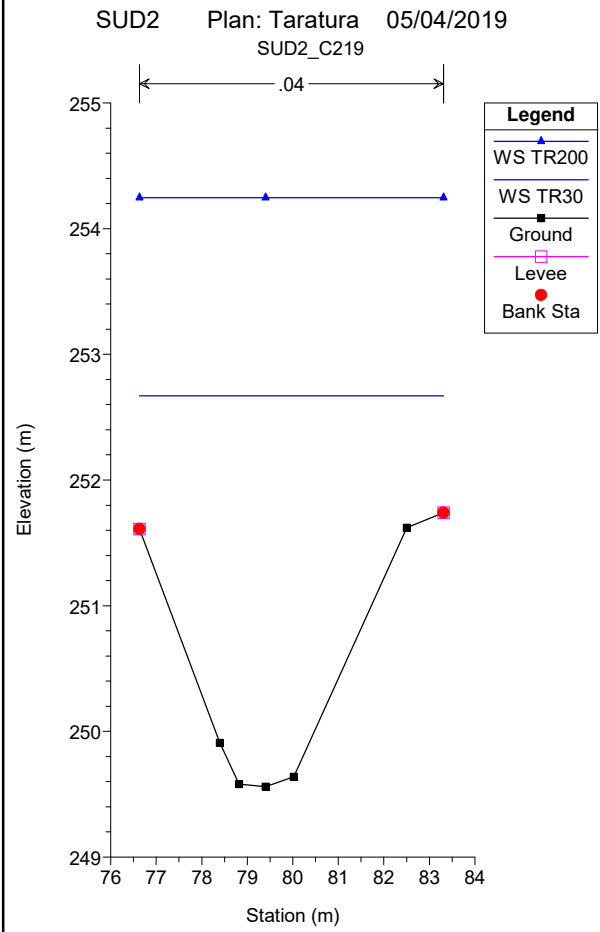
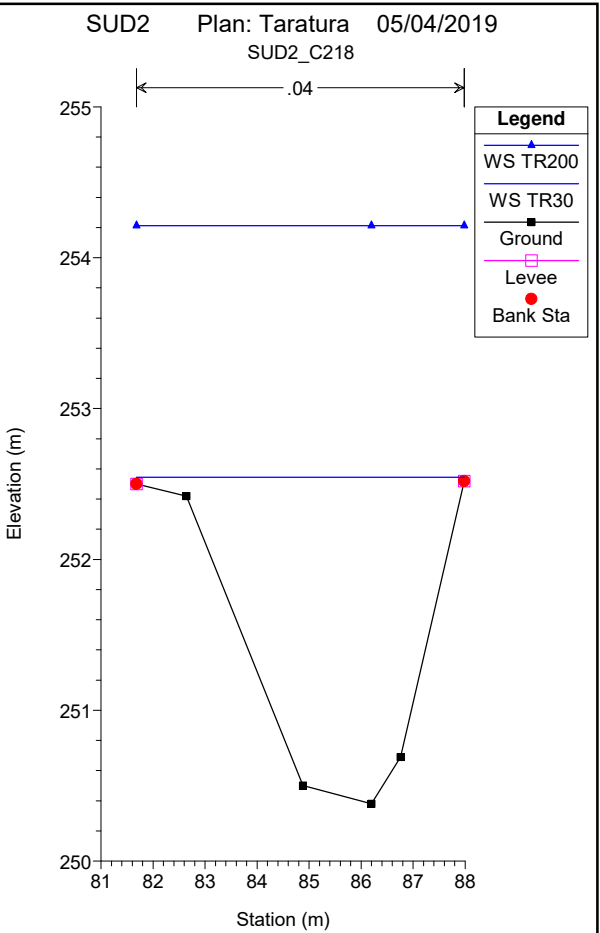
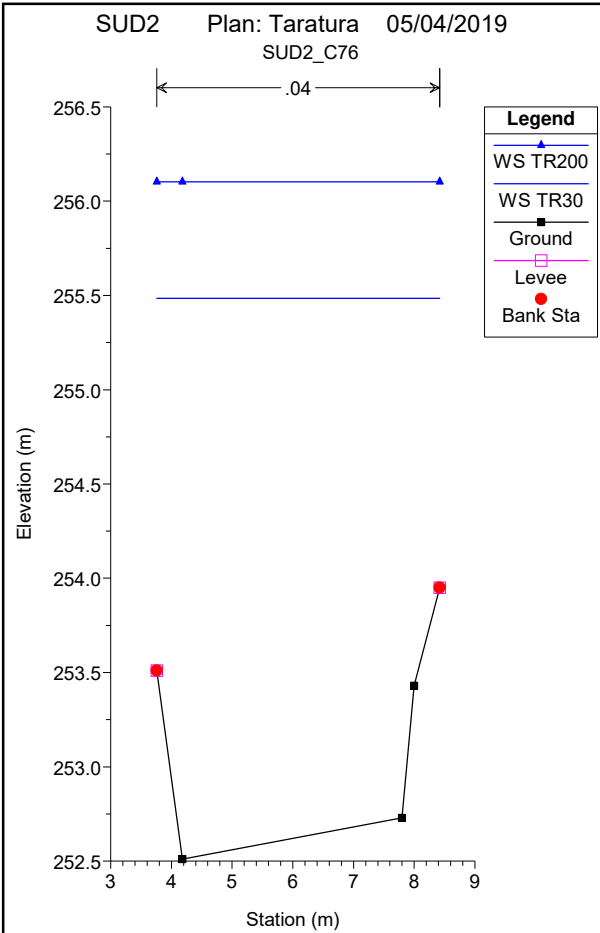
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C72 (MRR\_03)

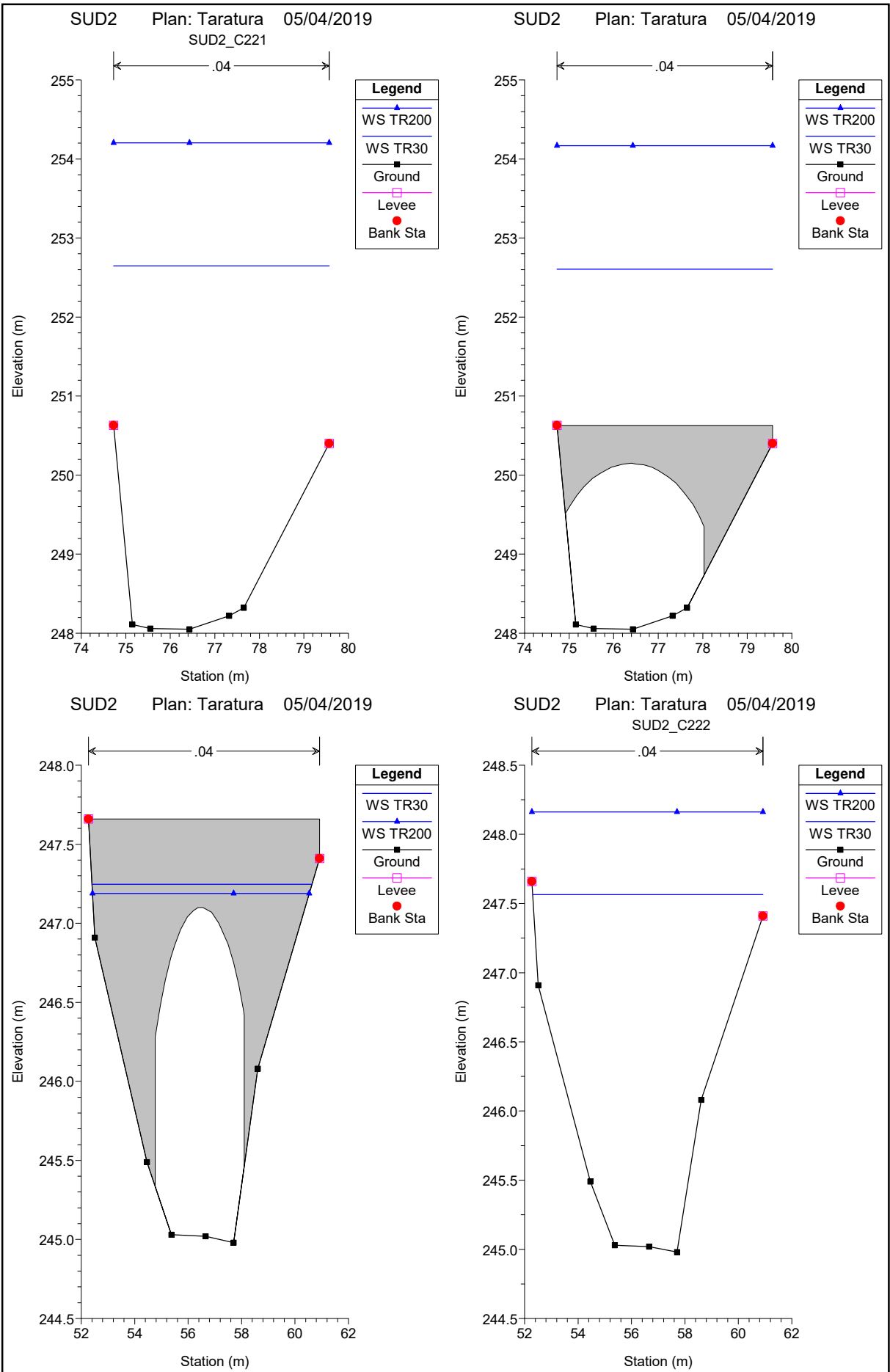


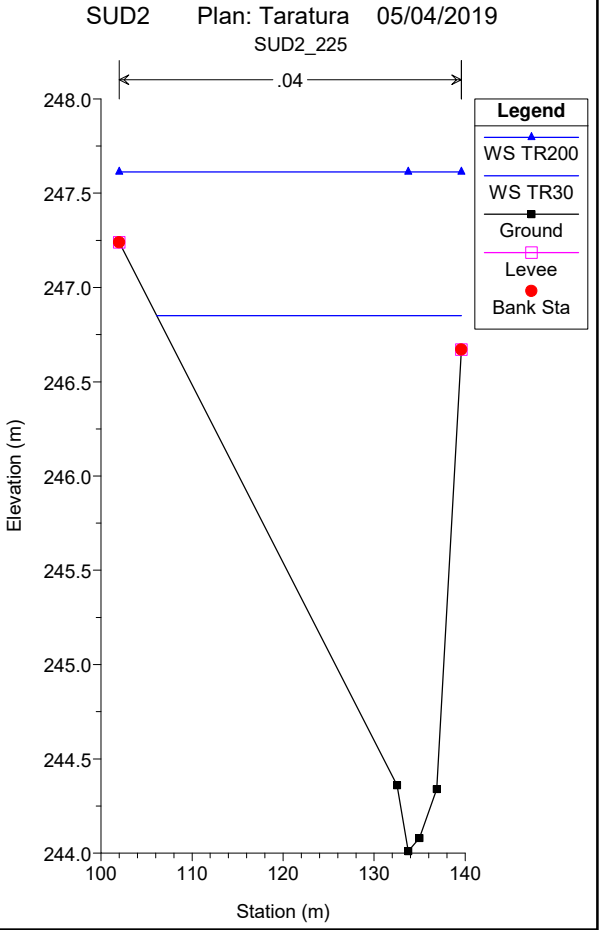
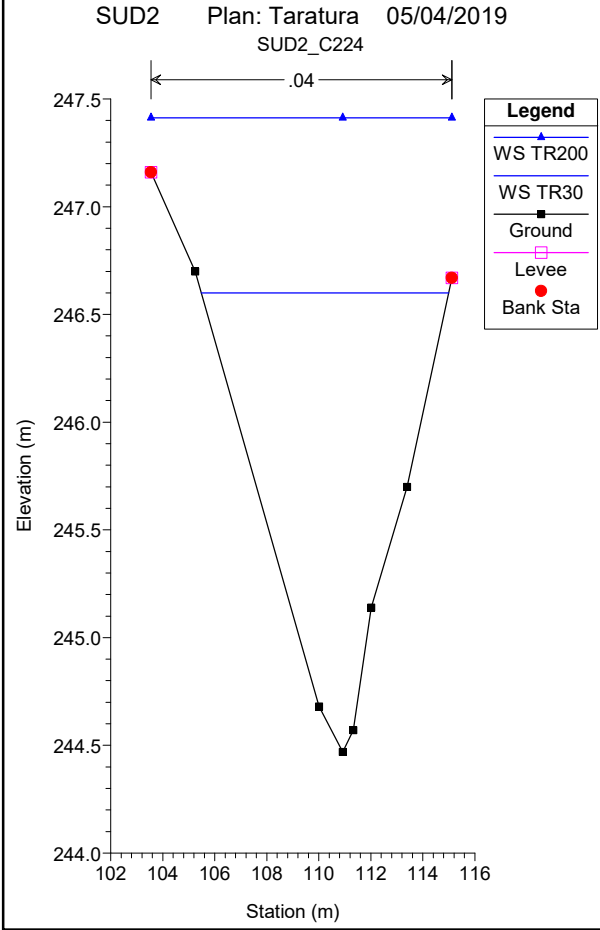
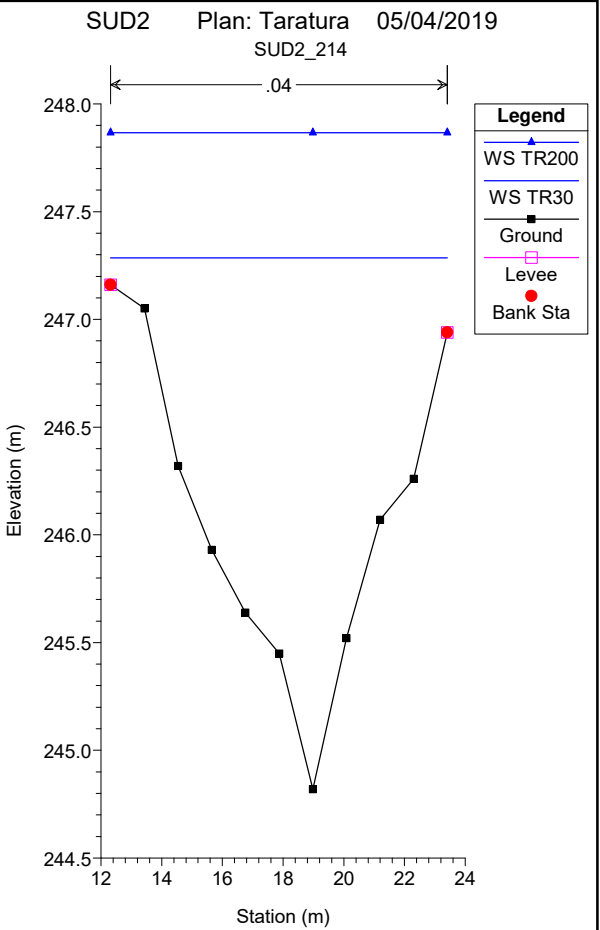
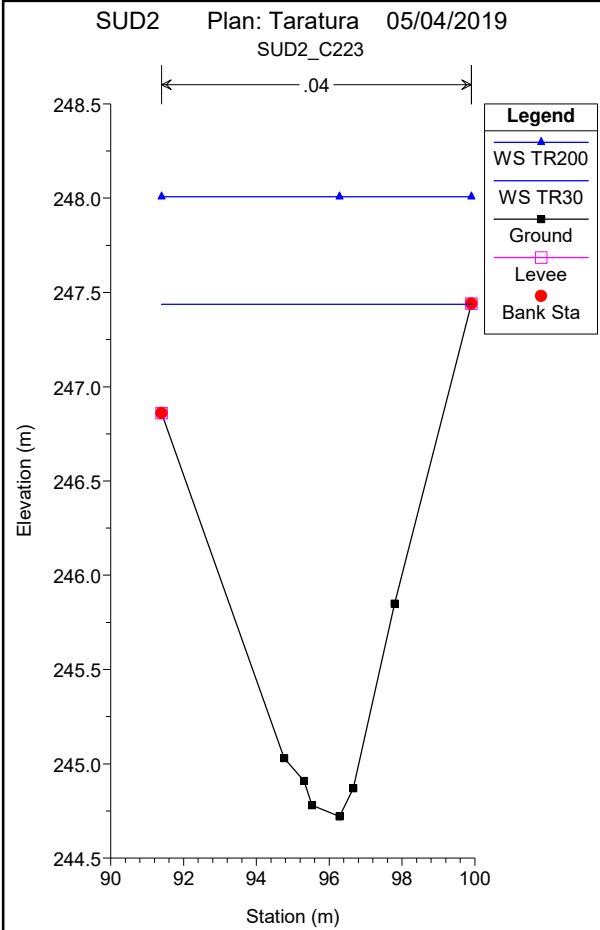
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C73 (MRR\_02)

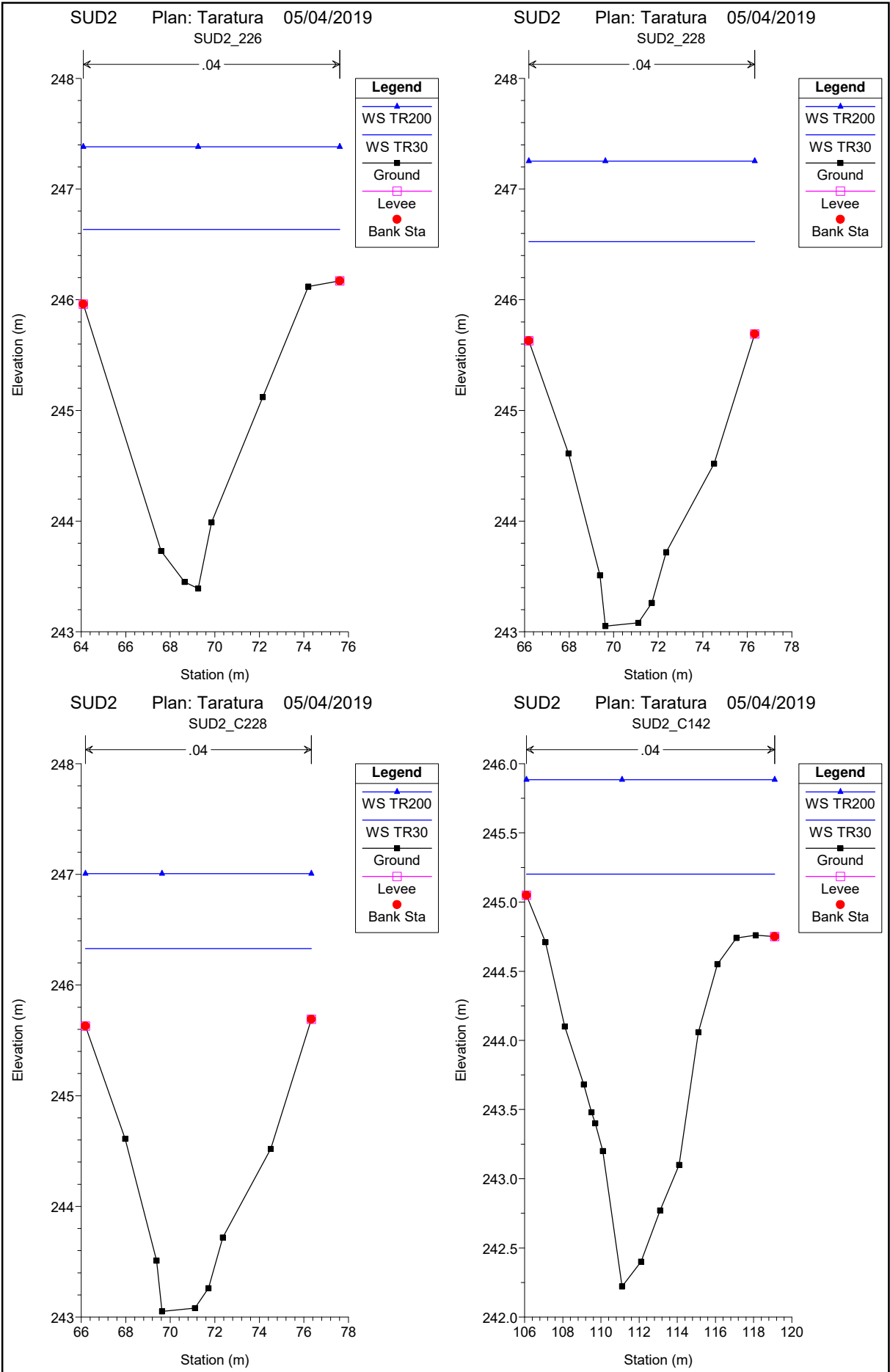




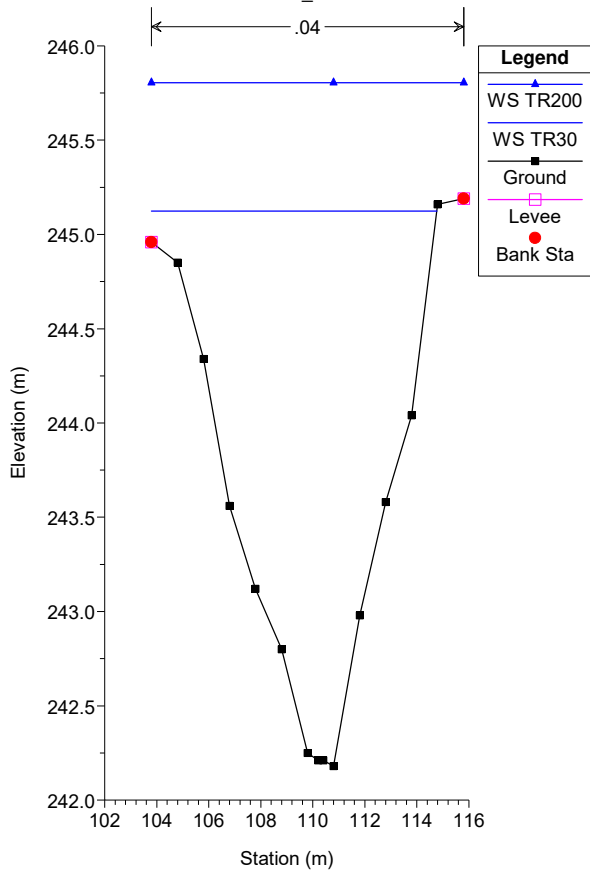




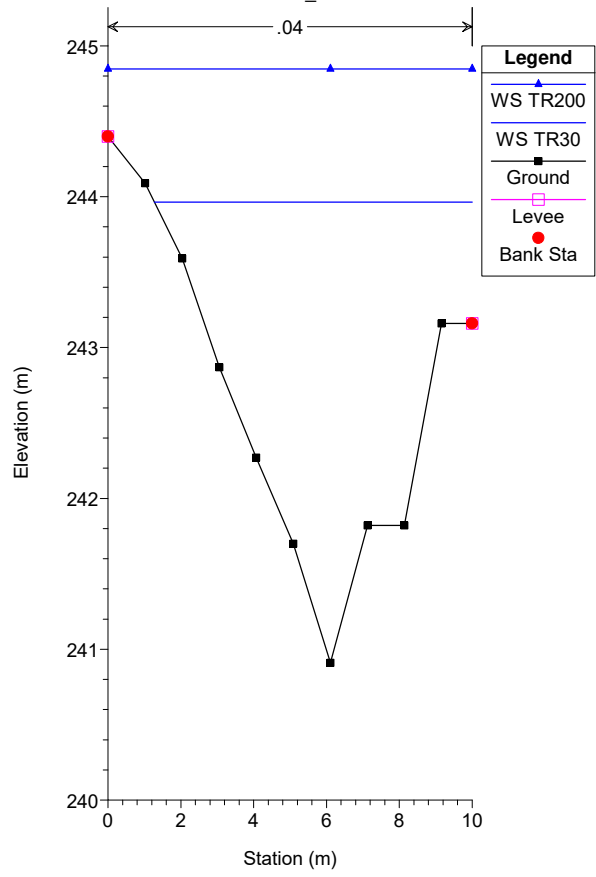




SUD2 Plan: Taratura 05/04/2019  
SUD2\_C143



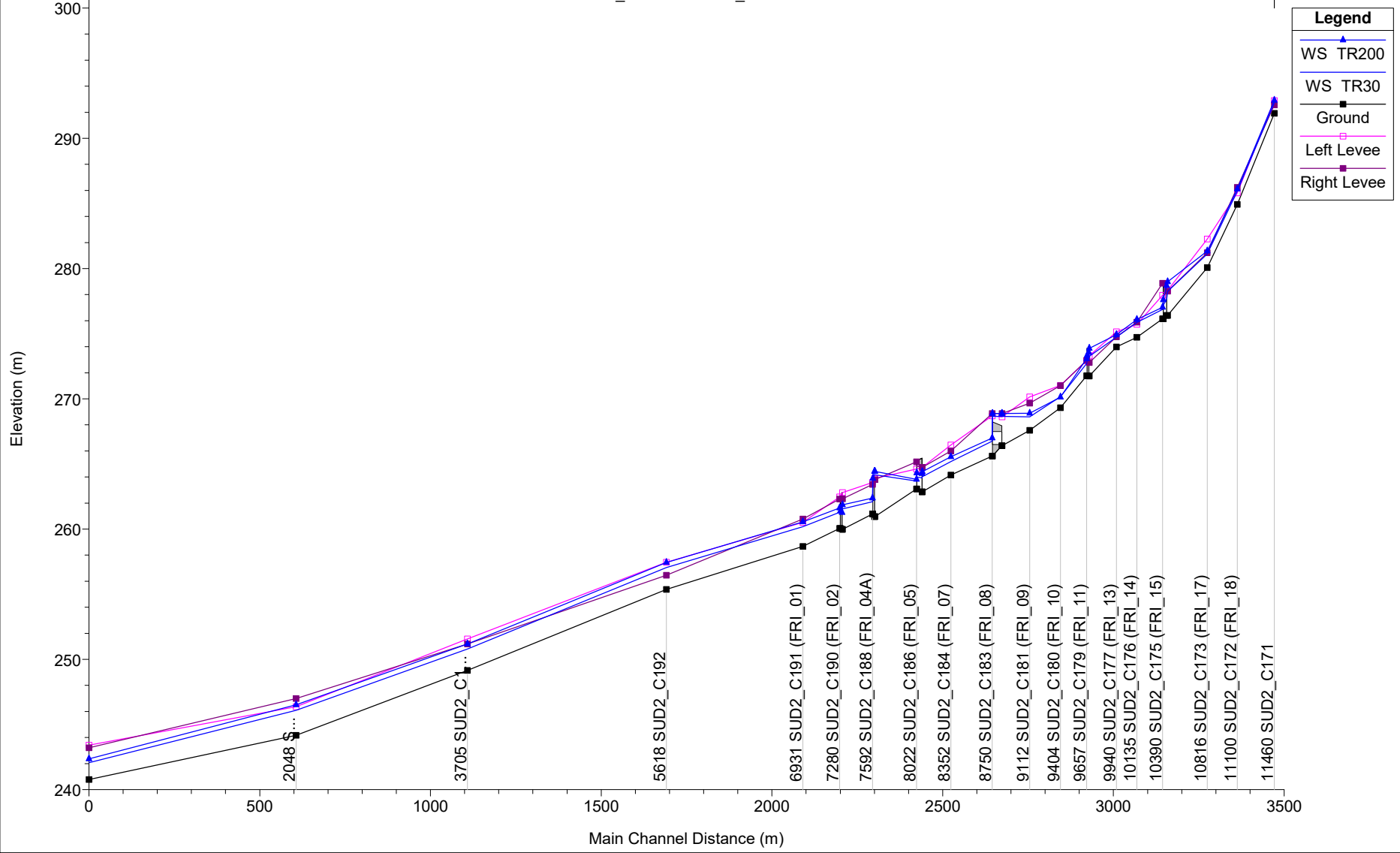
SUD2 Plan: Taratura 05/04/2019  
SUD2\_C216



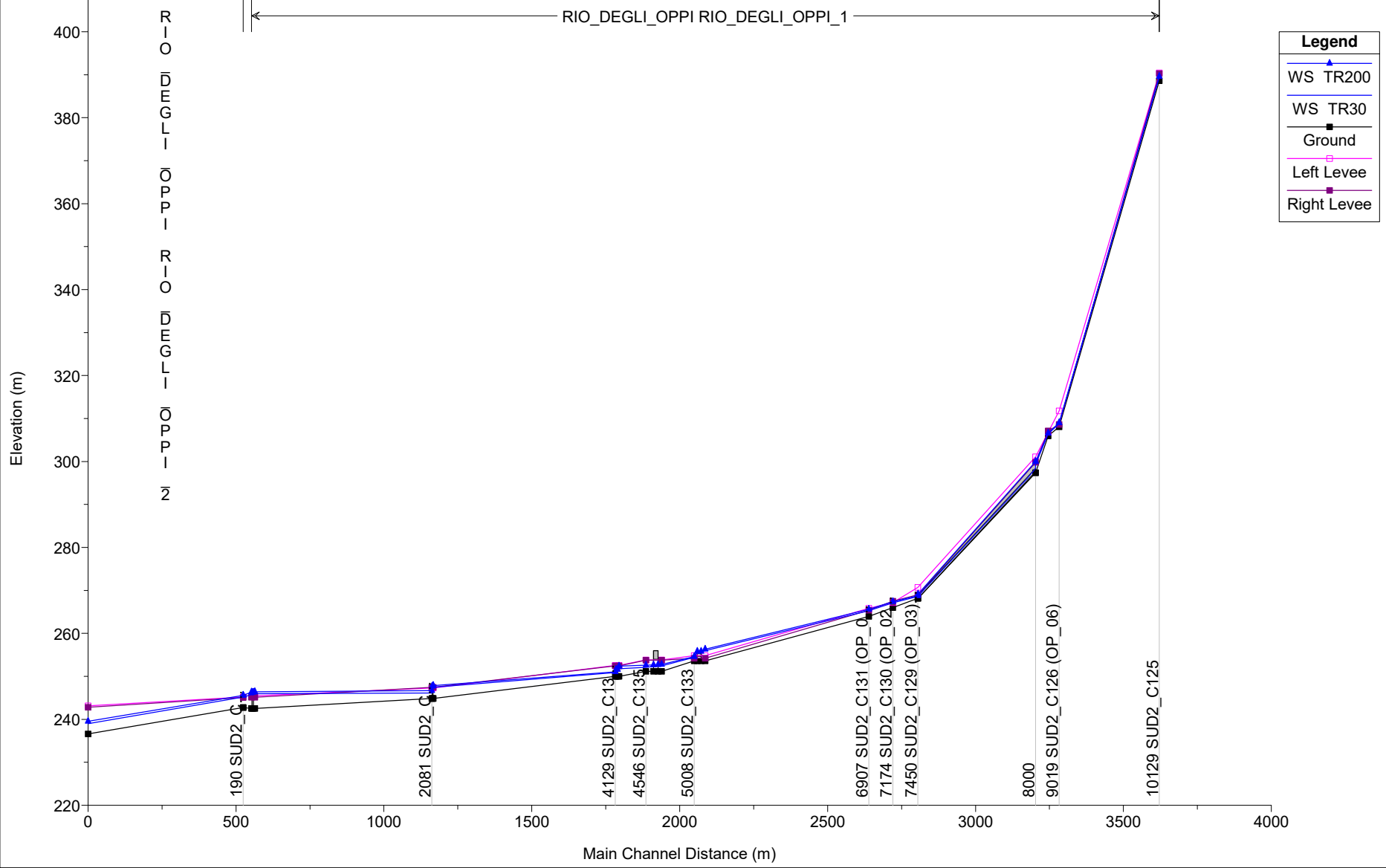


SUD2 Plan: Taratura 05/04/2019

FOSSO\_RIOLO FOSSO\_RIOLO1



SUD2 Plan: Taratura 05/04/2019



RIO DEGLI OPPI

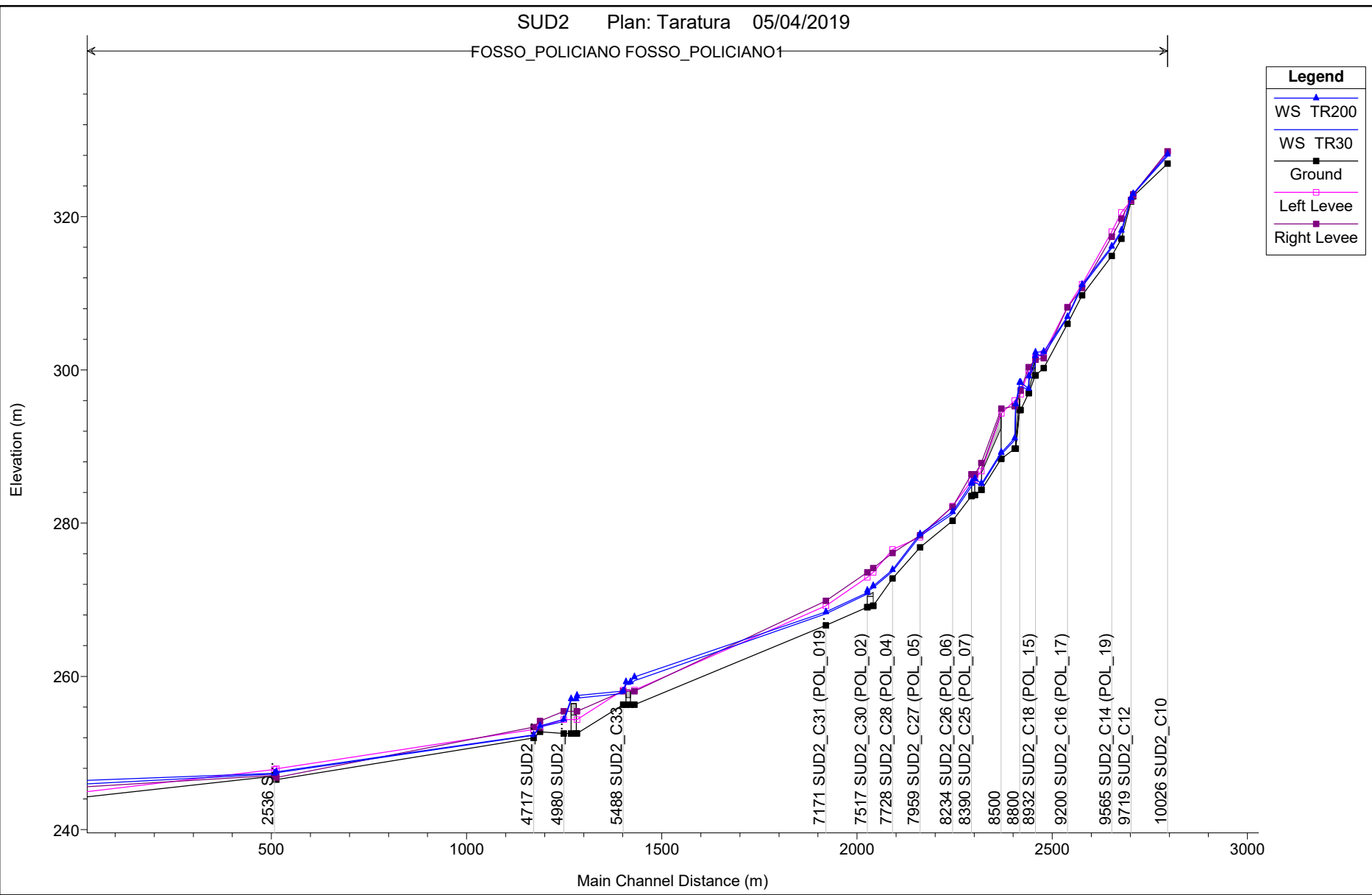
RIO DEGLI OPPI RIO DEGLI OPPI\_1

**Legend**

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

SUD2 Plan: Taratura 05/04/2019

FOSSO\_POLICIANO FOSSO\_POLICIANO1



**Legend**

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

2536 S

4717 SUD2

4980 SUD2

5488 SUD2\_C33

7171 SUD2\_C31 (POL\_019)

7517 SUD2\_C30 (POL\_02)

7728 SUD2\_C28 (POL\_04)

7959 SUD2\_C27 (POL\_05)

8234 SUD2\_C26 (POL\_06)

8390 SUD2\_C25 (POL\_07)

8500

8800

8932 SUD2\_C18 (POL\_15)

9200 SUD2\_C16 (POL\_17)

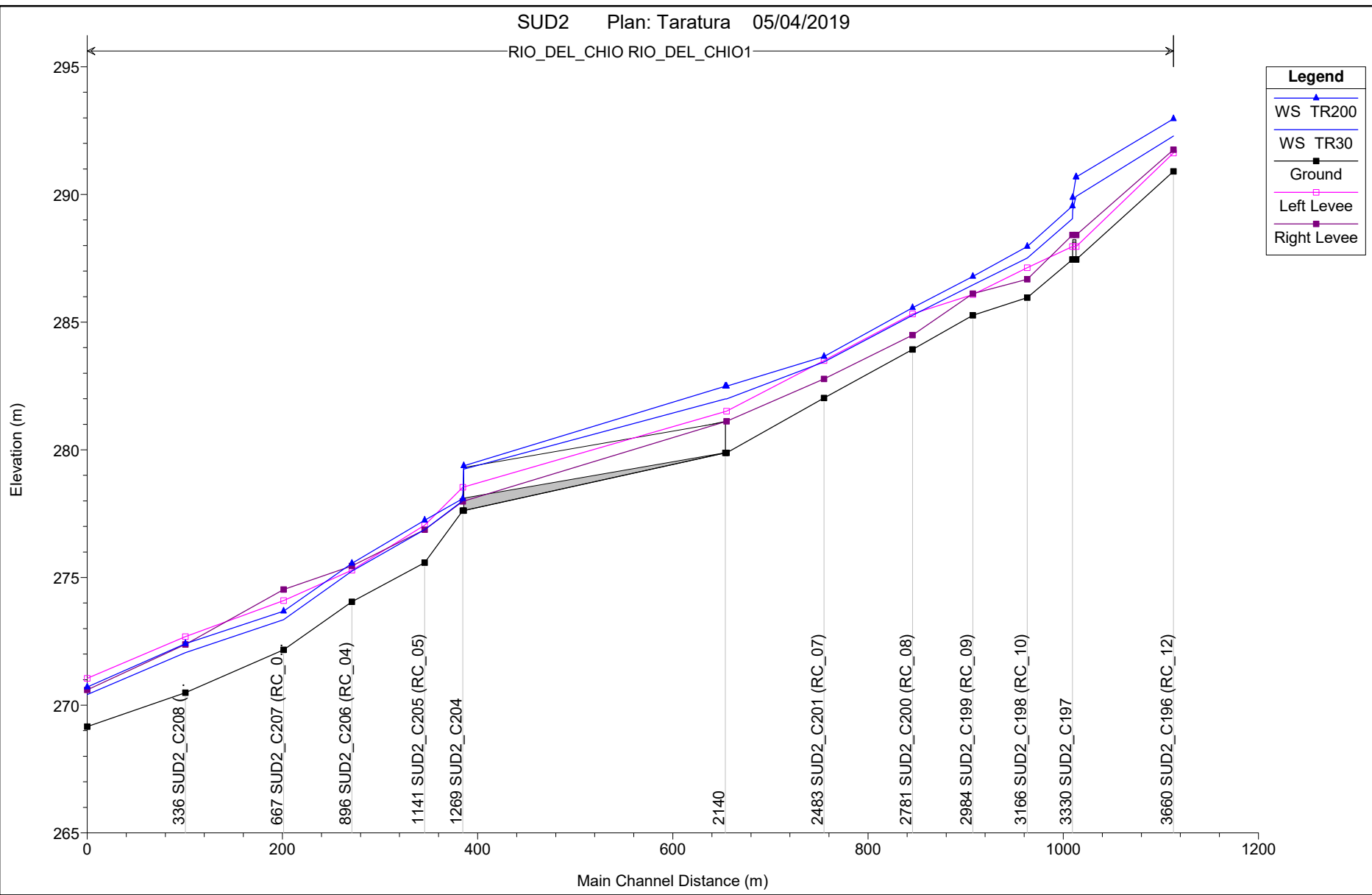
9565 SUD2\_C14 (POL\_19)

9719 SUD2\_C12

10026 SUD2\_C10

SUD2 Plan: Taratura 05/04/2019

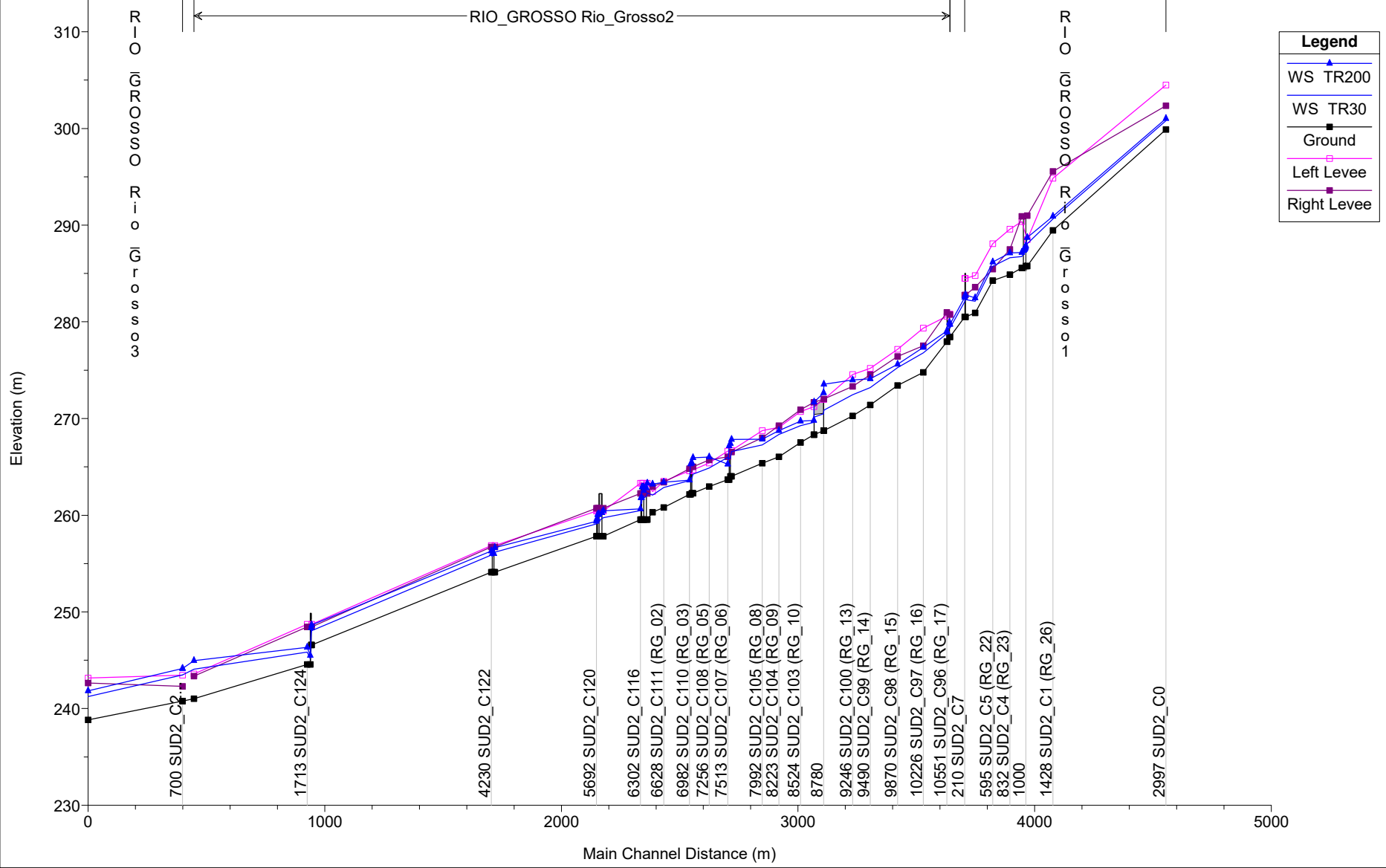
RIO\_DEL\_CHIO RIO\_DEL\_CHIO1



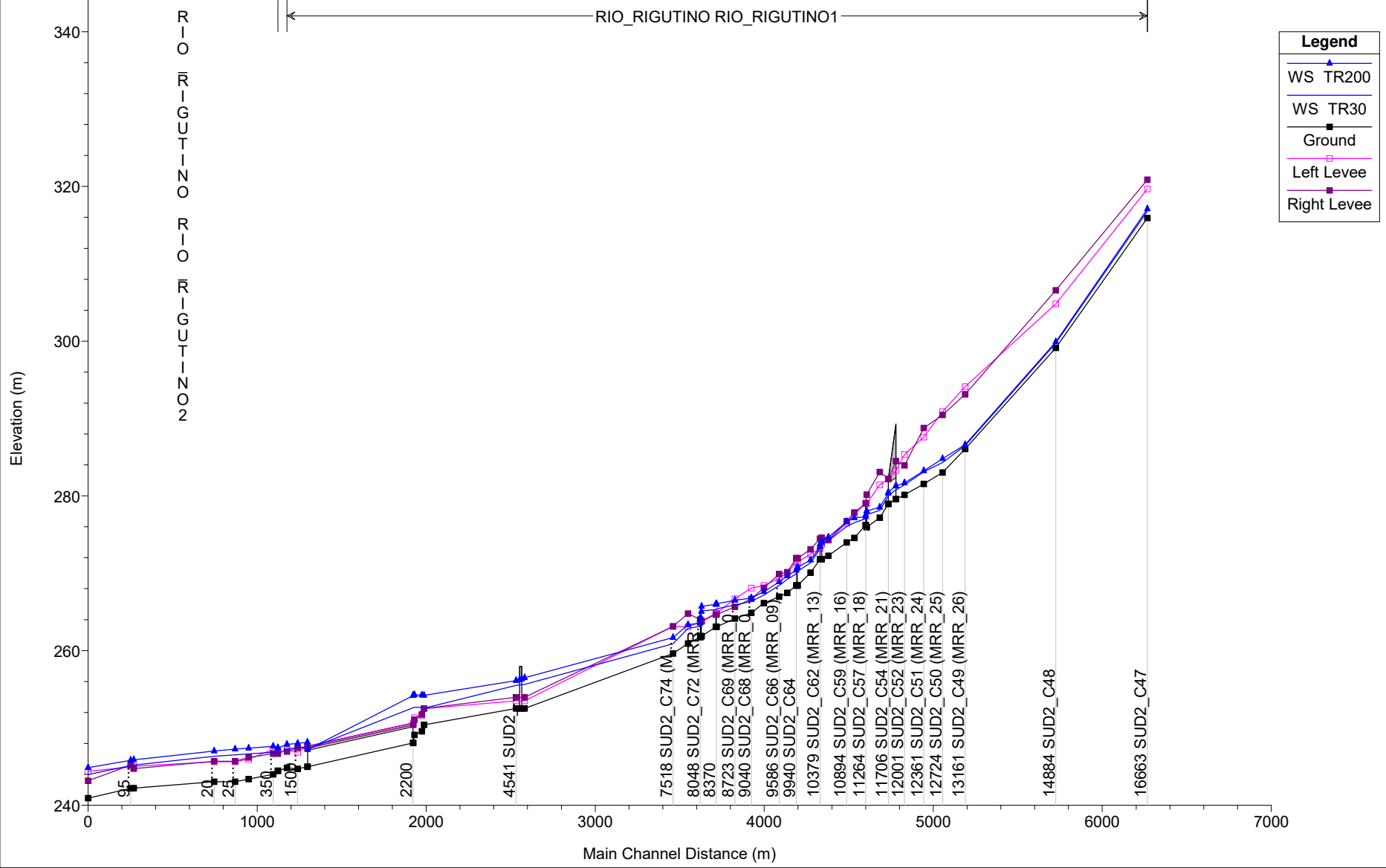
**Legend**

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

SUD2 Plan: Taratura 05/04/2019

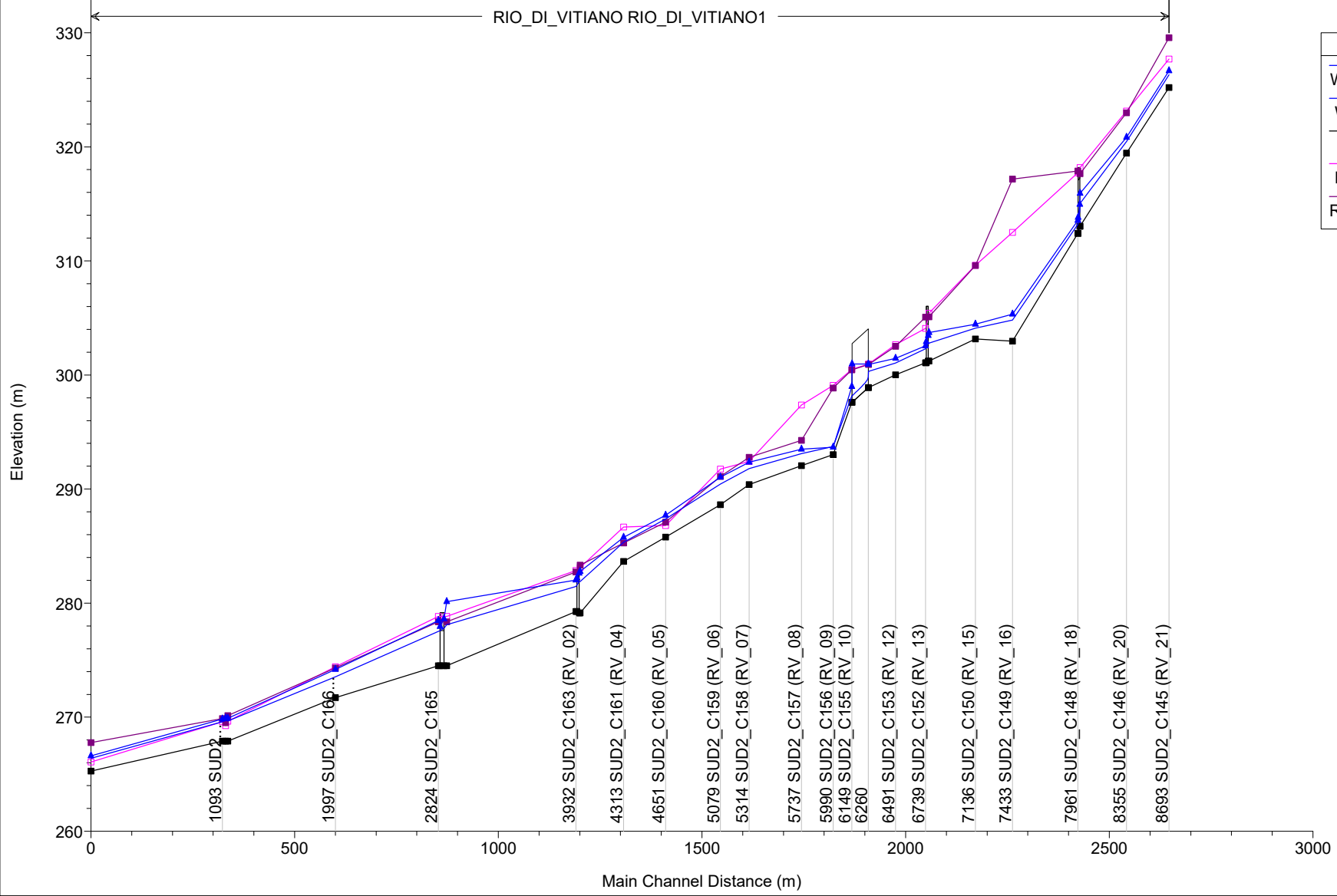


SUD2 Plan: Taratura 05/04/2019



SUD2 Plan: Taratura 05/04/2019

RIO\_DI\_VITIANO RIO\_DI\_VITIANO1



**Legend**

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

HEC-RAS Plan: Taratura

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_RIGUTINO	RIO_RIGUTINO1	16663	TR30	7.90	315.92	316.82	316.82	317.12	0.020297	2.44	3.24	5.28	0.99
RIO_RIGUTINO	RIO_RIGUTINO1	16663	TR200	13.40	315.92	317.09	317.09	317.49	0.019837	2.83	4.74	5.92	1.01
RIO_RIGUTINO	RIO_RIGUTINO1	14884	TR30	7.90	299.14	299.74	299.88	300.21	0.054072	3.02	2.61	6.82	1.56
RIO_RIGUTINO	RIO_RIGUTINO1	14884	TR200	13.40	299.14	299.89	300.11	300.55	0.056369	3.57	3.75	7.82	1.65
RIO_RIGUTINO	RIO_RIGUTINO1	13161	TR30	7.90	286.05	286.50	286.50	286.65	0.024048	1.74	4.54	14.55	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	13161	TR200	13.40	286.05	286.63	286.63	286.85	0.022292	2.06	6.51	15.19	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	12724	TR30	7.90	283.03	284.32	284.15	284.50	0.010800	1.84	4.29	5.89	0.69
RIO_RIGUTINO	RIO_RIGUTINO1	12724	TR200	13.40	283.03	284.79	284.41	284.96	0.006746	1.84	7.28	6.90	0.57
RIO_RIGUTINO	RIO_RIGUTINO1	12361	TR30	7.90	281.55	283.11	282.83	283.33	0.010308	2.06	3.84	3.95	0.67
RIO_RIGUTINO	RIO_RIGUTINO1	12361	TR200	13.40	281.55	283.25	283.21	283.72	0.020881	3.06	4.38	4.19	0.96
RIO_RIGUTINO	RIO_RIGUTINO1	12001	TR30	7.90	280.14	281.41	281.41	281.59	0.024170	1.89	4.18	11.40	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	12001	TR200	13.40	280.14	281.68	281.57	281.84	0.012119	1.78	7.53	13.42	0.76
RIO_RIGUTINO	RIO_RIGUTINO1	11849	TR30	7.90	279.59	280.77	280.29	280.88	0.005317	1.53	5.18	4.46	0.45
RIO_RIGUTINO	RIO_RIGUTINO1	11849	TR200	13.40	279.59	281.30	280.58	281.46	0.005276	1.77	7.55	4.47	0.44
RIO_RIGUTINO	RIO_RIGUTINO1	11800		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	11706	TR30	7.90	278.95	279.99	279.99	280.42	0.027448	2.92	2.70	3.11	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	11706	TR200	13.40	278.95	280.36	280.36	280.97	0.029383	3.47	3.86	3.14	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	11536	TR30	7.90	277.19	278.14	278.29	278.74	0.040950	3.42	2.31	3.24	1.29
RIO_RIGUTINO	RIO_RIGUTINO1	11536	TR200	13.40	277.19	278.54	278.62	278.83	0.059744	2.39	5.61	21.63	1.50
RIO_RIGUTINO	RIO_RIGUTINO1	11282	TR30	7.90	275.95	277.57	276.87	277.68	0.003838	1.43	5.51	3.88	0.38
RIO_RIGUTINO	RIO_RIGUTINO1	11282	TR200	13.40	275.95	278.04	277.20	278.21	0.005046	1.81	7.39	4.02	0.43
RIO_RIGUTINO	RIO_RIGUTINO1	11280		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	11264	TR30	7.90	276.21	277.06	277.18	277.58	0.036689	3.20	2.47	3.80	1.27
RIO_RIGUTINO	RIO_RIGUTINO1	11264	TR200	13.40	276.21	277.29	277.51	278.09	0.043495	3.96	3.38	4.18	1.41
RIO_RIGUTINO	RIO_RIGUTINO1	11044	TR30	7.90	274.57	276.53	275.86	276.56	0.001934	0.76	10.35	16.67	0.31
RIO_RIGUTINO	RIO_RIGUTINO1	11044	TR200	13.40	274.57	277.14	276.22	277.16	0.000613	0.65	20.69	17.32	0.19
RIO_RIGUTINO	RIO_RIGUTINO1	10894	TR30	15.80	273.97	276.04	275.58	276.32	0.009341	2.35	6.73	4.91	0.64
RIO_RIGUTINO	RIO_RIGUTINO1	10894	TR200	26.81	273.97	276.66	276.13	277.02	0.009124	2.64	10.15	5.78	0.64
RIO_RIGUTINO	RIO_RIGUTINO1	10541	TR30	15.80	272.27	274.19	274.19	274.73	0.025712	3.26	4.85	4.43	0.99
RIO_RIGUTINO	RIO_RIGUTINO1	10541	TR200	26.81	272.27	274.65	274.65	275.41	0.027028	3.87	6.93	4.55	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	10410	TR30	15.80	271.84	273.84	273.53	274.05	0.009282	2.02	7.80	7.08	0.62
RIO_RIGUTINO	RIO_RIGUTINO1	10410	TR200	26.81	271.84	274.23	273.87	274.56	0.010662	2.53	10.59	7.12	0.66
RIO_RIGUTINO	RIO_RIGUTINO1	10400		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	10379	TR30	15.80	271.81	273.14	273.31	273.76	0.053247	3.49	4.53	8.33	1.51
RIO_RIGUTINO	RIO_RIGUTINO1	10379	TR200	26.81	271.81	273.41	273.62	274.21	0.043703	3.97	6.75	8.38	1.41
RIO_RIGUTINO	RIO_RIGUTINO1	10195	TR30	15.80	270.07	271.32	271.37	271.85	0.023587	3.21	4.92	5.32	1.07
RIO_RIGUTINO	RIO_RIGUTINO1	10195	TR200	26.81	270.07	271.72	271.80	272.44	0.023809	3.77	7.12	5.84	1.09
RIO_RIGUTINO	RIO_RIGUTINO1	9944	TR30	15.80	268.41	270.26	269.91	270.53	0.008660	2.27	6.95	5.69	0.66
RIO_RIGUTINO	RIO_RIGUTINO1	9944	TR200	26.81	268.41	270.78	270.37	271.14	0.009002	2.65	10.13	6.66	0.68
RIO_RIGUTINO	RIO_RIGUTINO1	9942		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	9940	TR30	15.80	268.41	269.91	269.91	270.41	0.020662	3.13	5.05	5.03	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	9940	TR200	26.81	268.41	270.37	270.37	271.01	0.019915	3.55	7.55	5.89	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	9744	TR30	15.80	267.45	269.20	268.88	269.40	0.007254	2.01	7.88	7.75	0.64
RIO_RIGUTINO	RIO_RIGUTINO1	9744	TR200	26.81	267.45	269.69	269.29	269.91	0.007042	2.08	12.91	12.01	0.64
RIO_RIGUTINO	RIO_RIGUTINO1	9586	TR30	15.80	266.97	268.40	268.40	268.85	0.019121	2.96	5.34	5.94	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	9586	TR200	26.81	266.97	268.88	268.88	269.37	0.018242	3.10	8.64	8.77	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	9290	TR30	15.80	266.15	267.20	266.86	267.26	0.003105	1.11	14.27	19.65	0.42
RIO_RIGUTINO	RIO_RIGUTINO1	9290	TR200	26.81	266.15	267.62	267.04	267.69	0.002235	1.13	23.65	24.39	0.37
RIO_RIGUTINO	RIO_RIGUTINO1	9040	TR30	15.80	264.88	266.36	266.32	266.77	0.017832	2.83	5.57	6.20	0.95
RIO_RIGUTINO	RIO_RIGUTINO1	9040	TR200	26.81	264.88	266.79	266.74	267.29	0.015828	3.12	8.59	7.44	0.93
RIO_RIGUTINO	RIO_RIGUTINO1	8723	TR30	15.80	264.15	265.89	265.39	266.00	0.003655	1.50	10.55	9.81	0.46
RIO_RIGUTINO	RIO_RIGUTINO1	8723	TR200	26.81	264.15	266.51	265.72	266.64	0.002827	1.57	17.06	11.64	0.41
RIO_RIGUTINO	RIO_RIGUTINO1	8372	TR30	15.80	263.05	265.41	264.84	265.55	0.004675	1.68	9.42	6.78	0.45
RIO_RIGUTINO	RIO_RIGUTINO1	8372	TR200	26.81	263.05	266.06	265.19	266.25	0.004454	1.94	13.80	6.78	0.43
RIO_RIGUTINO	RIO_RIGUTINO1	8370		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	8360	TR30	15.80	263.05	265.29	264.84	265.46	0.006069	1.83	8.63	6.78	0.52
RIO_RIGUTINO	RIO_RIGUTINO1	8360	TR200	26.81	263.05	265.98	265.19	266.19	0.004953	2.02	13.30	6.78	0.46
RIO_RIGUTINO	RIO_RIGUTINO1	8081	TR30	15.80	261.86	265.12	263.49	265.20	0.001593	1.24	12.76	4.88	0.24
RIO_RIGUTINO	RIO_RIGUTINO1	8081	TR200	26.81	261.86	265.72	263.97	265.87	0.002718	1.71	15.67	4.88	0.30
RIO_RIGUTINO	RIO_RIGUTINO1	8070		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	8048	TR30	15.80	261.73	263.11	263.51	264.37	0.071729	4.96	3.19	3.41	1.64
RIO_RIGUTINO	RIO_RIGUTINO1	8048	TR200	26.81	261.73	263.55	264.05	265.13	0.067768	5.57	4.82	3.97	1.61
RIO_RIGUTINO	RIO_RIGUTINO1	7813	TR30	15.80	260.92	262.88	262.70	263.21	0.013763	2.54	6.23	5.72	0.78
RIO_RIGUTINO	RIO_RIGUTINO1	7813	TR200	26.81	260.92	263.35	263.12	263.80	0.013876	2.99	8.98	6.10	0.79
RIO_RIGUTINO	RIO_RIGUTINO1	7518	TR30	15.80	259.63	260.87	260.87	261.48	0.028406	3.46	4.57	3.75	1.00
RIO_RIGUTINO	RIO_RIGUTINO1	7518	TR200	26.81	259.63	261.69	261.38	262.31	0.019968	3.50	7.67	3.79	0.79



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_RIGUTINO	RIO_RIGUTINO1	4618	TR30	19.67	252.51	255.63	253.99	255.74	0.002359	1.48	13.30	4.66	0.28
RIO_RIGUTINO	RIO_RIGUTINO1	4618	TR200	32.87	252.51	256.48	254.49	256.66	0.003409	1.90	17.27	4.66	0.32
RIO_RIGUTINO	RIO_RIGUTINO1	4580		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	4541	TR30	19.67	252.51	255.49	253.99	255.61	0.002687	1.56	12.65	4.66	0.30
RIO_RIGUTINO	RIO_RIGUTINO1	4541	TR200	32.87	252.51	256.10	254.49	256.33	0.004450	2.12	15.53	4.66	0.37
RIO_RIGUTINO	RIO_RIGUTINO1	2693	TR30	19.67	250.38	252.55	252.22	252.89	0.011950	2.60	7.56	6.30	0.76
RIO_RIGUTINO	RIO_RIGUTINO1	2693	TR200	32.87	250.38	254.21	252.75	254.38	0.002895	1.82	18.06	6.30	0.34
RIO_RIGUTINO	RIO_RIGUTINO1	2654	TR30	19.67	249.56	252.67	251.40	252.77	0.001983	1.39	14.17	6.68	0.30
RIO_RIGUTINO	RIO_RIGUTINO1	2654	TR200	32.87	249.56	254.25	251.90	254.34	0.001246	1.33	24.69	6.68	0.22
RIO_RIGUTINO	RIO_RIGUTINO1	2511	TR30	19.67	249.10	252.67	250.88	252.71	0.000535	0.81	24.20	10.20	0.17
RIO_RIGUTINO	RIO_RIGUTINO1	2511	TR200	32.87	249.10	254.26	251.32	254.29	0.000353	0.81	40.36	10.20	0.13
RIO_RIGUTINO	RIO_RIGUTINO1	2485	TR30	19.67	248.05	252.65	249.80	252.70	0.000947	1.03	19.01	4.84	0.17
RIO_RIGUTINO	RIO_RIGUTINO1	2485	TR200	32.87	248.05	254.21	250.39	254.28	0.001175	1.24	26.55	4.84	0.17
RIO_RIGUTINO	RIO_RIGUTINO1	2200		Bridge									
RIO_RIGUTINO	RIO_RIGUTINO1	2000	TR30	19.67	244.98	247.56	246.49	247.66	0.001956	1.36	14.51	8.62	0.33
RIO_RIGUTINO	RIO_RIGUTINO1	2000	TR200	32.87	244.98	248.16	246.95	248.30	0.002280	1.67	19.68	8.65	0.35
RIO_RIGUTINO	RIO_RIGUTINO1	1500	TR30	19.67	244.72	247.44	246.44	247.54	0.002167	1.41	13.98	8.50	0.35
RIO_RIGUTINO	RIO_RIGUTINO1	1500	TR200	32.87	244.72	248.01	246.89	248.16	0.002575	1.75	18.83	8.50	0.37
RIO_RIGUTINO	RIO_RIGUTINO1	500	TR30	19.67	244.82	247.29	246.56	247.38	0.002659	1.39	14.14	11.09	0.39
RIO_RIGUTINO	RIO_RIGUTINO1	500	TR200	32.87	244.82	247.87	246.91	248.00	0.002389	1.60	20.58	11.09	0.37
RIO_RIGUTINO	RIO_RIGUTINO2	4000	TR30	30.70	244.47	246.60	246.49	247.03	0.013330	2.90	10.57	9.51	0.88
RIO_RIGUTINO	RIO_RIGUTINO2	4000	TR200	50.20	244.47	247.41	246.94	247.75	0.006701	2.59	19.40	11.57	0.64
RIO_RIGUTINO	RIO_RIGUTINO2	3500	TR30	30.70	244.01	246.85	245.39	246.87	0.000417	0.64	48.26	33.46	0.17
RIO_RIGUTINO	RIO_RIGUTINO2	3500	TR200	50.20	244.01	247.61	245.70	247.63	0.000296	0.66	76.06	37.58	0.15
RIO_RIGUTINO	RIO_RIGUTINO2	3000	TR30	30.70	243.39	246.64	245.51	246.75	0.002088	1.48	20.76	11.52	0.35
RIO_RIGUTINO	RIO_RIGUTINO2	3000	TR200	50.20	243.39	247.38	246.00	247.53	0.002009	1.71	29.37	11.52	0.34
RIO_RIGUTINO	RIO_RIGUTINO2	2500	TR30	30.70	243.05	246.53	245.04	246.61	0.001269	1.30	23.66	10.14	0.27
RIO_RIGUTINO	RIO_RIGUTINO2	2500	TR200	50.20	243.05	247.25	245.53	247.39	0.001576	1.62	31.03	10.14	0.30
RIO_RIGUTINO	RIO_RIGUTINO2	2000	TR30	30.70	243.05	246.33	245.04	246.43	0.001636	1.42	21.67	10.14	0.31
RIO_RIGUTINO	RIO_RIGUTINO2	2000	TR200	50.20	243.05	247.01	245.53	247.16	0.001994	1.76	28.53	10.14	0.33
RIO_RIGUTINO	RIO_RIGUTINO2	1019	TR30	30.70	242.22	245.20	244.36	245.34	0.003388	1.66	18.45	13.00	0.45
RIO_RIGUTINO	RIO_RIGUTINO2	1019	TR200	50.20	242.22	245.88	244.92	246.06	0.002750	1.84	27.30	13.00	0.41
RIO_RIGUTINO	RIO_RIGUTINO2	956	TR30	30.70	242.18	245.12	244.22	245.28	0.003192	1.74	17.61	10.97	0.44
RIO_RIGUTINO	RIO_RIGUTINO2	956	TR200	50.20	242.18	245.81	244.71	246.00	0.003016	1.95	25.73	12.00	0.43
RIO_RIGUTINO	RIO_RIGUTINO2	200	TR30	30.70	240.91	243.96	243.35	244.21	0.005842	2.19	14.02	8.72	0.55
RIO_RIGUTINO	RIO_RIGUTINO2	200	TR200	50.20	240.91	244.85	243.84	245.10	0.004249	2.23	22.55	10.00	0.47
RIO_GROSSO	Aff_Sx	1658	TR30	2.70	293.24	293.63	293.64	293.76	0.027907	1.61	1.68	6.93	1.05
RIO_GROSSO	Aff_Sx	1658	TR200	4.30	293.24	293.72	293.73	293.89	0.027919	1.87	2.30	7.50	1.08
RIO_GROSSO	Aff_Sx	38	TR30	2.70	279.50	279.91	279.93	280.05	0.027608	1.69	1.63	6.66	1.05
RIO_GROSSO	Aff_Sx	38	TR200	4.30	279.50	280.00	280.02	280.19	0.027578	1.95	2.26	7.22	1.09
RIO_GROSSO	Rio_Grosso1	2997	TR30	14.70	299.90	300.80	300.83	301.12	0.022758	2.51	5.87	10.59	1.07
RIO_GROSSO	Rio_Grosso1	2997	TR200	24.80	299.90	301.02	301.09	301.48	0.022769	2.99	8.29	11.34	1.12
RIO_GROSSO	Rio_Grosso1	1428	TR30	14.70	289.47	290.63	290.64	290.98	0.019817	2.61	5.62	8.40	1.02
RIO_GROSSO	Rio_Grosso1	1428	TR200	24.80	289.47	290.92	290.96	291.37	0.019676	2.98	8.33	10.18	1.05
RIO_GROSSO	Rio_Grosso1	1075	TR30	14.70	285.78	288.09	286.92	288.16	0.001764	1.16	12.63	8.78	0.31
RIO_GROSSO	Rio_Grosso1	1075	TR200	24.80	285.78	288.73	287.31	288.81	0.001692	1.30	19.06	10.86	0.31
RIO_GROSSO	Rio_Grosso1	1000		Culvert									
RIO_GROSSO	Rio_Grosso1	997	TR30	14.70	285.58	286.75	286.59	286.98	0.010608	2.17	6.79	8.31	0.77
RIO_GROSSO	Rio_Grosso1	997	TR200	24.80	285.58	287.18	286.92	287.45	0.008355	2.30	10.80	10.02	0.71
RIO_GROSSO	Rio_Grosso1	832	TR30	14.70	284.88	286.63	286.15	286.69	0.002664	1.16	12.66	13.26	0.38
RIO_GROSSO	Rio_Grosso1	832	TR200	24.80	284.88	287.13	286.37	287.21	0.002013	1.27	19.54	13.98	0.34
RIO_GROSSO	Rio_Grosso1	595	TR30	14.70	284.28	285.74	285.74	286.23	0.022075	3.11	4.73	4.79	1.00
RIO_GROSSO	Rio_Grosso1	595	TR200	24.80	284.28	286.18	286.18	286.82	0.021821	3.53	7.02	5.55	1.00
RIO_GROSSO	Rio_Grosso1	351	TR30	14.70	280.92	282.12	282.54	283.35	0.078708	4.90	3.00	4.05	1.82
RIO_GROSSO	Rio_Grosso1	351	TR200	24.80	280.92	282.46	282.96	283.96	0.077497	5.41	4.58	5.25	1.85
RIO_GROSSO	Rio_Grosso1	217	TR30	14.70	280.51	282.30	282.09	282.62	0.011828	2.48	5.92	5.40	0.76
RIO_GROSSO	Rio_Grosso1	217	TR200	24.80	280.51	282.79	282.52	283.20	0.011653	2.83	8.75	6.32	0.77
RIO_GROSSO	Rio_Grosso1	215		Bridge									
RIO_GROSSO	Rio_Grosso1	210	TR30	14.70	280.51	282.09	282.09	282.57	0.021006	3.06	4.80	4.98	1.00
RIO_GROSSO	Rio_Grosso1	210	TR200	24.80	280.51	282.52	282.52	283.14	0.020103	3.47	7.15	5.82	1.00
RIO_GROSSO	Rio_Grosso2	10594	TR30	18.55	278.45	279.36	279.64	280.36	0.055911	4.44	4.18	4.88	1.53
RIO_GROSSO	Rio_Grosso2	10594	TR200	30.90	278.45	279.75	280.10	281.05	0.051090	5.06	6.11	4.94	1.45
RIO_GROSSO	Rio_Grosso2	10552		Bridge									
RIO_GROSSO	Rio_Grosso2	10551	TR30	18.55	277.94	278.79	279.00	279.59	0.048306	3.95	4.70	6.20	1.45
RIO_GROSSO	Rio_Grosso2	10551	TR200	30.90	277.94	279.06	279.40	280.25	0.052480	4.83	6.40	6.23	1.52

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_GROSSO	Rio_Grosso2	10226	TR30	18.55	274.77	276.80	276.57	277.15	0.012187	2.62	7.08	6.14	0.78
RIO_GROSSO	Rio_Grosso2	10226	TR200	30.90	274.77	277.37	277.06	277.77	0.010510	2.80	11.02	7.76	0.75
RIO_GROSSO	Rio_Grosso2	9870	TR30	18.55	273.42	275.26	275.14	275.67	0.015309	2.82	6.58	6.10	0.87
RIO_GROSSO	Rio_Grosso2	9870	TR200	30.90	273.42	275.60	275.60	276.23	0.019469	3.51	8.80	7.02	1.00
RIO_GROSSO	Rio_Grosso2	9490	TR30	18.55	271.39	273.21	273.17	273.69	0.019095	3.07	6.05	5.82	0.96
RIO_GROSSO	Rio_Grosso2	9490	TR200	30.90	271.39	274.10	273.64	274.42	0.007841	2.48	12.44	8.49	0.66
RIO_GROSSO	Rio_Grosso2	9246	TR30	18.55	270.28	272.47	272.01	272.73	0.008193	2.29	8.10	6.18	0.64
RIO_GROSSO	Rio_Grosso2	9246	TR200	30.90	270.28	273.99	272.54	274.10	0.001919	1.50	20.60	9.68	0.33
RIO_GROSSO	Rio_Grosso2	8845	TR30	18.55	268.75	270.86	270.44	271.33	0.016818	3.02	6.15	3.25	0.70
RIO_GROSSO	Rio_Grosso2	8845	TR200	30.90	268.75	273.54	271.08	273.74	0.004666	2.00	15.46	3.54	0.31
RIO_GROSSO	Rio_Grosso2	8780		Bridge									
RIO_GROSSO	Rio_Grosso2	8707	TR30	18.55	268.33	269.62	270.00	270.85	0.063952	4.93	3.77	4.50	1.72
RIO_GROSSO	Rio_Grosso2	8707	TR200	30.90	268.33	269.80	270.49	272.08	0.100255	6.69	4.62	4.74	2.16
RIO_GROSSO	Rio_Grosso2	8524	TR30	18.55	267.52	269.27	269.27	269.74	0.020587	3.04	6.10	6.51	1.00
RIO_GROSSO	Rio_Grosso2	8524	TR200	30.90	267.52	269.73	269.70	270.27	0.017447	3.25	9.52	8.19	0.96
RIO_GROSSO	Rio_Grosso2	8223	TR30	19.70	266.05	268.36	267.97	268.59	0.007480	2.14	9.22	7.80	0.63
RIO_GROSSO	Rio_Grosso2	8223	TR200	32.70	266.05	268.76	268.40	269.10	0.008952	2.61	12.55	9.03	0.71
RIO_GROSSO	Rio_Grosso2	7992	TR30	19.70	265.38	267.26	267.26	267.76	0.020347	3.11	6.34	6.43	1.00
RIO_GROSSO	Rio_Grosso2	7992	TR200	32.70	265.38	267.87	267.70	268.34	0.013249	3.02	10.83	8.36	0.85
RIO_GROSSO	Rio_Grosso2	7568	TR30	19.70	264.03	266.58	265.56	266.67	0.001932	1.29	15.23	9.58	0.33
RIO_GROSSO	Rio_Grosso2	7568	TR200	32.70	264.03	267.83	265.95	267.90	0.000990	1.20	27.24	9.65	0.23
RIO_GROSSO	Rio_Grosso2	7520		Bridge									
RIO_GROSSO	Rio_Grosso2	7513	TR30	19.70	263.69	266.00	265.46	266.16	0.004832	1.78	11.09	9.31	0.52
RIO_GROSSO	Rio_Grosso2	7513	TR200	32.70	263.69	265.28	265.87	267.17	0.094647	6.09	5.37	6.57	2.15
RIO_GROSSO	Rio_Grosso2	7256	TR30	19.70	262.96	264.88	264.88	265.42	0.022170	3.25	6.06	5.72	1.01
RIO_GROSSO	Rio_Grosso2	7256	TR200	32.70	262.96	266.03	265.44	266.21	0.004455	1.87	17.44	11.82	0.49
RIO_GROSSO	Rio_Grosso2	7039	TR30	19.70	262.28	264.25	263.85	264.49	0.007093	2.14	9.19	7.64	0.62
RIO_GROSSO	Rio_Grosso2	7039	TR200	32.70	262.28	265.94	264.29	266.03	0.001259	1.34	24.47	9.37	0.26
RIO_GROSSO	Rio_Grosso2	7000		Bridge									
RIO_GROSSO	Rio_Grosso2	6982	TR30	19.70	262.15	263.57	263.71	264.21	0.028926	3.56	5.54	6.34	1.22
RIO_GROSSO	Rio_Grosso2	6982	TR200	32.70	262.15	263.62	264.13	265.21	0.068455	5.58	5.85	6.50	1.88
RIO_GROSSO	Rio_Grosso2	6628	TR30	19.70	260.81	262.87	262.51	263.11	0.007494	2.17	9.06	7.86	0.65
RIO_GROSSO	Rio_Grosso2	6628	TR200	32.70	260.81	263.41	262.94	263.70	0.006725	2.38	13.76	9.59	0.63
RIO_GROSSO	Rio_Grosso2	6470	TR30	19.70	260.31	262.08	262.08	262.55	0.019240	3.02	6.52	6.96	1.00
RIO_GROSSO	Rio_Grosso2	6470	TR200	32.70	260.31	263.21	262.50	263.42	0.004279	2.05	15.98	8.94	0.49
RIO_GROSSO	Rio_Grosso2	6399	TR30	19.70	259.55	262.31	260.89	262.34	0.000628	0.78	25.38	16.30	0.20
RIO_GROSSO	Rio_Grosso2	6399	TR200	32.70	259.55	263.32	261.23	263.35	0.000371	0.78	42.09	16.79	0.16
RIO_GROSSO	Rio_Grosso2	6370		Bridge									
RIO_GROSSO	Rio_Grosso2	6341	TR30	19.70	259.55	262.00	260.89	262.05	0.001117	0.96	20.57	14.93	0.26
RIO_GROSSO	Rio_Grosso2	6341	TR200	32.70	259.55	262.92	261.23	262.97	0.000617	0.92	35.55	16.60	0.20
RIO_GROSSO	Rio_Grosso2	6327	TR30	19.70	259.55	261.99	260.89	262.04	0.001135	0.96	20.45	14.89	0.26
RIO_GROSSO	Rio_Grosso2	6327	TR200	32.70	259.55	262.92	261.23	262.96	0.000621	0.92	35.48	16.60	0.20
RIO_GROSSO	Rio_Grosso2	6315		Bridge									
RIO_GROSSO	Rio_Grosso2	6302	TR30	19.70	259.55	260.48	260.89	261.81	0.107144	5.11	3.85	7.06	2.21
RIO_GROSSO	Rio_Grosso2	6302	TR200	32.70	259.55	260.66	261.23	262.66	0.127293	6.26	5.22	8.00	2.48
RIO_GROSSO	Rio_Grosso2	5794	TR30	19.70	257.82	259.75	259.13	259.94	0.005085	1.93	10.20	6.93	0.51
RIO_GROSSO	Rio_Grosso2	5794	TR200	32.70	257.82	260.45	259.57	260.68	0.004524	2.11	15.53	8.10	0.49
RIO_GROSSO	Rio_Grosso2	5761		Bridge									
RIO_GROSSO	Rio_Grosso2	5727	TR30	20.15	257.82	259.47	259.15	259.77	0.009108	2.41	8.37	6.46	0.68
RIO_GROSSO	Rio_Grosso2	5727	TR200	33.35	257.82	260.14	259.58	260.47	0.007540	2.56	13.04	7.61	0.62
RIO_GROSSO	Rio_Grosso2	5709	TR30	20.15	257.82	259.34	259.15	259.71	0.012112	2.67	7.54	6.23	0.78
RIO_GROSSO	Rio_Grosso2	5709	TR200	33.35	257.82	260.06	259.58	260.43	0.008515	2.68	12.46	7.48	0.66
RIO_GROSSO	Rio_Grosso2	5701		Bridge									
RIO_GROSSO	Rio_Grosso2	5692	TR30	20.15	257.82	259.11	259.15	259.67	0.022597	3.31	6.09	6.14	1.06
RIO_GROSSO	Rio_Grosso2	5692	TR200	33.35	257.82	259.38	259.58	260.32	0.030607	4.30	7.76	6.29	1.24
RIO_GROSSO	Rio_Grosso2	4279	TR30	20.15	254.10	256.16	255.58	256.23	0.002565	1.17	17.26	18.74	0.39
RIO_GROSSO	Rio_Grosso2	4279	TR200	33.35	254.10	256.63	255.86	256.71	0.002104	1.23	27.10	23.45	0.37
RIO_GROSSO	Rio_Grosso2	4255		Bridge									
RIO_GROSSO	Rio_Grosso2	4230	TR30	20.15	254.10	255.87	255.57	256.01	0.006397	1.65	12.24	15.73	0.60
RIO_GROSSO	Rio_Grosso2	4230	TR200	33.35	254.10	256.29	255.86	256.44	0.004899	1.69	19.77	20.09	0.54
RIO_GROSSO	Rio_Grosso2	1745	TR30	20.60	246.57	248.06	247.84	248.52	0.016704	3.02	6.83	4.59	0.79
RIO_GROSSO	Rio_Grosso2	1745	TR200	34.00	246.57	248.64	248.35	249.29	0.023767	3.58	9.50	4.59	0.79
RIO_GROSSO	Rio_Grosso2	1729		Bridge									
RIO_GROSSO	Rio_Grosso2	1713	TR30	20.60	244.57	245.84	245.84	246.48	0.025887	3.52	5.85	4.59	1.00
RIO_GROSSO	Rio_Grosso2	1713	TR200	34.00	244.57	246.35	246.35	247.23	0.027774	4.17	8.15	4.59	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_GROSSO	Rio_Grosso2	1000	TR30	20.60	241.03	244.08	242.97	244.16	0.001565	1.21	17.08	10.00	0.29
RIO_GROSSO	Rio_Grosso2	1000	TR200	34.00	241.03	244.97	243.41	245.05	0.001264	1.31	25.91	10.00	0.26
RIO_GROSSO	Rio_Grosso3	700	TR30	51.30	240.78	243.48	242.98	243.92	0.007638	2.91	17.63	8.94	0.66
RIO_GROSSO	Rio_Grosso3	700	TR200	84.20	240.78	244.14	243.59	244.80	0.009111	3.58	23.50	8.94	0.71
RIO_GROSSO	Rio_Grosso3	675	TR30	51.30	238.82	241.24	240.63	241.45	0.004870	2.01	25.49	18.35	0.55
RIO_GROSSO	Rio_Grosso3	675	TR200	84.20	238.82	241.83	241.11	242.08	0.004878	2.18	38.54	24.81	0.56
RIO_DI_VITIANO	RIO_DI_VITIANO1	8693	TR30	14.25	325.21	326.33	326.37	326.75	0.022499	2.89	4.93	6.69	1.08
RIO_DI_VITIANO	RIO_DI_VITIANO1	8693	TR200	24.55	325.21	326.66	326.74	327.23	0.022516	3.34	7.36	8.03	1.11
RIO_DI_VITIANO	RIO_DI_VITIANO1	8355	TR30	14.25	319.45	320.46	320.97	322.11	0.115750	5.69	2.51	3.65	2.19
RIO_DI_VITIANO	RIO_DI_VITIANO1	8355	TR200	24.55	319.45	320.82	321.44	322.78	0.098810	6.20	3.96	4.43	2.10
RIO_DI_VITIANO	RIO_DI_VITIANO1	7981	TR30	14.25	313.04	315.03	313.97	315.09	0.001213	1.02	13.90	9.01	0.26
RIO_DI_VITIANO	RIO_DI_VITIANO1	7981	TR200	24.55	313.04	315.92	314.31	315.98	0.000952	1.09	22.54	10.50	0.24
RIO_DI_VITIANO	RIO_DI_VITIANO1	7971		Bridge									
RIO_DI_VITIANO	RIO_DI_VITIANO1	7961	TR30	14.25	312.41	313.22	313.67	314.68	0.101631	5.36	2.66	3.68	2.01
RIO_DI_VITIANO	RIO_DI_VITIANO1	7961	TR200	24.55	312.41	313.56	314.16	315.52	0.097436	6.20	3.96	3.97	1.98
RIO_DI_VITIANO	RIO_DI_VITIANO1	7433	TR30	14.25	302.96	304.82	303.95	304.88	0.001628	1.09	13.05	10.49	0.31
RIO_DI_VITIANO	RIO_DI_VITIANO1	7433	TR200	24.55	302.96	305.34	304.29	305.42	0.001740	1.29	19.03	12.41	0.33
RIO_DI_VITIANO	RIO_DI_VITIANO1	7136	TR30	14.25	303.15	304.11	304.09	304.49	0.019235	2.73	5.22	6.41	0.97
RIO_DI_VITIANO	RIO_DI_VITIANO1	7136	TR200	24.55	303.15	304.45	304.45	305.00	0.019812	3.28	7.49	6.86	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	6761	TR30	14.25	301.22	302.79	302.42	303.03	0.008678	2.18	6.52	5.04	0.61
RIO_DI_VITIANO	RIO_DI_VITIANO1	6761	TR200	24.55	301.22	303.72	303.10	303.84	0.003682	1.56	15.69	11.20	0.42
RIO_DI_VITIANO	RIO_DI_VITIANO1	6760		Bridge									
RIO_DI_VITIANO	RIO_DI_VITIANO1	6739	TR30	14.25	301.08	302.29	302.44	302.94	0.034928	3.55	4.02	5.17	1.28
RIO_DI_VITIANO	RIO_DI_VITIANO1	6739	TR200	24.55	301.08	302.56	302.85	303.60	0.042717	4.52	5.43	5.33	1.43
RIO_DI_VITIANO	RIO_DI_VITIANO1	6491	TR30	14.25	300.01	301.05	301.05	301.40	0.020746	2.63	5.42	7.71	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	6491	TR200	24.55	300.01	301.45	301.38	301.85	0.015492	2.81	8.75	8.80	0.30
RIO_DI_VITIANO	RIO_DI_VITIANO1	6268	TR30	14.25	298.90	300.31	299.94	300.52	0.007141	2.02	7.04	5.98	0.60
RIO_DI_VITIANO	RIO_DI_VITIANO1	6268	TR200	24.55	298.90	300.91	300.33	301.16	0.006654	2.20	11.18	7.99	0.59
RIO_DI_VITIANO	RIO_DI_VITIANO1	6260		Culvert									
RIO_DI_VITIANO	RIO_DI_VITIANO1	6149	TR30	14.25	297.61	298.17	298.61	300.05	0.226746	6.07	2.35	5.88	3.07
RIO_DI_VITIANO	RIO_DI_VITIANO1	6149	TR200	24.55	297.61	298.98	298.98	299.55	0.020897	3.36	7.30	6.37	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	5990	TR30	14.25	293.02	293.72	294.00	294.64	0.066579	4.25	3.36	5.75	1.78
RIO_DI_VITIANO	RIO_DI_VITIANO1	5990	TR200	24.55	293.02	293.67	294.38	296.96	0.261407	8.04	3.05	5.64	3.49
RIO_DI_VITIANO	RIO_DI_VITIANO1	5737	TR30	14.25	292.05	293.10	293.08	293.54	0.020719	2.95	4.83	5.20	0.98
RIO_DI_VITIANO	RIO_DI_VITIANO1	5737	TR200	24.55	292.05	293.50	293.50	294.13	0.021356	3.52	6.98	5.59	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	5314	TR30	14.25	290.40	291.79	291.53	291.95	0.007541	1.73	8.22	10.65	0.63
RIO_DI_VITIANO	RIO_DI_VITIANO1	5314	TR200	24.55	290.40	292.35	291.84	292.48	0.004314	1.61	15.26	14.58	0.50
RIO_DI_VITIANO	RIO_DI_VITIANO1	5079	TR30	28.50	288.63	290.45	290.45	291.00	0.017714	3.30	8.63	7.70	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	5079	TR200	51.11	288.63	291.03	291.03	291.74	0.016560	3.74	13.67	9.56	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	4651	TR30	28.50	285.78	287.38	287.49	287.97	0.029782	3.38	8.42	10.57	1.21
RIO_DI_VITIANO	RIO_DI_VITIANO1	4651	TR200	51.11	285.78	287.70	287.93	288.66	0.033343	4.33	11.80	10.57	1.31
RIO_DI_VITIANO	RIO_DI_VITIANO1	4313	TR30	28.50	283.65	285.34	285.34	285.79	0.017879	2.95	9.65	10.92	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	4313	TR200	51.11	283.65	285.78	285.78	286.40	0.016918	3.51	14.56	11.72	1.01
RIO_DI_VITIANO	RIO_DI_VITIANO1	3953	TR30	28.50	279.14	281.89	280.92	282.14	0.004916	2.17	13.11	5.80	0.46
RIO_DI_VITIANO	RIO_DI_VITIANO1	3953	TR200	51.11	279.14	282.77	281.61	283.16	0.006517	2.79	18.32	6.18	0.52
RIO_DI_VITIANO	RIO_DI_VITIANO1	3950		Bridge									
RIO_DI_VITIANO	RIO_DI_VITIANO1	3932	TR30	28.50	279.26	281.46	281.27	282.01	0.015576	3.31	8.62	5.56	0.85
RIO_DI_VITIANO	RIO_DI_VITIANO1	3932	TR200	51.11	279.26	282.01	282.01	282.95	0.021153	4.29	11.92	6.35	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	2877	TR30	28.50	274.50	278.11	276.54	278.36	0.008465	2.23	12.78	7.10	0.53
RIO_DI_VITIANO	RIO_DI_VITIANO1	2877	TR200	51.11	274.50	280.12	277.99	280.26	0.002345	1.68	30.46	8.99	0.29
RIO_DI_VITIANO	RIO_DI_VITIANO1	2851		Bridge									
RIO_DI_VITIANO	RIO_DI_VITIANO1	2824	TR30	28.50	274.50	277.53	276.54	277.97	0.013082	2.96	9.64	3.25	0.55
RIO_DI_VITIANO	RIO_DI_VITIANO1	2824	TR200	51.11	274.50	278.47	277.99	279.01	0.016270	3.25	15.71	8.67	0.77
RIO_DI_VITIANO	RIO_DI_VITIANO1	1997	TR30	28.50	271.72	273.55	273.55	274.11	0.018008	3.33	8.57	7.59	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	1997	TR200	51.11	271.72	274.18	274.18	274.84	0.016735	3.58	14.26	10.83	1.00
RIO_DI_VITIANO	RIO_DI_VITIANO1	1136	TR30	28.50	267.91	269.67	269.39	269.79	0.006561	1.66	21.99	65.92	0.61
RIO_DI_VITIANO	RIO_DI_VITIANO1	1136	TR200	51.11	267.91	269.89	269.79	270.02	0.005630	1.79	36.66	66.40	0.58
RIO_DI_VITIANO	RIO_DI_VITIANO1	1118	TR30	28.50	267.90	269.72	268.94	269.75	0.000910	0.78	36.56	33.99	0.24
RIO_DI_VITIANO	RIO_DI_VITIANO1	1118	TR200	51.11	267.90	269.91	269.22	269.99	0.001721	1.19	43.07	33.99	0.34
RIO_DI_VITIANO	RIO_DI_VITIANO1	1093	TR30	28.50	267.89	269.60	269.44	269.73	0.007406	1.75	21.02	58.42	0.64
RIO_DI_VITIANO	RIO_DI_VITIANO1	1093	TR200	51.11	267.89	269.84	269.74	269.96	0.006643	1.71	35.76	63.91	0.62
RIO_DI_VITIANO	RIO_DI_VITIANO1	31	TR30	28.50	265.28	266.40	266.40	266.61	0.013009	2.25	14.98	31.26	0.85
RIO_DI_VITIANO	RIO_DI_VITIANO1	31	TR200	51.11	265.28	266.61	266.61	266.92	0.014095	2.74	21.54	31.42	0.91
RIO_DEL_CHIO	RIO_DEL_CHIO1	3660	TR30	5.20	290.90	292.28	292.28	292.72	0.038592	2.91	1.78	2.06	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	3660	TR200	8.70	290.90	292.96	292.64	293.34	0.023385	2.73	3.18	2.06	0.70

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_DEL_CHIO	RIO_DEL_CHIO1	3332	TR30	5.20	287.45	289.92	289.05	290.13	0.016978	2.00	2.60	1.25	0.44
RIO_DEL_CHIO	RIO_DEL_CHIO1	3332	TR200	8.70	287.45	290.69	289.55	290.99	0.023345	2.45	3.56	1.25	0.46
RIO_DEL_CHIO	RIO_DEL_CHIO1	3331											
RIO_DEL_CHIO	RIO_DEL_CHIO1	3330	TR30	5.20	287.45	289.05	289.05	289.65	0.061540	3.44	1.51	1.25	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	3330	TR200	8.70	287.45	289.55	289.55	290.40	0.075518	4.08	2.13	1.25	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	3166	TR30	5.20	285.96	287.51	287.13	287.65	0.008171	1.67	3.11	2.93	0.52
RIO_DEL_CHIO	RIO_DEL_CHIO1	3166	TR200	8.70	285.96	287.96	287.41	288.16	0.008707	1.96	4.45	2.93	0.51
RIO_DEL_CHIO	RIO_DEL_CHIO1	2984	TR30	5.20	285.27	286.46	286.46	286.83	0.031217	2.69	1.93	2.59	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	2984	TR200	8.70	285.27	286.79	286.76	287.29	0.032047	3.14	2.77	2.59	0.97
RIO_DEL_CHIO	RIO_DEL_CHIO1	2781	TR30	5.20	283.93	285.27	285.08	285.48	0.014077	2.00	2.59	3.27	0.72
RIO_DEL_CHIO	RIO_DEL_CHIO1	2781	TR200	8.70	283.93	285.56	285.38	285.87	0.016055	2.43	3.57	3.36	0.75
RIO_DEL_CHIO	RIO_DEL_CHIO1	2483	TR30	5.20	282.03	283.44	283.44	283.69	0.029155	2.23	2.34	4.62	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	2483	TR200	8.70	282.03	283.65	283.65	283.98	0.027827	2.54	3.42	5.23	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	2155	TR30	5.20	279.88	281.99	281.01	282.05	0.002450	1.09	4.75	2.96	0.28
RIO_DEL_CHIO	RIO_DEL_CHIO1	2155	TR200	8.70	279.88	282.49	281.33	282.59	0.003453	1.40	6.23	2.96	0.31
RIO_DEL_CHIO	RIO_DEL_CHIO1	2140											
RIO_DEL_CHIO	RIO_DEL_CHIO1	1269	TR30	5.20	277.62	278.01	278.01	278.11	0.026780	1.44	3.61	17.21	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	1269	TR200	8.70	277.62	278.09	278.09	278.24	0.023783	1.69	5.14	17.48	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	1141	TR30	5.20	275.58	276.87	276.86	277.09	0.014974	2.09	2.49	3.08	0.74
RIO_DEL_CHIO	RIO_DEL_CHIO1	1141	TR200	8.70	275.58	277.24	277.01	277.52	0.014245	2.34	3.72	3.42	0.71
RIO_DEL_CHIO	RIO_DEL_CHIO1	896	TR30	5.20	274.05	275.24	275.24	275.61	0.027036	2.68	1.94	2.63	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	896	TR200	8.70	274.05	275.55	275.55	276.05	0.028007	3.11	2.80	2.82	1.00
RIO_DEL_CHIO	RIO_DEL_CHIO1	667	TR30	5.20	272.17	273.35	273.20	273.55	0.013093	1.97	2.63	3.64	0.74
RIO_DEL_CHIO	RIO_DEL_CHIO1	667	TR200	8.70	272.17	273.68	273.47	273.93	0.011949	2.21	3.94	4.12	0.72
RIO_DEL_CHIO	RIO_DEL_CHIO1	336	TR30	5.20	270.49	272.06	271.80	272.25	0.012648	1.96	2.66	3.06	0.67
RIO_DEL_CHIO	RIO_DEL_CHIO1	336	TR200	8.70	270.49	272.41	272.14	272.67	0.013254	2.26	3.85	3.68	0.71
RIO_DEL_CHIO	RIO_DEL_CHIO1	6	TR30	5.20	269.16	270.41	270.35	270.68	0.019522	2.29	2.27	3.26	0.88
RIO_DEL_CHIO	RIO_DEL_CHIO1	6	TR200	8.70	269.16	270.71	270.64	271.06	0.019517	2.62	3.32	3.85	0.90
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	10129	TR30	1.30	388.59	389.44	389.47	389.69	0.047655	2.25	0.58	1.37	1.11
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	10129	TR200	2.20	388.59	389.62	389.67	389.96	0.047575	2.57	0.86	1.66	1.14
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	9019	TR30	1.30	308.05	308.78	308.78	309.00	0.035626	2.05	0.63	1.47	1.00
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	9019	TR200	2.20	308.05	308.98	308.98	309.25	0.035163	2.33	0.95	1.70	1.00
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	8897	TR30	1.30	305.98	306.45	306.59	306.91	0.102888	3.01	0.43	1.59	1.84
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	8897	TR200	2.20	305.98	306.57	306.76	307.17	0.103572	3.44	0.64	1.92	1.90
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	8758	TR30	1.30	297.38	299.30	298.03	299.30	0.000138	0.24	5.47	5.94	0.08
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	8758	TR200	2.20	297.38	299.96	298.23	299.96	0.000075	0.22	10.06	7.88	0.06
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	8000											
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	7450	TR30	1.30	268.14	268.59	268.59	268.76	0.028571	1.84	0.71	2.06	1.00
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	7450	TR200	2.20	268.14	268.74	268.74	268.97	0.027328	2.11	1.04	2.28	1.00
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	7174	TR30	1.30	265.99	267.10	266.56	267.13	0.003928	0.78	1.67	3.53	0.36
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	7174	TR200	2.20	265.99	267.37	266.76	267.40	0.003095	0.69	3.19	7.63	0.34
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	6907	TR30	5.82	263.95	265.29	265.29	265.70	0.030026	2.84	2.05	2.50	1.00
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	6907	TR200	9.15	263.95	265.59	265.59	266.11	0.030271	3.19	2.87	2.79	1.00
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	5093	TR30	5.82	253.62	255.96	254.62	256.00	0.001275	0.87	6.72	3.34	0.20
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	5093	TR200	9.15	253.62	256.33	254.87	256.40	0.002064	1.15	7.93	3.34	0.24
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	5051											
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	5008	TR30	5.82	253.62	254.40	254.62	255.12	0.075991	3.76	1.55	3.13	1.71
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	5008	TR200	9.15	253.62	254.60	254.87	255.51	0.070638	4.23	2.16	3.23	1.65
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4612	TR30	5.82	251.16	252.44	251.98	252.48	0.002254	0.91	6.42	9.13	0.35
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4612	TR200	9.15	251.16	252.76	252.15	252.81	0.001800	0.95	9.62	10.74	0.32
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4579											
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4546	TR30	5.82	251.16	252.13	251.98	252.25	0.009127	1.51	3.87	7.35	0.66
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4546	TR200	9.15	251.16	252.59	252.15	252.66	0.003207	1.17	7.81	9.86	0.42
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4170	TR30	10.35	249.99	251.77	251.12	251.86	0.002995	1.28	8.07	7.50	0.39
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4170	TR200	16.10	249.99	252.37	251.40	252.44	0.001994	1.23	13.10	9.45	0.33
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4150											
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4129	TR30	10.35	249.99	250.88	251.12	251.65	0.059178	3.89	2.66	4.56	1.63
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	4129	TR200	16.10	249.99	251.03	251.40	252.18	0.074971	4.76	3.38	5.05	1.86
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	2122	TR30	10.35	244.87	247.48	245.91	247.50	0.000361	0.58	17.81	11.66	0.15
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	2122	TR200	16.10	244.87	247.83	246.16	247.85	0.000472	0.74	21.86	11.66	0.17
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	2102											
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	2081	TR30	10.35	244.87	246.13	245.91	246.31	0.008766	1.91	5.41	6.71	0.68
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	2081	TR200	16.10	244.87	246.69	246.16	246.83	0.004297	1.66	9.67	8.49	0.50
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	122	TR30	10.35	242.55	245.95	243.70	245.96	0.000164	0.46	22.34	9.76	0.10
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	122	TR200	16.10	242.55	246.41	243.98	246.43	0.000236	0.60	26.83	9.76	0.12

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_DEGLI_OPPI	RIO_DEGLI_OPPI_1	109											
			Bridge										
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	95	TR30	10.35	242.55	245.74	243.70	245.75	0.000215	0.51	20.33	9.76	0.11
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_1	95	TR200	16.10	242.55	246.32	243.98	246.34	0.000258	0.62	25.99	9.76	0.12
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_2	190	TR30	35.90	242.76	245.18	245.08	245.65	0.014242	3.03	11.84	10.01	0.89
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_2	190	TR200	55.70	242.76	245.60	245.47	246.21	0.013804	3.48	15.99	10.01	0.88
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_2	185	TR30	35.90	236.58	239.00	238.70	239.43	0.009998	2.89	12.43	8.48	0.76
RIO_DEGLI_OPPI	RIO_DEGLI_OPPI_2	185	TR200	55.70	236.58	239.56	239.23	240.06	0.010002	3.12	17.85	10.98	0.78
FOSSO_RIOLO	FOSSO_RIOLO1	11460	TR30	5.60	291.92	292.73	292.73	292.95	0.022267	2.09	2.67	5.97	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	11460	TR200	9.30	291.92	292.92	292.92	293.21	0.020853	2.39	3.89	6.60	0.99
FOSSO_RIOLO	FOSSO_RIOLO1	11100	TR30	5.60	284.93	285.94	286.30	287.31	0.212861	5.18	1.08	2.69	2.61
FOSSO_RIOLO	FOSSO_RIOLO1	11100	TR200	9.30	284.93	286.11	286.55	287.84	0.207366	5.82	1.60	3.28	2.66
FOSSO_RIOLO	FOSSO_RIOLO1	10816	TR30	5.60	280.08	281.13	281.19	281.49	0.029563	2.64	2.12	3.76	1.12
FOSSO_RIOLO	FOSSO_RIOLO1	10816	TR200	9.30	280.08	281.35	281.43	281.84	0.030687	3.10	3.00	4.12	1.16
FOSSO_RIOLO	FOSSO_RIOLO1	10434	TR30	5.60	276.40	278.25	277.49	278.29	0.001616	0.88	6.34	6.64	0.29
FOSSO_RIOLO	FOSSO_RIOLO1	10434	TR200	9.30	276.40	278.98	277.76	279.01	0.000833	0.82	11.28	6.78	0.20
FOSSO_RIOLO	FOSSO_RIOLO1	10400											
			Bridge										
FOSSO_RIOLO	FOSSO_RIOLO1	10390	TR30	5.60	276.15	276.87	277.13	277.67	0.081529	3.97	1.41	2.96	1.84
FOSSO_RIOLO	FOSSO_RIOLO1	10390	TR200	9.30	276.15	277.03	277.41	278.24	0.097708	4.87	1.91	3.31	2.05
FOSSO_RIOLO	FOSSO_RIOLO1	10135	TR30	5.60	274.72	275.86	275.78	276.10	0.016455	2.13	2.63	3.97	0.84
FOSSO_RIOLO	FOSSO_RIOLO1	10135	TR200	9.30	274.72	276.09	276.03	276.44	0.018906	2.62	3.55	4.00	0.89
FOSSO_RIOLO	FOSSO_RIOLO1	9940	TR30	5.60	273.99	274.73	274.73	274.97	0.021446	2.14	2.61	5.53	0.99
FOSSO_RIOLO	FOSSO_RIOLO1	9940	TR200	9.30	273.99	274.93	274.93	275.25	0.020575	2.50	3.72	5.87	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	9682	TR30	5.60	271.75	273.26	272.69	273.32	0.002473	1.08	5.18	5.12	0.34
FOSSO_RIOLO	FOSSO_RIOLO1	9682	TR200	9.30	271.75	273.88	272.92	273.94	0.001760	1.11	8.35	5.16	0.28
FOSSO_RIOLO	FOSSO_RIOLO1	9660											
			Bridge										
FOSSO_RIOLO	FOSSO_RIOLO1	9657	TR30	5.60	271.78	272.72	272.72	273.17	0.036476	2.97	1.89	2.10	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	9657	TR200	9.30	271.78	273.08	273.08	273.70	0.040552	3.50	2.66	2.12	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	9404	TR30	5.60	269.32	270.17	270.06	270.33	0.011441	1.74	3.22	5.76	0.74
FOSSO_RIOLO	FOSSO_RIOLO1	9404	TR200	9.30	269.32	270.14	270.27	270.62	0.038545	3.10	3.00	5.64	1.35
FOSSO_RIOLO	FOSSO_RIOLO1	9112	TR30	5.60	267.58	268.62	268.62	268.92	0.022335	2.39	2.34	4.03	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	9112	TR200	9.30	267.58	268.88	268.88	269.24	0.020955	2.66	3.50	4.87	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	8843	TR30	5.60	266.41	268.66	267.27	268.66	0.000219	0.32	17.39	20.03	0.11
FOSSO_RIOLO	FOSSO_RIOLO1	8843	TR200	9.30	266.41	268.88	267.51	268.89	0.000295	0.43	21.86	20.52	0.13
FOSSO_RIOLO	FOSSO_RIOLO1	8780											
			Culvert										
FOSSO_RIOLO	FOSSO_RIOLO1	8750	TR30	5.60	265.60	266.76	266.76	267.03	0.024511	2.32	2.41	4.38	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	8750	TR200	9.30	265.60	267.00	267.00	267.35	0.022753	2.62	3.55	5.10	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	8352	TR30	5.60	264.15	265.18	264.92	265.29	0.006327	1.47	3.81	5.45	0.56
FOSSO_RIOLO	FOSSO_RIOLO1	8352	TR200	9.30	264.15	265.55	265.14	265.67	0.004891	1.54	6.03	6.46	0.51
FOSSO_RIOLO	FOSSO_RIOLO1	8075	TR30	5.60	262.86	264.03	263.92	264.35	0.023284	2.51	2.23	2.43	0.84
FOSSO_RIOLO	FOSSO_RIOLO1	8075	TR200	9.30	262.86	264.40	264.26	264.85	0.025319	2.95	3.15	2.51	0.84
FOSSO_RIOLO	FOSSO_RIOLO1	8030											
			Bridge										
FOSSO_RIOLO	FOSSO_RIOLO1	8022	TR30	5.60	263.08	263.69	263.90	264.35	0.085736	3.61	1.55	4.22	1.90
FOSSO_RIOLO	FOSSO_RIOLO1	8022	TR200	9.30	263.08	263.81	264.12	264.80	0.099255	4.41	2.11	4.73	2.11
FOSSO_RIOLO	FOSSO_RIOLO1	7622	TR30	5.60	260.96	264.17	262.15	264.17	0.000128	0.35	15.86	8.93	0.08
FOSSO_RIOLO	FOSSO_RIOLO1	7622	TR200	9.30	260.96	264.42	262.43	264.44	0.000238	0.51	18.16	8.93	0.11
FOSSO_RIOLO	FOSSO_RIOLO1	7600											
			Culvert										
FOSSO_RIOLO	FOSSO_RIOLO1	7592	TR30	5.60	261.17	262.11	262.11	262.42	0.022389	2.45	2.28	3.71	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	7592	TR200	9.30	261.17	262.39	262.39	262.77	0.021068	2.73	3.40	4.43	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	7309	TR30	5.60	259.98	261.55	260.86	261.59	0.001734	0.91	6.14	6.67	0.30
FOSSO_RIOLO	FOSSO_RIOLO1	7309	TR200	9.30	259.98	261.86	261.11	261.93	0.002038	1.10	8.44	7.78	0.34
FOSSO_RIOLO	FOSSO_RIOLO1	7300											
			Bridge										
FOSSO_RIOLO	FOSSO_RIOLO1	7280	TR30	5.60	260.05	261.30	260.94	261.39	0.004705	1.33	4.20	5.47	0.49
FOSSO_RIOLO	FOSSO_RIOLO1	7280	TR200	9.30	260.05	261.63	261.18	261.74	0.004578	1.51	6.16	6.43	0.49
FOSSO_RIOLO	FOSSO_RIOLO1	6931	TR30	9.60	258.68	260.19	260.05	260.46	0.013374	2.29	4.19	5.01	0.80
FOSSO_RIOLO	FOSSO_RIOLO1	6931	TR200	15.50	258.68	260.55	260.37	260.87	0.012072	2.49	6.22	6.03	0.78
FOSSO_RIOLO	FOSSO_RIOLO1	5618	TR30	15.20	255.37	257.06	256.70	257.22	0.006138	1.79	8.48	8.63	0.58
FOSSO_RIOLO	FOSSO_RIOLO1	5618	TR200	24.10	255.37	257.43	256.99	257.64	0.006392	2.00	12.04	10.53	0.60
FOSSO_RIOLO	FOSSO_RIOLO1	3705	TR30	15.20	249.15	250.80	250.80	251.24	0.020288	2.92	5.20	6.04	1.01
FOSSO_RIOLO	FOSSO_RIOLO1	3705	TR200	24.10	249.15	251.17	251.17	251.66	0.018775	3.09	7.81	8.00	1.00
FOSSO_RIOLO	FOSSO_RIOLO1	2048	TR30	15.20	244.17	246.08	245.44	246.20	0.003425	1.52	9.99	8.40	0.45
FOSSO_RIOLO	FOSSO_RIOLO1	2048	TR200	24.10	244.17	246.52	245.77	246.67	0.003505	1.71	14.11	10.04	0.46
FOSSO_RIOLO	FOSSO_RIOLO1	70	TR30	15.20	240.78	242.06	242.00	242.39	0.014766	2.54	5.99	7.28	0.89
FOSSO_RIOLO	FOSSO_RIOLO1	70	TR200	24.10	240.78	242.37	242.30	242.79	0.014785	2.87	8.38	8.40	0.92
FOSSO_POLICIANO	FOSSO_POLICIANO1	10026	TR30	7.50	326.92	327.92	328.00	328.36	0.029877	2.94	2.55	3.93	1.17
FOSSO_POLICIANO	FOSSO_POLICIANO1	10026	TR200	11.70	326.92	328.16	328.27	328.72	0.029833	3.32	3.53	4.46	1.19

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
FOSSO_POLICIANO	FOSSO_POLICIANO1	9737	TR30	7.50	322.65	322.94	323.07	323.39	0.145012	3.08	2.61	17.05	2.29
FOSSO_POLICIANO	FOSSO_POLICIANO1	9737	TR200	11.70	322.65	322.99	323.16	323.63	0.155908	3.70	3.40	17.38	2.47
FOSSO_POLICIANO	FOSSO_POLICIANO1	9719	TR30	7.50	321.98	322.40	322.53	322.82	0.071746	3.16	2.85	13.12	1.72
FOSSO_POLICIANO	FOSSO_POLICIANO1	9719	TR200	11.70	321.98	322.47	322.82	323.01	0.073398	3.61	3.87	13.96	1.79
FOSSO_POLICIANO	FOSSO_POLICIANO1	9637	TR30	7.50	317.11	317.96	318.48	319.90	0.206737	6.18	1.21	2.21	2.66
FOSSO_POLICIANO	FOSSO_POLICIANO1	9637	TR200	11.70	317.11	318.21	318.81	320.29	0.165248	6.37	1.84	2.64	2.44
FOSSO_POLICIANO	FOSSO_POLICIANO1	9565	TR30	7.50	314.88	315.91	316.20	316.79	0.070759	4.15	1.81	2.72	1.63
FOSSO_POLICIANO	FOSSO_POLICIANO1	9565	TR200	11.70	314.88	316.13	316.57	317.30	0.077798	4.80	2.44	3.14	1.74
FOSSO_POLICIANO	FOSSO_POLICIANO1	9322	TR30	7.50	309.74	310.88	311.11	311.65	0.063475	3.88	1.93	3.00	1.55
FOSSO_POLICIANO	FOSSO_POLICIANO1	9322	TR200	11.70	309.74	311.13	311.39	312.07	0.059364	4.28	2.73	3.29	1.50
FOSSO_POLICIANO	FOSSO_POLICIANO1	9200	TR30	7.50	306.02	306.84	307.12	307.87	0.185827	4.51	1.66	5.08	2.51
FOSSO_POLICIANO	FOSSO_POLICIANO1	9200	TR200	11.70	306.02	306.94	307.33	308.40	0.189524	5.34	2.19	5.11	2.61
FOSSO_POLICIANO	FOSSO_POLICIANO1	8998	TR30	7.50	300.25	301.97	300.98	301.99	0.000459	0.50	15.06	15.32	0.16
FOSSO_POLICIANO	FOSSO_POLICIANO1	8998	TR200	11.70	300.25	302.38	301.15	302.39	0.000386	0.54	21.57	16.41	0.15
FOSSO_POLICIANO	FOSSO_POLICIANO1	8932	TR30	7.50	299.30	301.93	300.43	301.97	0.001246	0.92	8.12	3.93	0.21
FOSSO_POLICIANO	FOSSO_POLICIANO1	8932	TR200	11.70	299.30	302.29	300.74	302.37	0.001988	1.22	9.56	3.93	0.25
FOSSO_POLICIANO	FOSSO_POLICIANO1	8900		Bridge									
FOSSO_POLICIANO	FOSSO_POLICIANO1	8872	TR30	7.50	296.97	297.42	297.90	299.51	0.288726	6.40	1.17	2.71	3.11
FOSSO_POLICIANO	FOSSO_POLICIANO1	8872	TR200	11.70	296.97	297.56	298.20	300.34	0.310568	7.38	1.59	2.97	3.23
FOSSO_POLICIANO	FOSSO_POLICIANO1	8805	TR30	7.50	294.77	297.85	296.26	297.90	0.001820	1.01	7.45	3.46	0.22
FOSSO_POLICIANO	FOSSO_POLICIANO1	8805	TR200	11.70	294.77	298.35	296.62	298.43	0.002565	1.27	9.20	3.46	0.25
FOSSO_POLICIANO	FOSSO_POLICIANO1	8800		Culvert									
FOSSO_POLICIANO	FOSSO_POLICIANO1	8755	TR30	7.50	289.71	290.82	290.82	291.16	0.021647	2.57	2.92	4.31	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	8755	TR200	11.70	289.71	291.10	291.10	291.49	0.020734	2.75	4.25	5.48	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	8642	TR30	7.50	288.39	288.98	289.24	289.83	0.081090	4.07	1.84	3.46	1.78
FOSSO_POLICIANO	FOSSO_POLICIANO1	8642	TR200	11.70	288.39	289.20	289.52	290.22	0.073183	4.49	2.60	3.71	1.71
FOSSO_POLICIANO	FOSSO_POLICIANO1	8500		Bridge									
FOSSO_POLICIANO	FOSSO_POLICIANO1	8475	TR30	7.50	284.33	284.95	285.39	286.56	0.169474	5.61	1.34	2.73	2.56
FOSSO_POLICIANO	FOSSO_POLICIANO1	8475	TR200	11.70	284.33	285.16	285.70	287.09	0.149985	6.16	1.90	2.86	2.41
FOSSO_POLICIANO	FOSSO_POLICIANO1	8421	TR30	7.50	283.66	285.27	284.81	285.49	0.010508	2.07	3.62	2.66	0.57
FOSSO_POLICIANO	FOSSO_POLICIANO1	8421	TR200	11.70	283.66	285.83	285.15	286.09	0.010333	2.27	5.16	2.83	0.54
FOSSO_POLICIANO	FOSSO_POLICIANO1	8400		Bridge									
FOSSO_POLICIANO	FOSSO_POLICIANO1	8390	TR30	7.50	283.53	284.79	284.79	285.31	0.033987	3.20	2.35	2.25	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	8390	TR200	11.70	283.53	285.16	285.16	285.85	0.036976	3.66	3.20	2.35	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	8234	TR30	7.50	280.31	281.20	281.61	282.50	0.115470	5.05	1.49	2.29	2.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	8234	TR200	11.70	280.31	281.47	281.97	282.97	0.104807	5.44	2.15	2.66	1.93
FOSSO_POLICIANO	FOSSO_POLICIANO1	7959	TR30	7.50	276.83	278.31	278.31	278.73	0.027225	2.89	2.59	3.03	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	7959	TR200	11.70	276.83	278.60	278.60	279.17	0.028573	3.32	3.52	3.12	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	7728	TR30	7.50	272.78	273.69	274.11	275.05	0.126194	5.16	1.45	2.59	2.20
FOSSO_POLICIANO	FOSSO_POLICIANO1	7728	TR200	11.70	272.78	273.92	274.41	275.48	0.114061	5.52	2.12	3.14	2.15
FOSSO_POLICIANO	FOSSO_POLICIANO1	7567	TR30	7.50	269.20	271.56	270.77	271.61	0.002784	0.98	7.64	9.75	0.35
FOSSO_POLICIANO	FOSSO_POLICIANO1	7567	TR200	11.70	269.20	271.80	271.22	271.86	0.003300	1.15	10.15	11.84	0.40
FOSSO_POLICIANO	FOSSO_POLICIANO1	7520		Culvert									
FOSSO_POLICIANO	FOSSO_POLICIANO1	7517	TR30	7.50	269.02	270.76	270.76	271.00	0.029340	2.15	3.48	7.40	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	7517	TR200	11.70	269.02	270.93	270.93	271.24	0.026518	2.45	4.77	7.69	0.99
FOSSO_POLICIANO	FOSSO_POLICIANO1	7171	TR30	15.00	266.66	268.18	268.18	268.51	0.021055	2.57	5.83	8.78	1.01
FOSSO_POLICIANO	FOSSO_POLICIANO1	7171	TR200	23.40	266.66	268.40	268.42	268.85	0.020705	2.97	7.87	9.33	1.03
FOSSO_POLICIANO	FOSSO_POLICIANO1	5537	TR30	15.00	256.31	259.44	258.14	259.53	0.002253	1.33	11.25	4.95	0.28
FOSSO_POLICIANO	FOSSO_POLICIANO1	5537	TR200	23.40	256.31	259.92	258.49	260.07	0.003291	1.72	13.63	4.95	0.33
FOSSO_POLICIANO	FOSSO_POLICIANO1	5513		Bridge									
FOSSO_POLICIANO	FOSSO_POLICIANO1	5488	TR30	15.00	256.31	257.79	258.14	258.92	0.077681	4.72	3.18	4.12	1.71
FOSSO_POLICIANO	FOSSO_POLICIANO1	5488	TR200	23.40	256.31	258.08	258.49	259.44	0.071726	5.16	4.54	4.88	1.71
FOSSO_POLICIANO	FOSSO_POLICIANO1	5076	TR30	15.00	252.53	257.17	254.57	257.18	0.000231	0.50	29.85	9.44	0.09
FOSSO_POLICIANO	FOSSO_POLICIANO1	5076	TR200	23.40	252.53	257.50	254.83	257.52	0.000423	0.71	32.94	9.44	0.12
FOSSO_POLICIANO	FOSSO_POLICIANO1	5028		Bridge									
FOSSO_POLICIANO	FOSSO_POLICIANO1	4980	TR30	15.00	252.53	254.13	254.57	255.56	0.176584	5.29	2.83	4.58	2.15
FOSSO_POLICIANO	FOSSO_POLICIANO1	4980	TR200	23.40	252.53	254.38	254.83	255.93	0.183858	5.51	4.25	7.37	2.32
FOSSO_POLICIANO	FOSSO_POLICIANO1	4768	TR30	15.00	252.76	253.40	253.40	253.56	0.021174	1.88	8.54	25.37	0.98
FOSSO_POLICIANO	FOSSO_POLICIANO1	4768	TR200	23.40	252.76	253.51	253.51	253.73	0.020273	2.17	11.53	26.52	1.00
FOSSO_POLICIANO	FOSSO_POLICIANO1	4717	TR30	16.50	251.95	252.30	252.43	252.76	0.159537	3.00	5.51	33.46	2.36
FOSSO_POLICIANO	FOSSO_POLICIANO1	4717	TR200	25.70	251.95	252.36	252.53	252.96	0.145669	3.44	7.47	34.41	2.36
FOSSO_POLICIANO	FOSSO_POLICIANO1	2552	TR30	16.50	246.53	247.40	247.04	247.44	0.002259	0.74	19.27	31.30	0.34
FOSSO_POLICIANO	FOSSO_POLICIANO1	2552	TR200	25.70	246.53	247.53	247.16	247.59	0.003098	0.93	23.49	33.69	0.40
FOSSO_POLICIANO	FOSSO_POLICIANO1	2536	TR30	16.50	246.97	247.26	247.26	247.40	0.021727	1.26	10.11	35.02	0.90
FOSSO_POLICIANO	FOSSO_POLICIANO1	2536	TR200	25.70	246.97	247.36	247.36	247.55	0.020491	1.54	13.60	35.76	0.93

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
FOSSO_POLICIANO	FOSSO_POLICIANO1	881	TR30	16.50	244.16	245.91	244.83	245.91	0.000073	0.26	69.30	85.37	0.07
FOSSO_POLICIANO	FOSSO_POLICIANO1	881	TR200	25.70	244.16	246.40	244.83	246.40	0.000050	0.26	114.70	94.36	0.06
FOSSO_POLICIANO	FOSSO_POLICIANO1	2	TR30	16.50	244.27	245.91	244.94	245.91	0.000096	0.29	76.87	94.58	0.08
FOSSO_POLICIANO	FOSSO_POLICIANO1	2	TR200	25.70	244.27	246.40	245.05	246.40	0.000051	0.25	122.90	94.58	0.06
AFF_RIGUTINO	AFF_RIGUTINO	1062	TR30	7.73	246.68	247.12	247.12	247.22	0.020828	1.45	5.94	29.44	0.92
AFF_RIGUTINO	AFF_RIGUTINO	1062	TR200	12.13	246.68	247.80	247.19	247.81	0.000438	0.50	25.90	29.44	0.17
AFF_RIGUTINO	AFF_RIGUTINO	158	TR30	7.73	245.74	247.11	246.29	247.11	0.000041	0.18	59.93	94.82	0.05
AFF_RIGUTINO	AFF_RIGUTINO	158	TR200	12.13	245.74	247.80	246.35	247.80	0.000010	0.12	129.32	101.53	0.03
AFF_RIGUTINO	AFF_RIGUTINO	106	TR30	7.73	245.49	247.11	246.46	247.11	0.000085	0.22	43.04	69.95	0.07
AFF_RIGUTINO	AFF_RIGUTINO	106	TR200	12.13	245.49	247.80	246.59	247.80	0.000019	0.15	97.13	81.58	0.04